

M Series 4" Non-IC

Project:	Type:
Product Code:	Date:

V 050426



Square Adjustable

Versatile Solution for all spaces providing high quality lighting ranging from 750lm all the way up to 3500lm

Expedite Install with our easily adjustable universal housing and bar hanger systems allowing for application in most ceiling types

Enhanced Serviceability features are achieved through our fully integrated driver solutions allow for ease of maintenance & implementation of design changes all below the ceiling plane

Seamless Integration with many control systems allowing two-channel control dimming options down as low as 0.1%

INSTALLATION

Ceiling Thickness

New Construction: 1/2" up to 2"

Remodel: 1/2" up to 1 1/4"

Ceiling Material

Drywall, Millwork, Acoustical Ceiling Tile

TRIMS

Aperture

4"

Shape

Square


Style

Standard, Flangeless, Pinhole

Finish

White, Black, Clear Diffuse, Custom Color (RAL Colors)

SPECIALTY LENS

 Hexcell Louver

LIGHT OUTPUT & DISTRIBUTION

Module

Adjustable

Adjustment

360° rotation, 40° tilt








Lumens (Power)

750 lm (9.5W), 1000 lm (12.5W),
1250 lm (14.3W), 1500 lm (14.3W),
2000 lm (24.5W), 2500 lm (27.5W),
3000 lm (34.0W), 3500 lm (40.5W)




Color Quality

93 CRI, 2-step SDCM

Color Temperature

-  2400K  2700K  3000K
 3500K  4000K
 Warm Dim (3000K–1800K)
 Tunable White (6500–2700K)

Beam Spread

-  15° Narrow Spot  25° Spot
 40° Flood

POWER & CONTROLS

Input Voltage


120/277V

Dimming


0-10V (1%), DALI-2 (0.1%),
Lutron Athena Wireless Node (1%)

RATINGS & CERTIFICATIONS

Housing

-  RoHS Compliant
(Suitable for Use in Air-Handling Space,
Complies with UL2043)

Module and Trim

-  UL Listed for Damp Location
(Under Covered Areas Only)

Warranty

5 year limited warranty; 50,000 hours

MAINTENANCE

LED chip embedded in module; driver externally connected via detachable touch-safe cable. Plug-and-play, tool-free serviceability and replacement from below ceiling.



Declare.





DMF LightSpeed
Our Quickest Shipping Selections are Highlighted for shipping in 2 days or less
All other items qty 100 or less ship in 5 days or less (custom color excluded)

M Series 4" Non-IC

Square Adjustable

PRODUCT BUILDER | SQUARE | ADJUSTABLE | EMBEDDED 0-10V

HOUSING

EXAMPLE: **M4NCSN**

PRODUCT CODE	
M4NCSN	4" Square Housing, New Construction, Non-IC Rated
M4RMSN	4" Square Housing, Remodel, Non-IC Rated ¹

LIGHT MODULE

EXAMPLE: **MA07924NSO**

PRODUCT CODE		LUMENS		CRI		CCT		BEAM SPREAD		DIMMING	
MA				9						O	
MA	Adjustable Module	07	750 lm	9	93 CRI	24	2400K ²	NS	Narrow Spot (15°) ⁴	O	0-10V
		10	1000 lm			27	2700K	SP	Spot (25°)		
		12	1250 lm			30	3000K	FL	Flood (40°)		
		15	1500 lm			35	3500K	NH	Narrow Spot Hexcell Louver ⁴		
		20	2000 lm			40	4000K	SH	Spot Hexcell Louver ⁵		
		25	2500 lm			3W	Warm Dim (3000-1800K) ³	FH	Flood Hexcell Louver ⁵		
		30	3000 lm								
		35	3500 lm								

TRIM

EXAMPLE: **M4TSAWH**

PRODUCT CODE		FINISH		OPTION	
M4TSA	Standard Trim	WH	White	[Blank]	None
M4TSP	Pinhole Trim ^{6,7}	BK	Black	FL	Flangeless ⁸
		CW	Clear Diffuse, White Flange		
		CC	Custom Color (RAL Colors)		

ACCESSORIES

M4XSMUD	Flangeless Mud Plate ⁹
M4KSTEMPLATE	Flangeless Wood Template ¹⁰

¹ Not available with Flangeless Trim options

² Only available 750 - 1000 lm

³ Only available in 1000 lm; Not Available in NS beam spread

⁴ Only available 750 - 2000 lm

⁵ Not available in 3500 lm

⁶ Only available in White, Black or Custom Color finish

⁷ Only available in 750 - 1500 lm

⁸ Mud Plate is required for all Flangeless Trim except for wood ceiling applications; Not compatible with remodel housing; Not available in Clear Diffuse finish

⁹ Required for Flangeless Trim drywall installation

¹⁰ Recommended for Flangeless Trim wood installation

LOOSE OPTIC ACCESSORIES

MALX-NS	Low Lumen (750 lm-2000 lm) Adjustable Optic NS 15° Beam Spread
MALX-SP	Low Lumen (750 lm-2000 lm) Adjustable Optic SP 25° Beam Spread
MALX-FL	Low Lumen (750 lm-2000 lm) Adjustable Optic FL 40° Beam Spread
MALX-NH	Low Lumen (750lm-2000lm) Adjustable Optic NS 15° Beam Spread with Hexcell Louver
MALX-SH	Low Lumen (750lm-2000lm) Adjustable Optic SP 25° Beam Spread with Hexcell Louver
MALX-FH	Low Lumen (750lm-2000lm) Adjustable Optic FL 40° Beam Spread with Hexcell Louver
MAHX-SP	High Lumen (2500 lm-3500 lm) Adjustable Optic SP 25° Beam Spread
MAHX-FL	High Lumen (2500 lm-3500 lm) Adjustable Optic FL 40° Beam Spread
MAHX-SH	High Lumen (2500lm-3500lm) Adjustable Optic SP 25° Beam Spread with Hexcell Louver
MAHX-FH	High Lumen (2500lm-3500lm) Adjustable Optic FL 40° Beam Spread with Hexcell Louver



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M Series 4" Non-IC

Square Adjustable

PRODUCT BUILDER | SQUARE | ADJUSTABLE | ATHENA WIRELESS NODE/DALI-2

HOUSING

EXAMPLE: **M4NCSN07OAWN**

PRODUCT CODE		INSTALLATION		SHAPE		RATING		OUTPUT		DIMMING		WIRELESS	
M4		NC		S		N							
M4	4" Housing	NC	New Construction	S	Square	N	Non-IC	07	750 lm	O	0-10V	[Blank]	None (DALI-2 Only)
								10	1000 lm	DS	DALI-2 (Static CCT) ¹	AWN	Athena Wireless Node
								12	1250 lm	DT	DALI-2 (Tunable White) ^{2,3}		
								15	1500 lm				
								20	2000 lm				
								25	2500 lm				
								30	3000 lm				
								35	3500 lm				

LIGHT MODULE

EXAMPLE: **MA07924NSA**

PRODUCT CODE		LUMENS		CRI		CCT		BEAM SPREAD		DIMMING	
MA				9						A	
MA	Adjustable Module	07	750 lm	9	93 CRI	24	2400K ⁴	NS	Narrow Spot (15°) ⁷	A	Alternate
		10	1000 lm			27	2700K	SP	Spot (25°)		
		12	1250 lm			30	3000K	FL	Flood (40°)		
		15	1500 lm			35	3500K	NH	Narrow Spot Hexcell Louver ⁷		
		20	2000 lm			40	4000K	SH	Spot Hexcell Louver ¹		
		25	2500 lm			3W	Warm Dim (3000–1800K) ^{2,5}	FH	Flood Hexcell Louver ¹		
		30	3000 lm			T2	Tunable White (6500–2700K) ^{2,3,6}				
		35	3500 lm								

TRIM | STANDARD

EXAMPLE: **M4TSAWH**

PRODUCT CODE		FINISH		OPTION	
M4TSA	Standard Trim	WH	White	[Blank]	None
M4TSP	Pinhole Trim ^{3,8}	BK	Black	FL	Flangeless ⁹
		CW	Clear Diffuse, White Flange		
		CC	Custom Color (RAL Colors)		

¹ Not available for 3500 lm

² Not available in NS beam spread

³ Only available in 750 - 1500 lm

⁴ Only available in 750 - 1000 lm

⁵ Only available in 1000 lm

⁶ Only available in DALI-2

⁷ Only available in 750 - 2000 lm

⁸ Only available in White, Black or Custom Color finish

⁹ Mud Plate Required for Flangeless install except wood ceiling; Not available in Clear Diffuse finish

ACCESSORIES

M4XSMUD	Flangeless Mud Plate (Required for Flangeless Trim drywall installation)
M4KSTEMPLATE	Flangeless Wood Template (Recommended for Flangeless Trim wood installation)



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M Series 4" Non-IC

Square Adjustable

PRODUCT BUILDER | SQUARE | DOWNLIGHT | EMERGENCY

HOUSING

EXAMPLE: **M4NCSN07OEMS**

PRODUCT CODE		INSTALLATION		SHAPE		RATING		OUTPUT		DIMMING		WIRELESS		OPTION	
M4		NC		S		N									
M4	4" Housing	NC	New Construction	S	Square	N	Non-IC	07	750 lm	O	0-10V	[Blank]	None (DALI-2 Only)	EMS	Emergency driver, Remote switch
								10	1000 lm	DS	DALI-2 Static CCT ¹	AWN	Athena Wireless Node		
								12	1250 lm	DT	DALI-2 Tunable White CCT ^{2,3}				
								15	1500 lm						
								20	2000 lm						
								25	2500 lm						
								30	3000 lm						
								35	3500 lm						

LIGHT MODULE

EXAMPLE: **MA07924NSA**

PRODUCT CODE		LUMENS		CRI		CCT		BEAM SPREAD		DIMMING	
MA				9						A	
MA	Adjustable Module	07	750 lm	9	93 CRI	24	2400K ⁴	NS	Narrow Spot (15°) ⁷	A	Alternate
		10	1000 lm			27	2700K	SP	Spot (25°)		
		12	1250 lm			30	3000K	FL	Flood (40°)		
		15	1500 lm			35	3500K	NH	Narrow Spot Hexcell Louver ⁷		
		20	2000 lm			40	4000K	SH	Spot Hexcell Louver ¹		
		25	2500 lm			3W	Warm Dim (3000–1800K) ^{2,5}	FH	Flood Hexcell Louver ¹		
		30	3000 lm			T2	Tunable White (6500–2700K) ^{2,3,6}				
		35	3500 lm								

TRIM | STANDARD

EXAMPLE: **M4TSAWH**

PRODUCT CODE		FINISH		OPTION	
M4TSA	Standard Trim	WH	White	[Blank]	None
M4TSP	Pinhole Trim ^{3,8}	BK	Black	FL	Flangeless ⁹
		CW	Clear Diffuse, White Flange		
		CC	Custom Color (RAL Colors)		

¹ Not available in 3500 lm

⁶ Only available in DALI-2

² Not available in NS beam spread

⁷ Only available in 750 - 2000 lm

³ Only available in 750 - 1500 lm

⁸ Only available in White, Black or Custom Color finish

⁴ Only available in 750 - 1000 lm

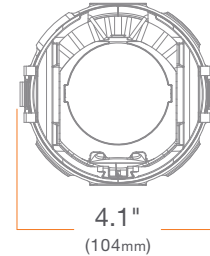
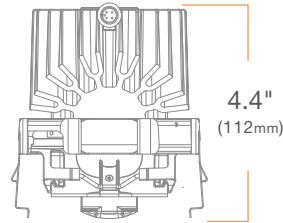
⁹ Mud Plate required for Flangeless Install except for wood ceiling; Not available in Clear Diffuse finish

⁵ Only available in 1000 lm

ACCESSORIES

M4XSMUD	Flangeless Mud Plate (Required for Flangeless Trim drywall installation)
M4KSTEMPLATE	Flangeless Wood Template (Recommended for Flangeless Trim wood installation)

MODULE



SUMMARY

	STATIC CCT	WARM DIM	TUNABLE WHITE
CCT	2400K, 2700K, 3000K, 3500K, 4000K	3000K - 1800K	6500K - 2700K
LUMENS (POWER)	750 lm (9.5W), 1000 lm (12.5W), 1250 lm (14.3W), 1500 lm (14.3W), 2000 lm (24.5W), 2500 lm (27.5W), 3000 lm (34.0W), 3500 lm (40.5W)	1000 lm (12.5W)	750 lm (9.5W), 1000 lm (12.5W), 1250 lm (14.3W), 1500 lm (14.3W)
EFFICACY	79 lm/W, 80 lm/W, 87 lm/W, 105 lm/W, 82 lm/W, 91 lm/W, 86 lm/W	80 lm/W	79 lm/W, 80 lm/W, 87 lm/W, 105 lm/W
COLOR QUALITY	93 CRI ¹ , 2-step SDCM	93 CRI ¹ , 2-step SDCM	93 CRI ¹ , 3-step SDCM
BEAM SPREAD	Narrow Spot (15°), Spot (25°), Flood (40°)	Spot (25°), Flood (40°)	Spot (25°), Flood (40°)
DIMMING	0-10V, DALI-2, Lutron Athena Wireless Node	0-10V, DALI-2, Lutron Athena Wireless Node	DALI-2, Lutron Athena Wireless Node
LED CHIP	Bridgelux (2400K), Cree (All other CCT)	Bridgelux	Bridgelux
LISTINGS	ENERGY STAR [®] qualified ² , UL Listed for Damp Location (Under covered ceilings only), UL Certified US•CA, Declare, RoHS Compliant, Shatter-Resistant Construction, NSF/ANSI 2 listed, suitable for splash zone ³ , DALI-2 Compliant, Compliant to FCC Title 47 Part 15; Class B		

¹ Tested in accordance to IESNA LM-79-2008

² Refer to ENERGY STAR Certified light fixtures database

³ White and Black Finish only

ADDITIONAL

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

MAX INPUT CURRENT (120V): 0.350 amps

MAX INPUT CURRENT (277V): 0.165 amps

AC CONNECTOR: 6 pin Molex

DC CONNECTOR: Male 4-Pin Low Voltage Connector

POWER FACTOR: Greater than 0.9

TOTAL HARMONIC DISTORTION: Less than 20%

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

WARRANTY: 5 year limited warranty; 50,000 hours at 70% lumen maintenance

MODULE PERFORMANCE

Based on 93 CRI, 3000K Module + STD White + Trim (M4TSAWH)

(Please refer to IES files for other trim types)

		STATIC CCT							WARM DIM	T2	
LED CHIP		Bridgelux 93 CRI (2400K), Cree 93 CRI (All other CCT)							Bridgelux 93 CRI		
SDCM		2-STEP							3-STEP		
PN DESIGNATION		07	10	12	15	20	25	30	35	10	07
WATTAGE		9.5W	12.5W	14.3W	14.3W	24.5W	27.5W	34.0W	40.5W	12.5W	12.5W
NS	Lumens	417	567	645	739	1024	N/A				
	LPW ¹	43.9	45.5	45.1	44.8	47.8					
	CBCP ²	1900	2591	2937	3368	4664					
	UGR ³	3.1	4.2	4.6	5.1	6.2					
SP	Lumens	424	578.7	656	752	1042	1605	1975	2346	515	637
	LPW	44.7	46.3	45.9	45.6	42.5	58.4	58.1	57.9	41.2	43.9
	CBCP	1224	1668.5	1891	2169	3003	3904	4805	5707	1485	1835
	UGR	4.4	5.5	6	6.4	7.6	12.3	13	13.6	5.1	5.9
FL	Lumens	328	447	507	581	805	1498	1845	2191	507	627
	LPW	34.5	35.8	35.4	35.2	32.9	54.5	54.3	54.1	40.6	43.2
	CBCP	658	898	1017	1167	1616	2667	3283	3899	819	1012
	UGR	1.9	3	3.4	3.9	5	11	11.7	12.3	8.1	8.8

		STATIC					WARM DIM		T2 TUNABLE WHITE		
CCT MULTIPLIER	2400K	2700K	3000K	3500K	4000K	1800K	3000K	2700K	3000K	6500K	
	0.80	0.93	1	1.05	1.07	0.05	1	0.96	1	1.07	

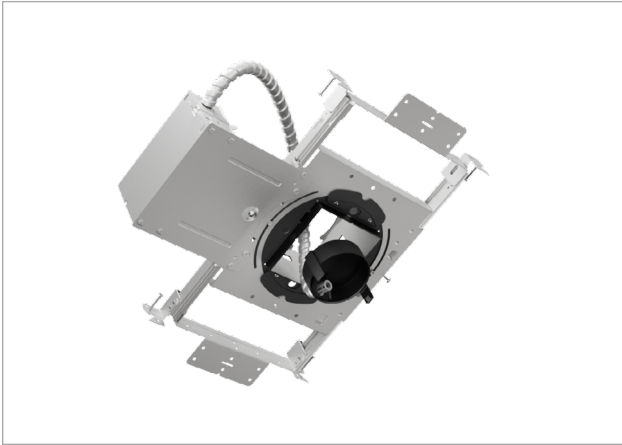
HEXCELL LOUVER MULTIPLIER	0.6
EMERGENCY BATTERY MULTIPLIER	LPW x 5

¹ LPW: Lumens per watt

² CBCP: Center beam candlepower

³ UGR: Unified glare ratio (0.7/0.5/0.2, 4H/8H)

HOUSING



New Construction

M4NCSN

SUMMARY

JUNCTION BOX: Equipped with 6 knockouts: two 1/2" and two 3/4" trade size knockouts on top, two 1/2" trade size knockouts on side. Approved for 8 (four in, four out) #12 AWG 70°C

BAR HANGER MOUNTING: Adjustable Bar Hangers for 10" (254mm) - 24" (610mm) joist spacing compatible with traditional joists, Armstrong ceiling™, Hat Channel, T-Bar

CEILING: Thickness ranging from 1/2" (13mm) to 2" (51mm)

CUTOUT: 4" (101mm) square opening

LISTINGS: Suitable for Use in Air-Handling Space – Complies with UL2043

ALTERNATE DIMMING SPECIFICATIONS

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

MAX INPUT CURRENT (120V): 0.130 amps

MAX INPUT CURRENT (277V): 0.065 amps

POWER FACTOR: Greater than 0.9

TOTAL HARMONIC DISTORTION: Less than 20%

LISTINGS: Compliant to FCC Title 47 Part 15; Class B

EMERGENCY BATTERY SPECIFICATIONS

EMERGENCY BATTERY : Emergency Battery Back up is designed to provide output for 90 minutes when in an emergency state

INPUT VOLTAGE: 120/277V 50/60Hz

ILLUMINATION TIME: 90min

CUTOUT: 4 1/4" (107mm) square opening

WATTAGE IN EM STATE: 5W

LUMEN OUTPUT IN EM STATE: LPW x 5

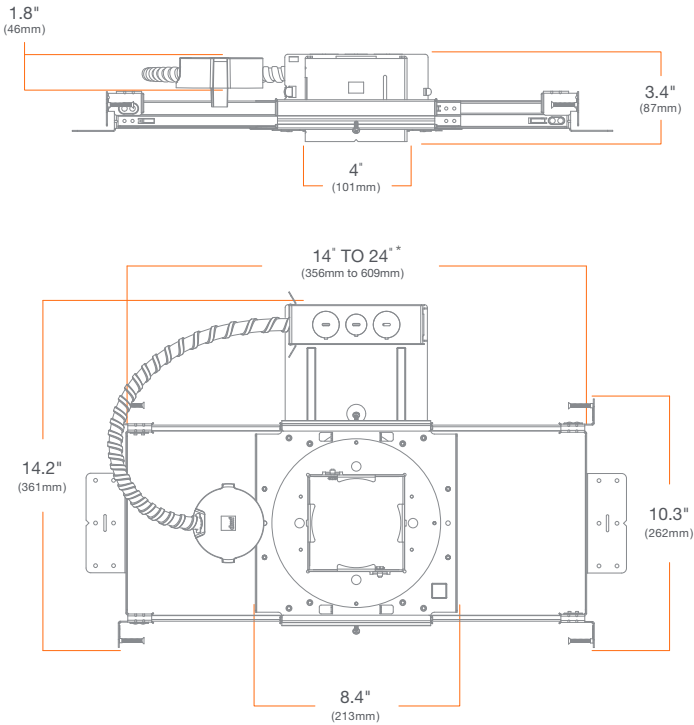
TEST SWITCH OPTIONS:

- **REMOTE TEST SWITCH(-EMS HOUSING):** Must be installed according to local code can be used with any flanged or flangeless

New Construction

M4NCSN

(Dimensions not including module)

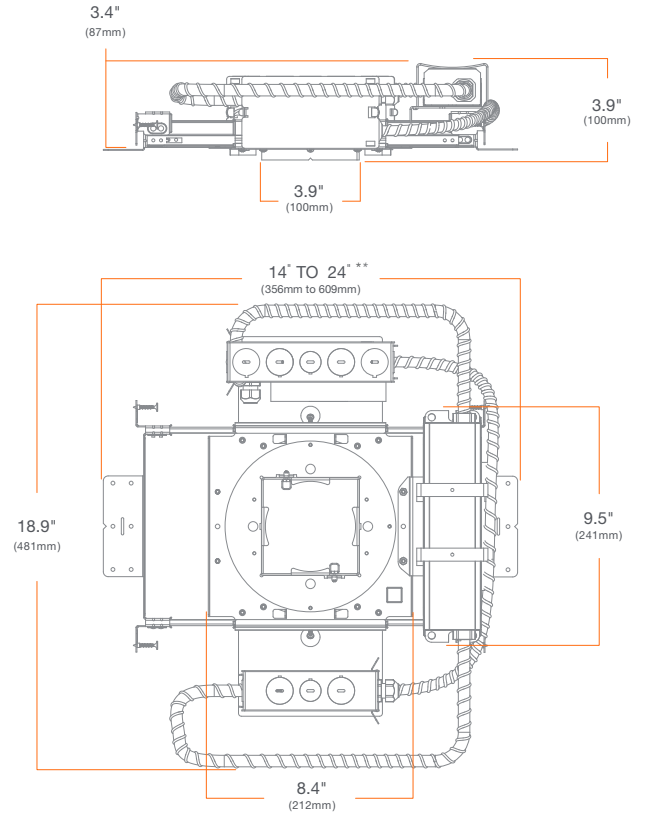


Emergency Lighting

M4NCSNxxxEMS

M4NCSNxxxAWNEMS

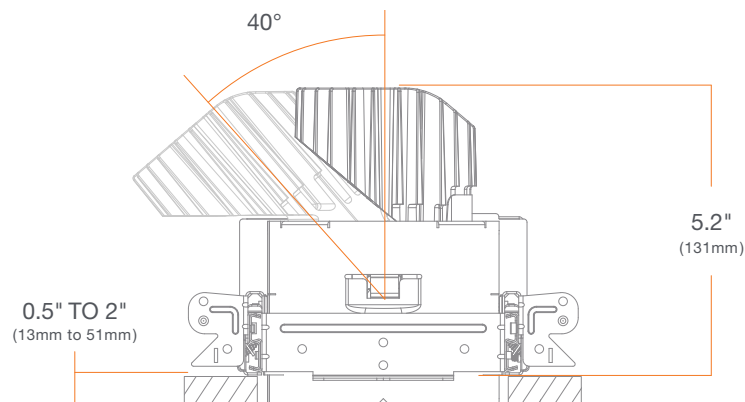
(Dimensions not including module)



* Can be field cut to minimum 10" (254mm) for a range of 10" (254mm) - 24" (610mm)

** Can be field cut to a minimum 12" (305mm) for a range of 12" (305mm) - 24" (610mm)

Total Height in Plenum



New Construction Static DALI/Lutron Athena Node

M4NCSNxxDS
M4NCSNxxOAWN
M4NCSNxxDSAWN

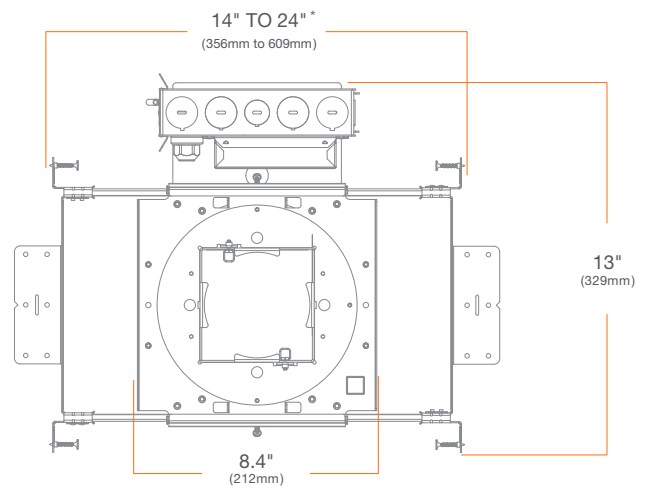
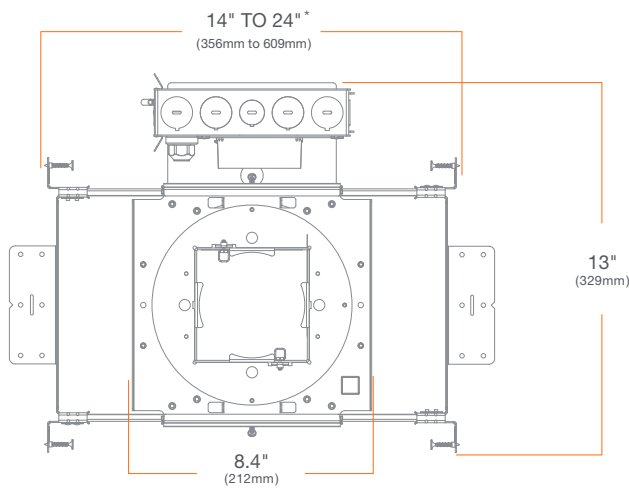
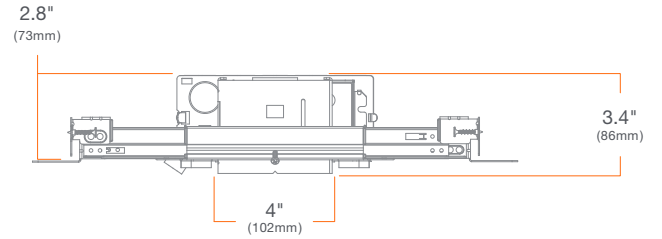
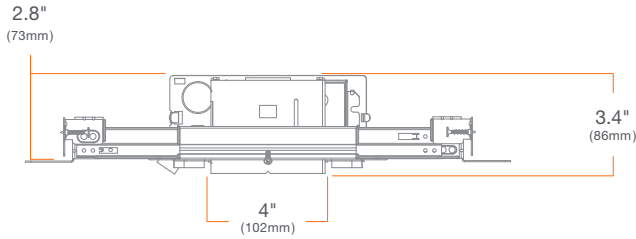
(Dimensions not including module)

New Construction

Tunable White DALI-2

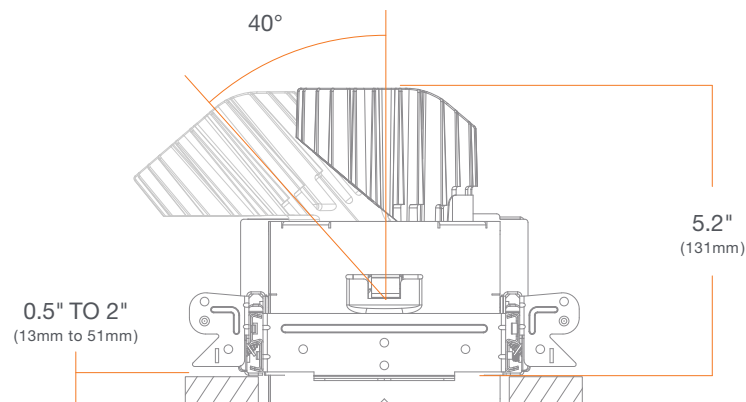
M4NCSNxxDT

(Dimensions not including module)

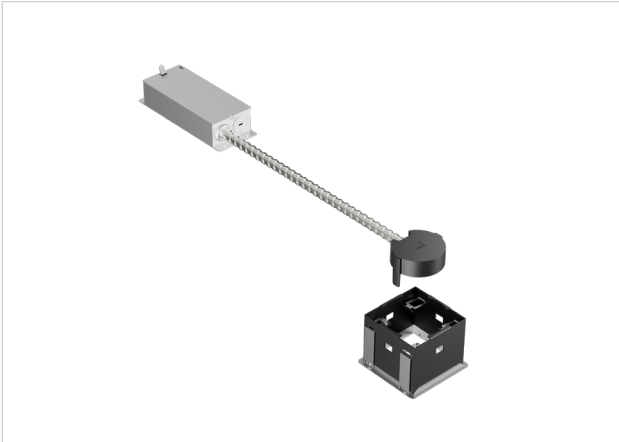


* Can be field cut to minimum 10" (254mm) for a range of 10" (254mm) - 24" (610mm)

Total Height in Plenum



HOUSING



Remodel

M4RMSN

SUMMARY

JUNCTION BOX: Equipped with 3 knockouts: two 1/2" trade size and one 3/4" trade size knockouts #12 AWG 70°C. Approved for 4 (2 in and 2 out)

CEILING: 1/2" (13mm) up to 1 1/4" (32mm)

CUTOUT: 4 1/4" (106mm) square opening

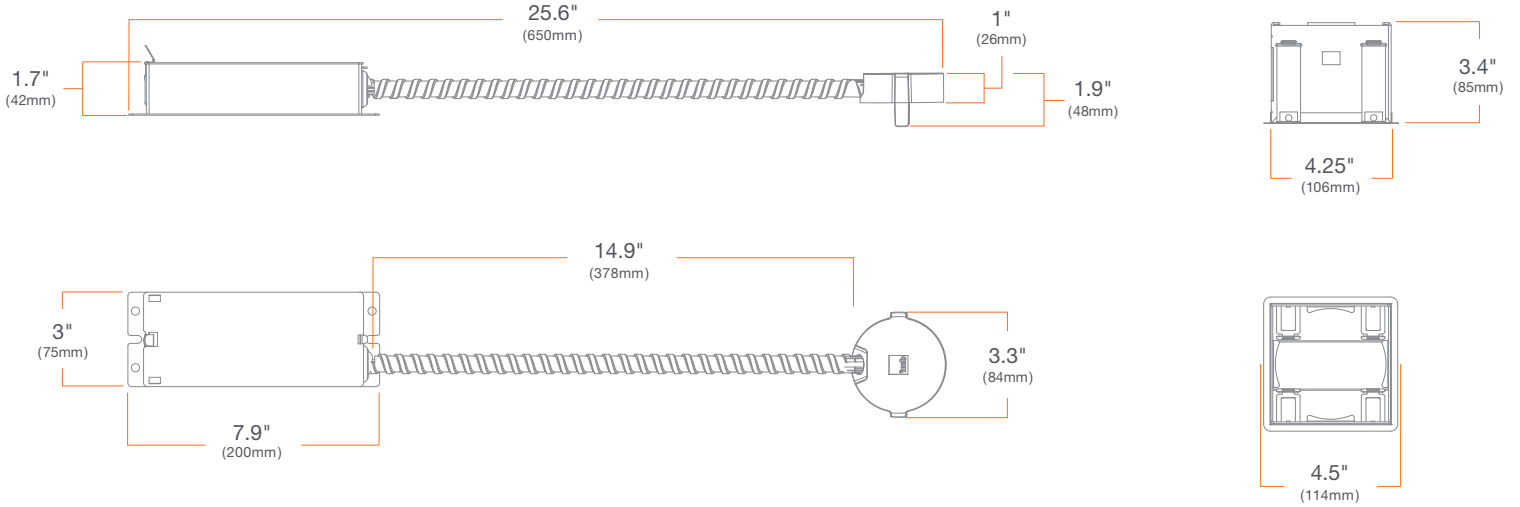
LISTINGS: Suitable for Use in Air-Handling Space – Complies with UL2043

TRIM COMPATIBILITY: Flanged Only

Standard

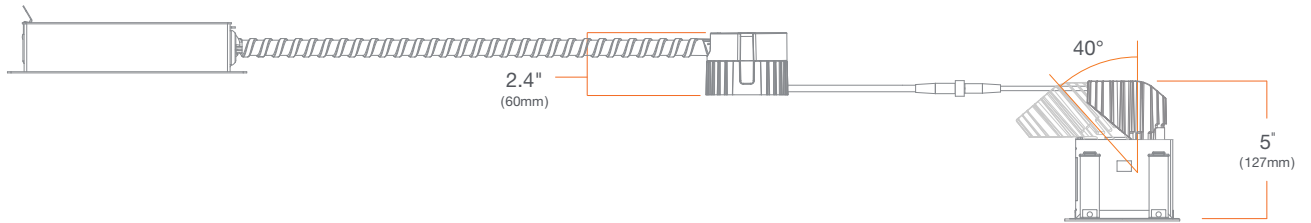
M4RMSN

(Dimensions not including module)

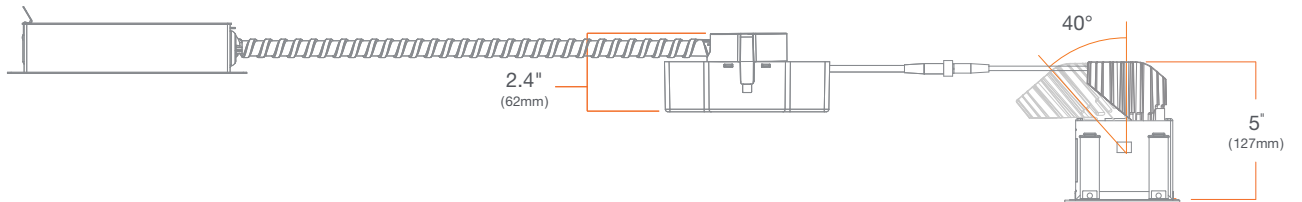


Total Height in Plenum

Low Lumen



High Lumen



TRIMS



4" Square Trims

M4TS

SUMMARY

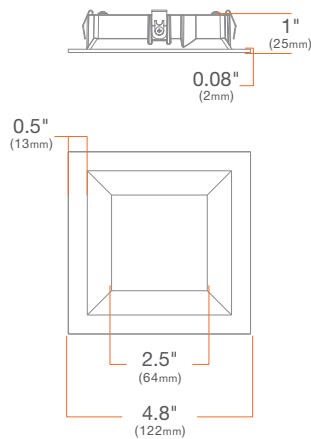
CONSTRUCTION: Die-cast aluminum

DECORATIVE: Acrylic diffuser

INSTALLATION: Twist & Lock

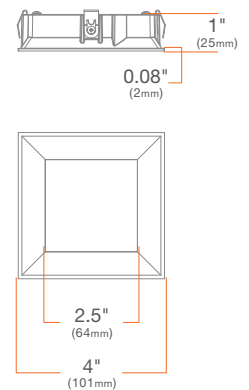
Standard Adjustable

M4TSAWH



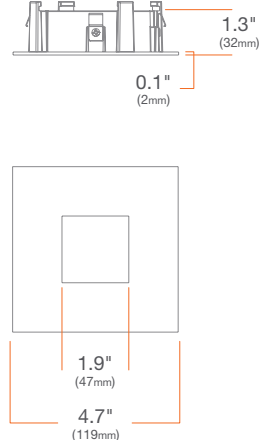
Flangeless Adjustable

M4TSAWHFL



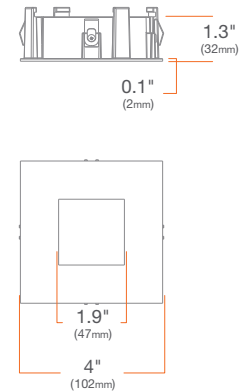
Pinhole

M4TSPWH



Pinhole Flangeless

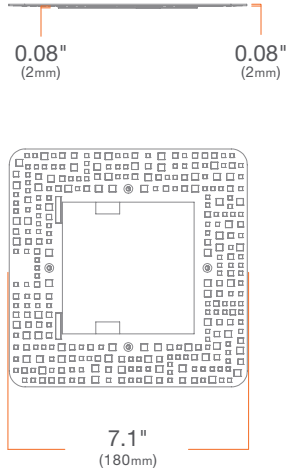
M4TSPWHFL



ACCESSORIES

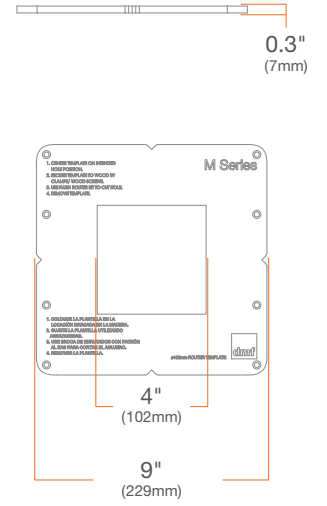
Flangeless Mud Plate

M4XSMUD



Router Template

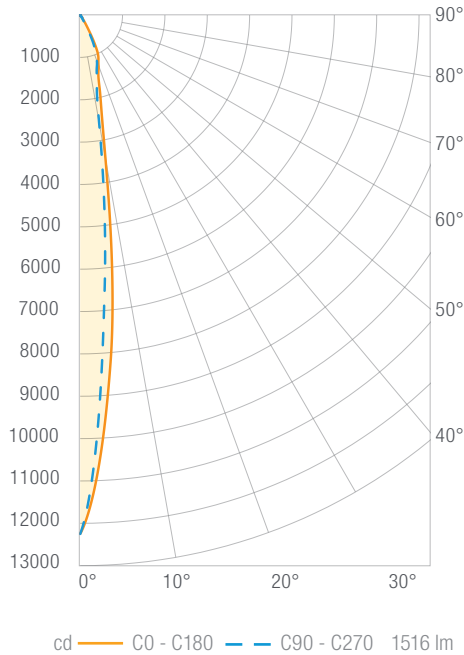
M4KSTEMPLATE



PHOTOMETRY

MA 2000 lm, 3000K, Narrow Spot

MA20930NS | M4TSAWH



Luminous Intensity

Gamma	C 0°
0°	12252
5°	8229
10°	3435
15°	1758
20°	1267
25°	969
30°	363
35°	100
40°	75
45°	19
50°	8
55°	3
60°	3
65°	2
70°	1
75°	1
80°	0
85°	0
90°	0

Values in candela

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	1389	92
0-40	1491	98
0-60	1513	100
0-90	1516	100
0-180	1516	100

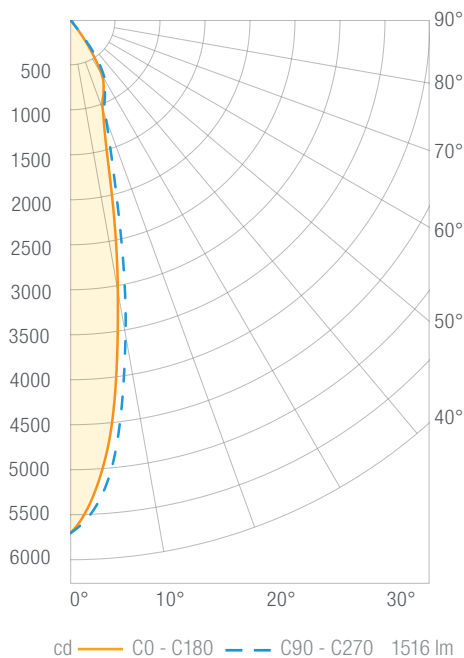
Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	1361.3	0.8'
6'	340.3	1.5'
9'	151.3	2.3'
12'	85.1	3.0'

Beam Angle: 14° x 11°

MA 2000 lm, 3000K, Spot

MA20930SP | M4TSAWH



Luminous Intensity

Gamma	C 0°
0°	5707
5°	4786
10°	3061
15°	1636
20°	1068
25°	883
30°	713
35°	357
40°	71
45°	33
50°	16
55°	6
60°	4
65°	3
70°	2
75°	1
80°	1
85°	0
90°	0

Values in candela

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	1312	87
0-40	1476	97
0-60	1511	100.8
0-90	1516	100
0-180	1516	100

Illuminance Chart

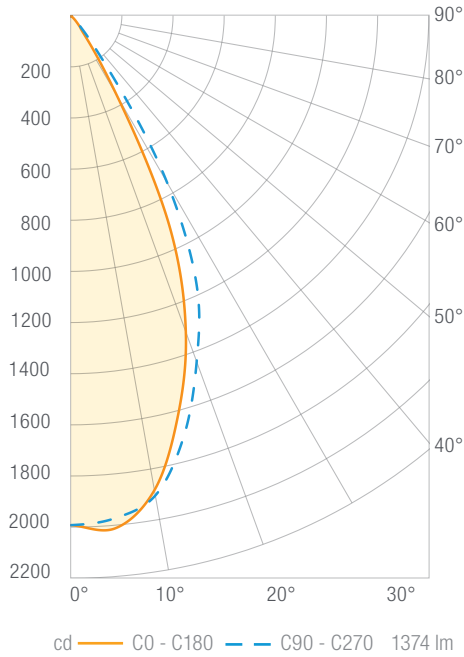
Distance from LED	Foot Candles	Diameter
3'	634.2	1.1'
6'	158.5	2.3'
9'	70.5	3.4'
12'	39.6	4.5'

Beam Angle: 21° x 24°

PHOTOMETRY

MA 2000 lm, 3000K, Flood

MA20930FL | M4TSAWH



Luminous Intensity

Gamma	C 0°
0°	1992
5°	1992
10°	1992
15°	1620
20°	1316
25°	923
30°	364
35°	109
40°	52
45°	23
50°	8
55°	3
60°	3
65°	3
70°	1
75°	1
80°	1
85°	0
90°	0

Values in candela

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	1139	83
0-40	1339	97
0-60	1371	100
0-90	1374	100
0-180	1374	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	221.4	2.7'
6'	55.3	5.3'
9'	24.6	8.0'
12'	13.8	10.6'

Beam Angle: 48° x 54°