

Project:	Type:
Product Code:	Date:

V062024



2" Square Downlight

**SMALL APERTURE** Delivers the ultimate in quiet ceiling designs

**PRECISION LOCK COLLAR** Eliminates over-cutting and ensures perfect cutout

**ARCHITECTURE-GRADE** Deep die-cast aluminum knife edge trim provide unmatched precision and exceptionally easy installation

**DIMMING COMPATIBILITY GUARANTEED** In-house designed integrated driver ensures seamless compatibility with every major lighting control system

INSTALLATION

Ceiling Thickness

New Construction: 1/2" up to 1 1/4"

Remodel: 5/8" up to 1 1/4"

Ceiling Material

Drywall, Millwork

TRIMS

Style

Standard, Wall Wash, Pinhole, Micro Flange, Flangeless, Decorative

Finish

White, Black, Bronze, Clear Diffuse, Warm Diffuse, Custom (RAL colors)

LIGHT OUTPUT & DISTRIBUTION

Module

Downlight

Lumens (Power)

750 lm (9.5W), 1000 lm (12.5W), 1250 lm (14.3W)

Color Quality

True Spectrum™

Color Temperature

- 2700K

3000K

3500K
- 4000K

Warm Dim (3000K–1800K)
- Tunable White (4000K–1800K)

Beam Spread

- Narrow Spot (20°)

Spot (30°)
- Flood (40°)

Wide Flood (50°)
- Linear Spread (50°x30°)

POWER & CONTROLS

Input Voltage

120 / 277V

Dimming

TRIAC/ELV (1%, 120V only), DALI-2 (0.1%)

RATINGS & CERTIFICATIONS

- IC (Insulation Contact) Rated\*

ASTM E283 Certified Air Tight

Chicago Plenum

UL Listed for Wet Location

RoHS Compliant

DarkSky Approved\*\*

\* New Construction only; IC for Roll, Batt, Loose Fill and Spray Foam see Housing section for details

\*\*Downlight only, CCT less than or equal to 3000K, non-decorative trims only

WARRANTY

10 year limited warranty; 50,000 hours

## PRODUCT BUILDER

## SQUARE HOUSING

PRODUCT CODE		INSTALLATION		SHAPE	
<input type="text"/>		<input type="text"/>		<input type="text"/>	
<b>X2</b>	2" Housing	<b>NC</b>	New Construction	<b>S</b>	Square
		<b>CP</b>	Chicago Plenum		
		<b>RM</b>	Remodel <sup>1</sup>		

<sup>1</sup> Non-IC installation only, flanged trims only; Not available with DALI-2 dimming; Not available for wood ceiling

## MODULE

PRODUCT CODE		LUMENS		COLORMETRIC		CCT		BEAM SPREAD		DIMMING	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<b>ART2D</b>	Downlight	<b>07</b>	750 lm	<b>T</b>	True Spectrum™	<b>27</b>	2700K	<b>NS</b>	Narrow Spot (20°)	<b>T</b>	TRIAC/ELV
		<b>10</b>	1000 lm			<b>30</b>	3000K	<b>SP</b>	Spot (30°)	<b>D</b>	DALI-2 <sup>4</sup>
		<b>12</b>	1250 lm			<b>35</b>	3500K	<b>FL</b>	Flood (40°)		
						<b>40</b>	4000K	<b>WF</b>	Wide Flood (50°)		
						<b>3W</b>	Warm Dim (3000K - 1800K) <sup>2</sup>	<b>LS</b>	Linear Spread (50°x30°)		
						<b>T1</b>	Tunable White (4000K - 1800K) <sup>3</sup>				

<sup>2</sup> Only available in 1000 lm; Not available in Narrow Spot beam spread

<sup>3</sup> Only available in 1000 lm, DALI-2 dimming

<sup>4</sup> Only available in 1000 lm for Tunable White CCT and Warm Dim or 1250 lm with static CCT

## SQUARE TRIM

PRODUCT CODE		FINISH		OPTION	
<input type="text"/>		<input type="text"/>		<input type="text"/>	
<b>X2TSDS</b>	2" Standard Trim	<b>WH</b>	White	<b>[Blank]</b>	None
<b>X2TSDW</b>	2" Wall Wash Trim <sup>5,6</sup>	<b>BK</b>	Black	<b>MF</b>	Micro Flange <sup>6</sup>
<b>X2TSDP</b>	2" Pinhole Trim <sup>6,7</sup>	<b>BZ</b>	Bronze	<b>FL</b>	Flangeless <sup>6,8,9</sup>
		<b>CW</b>	Clear Diffuse, White Flange	<b>DO</b>	Decorative: Open <sup>10</sup> (Coming Soon)
		<b>WW</b>	Warm Diffuse, White Flange	<b>DF</b>	Decorative: Float <sup>10</sup> (Coming Soon)
		<b>CC</b>	Custom (RAL colors)		

<sup>5</sup> Recommended with Wide Flood beam spread;  
Not available in Custom color finish

<sup>6</sup> Not available in Clear or Warm Diffuse finish

<sup>7</sup> Not available in Custom color finish

<sup>8</sup> Requires Flangeless Mud or Wood Kit

<sup>9</sup> Not compatible with Remodel Housing

<sup>10</sup> Only available in 750 lm, Standard style, White finish



PRODUCT BUILDER

OPTICS

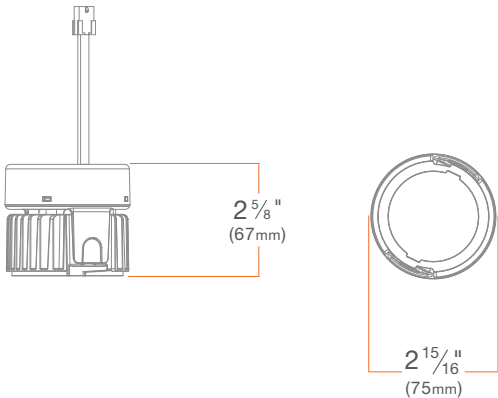
DXOP	Bundled Downlight Optics Kit <i>(Includes Narrow Spot, Spot, Flood, Wide Flood and Linear Spread)</i>
DXNS	Narrow Spot (20°) Optic
DXSP	Spot (30°) Optic
DXFL	Flood (40°) Optic
DXWF	Wide Flood (50°) Optic
DXLS	Linear Spread (50°x30°) Optic
DXHD	High Diffusion Front Lens <i>(Can be paired with all beam spreads to provide extra diffusion; Only available as an optical accessory)</i>
DXCD	Clear Front Lens <i>(Can be paired with all beam spreads to decrease diffusion and define edges; Only available as an optical accessory)</i>

ACCESSORIES

X2KSMUD	Flangeless Mud Kit <i>(Required for New Construction installation of Flangeless Trim in drywall ceiling)</i>
X2KSWOOD	Wood Kit <i>(Required for New Construction installation in wood ceiling)</i>
X2KSTEMPLATE	Router Template <i>(Recommended for routing 3 1/4" [82mm] cutout in wood ceiling)</i>
X2KSRETRO6	6" to 2" Retrofit Conversion Kit



MODULE



SUMMARY

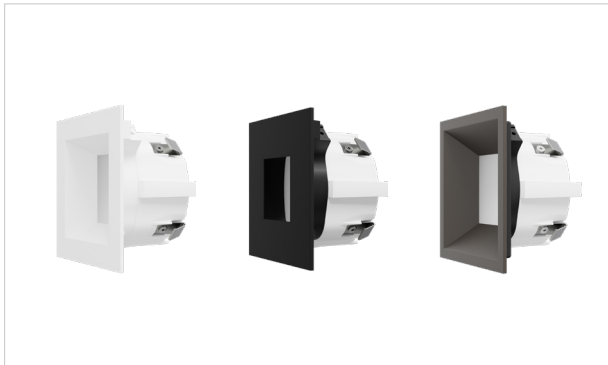
	STATIC CCT	WARM DIM	TUNABLE WHITE
CCT	2700K, 3000K, 3500K, 4000K	3000K - 1800K	4000K - 1800K
LUMENS (POWER)	750 lm (9.5W), 1000 lm (12.5W), 1250 lm (14.3W)	1000 lm (12.0W)	1000 lm (14.3W)
EFFICACY	79 lm/W, 80 lm/W, 87 lm/W	83 lm/W	70 lm/W
COLOR QUALITY	True Spectrum™ 98 CRI, 2-step SDCM	True Spectrum™ 93 CRI, 2-step SDCM	True Spectrum™ 93 CRI, 3-step SDCM
BEAM SPREAD	Narrow Spot (20°), Spot (30°), Flood (40°), Wide Flood (50°), Linear Spread (50° x 30°)	Spot (30°), Flood (40°), Wide Flood (50°), Linear Spread (50° x 30°)	Spot (30°), Flood (40°), Wide Flood (50°), Linear Spread (50° x 30°)
DIMMING	TRIAC/ELV, DALI-2	TRIAC/ELV, DALI-2	DALI-2
LED CHIP	Cree Pro9	Bridgelux	Bridgelux
LISTINGS	ENERGY STAR® qualified*, California Title 24 2019–2022 JA8-E compliant, UL Listed for Wet Location, UL Certified US-CA, Declare, RoHS compliant		

\* Refer to ENERGY STAR Certified light fixtures database

ADDITIONAL

INPUT VOLTAGE: 120/277V, 50/60Hz	TOTAL HARMONIC DISTORTION: Less than 20%
MAX INPUT CURRENT (120V): 0.13 amps	AMBIENT OPERATING TEMPERATURE: -20°C to 40°C
MAX INPUT CURRENT (277V): 0.06 amps	WARRANTY: 10 year limited warranty; 50,000 hours at 70% lumen maintenance
CONNECTOR: 6-pin Molex	
POWER FACTOR: Greater than 0.9	

## TRIMS



### SUMMARY

**CONSTRUCTION:** Die-cast aluminum

**FINISH:** Wet paint

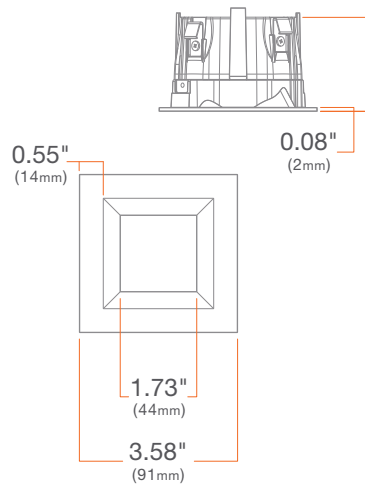
**DECORATIVE:** Acrylic diffuser

**INSTALLATION:** Precision Lock Collar included with Flanged or Micro Flange Trim and Flangeless Mud or Wood Kit

**WARRANTY:** 5 year limited warranty

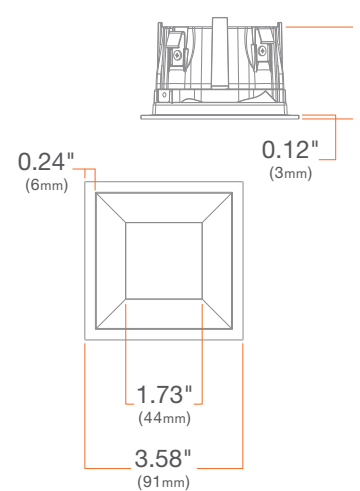
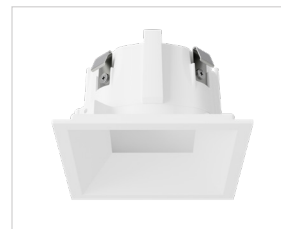
### Standard

#### X2TSDSWH



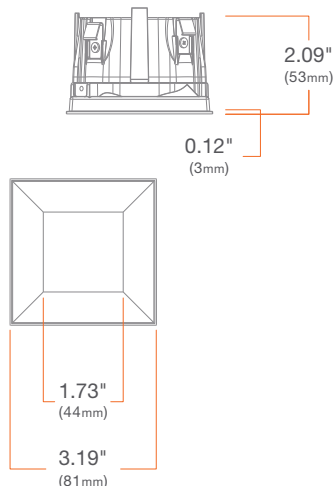
### Standard Micro Flange

#### X2TSDSWHMF



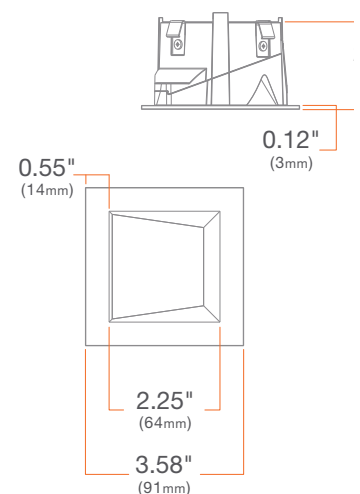
### Standard Flangeless

#### X2TSDSWHFL



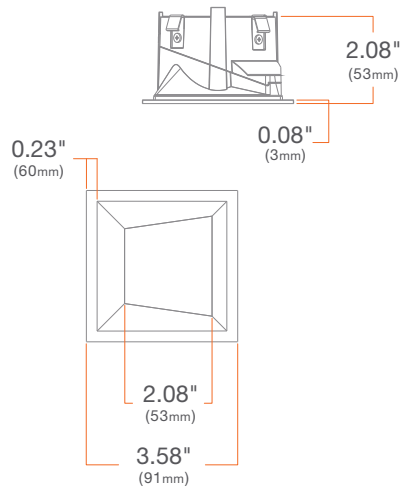
### Wall Wash

#### X2TSDWWH



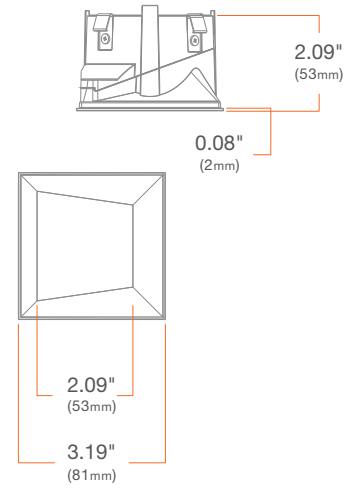
## Wall Wash Micro Flange

**X2TSDWWHMF**



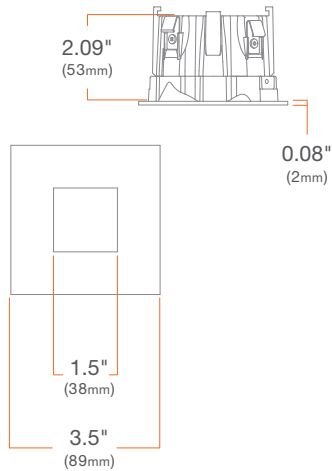
## Wall Wash Flangeless

**X2TSDWWHFL**



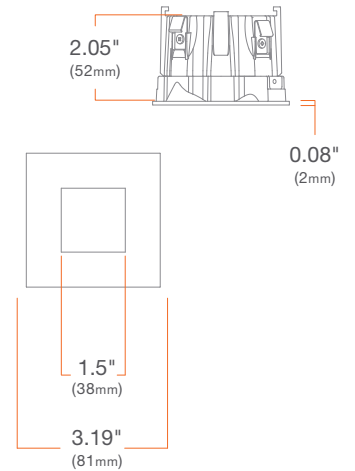
## Pinhole

**X2TSDPWH**



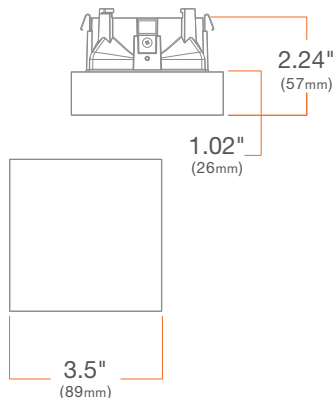
## Pinhole Flangeless

**X2TSDPWHFL**



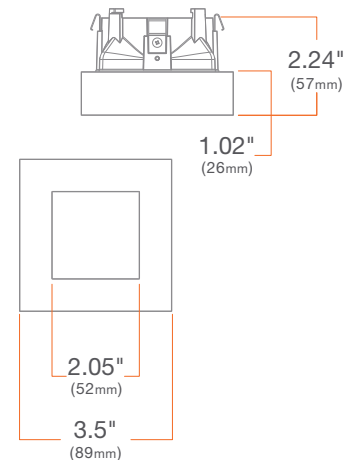
## Decorative: Float

**X2TSDSWHDF**

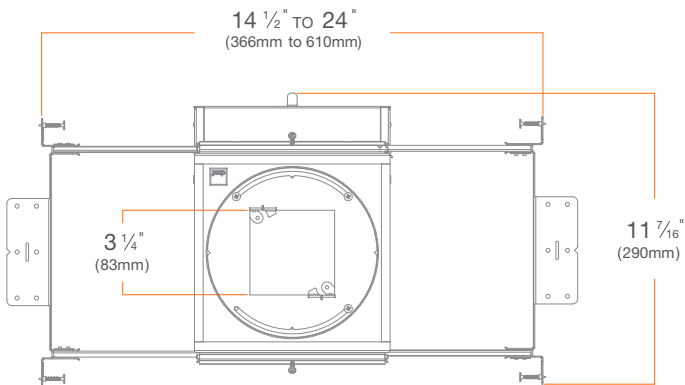
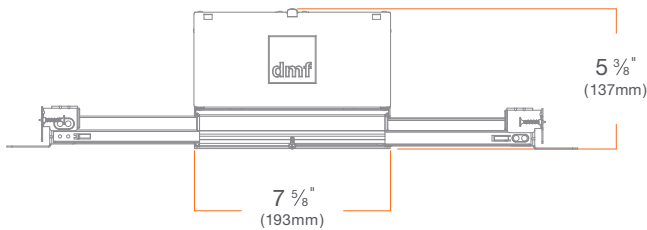
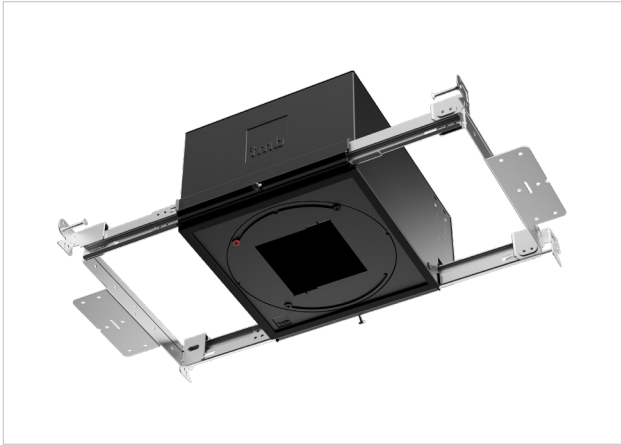


## Decorative: Open

**X2TSDSWHDO**



## HOUSING



## New Construction **X2NCS** Chicago Plenum **X2CPS**

## SUMMARY

**JUNCTION BOX:** Equipped with 10 knockouts: four 1/2" trade size knockouts, two 3/4" trade size knockouts, and four romex knockouts. Approved for 8 (four in, four out) #12 AWG 70°C.

**MOUNTING:** Adjustable Bar Hangers for 14.5" to 24" joist spacing, when bar hangers are broken down, up to 10.5" of joist spacing. Compatible with traditional joists, Armstrong TM ceiling, Hat Channel and T-Bar. Vertical adjustment (0.5"-1.25") through installation of the square collar.

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

**CUTOUT:** 3 1/4" (82mm) square opening

**LISTINGS:** Chicago Plenum, ASTM E283 certified Air Tight, IC (Insulation Contact) up to R-32 for Roll, Batt, and Loose Fill, up to R-60 Spray Foam with standard trims, up to R-32 Spray Foam with other trims or hex louver.

**WARRANTY:** 1 year limited warranty

## HOUSING



### Remodel

**X2RMS**

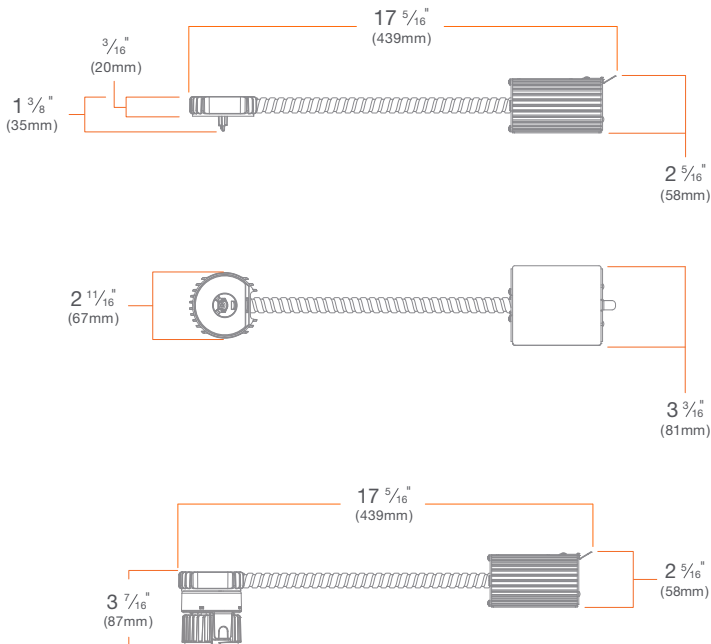
### SUMMARY

**JUNCTION BOX:** Equipped with four knockouts: two 1/2" trade size knockouts and two romex knockouts. Approved for 8 (four in, four out) #12 AWG 70°C.

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

**CUTOUT:** 3 1/4" (82mm) square opening

**WARRANTY:** 1 year limited warranty





**ACCESSORIES**

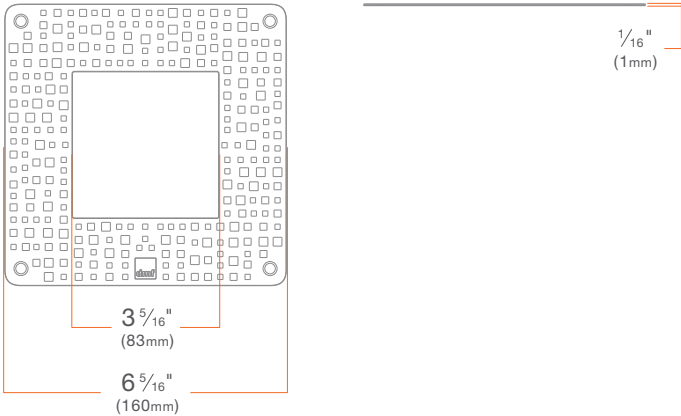


**Flangeless Mud Kit**

**X2KSMUD**

**SUMMARY:** Flangeless Mud Kit (Required for New Construction installation of Flangeless Trim in drywall ceiling)

**CEILING:** 0.5" up to 1.25"

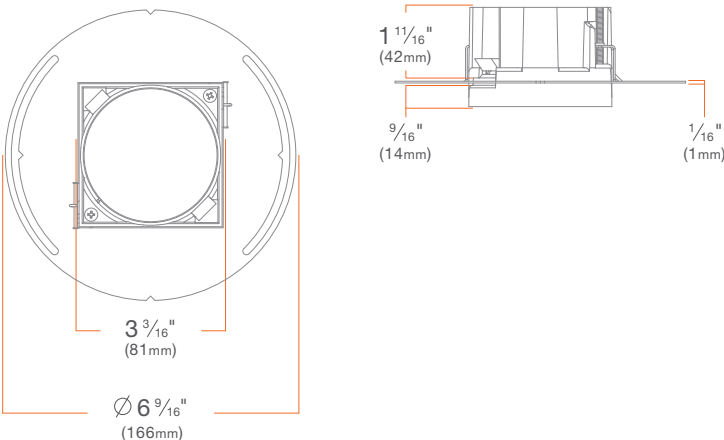


**Wood Kit**

**X2KSWOOD**

**SUMMARY:** Wood Kit (Required for New Construction installation in wood ceiling. Must be mounted on wood before installation to ceiling.)

**CEILING:** 0.5" up to 1.25"

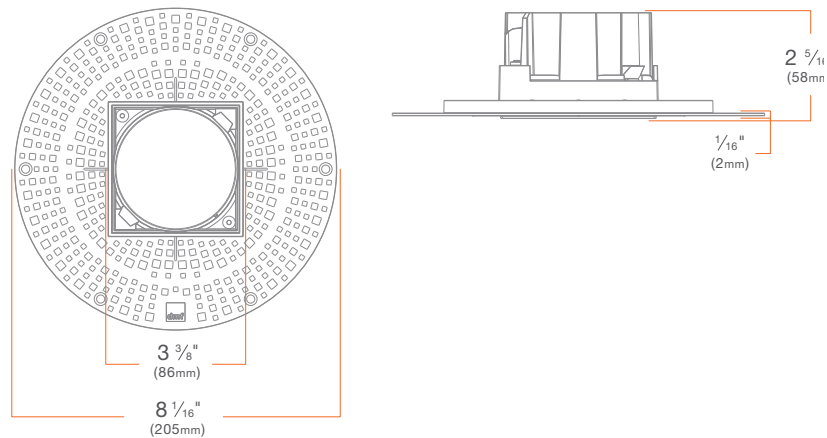


## ACCESSORIES

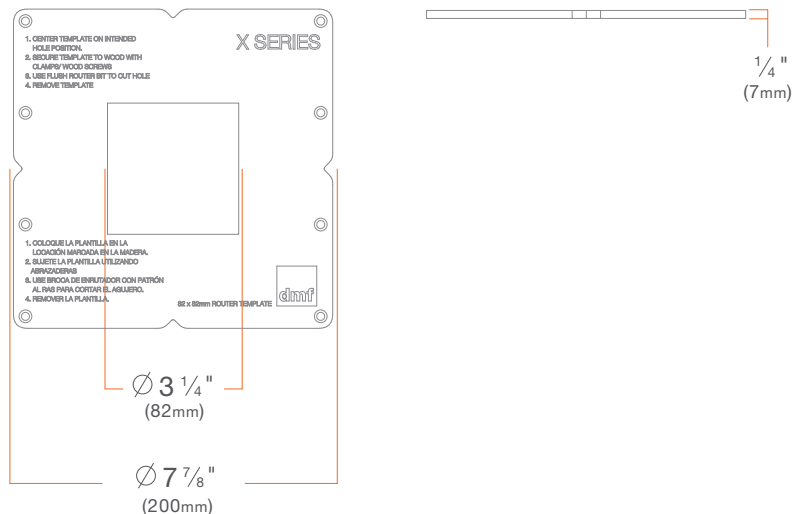
**Retrofit Kit - 6" to 2" Round Conversion****X2KSRETRO6**

**SUMMARY:** Retrofit Conversion Kit (Used to convert existing 6" fixture to a 2" fixture)

**CEILING:** Can be installed in any ceiling thickness

**Router Template****X2KSTEMPLATE**

**SUMMARY:** Router Template (Recommended for routing 3 1/4" [82mm] cutout in wood ceiling)

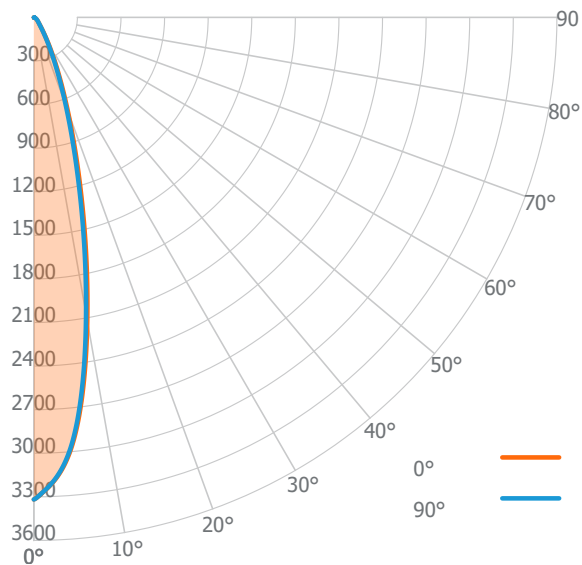


## PHOTOMETRY

1000 lm, 3000K, Narrow Spot **ART2D-10T30NST**

2" Standard White Trim **X2TSDSWH**

Candela Distribution



Luminous Intensity

	0°
0°	3318
5°	2972
10°	2119
15°	1258
20°	682
25°	360
30°	183
35°	97
40°	59
45°	42
50°	31
55°	23
60°	16
65°	11
70°	6
75°	3
80°	2
85°	1
90°	1

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	708	87%
0° - 40°	760	93%
0° - 60°	803	98%
0° - 90°	816	100%
0° - 180°	816	100%

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	368.7 fc	1.3 ft
6 ft	92.2 fc	2.7 ft
9 ft	41.0 fc	4.0 ft
12 ft	23.0 fc	5.3 ft

Input Watts: **12.3 W**

Lumens: **816 lm**

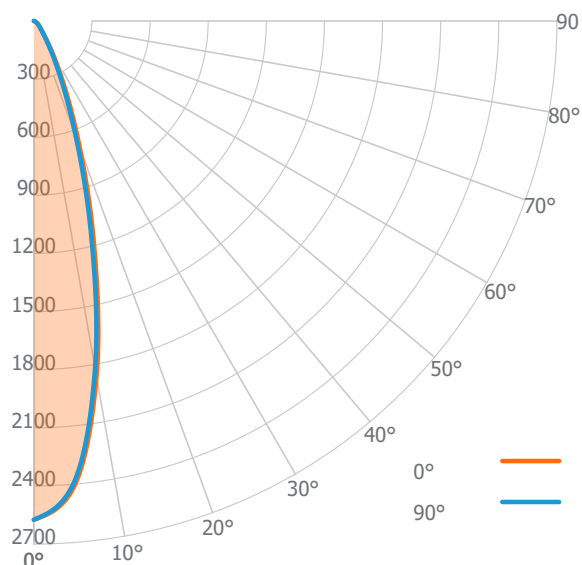
Efficacy: **66 lm/W**

Beam Angle: **25° x 24°**

1000 lm, 3000K, Spot **ART2D-10T30SPT**

2" Standard White Trim **X2TSDSWH**

Candela Distribution



Luminous Intensity

	0°
0°	2574
5°	2408
10°	1863
15°	1203
20°	690
25°	374
30°	198
35°	106
40°	64
45°	44
50°	33
55°	24
60°	17
65°	11
70°	6
75°	3
80°	2
85°	1
90°	0

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	652	85%
0° - 40°	709	92%
0° - 60°	754	98%
0° - 90°	767	100%
0° - 180°	767	100%

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	286.0 fc	1.5 ft
6 ft	71.5 fc	3.1 ft
9 ft	31.8 fc	4.6 ft
12 ft	17.9 fc	6.1 ft

Input Watts: **12.0 W**

Lumens: **767 lm**

Efficacy: **64 lm/W**

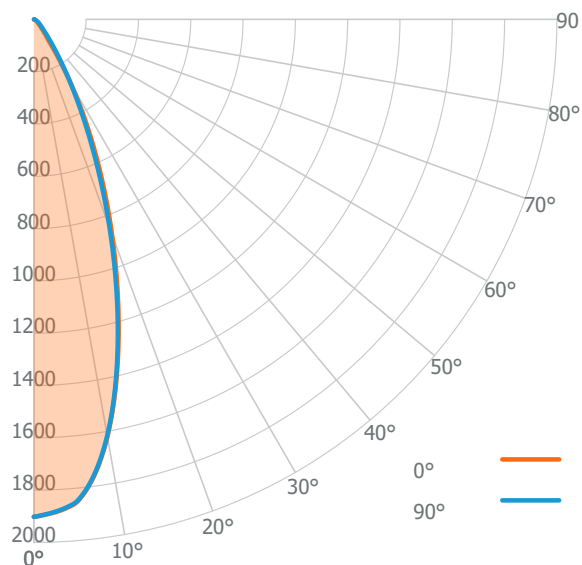
Beam Angle: **29° x 28°**

## PHOTOMETRY

1000 lm, 3000K, Flood **ART2D-10T30FLT**

2" Standard White Trim **X2TSDSWH**

Candela Distribution



Luminous Intensity

	0°
0°	1902
5°	1855
10°	1620
15°	1252
20°	874
25°	546
30°	283
35°	99
40°	52
45°	30
50°	20
55°	14
60°	10
65°	7
70°	4
75°	2
80°	2
85°	1
90°	1

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	693	85%
0° - 40°	763	94%
0° - 60°	801	99%
0° - 90°	813	100%
0° - 180°	813	100%

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	211.3 fc	2.1 ft
6 ft	52.8 fc	4.1 ft
9 ft	23.5 fc	6.2 ft
12 ft	13.2 fc	8.2 ft

Input Watts: **12.0 W**

Lumens: **813 lm**

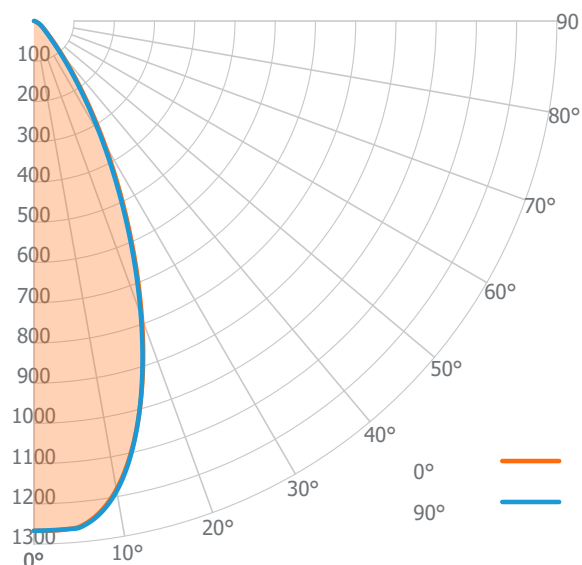
Efficacy: **68 lm/W**

Beam Angle: **38° x 37°**

1000 lm, 3000K, Wide Flood **ART2D-10T30WFT**

2" Standard White Trim **X2TSDSWH**

Candela Distribution



Luminous Intensity

	0°
0°	1267
5°	1263
10°	1182
15°	1011
20°	785
25°	549
30°	349
35°	199
40°	107
45°	60
50°	38
55°	27
60°	19
65°	12
70°	7
75°	4
80°	3
85°	1
90°	0

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	593	77%
0° - 40°	697	91%
0° - 60°	755	98%
0° - 90°	770	100%
0° - 180°	770	100%

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	140.8 fc	2.6 ft
6 ft	35.2 fc	5.1 ft
9 ft	15.6 fc	7.7 ft
12 ft	8.8 fc	10.3 ft

Input Watts: **12.0 W**

Lumens: **770 lm**

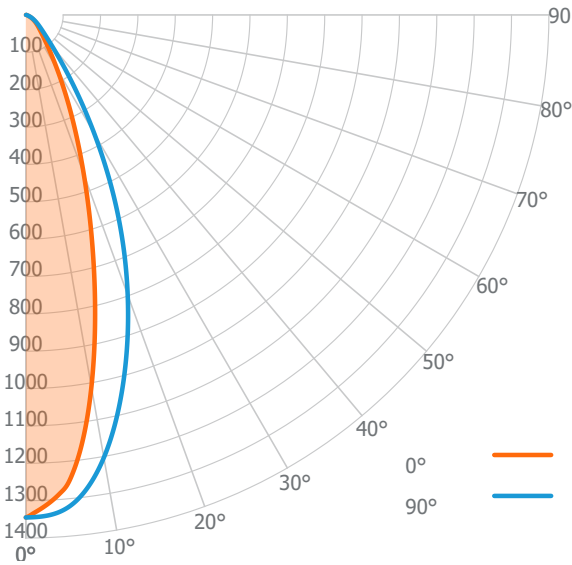
Efficacy: **64 lm/W**

Beam Angle: **46° x 46°**

PHOTOMETRY

1000 lm, 3000K, Linear Spread    **ART2D-10T30LST**  
2" Standard White Trim    **X2TSDSWH**

Candela Distribution



Luminous Intensity

	0°
0°	1345
5°	1264
10°	1011
15°	704
20°	454
25°	280
30°	168
35°	102
40°	68
45°	50
50°	38
55°	28
60°	20
65°	13
70°	7
75°	4
80°	2
85°	1
90°	0

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	507	76%
0° - 40°	591	88%
0° - 60°	652	97%
0° - 90°	670	100%
0° - 180°	670	100%

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	149.5 fc	1.7 ft
6 ft	37.4 fc	3.3 ft
9 ft	16.6 fc	5.0 ft
12 ft	9.3 fc	6.7 ft

Input Watts: **12.0 W**  
Lumens: **670 lm**  
Efficacy: **56 lm/W**  
Beam Angle: **31° x 46°**