

Project:	Type:
Product Code:	Date:

V041024



# 2" Square Adjustable

2" Adjustable delivers high quality light with field changeable optics

**Precision Lock Collar eliminates overcutting** and ensures flush installation

Architectural Trims are wet painted for a rich, matte finish

Integrated Drivers provide smooth dimming, ease of installation and serviceability

#### 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, Micro Flange, Pinhole, Flangeless

### **Finish**

White, Black, Bronze, Clear Diffuse, Warm Diffuse

#### **LIGHT OUTPUT & DISTRIBUTION**

#### Module

Adjustable

#### Adjustment

360° directional aim, 35° tilt

#### Lumens (Power)

500 lm (9.5W), 750 lm (9.5W), 1000 lm (12.5W)

### **Color Quality**

93 CRI, 2-step SDCM

#### **Color Temperature**

2700K



3000K





Warm Dim (3000K-1800K)



4000K

Tunable White (4000K-1800K)



Tunable White (6500K-2700K)

#### **Beam Spread**

Ultra Narrow Spot (10°)

Narrow Spot (20°)



Spot (30°)



Flood (40°)



Wide Flood (50°)



Linear Spread (50°x30°)

#### **POWER & CONTROLS**

#### Input Voltage

120/277V

#### **Dimming**

0-10V (1%), TRIAC/ELV (1%), DALI-2 (0.1%)

#### **RATINGS & CERTIFICATIONS**

IC Insulation Contact Rated (New Construction Only; IC for roll, batt, loose fill and spray foam)

ASTM E283 Certified Air Tight

Chicago Plenum

UL Listed for Damp Location (Flanged Trims Only)

RoHS Compliant

NSF Listed (White and Black Finish Only)

#### WARRANTY

5 year limited warranty; 50,000 hours



















### PRODUCT BUILDER

#### HOUSING

PROI	DUCT CODE	INST	ALLATION	SHAPE	
X2	2" Housing	NC	New Construction	S	Square
		СР	Chicago Plenum		
		RM	Remodel <sup>1</sup>		

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

#### **MODULE**

PRODU	CT CODE	LUM	1ENS	CI	RI	ССТ	2	BEAM	M SPREAD	DIN	MMING
XMA	Adjustable	05	500 lm <sup>3</sup>	9	93 CRI	27	2700K	UN	Ultra Narrow Spot (10°) 6	0	0-10V
		07	750 lm			30	3000K	NS	Narrow Spot (20°)	Т	TRIAC/ELV
		10	1000 lm			35	3500K	SP	Spot (30°)	D	DALI-2 <sup>7</sup>
						40	4000K	FL	Flood (40°)		
						3W	Warm Dim (3000K - 1800K) 4	WF	Wide Flood (50°)		
						T1	Tunable White (4000K - 1800K) 5	LS	Linear Spread (50°x30°)		
						T2	Tunable White (6500K - 2700K) 5				

<sup>&</sup>lt;sup>2</sup> DarkSky approved is only applicable to CCT options less than or equal to 3000K

#### TRIM

PRODUCT	CODE	FINISH		OPTION	
X2TSAS	2" Standard Trim	WH	White	[Blank]	None
X2TSAP	2" Pinhole Trim 8,9	вк	Black	MF	Micro Flange 8
		BZ	Bronze	FL	Flangeless 8,10
		CW	Clear Diffuse, White Flange		
		ww	Warm Diffuse, White Flange		

<sup>&</sup>lt;sup>8</sup> Not available in Clear or Warm Diffuse finish

<sup>&</sup>lt;sup>3</sup> Only available with UN beam spread

<sup>&</sup>lt;sup>4</sup> Only available in 1000 lm; Not available in Narrow Spot beam spread

<sup>&</sup>lt;sup>5</sup> Only available in 750 lm, DALI-2 dimming

<sup>&</sup>lt;sup>6</sup> Only available in 500 lm, not available as an optical accessory

Only available in 750 Im with Tunable White CCT, 1000 Im Warm Dim or 1000 Im with static CCT

<sup>&</sup>lt;sup>9</sup> Not available in Micro flange

Requires Flangeless Mud or Wood Kit in New Construction housings; Not compatible with Remodel Housing





# **PRODUCT BUILDER**

### **OPTICS**

XAXNS	Narrow Spot (20°) Optic
XAXSP	Spot (30°) Optic
XAXFL	Flood (40°) Optic
XAXWF	Wide Flood (50°) Optic
XAXLS	Linear Spread (50°x30°) Optic
XAXOP	Bundled Adjustable Optics Kit (Includes Narrow Spot, Spot, Flood, Wide Flood and Linear Spread)

# **ACCESSORIES**

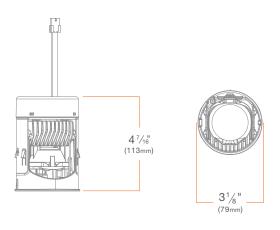
X2KSMUD	Flangeless Mud Kit (Required for New Construction installation of flangeless trim in drywall ceiling)			
X2KSWOOD	X2KSWOOD Wood Kit (Required for New Construction installation of all trims in wood ceiling)			
X2KSTEMPLATE	Router Template (Recommended for routing 3 1/4" [82mm] cutout in wood ceiling)			





#### **MODULE**





#### PERFORMANCE SUMMARY

	STATIC CCT	WARM DIM	TUNABLE WHITE
ССТ	2700K, 3000K, 3500K, 4000K	3000K - 1800K	4000K - 1800K; 6500K - 2700K
LUMENS (POWER)	500 lm (9.5W), 750 lm (9.5W), 1000 lm (12.5W)	1000 lm (12.0W)	750 lm (13.4W)
EFFICACY	40 lm /W, 60 lm/W, 70 lm/W	83 lm/W	56 lm/W
COLOR QUALITY	93 CRI 1, 2-step SDCM	93 CRI 1, 3-step SDCM	93 CRI 1, 3-step SDCM
BEAM SPREAD	Ultra Narrow Spot (10°), Narrow Spot (20°), Spot (30°), Flood (40°), Wide Flood (50°), Linear Spread (50°x30°)	Spot (30°), Flood (40°), Wide Flood (50°), Linear Spread (50°x30°)	Narrow Spot (20°), Spot (30°), Flood (40°), Wide Flood (50°), Linear Spread (50°x30°)
DIMMING	0-10V, TRIAC/ELV, DALI-2	0-10V, TRIAC/ELV, DALI-2	DALI-2
LED CHIP	Cree	Bridgelux	Bridgelux
LISTINGS	'	ornia Title 24 2019-2022 JA8-E Comp compliant, DALI-2 Compliant, NSF/A	oliant, UL Listed for Damp Location, UL NSI 2 Listed 3, Dark Sky Compliant 4
ADJUSTMENT	360° directional aim, 35° tilt		
SLOPE CEILING COMPATIBILITY	Up to 35°		

<sup>&</sup>lt;sup>1</sup> Tested in accordance to IESNA LM-79-2008

#### **ADDITIONAL**

INPUT VOLTAGE: 120/277V, 50/60Hz MAX INPUT CURRENT (120V): 0.11 amps MAX INPUT CURRENT (277V): 0.05 amps

**CONNECTOR:** 6-pin Molex

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

<sup>&</sup>lt;sup>2</sup> Refer to ENERGY STAR Certified light fixtures database

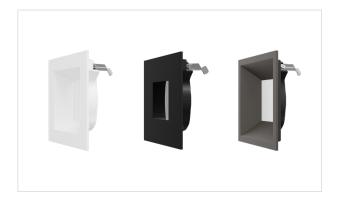
<sup>&</sup>lt;sup>3</sup> In accordance to NSF/ANSI 2 for Splash Zone having designated trim finishes

<sup>&</sup>lt;sup>4</sup> Only applicable to CCT options less than or equal to 3000K and not compatible with decorative trims

X Series



### **TRIMS**



#### **SUMMARY**

**CONSTRUCTION:** Die-cast aluminum

FINISH: Wet paint

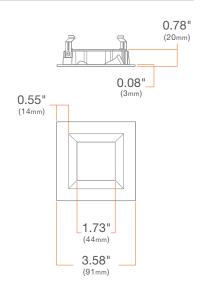
INSTALLATION: Precision Lock Collar included with Flanged or

Micro Flange Trim and Flangeless Mud or Wood Kit

WARRANTY: 5 year limited warranty

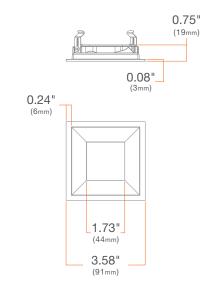
# **Standard**





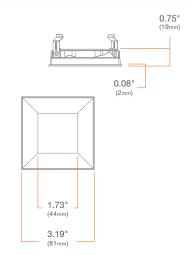
# **Standard Micro Flange**





# **Standard Flangeless**

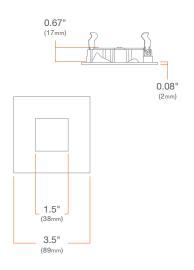




# **Pinhole**

**X2TSAPWH** 







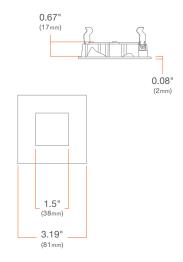
2" Square Adjustable



# **Pinhole Flangeless**

# X2TSAPWHFL

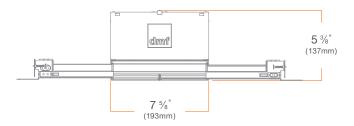


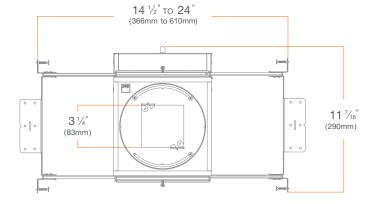




### **HOUSING**







# 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.

**BAR HANGER 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

**WARRANTY:** 5 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"

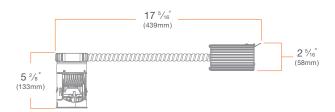
CUTOUT: 3 1/4" (82mm) square opening

LISTINGS: Non-IC

WARRANTY: 5 year limited warranty









### **ACCESSORIES**



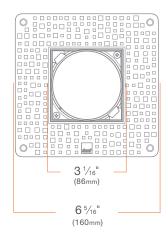
# Flangeless Mud Kit

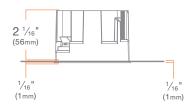
#### **X2KSMUD**

**SUMMARY:** Flangeless Mud Kit (Required for New

Construction installation of Flangeless Trim in drywall ceiling)

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





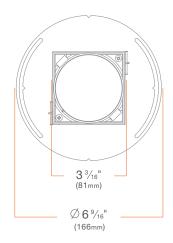


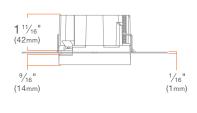
# **Wood Kit**

#### **X2KSWOOD**

**SUMMARY: Wood Kit (Required for New Construction** installation of all trims in wood ceiling)

**CEILING:** 0.5" up to 1"









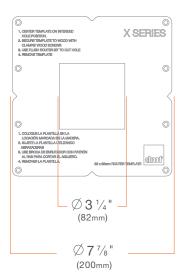
### **ACCESSORIES**



# **Router Template**

### **X2KSTEMPLATE**

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





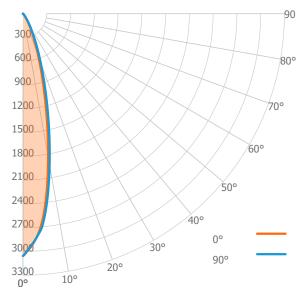


### **PHOTOMETRY**

### 1000 lm, 3000K, Narrow Spot XMA10930NST

2" Standard White Trim X2TSASWH

### Candela Distribution



### Luminous Intensity

	0°
0°	3057
5°	2670
10°	1832
15°	1055
20°	563
25°	294
30°	143
35°	65
40°	29
45°	13
50°	7
55°	6
60°	5
65°	4
70°	3
75°	2
80°	1
85°	1
90°	0

### **Zonal Lumen Summary**

Zone	Lumens	Luminaire %
0° - 30°	686	91%
0° - 40°	732	97%
0° - 60°	749	99%
0° - 90°	755	100%
0° - 180°	755	100%

### Illuminance Chart

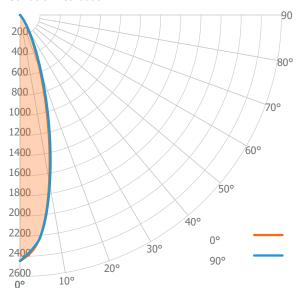
Distance from LED	Foot Candles	Diameter
3 ft	339.6 fc	1.3 ft
6 ft	84.9 fc	2.5 ft
9 ft	37.7 fc	3.8 ft
12 ft	21.2 fc	5.0 ft

Input Watts: 12.0 W Lumens: 755 Im Efficacy: 63 Im/W Beam Angle: 24° x 25°

### 1000 lm, 3000K, Spot XMA10930SPT

2" Standard White Trim X2TSASWH

#### Candela Distribution



### Luminous Intensity

	0°
0°	2445
5°	2231
10°	1679
15°	1055
20°	583
25°	308
30°	158
35°	75
40°	33
45°	15
50°	8
55°	6
60°	5
65°	4
70°	3
75°	2
80°	1
85°	1
90°	0

### **Zonal Lumen Summary**

Zone	Lumens	Luminaire %
0° - 30°	640	89%
0° - 40°	691	97%
0° - 60°	710	99%
0° - 90°	716	100%
0° - 180°	716	100%

#### Illuminance Chart

Foot Candles	Diameter
271.7 fc	1.5 ft
67.9 fc	2.9 ft
30.2 fc	4.4 ft
17.0 fc	5.8 ft
	271.7 fc 67.9 fc 30.2 fc

Input Watts: 12.0 W Lumens: 716 Im Efficacy: 60 Im/W Beam Angle: 27° x 28°

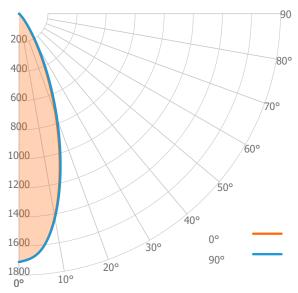


### **PHOTOMETRY**

### 1000 lm, 3000K, Flood XMA10930FLT

2" Standard White Trim X2TSASWH

### Candela Distribution



### Luminous Intensity

	0°
0°	1709
5°	1644
10°	1421
15°	1088
20°	740
25°	448
30°	239
35°	114
40°	50
45°	22
50°	10
55°	6
60°	5
65°	4
70°	3
75°	2
80°	1
85°	1
90°	0

### **Zonal Lumen Summary**

Zone	Lumens	Luminaire %
0° - 30°	653	86%
0° - 40°	730	96%
0° - 60°	755	99%
0° - 90°	762	100%
0° - 180°	762	100%

### Illuminance Chart

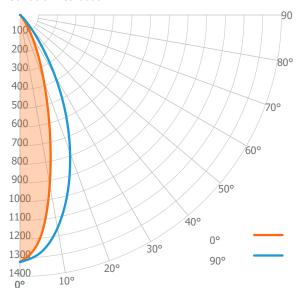
Distance from LED	Foot Candles	Diameter
3 ft	189.8 fc	2.0 ft
6 ft	47.5 fc	4.0 ft
9 ft	21.1 fc	6.0 ft
12 ft	11.9 fc	7.9 ft

Input Watts: 12.0 W Lumens: 762 Im Efficacy: 64 Im/W Beam Angle: 37° x 37°

# 1000 lm, 3000K, Linear Spread XMA10930LST

2" Standard White Trim X2TSASWH

#### Candela Distribution



# Luminous Intensity

0°
1322
1206
920
610
373
221
118
58
28
14
8
6
5
4
3
2
1
1
0

### **Zonal Lumen Summary**

Zone	Lumens	Luminaire %
0° - 30°	509	81%
0° - 40°	591	94%
0° - 60°	619	99%
0° - 90°	628	100%
0° - 180°	628	100%

#### Illuminance Chart

Foot Candles	Diameter
146.9 fc	1.5 ft
36.7 fc	3.0 ft
16.3 fc	4.5 ft
9.2 fc	6.0 ft
	146.9 fc 36.7 fc 16.3 fc

Input Watts: 12.0 W Lumens: 628 Im Efficacy: 52 Im/W Beam Angle: 28° x 46°