



## 2" SQUARE DOWNLIGHT 2000 LUMENS MAX

### UNIVERSAL HOUSINGS WITH INTERCHANGEABLE TRIMS

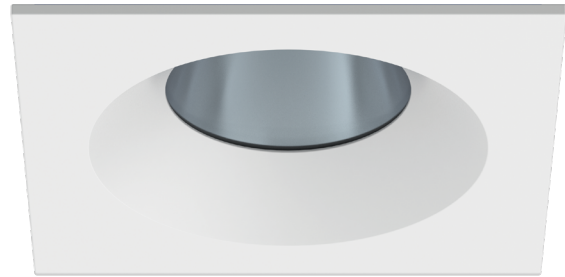
Spectrum's A Spec 2" recessed square downlight series features a shallow plenum housing and variety of trims for accent and general illumination.

LUMENS AND WATTAGE CHART					
PART NUMBER	LUMENS	SOURCE LUMENS <sup>1</sup>	DELIVERED LUMENS <sup>2</sup>	SYSTEM WATTS	LPW
SD2F	XT10L	1000	907	11.1	81.7
SD2F	XT13L	1300	1222	15.0	81.5
SD2F	XT20L	2000	1881	23.7	79.4

PROJECT: \_\_\_\_\_  
QUANTITY: \_\_\_\_\_ TYPE: \_\_\_\_\_



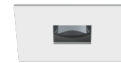
Lensed



Open



Pinhole



Adjustable



### AVAILABLE HOUSING TYPES

**SR2MO** - New Construction / 20L MAX



**SR2MI** - IC New Construction / 13L MAX



**SR2MR** - Remodel Construction / 20L MAX



### FIXTURE HOUSING SPECIFICATION

SERIES		LUMENS <sup>1</sup>		DRIVER / DIMMING / VOLTAGE			OPTIONS	
<b>SR2MO</b>	New Construction	<b>XT10L</b>	1000 Lm	<b>E<sub>-</sub></b>	Electronic Driver	<b>1</b>	<b>120V</b>	<b>H12<sup>5</sup></b>
<b>SR2MI<sup>4</sup></b>	IC New Construction	<b>XT13L</b>	1300 Lm					
<b>SR2MR</b>	Remodel Construction	<b>XT20L</b>	2000 Lm	<b>DS2W1</b>	ELV/MLV, 120V			<b>EMRM</b>
		XN BEAM						
		<b>XN10L</b>	1000 Lm					
		<b>XN13L<sup>4</sup></b>	1300 Lm					

- Die-cast aluminum trim with a wide variety of options.
- Shallow plenum housing.
- Universal housing accepts all trim types, including 2" round trim.
- Performance Xicato LED module for superior reliability and color consistency.
- Interchangeable optics and lenses.
- 5 year warranty on fixture and electronics.
- 10 year warranty on LED CCT.
- Sustainable fixture.
- Zhaga International Standard LED Module for future upgrades.
- 83CRI 2SDCM, 98CRI 1x2SDCM best in industry.

### AVAILABLE TRIM / MODULE TYPES



### TRIM / MODULE SPECIFICATION

TRIM		CCT		OPTICS		FINISH <sup>7</sup>		OPTIONS	
<b>SD2F</b>	Downlight	83 CRI		<b>XN<sup>6</sup></b>	14°	<b>MW<sup>8</sup></b>	Matte White	<b>NL</b>	No Lens
<b>SI2F</b>	15° Adjustable	<b>27K</b>	2700K						
<b>SH2F</b>	Pinhole	<b>30K</b>	3000K	<b>WD</b>	51°	<b>PT</b>	Platinum Silver	<b>SO</b>	Micro Prism Solite™ Lens
<b>SHI2F</b>	15° Adjustable Pinhole	<b>35K</b>	3500K			<b>OB</b>	Oil Rubbed Bronze	<b>FG</b>	Frosted Glass Lens
		<b>40K</b>	4000K			<b>CH</b>	Charcoal		
		98 CRI ARTIST				<b>AS</b>	Sapphire		
		<b>27HK</b>	2700K			<b>AM</b>	Malachite		
		<b>30HK</b>	3000K			<b>SN</b>	Sun Gold		
		<b>35HK</b>	3500K			<b>CO</b>	Copper Metallic		
		<b>40HK</b>	4000K			<b>GH</b>	Graphite		
						<b>CC<sup>9</sup></b>	Custom Color		

EXAMPLE: SR2MOXT10LDS2W1/H12EB/SD2F27KMDCHNL

### NOTES:

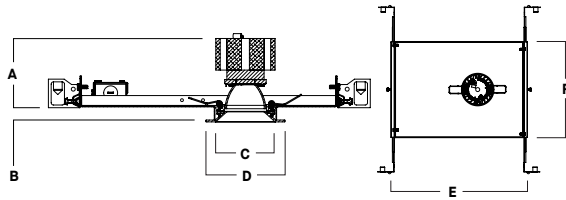
1 Nominal Source Lumens at Any CCT 2 Nominal Delivered Lumens 83 CRI at Any CCT with MD-MW-NL Trim 3 IC New Construction not Available in XN Beam or XT20L  
4 Not Available with HK 5 Standard Bar Hangers 6 9mm, 13L Max, All XN Draw More Watts Than Other Optics; See Photometry 7 Inside Trim And Flange Will Match Color Specified 8 Standard Finish 9 Contact Factory for Special Finishes 10 Standard Lens 11 Otherwise Flange Is Same Color As Interior Of Trim



## HOUSING DIMENSIONS

### SR2MO - NEW CONSTRUCTION / 20L MAX

Non-IC rated, thermally protected frame-in kit for new construction. Non-IC designation requires insulation must be minimum of 3" from housing.



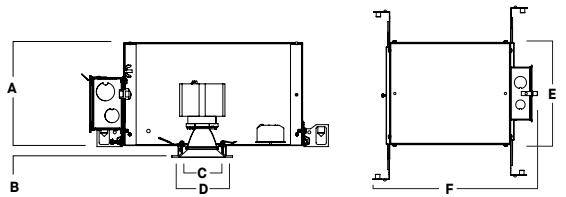
A	B	C	D	E	F
4.2	.625	2.82	3.75	12.9	9.1
106.7 mm	15.2 mm	71.6 mm	95.3 mm	327.7 mm	231.1 mm

Fixture Weight: 4.0 lbs

Ceiling Cutout: Ø 3"

### SR2MI - IC NEW CONSTRUCTION / 13L MAX

IC rated frame-in kit for new construction with direct insulation contact.



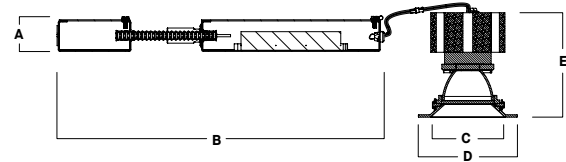
A	B	C	D	E	F
6.4	.625	2.82	3.75	9.8	15.4
162.6 mm	15.2 mm	71.6 mm	95.3 mm	248.9 mm	391.2 mm

Fixture Weight: 5.0 lbs

Ceiling Cutout: Ø 3"

### SR2MR - REMODEL CONSTRUCTION / 20L MAX

Non-IC rated frame-in kit for existing construction. Non-IC designation requires insulation must be minimum of 3" from housing.



A	B	C	D	E
1.5	13.9	2.82	3.75	4.8
38.1 mm	353.1 mm	71.6 mm	95.3 mm	121.9 mm

Fixture Weight: 2.0 lbs

Ceiling Cutout: Ø 3"

## FEATURES

### NEW CONSTRUCTION

Precision Die-formed 20 gauge galvanized steel housing and integral junction box with (1) 7/8" knockout for Non-IC (not designed for through branch circuit wiring) and (1) 5/8", (3) 7/8" and 2 (1") knockouts for IC. Junction box capacity: 8 12AWG rated for 90 °C. Tool-less driver and junction box access for ease of maintenance. Posi-loc trim retention springs for 5/8"-1" ceiling thickness. For thicker ceilings consult factory.

### REMODEL CONSTRUCTION

Features tethered power supply and junction box with sheathed wire, (1) 7/8" knockout, and (1) 5/8" Knockout.

### MOUNTING

A variety of mounting bars are available (excluding remodel). Ceiling materials must be rigid to support luminaire frame.

### DRIVER

Several constant current dimming drivers are available. Power factor >.9 typical, 50/60Hz, 350-1050mA.

### TRIM

Self-flanged, one-piece, die-cast aluminum finished in a variety of powdercoat options. Inside trim and flange are finished in same color unless otherwise specified (WF= White Flange).

### LUMEN OUTPUT

Optics maintain 1000-2000 lumens range.

### LED

Zhaga compatible high performance Xicato module. Proprietary phosphor technology provides consistent and stable color with CCT control of +/- 100K over life of light engine.

### EMERGENCY

Remote 7W emergency battery options are available. Operates for 90 minutes and produces nominal 450 lumens.

### FUSING

Integral optional fast blow fuse with fuse holder.

### COLOR VARIATION

Standard CRI (83) within 2-step MacAdam Ellipse. High CRI (98) within 1x2-step MacAdam Ellipse.

### LISTINGS

ETL Certified to meet US and Canadian Standards.

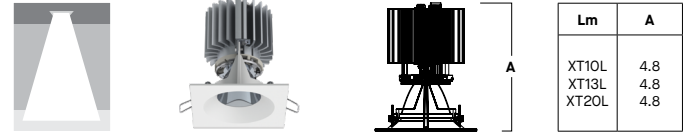
Manufactured and tested to UL standard No. 1598/8750. BAA compliant. Insulated Ceiling (IC) options available.

### WARRANTY

Fixtures, LEDs and drivers carry 5 year Spectrum warranty, as well as individual OEM warranty. Warranty is 5 years from date of manufacturing. LED system rated for operation in an ambient temperatures up to 25 °C.

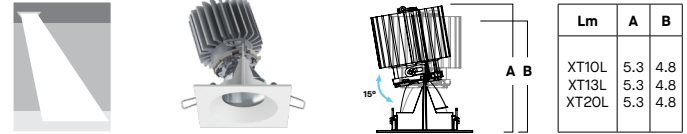
## TRIM / MODULE DATA

### SD2F - DOWNLIGHT MODULE



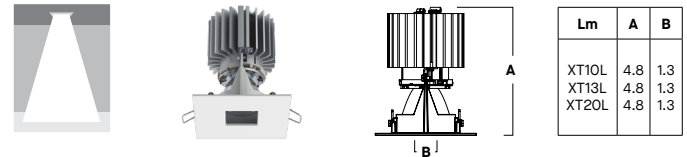
Lm	A
XT10L	4.8
XT13L	4.8
XT20L	4.8

### SI2F - 15° ADJUSTABLE MODULE



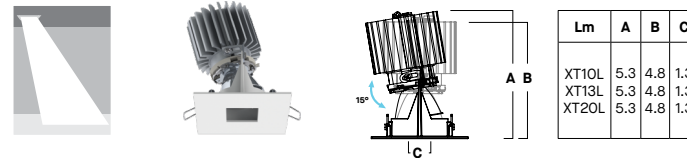
Lm	A	B
XT10L	5.3	4.8
XT13L	5.3	4.8
XT20L	5.3	4.8

### SH2F - PINHOLE MODULE



Lm	A	B
XT10L	4.8	1.3
XT13L	4.8	1.3
XT20L	4.8	1.3

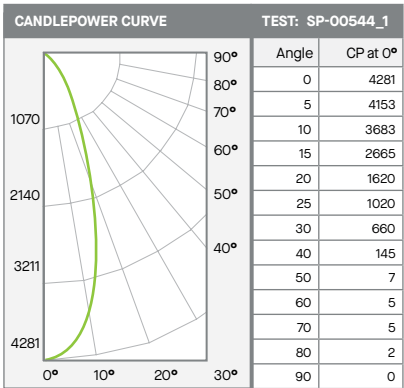
### SHI2F - 15° ADJUSTABLE PINHOLE MODULE



Lm	A	B	C
XT10L	5.3	4.8	1.3
XT13L	5.3	4.8	1.3
XT20L	5.3	4.8	1.3

# PHOTOMETRIC DATA - 2" SQUARE

## SR2MRx-XT20L-E1-xD2F-xxK-MD-MW-NL



ZONAL LUMENS		
0-10	383	20%
0-20	1120	60%
0-30	1602	85%
0-40	1828	97%
0-60	1870	99%
0-80	1879	100%
0-90	1881	100%
Total Lumens	1881	100%

## 20L MEDIUM - 83 CRI

SINGLE UNIT: PERFORMANCE			
INITIAL FOOTCANDLES AND BEAM ANGLE DIAMETERS			
Mounting Height*	FC at Center	Diameter of Beam**	FC at Beam**
5.5'	142	3.5'	64
6.5'	101	4.1'	46
7.5'	76	4.7'	35
8.5'	59	5.4'	27
10'	43	6.3'	19
12'	30	7.6'	14
14'	22	8.8'	10
16'	17	10.1'	8

\* From aperture to horizontal surface below.  
\*\* At IESNA defined Beam Angle, to 50% Max. CP.

MULTIPLE UNITS: PERFORMANCE					
80/50/20% REFLECTANCES					
INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT					
Ceiling Height	Fixture Spacing	RCR 4		RCR 6	
		FC*	W/Sq. Ft.	FC*	W/Sq. Ft.
8'	5' **	40	0.53	37	0.54
12'	8' ***	32	0.42	36	0.53
16'	10' **	18	0.24	21	0.3
Delivered Illuminance Rating: (DIR)		75 FC per W/Sq. Ft.		68 FC per W/Sq. Ft.	

Square Rooms used for Multiple Units:  
- RCR 4: Length & Width = Ceiling Ht. x 2.5  
- RCR 6: Length & Width = Ceiling Ht. x 1.66  
\* Average Footcandles at floor  
\*\* Exceeds spacing ratio by 4%  
\*\*\* Exceeds Spacing ratio by 11%

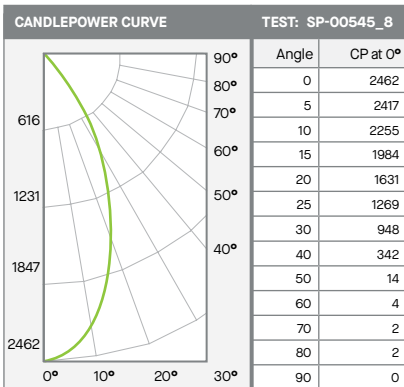
Delivered Lumens: 1881  
Luminaire Watts: 23.7  
LER: 79

CP @ 0° (Nadir): 4281  
CRI: 83

Beam Angle: 35°  
Spacing Ratio: 0.6

FC Multipliers: 10L x 0.482, 13L x 0.65  
W/Sq. Ft. Multipliers: 10L x 0.468, 13L x 0.633

## SR2MRx-XT20L-E1-xD2F-xxK-WD-MW-NL



ZONAL LUMENS		
0-10	225	12%
0-20	777	41%
0-30	1364	72%
0-40	1759	94%
0-60	1900	101%
0-80	1906	101%
0-90	1906	101%
Total Lumens	1906	100%

## 20L WIDE - 83 CRI

SINGLE UNIT: PERFORMANCE			
INITIAL FOOTCANDLES AND BEAM ANGLE DIAMETERS			
Mounting Height*	FC at Center	Diameter of Beam**	FC at Beam**
5.5'	81	5.3'	33
6.5'	58	6.2'	24
7.5'	44	7.2'	18
8.5'	34	8.1'	14
10'	25	9.6'	10
12'	17	11.5'	7
14'	13	13.4'	5
16'	10	15.3'	4

\* From aperture to horizontal surface below.  
\*\* At IESNA defined Beam Angle, to 50% Max. CP.

MULTIPLE UNITS: PERFORMANCE					
80/50/20% REFLECTANCES					
INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT					
Ceiling Height	Fixture Spacing	RCR 2		RCR 4	
		FC*	W/Sq. Ft.	FC*	W/Sq. Ft.
8'	6'	44	0.53	39	0.53
12'	9'	20	0.24	17	0.23
16'	12'	11	0.13	10	0.13
Delivered Illuminance Rating: (DIR)		84 FC per W/Sq. Ft.		74 FC per W/Sq. Ft.	

Square Rooms used for Multiple Units:  
- RCR 2: Length & Width = Ceiling Ht. x 5.0  
- RCR 4: Length & Width = Ceiling Ht. x 2.5  
\* Average Footcandles at floor

Delivered Lumens: 1906  
Luminaire Watts: 23.7  
LER: 80

CP @ 0° (Nadir): 2462  
CRI: 83

Beam Angle: 51.2°  
Spacing Ratio: 0.8

FC Multipliers: 10L x 0.482, 13L x 0.65  
W/Sq. Ft. Multipliers: 10L x 0.468, 13L x 0.633



Spectrum Lighting