



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 ¹	DELIVERED LUMENS ²	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



AVAILABLE HOUSING TYPES

SR2MO - New Construction / 20L MAX



SR2MI - IC New Construction / 13L MAX



SR2MR - Remodel Construction / 20L MAX



FIXTURE HOUSING SPECIFICATION

SERIES		LUMENS ¹		DRIVER / DIMMING / VOLTAGE			OPTIONS						
SR2MO	New Construction	XT10L	1000 Lm	E₋	Electronic Driver	1	120V	H12⁵					
SR2MI⁶	IC New Construction	XT13L	1300 Lm						DS10₋	10%, 0-10V	2	277V	EB
SR2MR	Remodel Construction	XT20L	2000 Lm						DS2W1	ELV/MLV, 120V			EMRM
		XN BEAM											
		XN10L	1000 Lm										
		XN13L⁴	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 ⁷		OPTIONS							
SD2F	Downlight	83 CRI		XN⁸	14°	MW⁸	Matte White	NL	No Lens						
SI2F	15° Adjustable	27K	2700K							MD	35°	MB	Matte Black	GL¹⁰	Clear Glass Lens
SH2F	Pinhole	30K	3000K							WD	51°	PT	Platinum Silver	SO	Micro Prism Solite™ Lens
SHI2F	15° Adjustable Pinhole	35K	3500K									BZ	Bronze	FG	Frosted Glass Lens
		40K	4000K			CH	Charcoal								
		98 CRI ARTIST				OB	Oil Rubbed Bronze								
		27HK	2700K			AS	Sapphire								
		30HK	3000K			AM	Malachite								
		35HK	3500K			SN	Sun Gold								
		40HK	4000K			CO	Copper Metallic								
						GH	Graphite								
						CC⁹	Custom Color								

EXAMPLE: SR2MOXT10LDS2W1/H12EB/SD2F27KMDCHNL

NOTES:

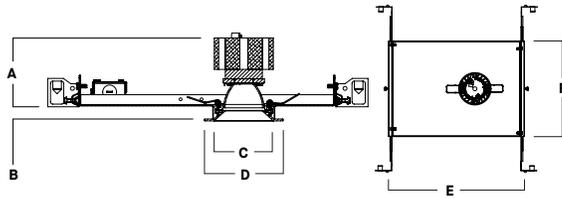
1 Nominal Source Lumens at Any CCT 2 Nominal Delivered Lumens 83 CRI at Any CCT with MD-MW-NL Trim 3 IC New Construction not Available in XN Beam or XT20L
4 Not Available with HK 5 Standard Bar Hangers 6 9mm, 13L Max, All XN Draw More Watts Than Other Optics; See Photometry 7 Inside Trim And Flange Will 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.



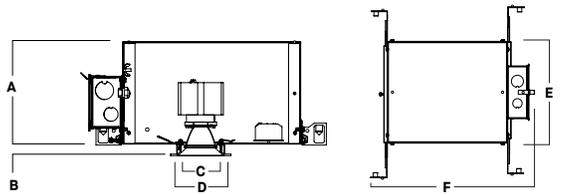
A	B	C	D	E	F
4.2	.625	2.82	3.75	12.9	9.1
106.7 mm	15.2 mm	71.6 mm	95.3 mm	327.7 mm	231.1 mm

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 and CCEA (Chicago Plenum) compatibility.



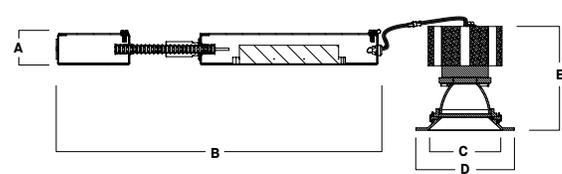
A	B	C	D	E	F
6.4	.625	2.82	3.75	9.8	15.4
162.6 mm	15.2 mm	71.6 mm	95.3 mm	248.9 mm	391.2 mm

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

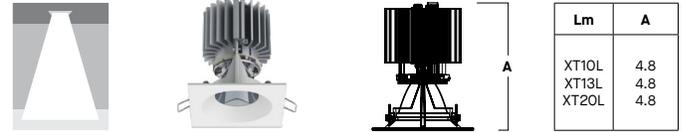
Standard CRI (83) within 2-step MacAdam Ellipse. High CRI (98) within 1x2-step MacAdam Ellipse.

LISTINGS

ETL Certified to meet US and Canadian Standards.

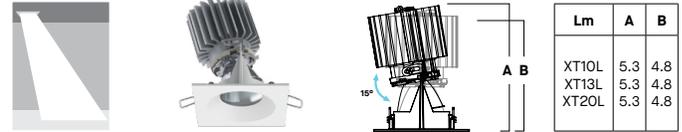
TRIM / MODULE DATA

SD2F - DOWNLIGHT MODULE



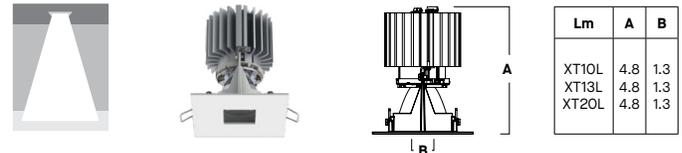
Lm	A
XT10L	4.8
XT13L	4.8
XT20L	4.8

SI2F - 15° ADJUSTABLE MODULE



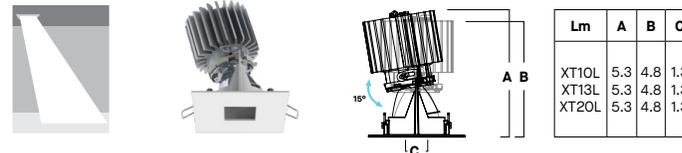
Lm	A	B
XT10L	5.3	4.8
XT13L	5.3	4.8
XT20L	5.3	4.8

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

Manufactured and tested to UL standard No. 1598/8750. BAA compliant. City of Chicago Environmental Air (CCEA), and Insulated Ceiling (IC) options available.

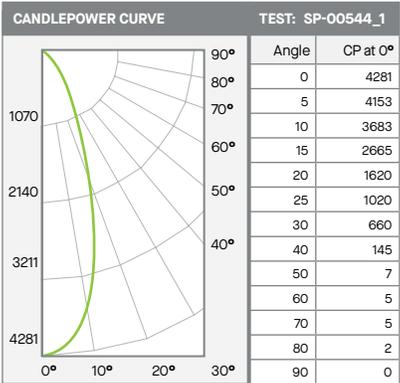
WARRANTY

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.



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%

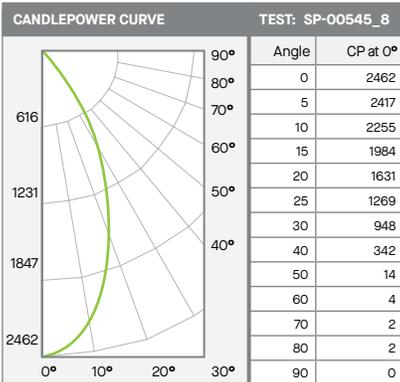
Delivered Lumens: 1881
Luminaire Watts: 23.7
LER: 79

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