a spec

2" ROUND DOWNLIGHT
2000 LUMENS MAX

UNIVERSAL HOUSINGS WITH INTERCHANGEABLE TRIMS

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

Lensed

Open   Pinhole   Adjustable

LUMENS AND WATTAGE CHART

PART NUMBER	LUMENS	SOURCE LUMENS[1]	DELIVERED LUMENS[2]	SYSTEM WATTS	LPW
RD2F	XT10L	1000	907	11.1	81.7
RD2F	XT13L	1300	1222	15.0	81.5
RD2F	XT20L	2000	1881	23.7	79.4

AVAILABLE HOUSING TYPES

SR2MO - New Construction / 20L Max

SR2MI - IC New Construction / 13L Max

SR2MR - Remodel Construction / 20L Max

- Die-cast aluminum trim with a wide variety of options.
- Shallow plenum housing.
- Universal housing accepts all trim types, including 2" square 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 1×2SDCM best in industry.

FIXTURE HOUSING SPECIFICATION

SERIES		LUMENS[1]		DRIVER / DIMMING / VOLTAGE				OPTIONS	
SR2MO	New Construction	XT10L	1000 Lm	E_	Electronic Driver	1	120V	H12[5]	12" - 24" Expandable Bars
SR2MI[3]	IC New Construction	XT13L	1300 Lm	DS10_	10%, 0-10V	2	277V	EB	Black Housing
SR2MR	Remodel Construction	XT20L	2000 Lm	DS2W1	ELV/MLV, 120V			EMRM	Remote Emergency Battery Pack
		XN BEAM							
		XN10L	1000 Lm						
		XN13L[4]	1300 Lm						

AVAILABLE TRIM / MODULE TYPES

RD2F   RI2F   RH2F   RHI2F

TRIM / MODULE SPECIFICATION

TRIM		CCT		OPTICS		FINISH[7]		OPTIONS	
RD2F	Downlight	**83 CRI**		XN[6]	14°	MW[8]	Matte White	NL	No Lens
RI2F	15° Adjustable	27K	2700K	MD	35°	MB	Matte Black	GL[10]	Clear Glass Lens
RH2F	Pinhole	30K	3000K	WD	51°	PT	Platinum Silver	SO	Micro Prism Solite™ Lens
RHI2F	15° Adjustable Pinhole	35K	3500K			BZ	Bronze	FG	Frosted Glass Lens
		40K	4000K			CH	Charcoal	WF[11]	White Flange
		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		
						CC[9]	Custom Color		

**EXAMPLE:** SR2MOXT10LDS2W1/H12EB/RD2F27KMDMWNL

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

LIGHTSOURCE BY XICATO   SUSTAINABLE   ETL   5 YEAR WARRANTY   MADE IN THE USA

Spectrum Lighting

Dimensions and values shown are nominal. Spectrum Lighting continually works to improve products and reserves the right to make changes which may alter the performance or appearance of products.

83-70001_RI

HOUSING DIMENSIONS

SR2MO - NEW CONSTRUCTION / 2OL MAX

Non-IC rated, thermally protected frame-in kit for new construction. Non-IC designation requires insulation must be minimum of 3" from housing.
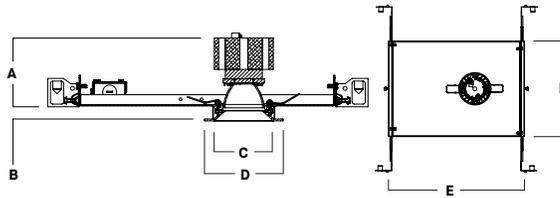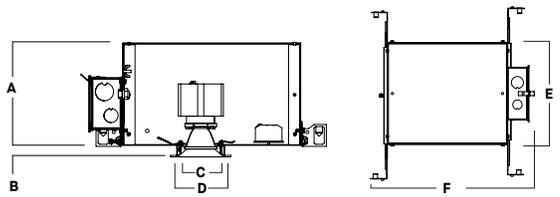
A	B	C	D	E	F
4.2 106.7 mm	.625 15.2 mm	2.82 71.6 mm	3.75 95.3 mm	12.9 327.7 mm	9.1 231.1 mm

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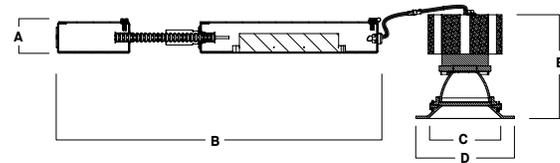
A	B	C	D	E	F
6.4 162.6 mm	.625 15.2 mm	2.82 71.6 mm	3.75 95.3 mm	9.8 248.9 mm	15.4 391.2 mm

Fixture Weight: 5.0 lbs   Ceiling Cutout: Ø 3"

SR2MR - REMODEL CONSTRUCTION / 2OL 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 38.1 mm	13.9 353.1 mm	2.82 71.6 mm	3.75 95.3 mm	4.8 121.9 mm

Fixture Weight: 2.0 lbs   Ceiling Cutout: Ø 3"

TRIM / MODULE DATA

RD2F - DOWNLIGHT MODULE

Lm	A
XT10L	4.8
XT13L	4.8
XT2OL	4.8

RI2F - 15° ADJUSTABLE MODULE

Lm	A	B
XT10L	5.3	4.8
XT13L	5.3	4.8
XT2OL	5.3	4.8

RH2F - PINHOLE MODULE

Lm	A	B
XT10L	4.8	1.5
XT13L	4.8	1.5
XT2OL	4.8	1.5

RHI2F - 15° ADJUSTABLE PINHOLE MODULE

Lm	A	B	C
XT10L	5.3	4.8	1.5
XT13L	5.3	4.8	1.5
XT2OL	5.3	4.8	1.5

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 rentention 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 1×2-step MacAdam Ellipse.
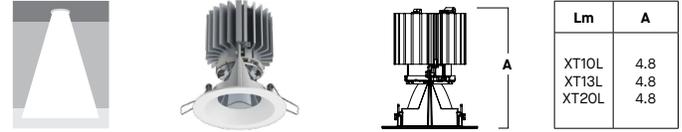
LISTINGS
ETL Certified to meet US and Canadian Standards. Manufactured and tested to UL standard No. 1598/8750. BAA compliant. City of Chicago Environmental Air (CCEA), and Insulated Ceiling (IC) options available.

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.
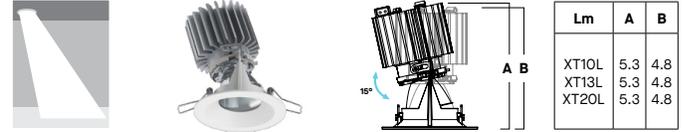
a spec | Spectrum Lighting
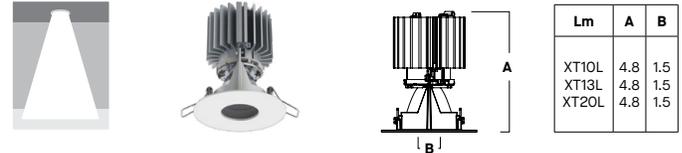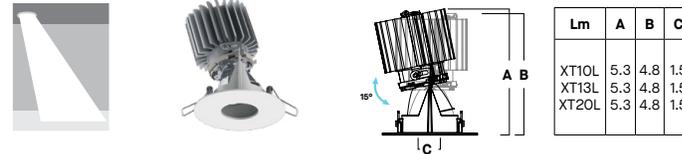
PHOTOMETRIC DATA - 2" ROUND

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

CANDLEPOWER CURVE — TEST: SP-00544_1

Angle	CP at 0°
0	4281
5	4153
10	3683
15	2665
20	1620
25	1020
30	660
40	145
50	7
60	5
70	5
80	2
90	0

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%

Delivered Lumens: 1881
Luminaire Watts: 23.7
LER: 79
CP @ 0° (Nadir): 4281
CRI: 83
Beam Angle: 35°
Spacing Ratio: 0.6

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.

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

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
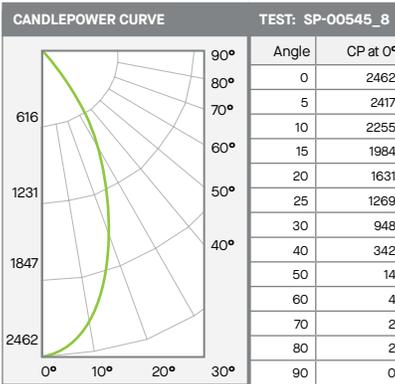** Exceeds spacing ratio by 4%
*** Exceeds Spacing ratio by 11%

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

CANDLEPOWER CURVE — TEST: SP-00545_8

Angle	CP at 0°
0	2462
5	2417
10	2255
15	1984
20	1631
25	1269
30	948
40	342
50	14
60	4
70	2
80	2
90	0

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%

Delivered Lumens: 1906
Luminaire Watts: 23.7
LER: 80
CP @ 0° (Nadir): 2462
CRI: 83
Beam Angle: 51.2°
Spacing Ratio: 0.8

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.

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

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

Spectrum Lighting

ILLUMINATING WHAT'S POSSIBLE.

83-70001_RI