



3" SQUARE DOWNLIGHT

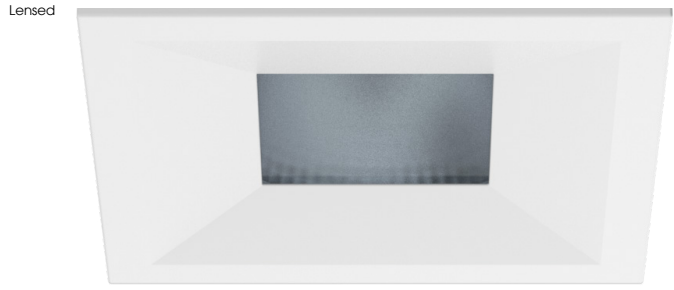
3000 LUMENS MAX

UNIVERSAL HOUSINGS WITH INTERCHANGEABLE TRIMS

Spectrum's A Spec 3" recessed square downlight series features a shallow plenum housing and variety of trims for accent and general illumination.

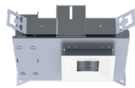
LUMENS AND WATTAGE CHART					
PART NUMBER	LUMENS	SOURCE LUMENS ¹	DELIVERED LUMENS ²	SYSTEM WATTS	LPW
SD3F	XT10L	1000	785	11.1	71
SD3F	XT13L	1300	1058	15	71
SD3F	XT20L	2000	1627	23.7	69
SD3F	XT30L	3000	2441	34.6	71

PROJECT: _____
 TYPE: _____

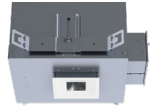


AVAILABLE HOUSING TYPES

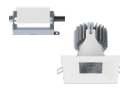
SS3MO - New Construction / 30L Max



SS3MI - IC New Construction / 20L Max



SS3MR - Remodel Construction / 30L Max



FIXTURE HOUSING SPECIFICATION

SERIES		LUMENS ¹		DRIVER / DIMMING / VOLTAGE			OPTIONS	
SS3MO New Construction SS3MI ⁸ IC New Construction SS3MR Remodel Construction		XT10L	1000 Lm	E Electronic Driver 10%, 0-10V DS10 1%, 0-10V DO10 1%, 0-10V DS2W1 ELV/MLV, 120V DLTE1 1% Lutron® 2-Wire Forward Phase, 120V DL3E 1% Lutron® EcoSystem® Fade EL10 1%, eldoLED ED01 0.1%, eldoLED DMXS ^{6,7} DMX Standard Configuration DMXC ^{6,7} DMX Non-Standard Custom BLU Bluetooth LE	1 120V 2 277V	H12 12" - 24" Expandable Bars H06 6" - 12" Expandable Bars BH27 27" Solid Bars CB24 24" C-Channel Bars CH24 24" Chicago Bars FS Fusing EM ¹ Integral Emergency Battery EMRM Remote Emergency Battery Pack EB Black Housing PR2 ² 2" Thick Ceiling Adaptor		
		XT13L	1300 Lm					
		XT20L ⁴	2000 Lm					
		XT30L ^{4,5}	3000 Lm					
		XN BEAM						
		XN10L	1000 Lm					
		XN13L ⁵	1300 Lm					

- Die-cast aluminum trim with a wide variety of options.
- Shallow plenum housing.
- Universal housing accepts all trim types, including N-Line trimless.
- Performance Xicato LED module for superior reliability and color consistency.
- Large selection of dimming and control options.
- Interchangeable optics and lenses.
- See SS3D for 1" deep regress trim and SS3S for super shallow plenum.
- 5 year warranty on fixture and electronics.
- 10 year warranty on LED CCT.
- Bluetooth LE option.
- 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 ¹¹		OPTIONS							
SD3F	Downlight	83 CRI		XN ¹⁰	13°	MW ¹²	Matte White	NL	No Lens						
SA3F⁹	35° Adjustable	27K	2700K							ND	26°	MB	Matte Black	SO	Solite™ Micro Prism Lens
SI3F	15° Adjustable	30K	3000K							MD	40°	PT	Platinum Silver	LW ¹⁴	Wall Wash Spread Lens
SW3F⁹	Wall Wash	35K	3500K							WD	47°	BZ	Bronze	GL	Clear Glass Lens
SH3F	Pinhole	40K	4000K	XW	62°	CH	Charcoal	FG	Frosted Glass Lens						
SP3F	25° Pull Down	98 CRI ARTIST ⁴				OB	Oil Rubbed Bronze	BB	Black Baffle						
		27HK	2700K			AS	Sapphire	PR2 ²	2" Thick Ceiling Adaptor						
		30HK	3000K			SN	Sun Gold	WL ¹⁵	Wet Location						
		35HK	3500K			CO	Copper Metallic	WF ¹⁶	White Flange						
		40HK	4000K			GH	Graphite								
						CC ¹³	Custom Color								

EXAMPLE: SS3MOXT10LDS2W1/H12/SA3F27KMDMWNL

NOTES:

1 Nominal Source Lumens at Any CCT 2 Nominal Delivered Lumens 83 CRI at Any CCT with WD-MW-GL Trim 3 20L Max 4 For 20L HK and 30L Options Install Fixtures in Accordance with the Following Marked Spacing: (a) Center To Center of Adjacent Luminaires: 600mm (24in); (b) Top of Luminaire to overhead Building Member: 39mm (1.5in); (c) Luminaire Center to side Building Member: 300mm (12in) 5 Not Available with HK 6 Contact Factory 7 Not Available with IC 8 ND and XW Optic Not Available 9 XW Optic Only / LW Lens Only 10 9mm, 13L Max, All XN Draw More Watts Than Other Optics; See Photometry 11 Inside Trim And Flange Will Match Color Specified 12 Standard Finish 13 Contact Factory for Special Finishes 14 Standard Lens for Wall Wash 15 SD3F,SA3F,SI3F,SW3F,SH3F Only 16 Otherwise Flange Is Same Color As Interior Of Trim

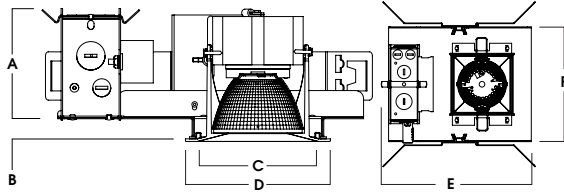
Dimensions and values shown are nominal. Spectrum Lighting continually works to improve products and reserves the right to make changes which may alter the performance or appearance of products.



HOUSING DIMENSIONS

SS3MO - NEW CONSTRUCTION / 30L MAX

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



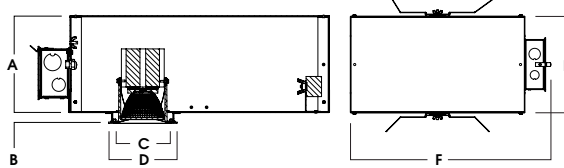
LED	A	B	C	D	E	F
XT10L	3.43	.625	3.8	4.5	9.6	7.6
XT13L	3.67	.625	3.8	4.5	9.6	7.6
XT20L	4.17	.625	3.8	4.5	9.6	7.6
XT30L	4.17	.625	3.8	4.5	9.6	7.6

Fixture Weight: 4.0 lbs

Ceiling Cutout: 4.12 Sq

SS3MI - IC NEW CONSTRUCTION / 20L MAX

IC rated frame-in kit for new construction with direct insulation contact and CCEA (Chicago Plenum) compatibility.



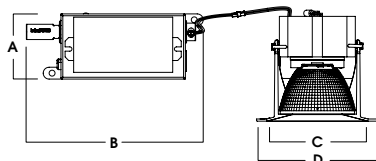
A	B	C	D	E	F
6.4	.625	3.8	4.5	9.5	10L-13L: 13.2
162.6 mm	15.9 mm	96.5 mm	114.3 mm	241.3 mm	20L: 19.2

Fixture Weight: 5.0 lbs

Ceiling Cutout: 4.12 Sq

SS3MR - REMODEL CONSTRUCTION / 30L 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
2.8	7.5	3.8	4.5
71.1 mm	190.5 mm	96.5 mm	114.3 mm

Fixture Weight: 2.0 lbs

Ceiling Cutout: 4" Sq

FEATURES

FRAME-IN KIT

Precision Die-formed 20 gauge galvanized steel housing and integral junction box with (3) 5/8", (3) 7/8" and (2) 1 1/8" knockouts. Junction box capacity: 8 12AWG rated for 90 °C. Tool-less driver and junction box access for ease of maintenance. Post-loc trim retention springs for 5/8"-1" ceiling thickness. Use PR2 for up to 2" thick ceiling. For thicker ceilings consult factory.

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). For trimless options see N-Line.

REMODEL

Features tethered power supply and junction box with sheathed wire.

LUMEN OUTPUT

XN narrow optic restricted to 1300 lumens max. All other optics and kelvins maintain 1000-3000 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

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

DMX

See [DMX Connections and Settings Guide](#) for default configurations. Contact quotes@speclight.com or your local representative for custom solutions.

BLUETOOTH

Integral Bluetooth LE option is available for dimming to .1%, grouping, remote access, electrical feedback and beacon technology.

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

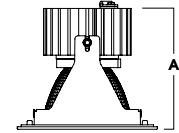
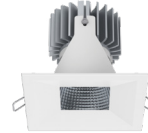
ETL Certified to meet US and Canadian Standards. Manufactured and tested to UL standard No. 1598/8750. BAA compliant. Wet location (WL), City of Chicago Environmental Air (CCEA), and Insulated Ceiling (IC) options available.

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.

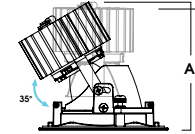
TRIM / MODULE DATA

SD3F - DOWNLIGHT MODULE



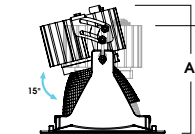
Lm	A
XT10L	3.9
XT13L	3.9
XT20L	4.4
XT30L	4.7

SA3F - 35° ADJUSTABLE MODULE



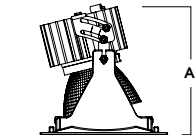
Lm	A	B
XT10L	4.5	4.3
XT13L	4.5	4.3
XT20L	4.9	4.8
XT30L	5.2	5.2

SI3F - 15° ADJUSTABLE MODULE



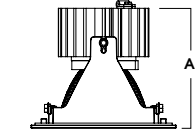
Lm	A	B
XT10L	4.5	4.3
XT13L	4.5	4.3
XT20L	5.0	4.8
XT30L	5.4	5.1

SW3F - WALL WASH MODULE



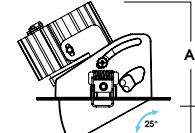
Lm	A
XT10L	4.5
XT13L	4.5
XT20L	5.0
XT30L	5.4

SH3F - PINHOLE MODULE



Lm	A	B
XT10L	3.7	1.9
XT13L	3.7	1.9
XT20L	4.2	1.9
XT30L	4.6	1.9

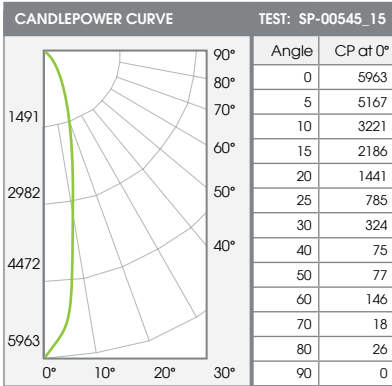
SP3F - 25° PULL DOWN MODULE



Lm	A	B
XT10L	4.8	4.1
XT13L	4.8	4.1
XT20L	5.2	4.6
XT30L	5.5	5.0

PHOTOMETRIC DATA - 3" SQUARE

SS3Mx-XT30L-E1-SD3x-xxK-ND-MW-NL



Delivered Lumens: 2511
 Luminaire Watts: 34.6
 LER: 73

CP @ 0° (Nadir): 5963
 CRI: 83

Beam Angle	0-10	0-20	0-30	0-40	0-60	0-80	0-90	Total Lumens
0-10	496							
0-20	1283	51%						
0-30	1874	75%						
0-40	2175	87%						
0-60	2359	94%						
0-80	2499	100%						
0-90	2511	100%						
Total Lumens	2511	100%						

Beam Angle: 22.3°
 Spacing Ratio: 0.38

30L NARROW - 83 CRI

SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES AND BEAM ANGLE DIAMETERS			
Mounting Height*	FC at Center	Diameter of Beam**	FC at Beam**
5.5'	197	2.2'	95
6.5'	141	2.6'	68
7.5'	106	3.0'	51
8.5'	83	3.4'	40
10'	60	3.9'	29
12'	41	4.7'	20
14'	30	5.5'	15
16'	23	6.3'	11

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

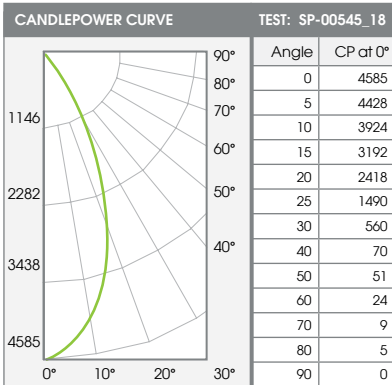
FC Multipliers: 10L x 0.322, 13L x 0.433, 20L x 0.667
 W/Sq. Ft. Multipliers: 10L x 0.320, 13L x 0.433, 20L x 0.685

MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT					
Ceiling Height	Fixture Spacing	RCR 8		RCR 10	
		FC*	W/Sq. Ft.	FC*	W/Sq. Ft.
8'	2.5'	73	1.38	52	1.08
12'	4'	49	0.92	46	0.96
16'	5'	41	0.78	39	0.81

Delivered Illuminance Rating: (DIR) 53 FC per W/Sq. Ft. 48 FC per W/Sq. Ft.

Square Rooms used for Multiple Units:
 - RCR 8: Length & Width = Ceiling Ht. x 1.25
 - RCR 10: Length & Width = Ceiling Ht. x 1.0
 * Average Footcandles at floor

SS3Mx-XT30L-E1-SD3x-MD-MW-NL



Delivered Lumens: 2361
 Luminaire Watts: 34.6
 LER: 68

CP @ 0° (Nadir): 4585
 CRI: 83

Beam Angle	0-10	0-20	0-30	0-40	0-60	0-80	0-90	Total Lumens
0-10	411							
0-20	1315	56%						
0-30	2052	87%						
0-40	2258	96%						
0-60	2341	99%						
0-80	2359	100%						
0-90	2361	100%						
Total Lumens	2361	100%						

Beam Angle: 41.3°
 Spacing Ratio: 0.68

30L 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'	152	4.1'	66
6.5'	109	4.9'	48
7.5'	82	5.7'	36
8.5'	63	6.4'	28
10'	46	7.5'	20
12'	32	9.0'	14
14'	23	10.6'	10
16'	18	12.1'	8

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

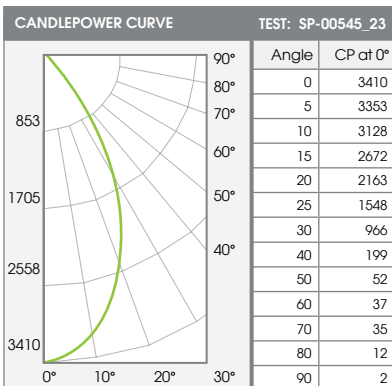
FC Multipliers: 10L x 0.322, 13L x 0.433, 20L x 0.667
 W/Sq. Ft. Multipliers: 10L x 0.320, 13L x 0.433, 20L x 0.685

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'	50	0.78	45	0.79
12'	8'	39	0.62	45	0.78
16'	10'	22	0.35	25	0.44

Delivered Illuminance Rating: (DIR) 63 FC per W/Sq. Ft. 57 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

SS3MRx-XT30L-E1-SD3x-WD-MW-NL



Delivered Lumens: 2441
 Luminaire Watts: 34.6
 LER: 71

CP @ 0° (Nadir): 3410
 CRI: 83

Beam Angle	0-10	0-20	0-30	0-40	0-60	0-80	0-90	Total Lumens
0-10	312							
0-20	1065	44%						
0-30	1818	75%						
0-40	2232	91%						
0-60	2374	97%						
0-80	2435	100%						
0-90	2441	100%						
Total Lumens	2441	100%						

Beam Angle: 47°
 Spacing Ratio: 0.76

30L 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'	113	4.8'	47
6.5'	81	5.7'	34
7.5'	61	6.5'	25
8.5'	47	7.4'	20
10'	34	8.7'	14
12'	24	10.4'	10
14'	17	12.2'	7
16'	13	13.9'	6

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

FC Multipliers: 10L x 0.322, 13L x 0.433, 20L x 0.667
 W/Sq. Ft. Multipliers: 10L x 0.320, 13L x 0.433, 20L x 0.685

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'	56	0.78	49	0.78
12'	9'	25	0.35	22	0.35
16'	12'	14	0.20	12	0.20

Delivered Illuminance Rating: (DIR) 71 FC per W/Sq. Ft. 62 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

