



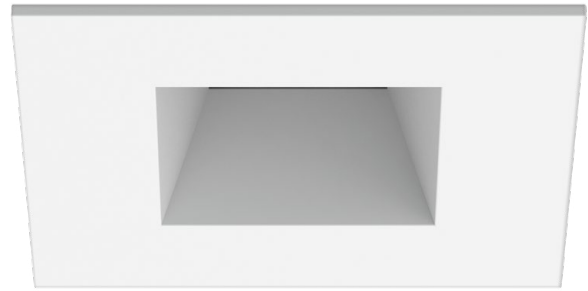
2" SQUARE DEEP DOWNLIGHT 2000 LUMENS MAX

UNIVERSAL HOUSINGS WITH INTERCHANGEABLE TRIMS

Spectrum's A Spec 2" recessed square downlight series features a 2" regressed trim and variety of options for accent and general illumination.

LUMENS AND WATTAGE CHART					
PART NUMBER	LUMENS	SOURCE LUMENS ¹	DELIVERED LUMENS ²	SYSTEM WATTS	LPW
SDD2F	XT10L	1000	501	11.1	45
SDD2F	XT13L	1300	676	15.0	45
SDD2F	XT20L	2000	1039	23.7	44

PROJECT: _____
 QUANTITY: _____ TYPE: _____



AVAILABLE HOUSING TYPES

SR2DMO - New Construction / 20L MAX



SR2DMI - IC New Construction / 13L MAX



SR2DMR - Remodel Construction / 20L MAX



FIXTURE HOUSING SPECIFICATION

SERIES	LUMENS ¹	DRIVER / DIMMING / VOLTAGE	OPTIONS
SR2DMO New Construction	XT10L 1000 Lm	E Electronic Driver DS10 10%, 0-10V DS2W1 ELV/MLV, 120V	H12 12" - 24" Expandable Bars EB Black Housing EMRM Remote Emergency Battery Pack
SR2DMI ³ IC New Construction	XT13L 1300 Lm		
SR2DMR Remodel Construction	XT20L 2000 Lm		
	XN BEAM		
	XN10L 1000 Lm		
	XN13L ⁴ 1300 Lm		

- Die-cast aluminum trim with a wide variety of options.
- Deep regressed trim.
- Universal housing accepts all trim types.
- 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	TRIM FINISH ⁷	OPTIONS
SDD2F Downlight	83 CRI	XN ⁶ 14° MD 35° WD 51°	MW ⁸ Matte White MB Matte Black PT Platinum Silver BZ Bronze CH Charcoal OB Oil Rubbed Bronze AS Sapphire AM Malachite SN Sun Gold CO Copper Metallic GH Graphite CC ⁹ Custom Color	NL No Lens GL ¹⁰ Clear Glass Lens SO Micro Prism Solite™ Lens FG Frosted Glass Lens WF ¹¹ White Flange
	27K 2700K			
	30K 3000K			
	35K 3500K			
	40K 4000K			
	98 CRI ARTIST			
	27HK 2700K			
	30HK 3000K			
	35HK 3500K			
	40HK 4000K			

EXAMPLE: SR2DMOXT10LDS2W1/H12/SDD2F27KMDCHNL

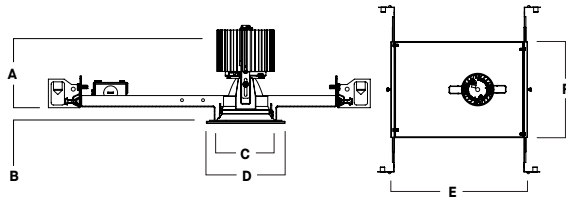
NOTES:
 1 Nominal Source Lumens at Any CCT 2 Nominal Delivered Lumens 83 CRI at Any CCT with MD-MW-GL Trim 3 IC New Construction not Available in XN Beam or XT20L
 4 Not Available with HK 5 Standard Bar Hanger 6 9mm, 13L Max, All XN Draw More Watts Than Other Optics; See Photometry 7 Inside Trim And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

SR2DMO - 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.



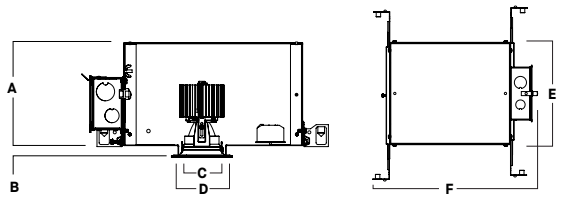
A	B	C	D	E	F
3.9	.625	2.0	3.8	12.9	9.1
99.1 mm	15.2 mm	50.8 mm	96.5 mm	327.7 mm	231.1 mm

Fixture Weight: 4.0 lbs

Ceiling Cutout: Ø 3"

SR2DMI - IC NEW CONSTRUCTION / 13L MAX

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



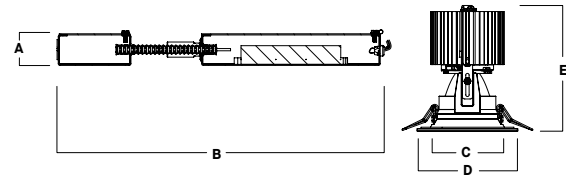
A	B	C	D	E	F
6.4	.625	2.0	3.8	9.8	15.4
162.6 mm	15.2 mm	50.8 mm	96.5 mm	248.9 mm	391.2 mm

Fixture Weight: 5.0 lbs

Ceiling Cutout: Ø 3"

SR2DMR - 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.



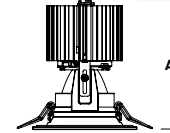
A	B	C	D	E
1.5	13.9	2.0	3.8	4.5
38.1 mm	353.1 mm	50.8 mm	96.5 mm	114.3 mm

Fixture Weight: 2.0 lbs

Ceiling Cutout: Ø 3"

TRIM / MODULE DATA

SDD2F - DOWNLIGHT MODULE



Lm	A
XT10L	3.5
XT13L	3.5
XT20L	4.5

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 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. 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" ROUND DEEP

SR2DMO-XT20L-E1-SDD2F-xxK-MD-MW-NL

CANDLEPOWER CURVE	INTENSITY	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT							
			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 3		RCR 5			
	0.00°	0° - 10°	243	21%	5.50'	90 fc	3.5'	45 fc	8'	3'	134	2.79	84	1.93
	0.00° 2,732	0° - 20°	693	59%	6.50'	65 fc	4.1'	32 fc	12'	5''	46	0.95	41	0.95
	5.00° 2,648	0° - 30°	981	84%	7.50'	49 fc	4.8'	24 fc	16'	7'''	19	0.40	17	0.40
	10.00° 2,311	0° - 40°	1,072	92%	8.50'	38 fc	5.4'	19 fc	Delivered Illuminance Rating: (DIR)		48 FC per W/Sq. Ft.		43 FC per W/Sq. Ft.	
	15.00° 1,705	0° - 60°	1,147	98%	10.00'	27 fc	6.4'	14 fc	2' Suspension Length Square rooms used for multiple units: - RCR 3: Length & Width = Ceiling Ht. - 4.5' x 3.33 - RCR 5: Length & Width = Ceiling Ht. - 4.5' x 2.00 + Average Footcandles at 2.5' Above Floor					
	20.00° 1,095	0° - 80°	1,167	100%	12.00'	19 fc	7.6'	9 fc	* Exceeds spacing criteria by 48%					
	30.00° 227	0° - 90°	1,169	100%	14.00'	14 fc	8.9'	7 fc	** Exceeds spacing criteria by 15%					
	40.00° 80	Total	1,170	100%	16.00'	11 fc	10.2'	5 fc	*** Exceeds spacing criteria by 5%					
	50.00° 52								Lamp Multiplier: 10L x 0.48, 13L x 0.65					
	60.00° 26								CCT Multiplier: LEDXT lumen output is the same for all available CCT's					
	70.00° 10													
	80.00° 3													
	90.00° 1													

Delivered Lumens: 1,170
Luminaire Watts: 23.7
LER: 49.37

CP at 0deg (Nadir): 2,732
CRI: 83

Beam Angle: 34.7
Spacing Ratio: 0.58

SR2DMO-XT20L-E1-SDD2F-xxK-MD-MW-GL

CANDLEPOWER CURVE	INTENSITY	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT							
			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 3		RCR 5			
	0.00°	0° - 10°	221	21%	5.50'	82 fc	3.4'	41 fc	8'	3'	119	2.79	167	4.35
	0.00° 2,485	0° - 20°	627	60%	6.50'	59 fc	4.0'	29 fc	12'	5'''	40	0.95	36	0.95
	5.00° 2,404	0° - 30°	871	84%	7.50'	44 fc	4.6'	22 fc	16'	7'''	25	0.58	15	0.40
	10.00° 2,086	0° - 40°	948	91%	8.50'	34 fc	5.3'	17 fc	Delivered Illuminance Rating: (DIR)		43 FC per W/Sq. Ft.		38 FC per W/Sq. Ft.	
	15.00° 1,520	0° - 60°	1,017	98%	10.00'	25 fc	6.2'	12 fc	2' Suspension Length Square rooms used for multiple units: - RCR 3: Length & Width = Ceiling Ht. - 4.5' x 3.33 - RCR 5: Length & Width = Ceiling Ht. - 4.5' x 2.00 + Average Footcandles at 2.5' Above Floor					
	20.00° 916	0° - 80°	1,034	100%	12.00'	17 fc	7.4'	9 fc	* Exceeds spacing criteria by 53%					
	30.00° 164	0° - 90°	1,036	100%	14.00'	13 fc	8.7'	6 fc	** Exceeds spacing criteria by 19%					
	40.00° 72	Total	1,036	100%	16.00'	10 fc	9.9'	5 fc	*** Exceeds spacing criteria by 9%					
	50.00° 47								Lamp Multiplier: 10L x 0.48, 13L x 0.65					
	60.00° 18								CCT Multiplier: LEDXT lumen output is the same for all available CCT's					
	70.00° 5													
	80.00° 3													
	90.00° 0													

Delivered Lumens: 1,036
Luminaire Watts: 23.7
LER: 43.71

CP at 0deg (Nadir): 2,485
CRI: 83

Beam Angle: 34.36
Spacing Ratio: 0.56

SR2DMO-XT20L-E1-SDD2F-xxK-MD-MW-SO

CANDLEPOWER CURVE	INTENSITY	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT							
			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 3		RCR 5			
	0.00°	0° - 10°	209	20%	5.50'	80 fc	3.5'	40 fc	8'	3'	121	2.79	169	4.35
	0.00° 2,411	0° - 20°	606	57%	6.50'	57 fc	4.2'	29 fc	12'	5'''	41	0.95	37	0.95
	5.00° 2,290	0° - 30°	863	81%	7.50'	43 fc	4.8'	21 fc	16'	7'''	25	0.58	16	0.40
	10.00° 1,951	0° - 40°	954	90%	8.50'	33 fc	5.5'	17 fc	Delivered Illuminance Rating: (DIR)		43 FC per W/Sq. Ft.		39 FC per W/Sq. Ft.	
	15.00° 1,472	0° - 60°	1,039	98%	10.00'	24 fc	6.4'	12 fc	2' Suspension Length Square rooms used for multiple units: - RCR 3: Length & Width = Ceiling Ht. - 4.5' x 3.33 - RCR 5: Length & Width = Ceiling Ht. - 4.5' x 2.00 + Average Footcandles at 2.5' Above Floor					
	20.00° 970	0° - 80°	1,061	100%	12.00'	17 fc	7.7'	8 fc	* Exceeds spacing criteria by 50%					
	30.00° 224	0° - 90°	1,063	100%	14.00'	12 fc	9.0'	6 fc	** Exceeds spacing criteria by 17%					
	40.00° 82	Total	1,064	100%	16.00'	9 fc	10.3'	5 fc	*** Exceeds spacing criteria by 7%					
	50.00° 57								Lamp Multiplier: 10L x 0.48, 13L x 0.65					
	60.00° 27								CCT Multiplier: LEDXT lumen output is the same for all available CCT's					
	70.00° 8													
	80.00° 4													
	90.00° 1													

Delivered Lumens: 1,064
Luminaire Watts: 23.7
LER: 44.89

CP at 0deg (Nadir): 2,411
CRI: 83

Beam Angle: 34.98
Spacing Ratio: 0.57



PHOTOMETRIC DATA - 2" ROUND DEEP

SR2DMO-XT20L-E1-SDD2F-xxK-WD-MW-NL

CANDLEPOWER CURVE	INTENSITY	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE	MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT																												
	0.00°	0° - 10° 190 14%	Mounting Height AFF	<table border="1"> <thead> <tr> <th rowspan="2">Ceiling Height</th> <th rowspan="2">Fixture Spacing</th> <th colspan="2">RCR 3</th> <th colspan="2">RCR 5</th> </tr> <tr> <th>FC +</th> <th>W/Sq. Ft.</th> <th>FC +</th> <th>W/Sq. Ft.</th> </tr> </thead> <tbody> <tr> <td>8'</td> <td>4' *</td> <td>85</td> <td>1.57</td> <td>92</td> <td>1.93</td> </tr> <tr> <td>12'</td> <td>6' **</td> <td>33</td> <td>0.61</td> <td>45</td> <td>0.95</td> </tr> <tr> <td>16'</td> <td>8' ***</td> <td>22</td> <td>0.40</td> <td>19</td> <td>0.40</td> </tr> </tbody> </table>	Ceiling Height	Fixture Spacing	RCR 3		RCR 5		FC +	W/Sq. Ft.	FC +	W/Sq. Ft.	8'	4' *	85	1.57	92	1.93	12'	6' **	33	0.61	45	0.95	16'	8' ***	22	0.40	19	0.40
	Ceiling Height	Fixture Spacing	RCR 3				RCR 5																									
			FC +	W/Sq. Ft.	FC +	W/Sq. Ft.																										
	8'	4' *	85	1.57	92	1.93																										
	12'	6' **	33	0.61	45	0.95																										
	16'	8' ***	22	0.40	19	0.40																										
	0.00° 2,141	0° - 20° 624 47%	5.50'	71 fc 4.5'	35 fc																											
	5.00° 2,073	0° - 30° 1,031 77%	6.50'	51 fc 5.3'	25 fc																											
	10.00° 1,877	0° - 40° 1,214 91%	7.50'	38 fc 6.1'	19 fc																											
	15.00° 1,628	0° - 60° 1,309 98%	8.50'	30 fc 6.9'	15 fc																											
	20.00° 1,289	0° - 80° 1,337 100%	10.00'	21 fc 8.1'	11 fc																											
30.00° 496	0° - 90° 1,340 100%	12.00'	15 fc 9.8'	7 fc																												
40.00° 98	Total 1,340 100%	14.00'	11 fc 11.4'	5 fc																												
50.00° 60		16.00'	8 fc 13.0'	4 fc																												
60.00° 31																																
70.00° 14																																
80.00° 4																																
90.00° 1																																
Delivered Lumens: 1,340 Luminaire Watts: 23.7 LER: 56.54	CP at 0deg (Nadir): 2,141 CRI: 83	Beam Angle: 43.96 Spacing Ratio: 0.72	Lamp Multiplier: 10L x 0.48, 13L x 0.65 CCT Multiplier: LEDXT lumen output is the same for all available CCT's																													

SR2DMO-XT20L-E1-SDD2F-xxK-WD-MW-GL

CANDLEPOWER CURVE	INTENSITY	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE	MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT																												
	0.00°	0° - 10° 171 15%	Mounting Height AFF	<table border="1"> <thead> <tr> <th rowspan="2">Ceiling Height</th> <th rowspan="2">Fixture Spacing</th> <th colspan="2">RCR 3</th> <th colspan="2">RCR 5</th> </tr> <tr> <th>FC +</th> <th>W/Sq. Ft.</th> <th>FC +</th> <th>W/Sq. Ft.</th> </tr> </thead> <tbody> <tr> <td>8'</td> <td>4' *</td> <td>74</td> <td>1.57</td> <td>81</td> <td>1.93</td> </tr> <tr> <td>12'</td> <td>6' **</td> <td>29</td> <td>0.61</td> <td>40</td> <td>0.95</td> </tr> <tr> <td>16'</td> <td>8' ***</td> <td>19</td> <td>0.40</td> <td>17</td> <td>0.40</td> </tr> </tbody> </table>	Ceiling Height	Fixture Spacing	RCR 3		RCR 5		FC +	W/Sq. Ft.	FC +	W/Sq. Ft.	8'	4' *	74	1.57	81	1.93	12'	6' **	29	0.61	40	0.95	16'	8' ***	19	0.40	17	0.40
	Ceiling Height	Fixture Spacing	RCR 3				RCR 5																									
			FC +	W/Sq. Ft.	FC +	W/Sq. Ft.																										
	8'	4' *	74	1.57	81	1.93																										
	12'	6' **	29	0.61	40	0.95																										
	16'	8' ***	19	0.40	17	0.40																										
	0.00° 1,950	0° - 20° 556 47%	5.50'	64 fc 4.3'	32 fc																											
	5.00° 1,885	0° - 30° 904 77%	6.50'	46 fc 5.1'	23 fc																											
	10.00° 1,700	0° - 40° 1,056 90%	7.50'	35 fc 5.9'	17 fc																											
	15.00° 1,467	0° - 60° 1,148 98%	8.50'	27 fc 6.7'	13 fc																											
	20.00° 1,147	0° - 80° 1,172 100%	10.00'	19 fc 7.9'	10 fc																											
30.00° 424	0° - 90° 1,174 100%	12.00'	14 fc 9.5'	7 fc																												
40.00° 90	Total 1,174 100%	14.00'	10 fc 11.0'	5 fc																												
50.00° 57		16.00'	8 fc 12.6'	4 fc																												
60.00° 30																																
70.00° 12																																
80.00° 4																																
90.00° 1																																
Delivered Lumens: 1,174 Luminaire Watts: 23.7 LER: 49.54	CP at 0deg (Nadir): 1,950 CRI: 83	Beam Angle: 42.69 Spacing Ratio: 0.71	Lamp Multiplier: 10L x 0.48, 13L x 0.65 CCT Multiplier: LEDXT lumen output is the same for all available CCT's																													

SR2DMO-XT20L-E1-SDD2F-xxK-WD-MW-SO

CANDLEPOWER CURVE	INTENSITY	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE	MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT																												
	0.00°	0° - 10° 168 14%	Mounting Height AFF	<table border="1"> <thead> <tr> <th rowspan="2">Ceiling Height</th> <th rowspan="2">Fixture Spacing</th> <th colspan="2">RCR 3</th> <th colspan="2">RCR 5</th> </tr> <tr> <th>FC +</th> <th>W/Sq. Ft.</th> <th>FC +</th> <th>W/Sq. Ft.</th> </tr> </thead> <tbody> <tr> <td>8'</td> <td>4' *</td> <td>76</td> <td>1.57</td> <td>83</td> <td>1.93</td> </tr> <tr> <td>12'</td> <td>6' **</td> <td>30</td> <td>0.61</td> <td>41</td> <td>0.95</td> </tr> <tr> <td>16'</td> <td>8' ***</td> <td>20</td> <td>0.40</td> <td>17</td> <td>0.40</td> </tr> </tbody> </table>	Ceiling Height	Fixture Spacing	RCR 3		RCR 5		FC +	W/Sq. Ft.	FC +	W/Sq. Ft.	8'	4' *	76	1.57	83	1.93	12'	6' **	30	0.61	41	0.95	16'	8' ***	20	0.40	17	0.40
	Ceiling Height	Fixture Spacing	RCR 3				RCR 5																									
			FC +	W/Sq. Ft.	FC +	W/Sq. Ft.																										
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	12'	6' **	30	0.61	41	0.95																										
	16'	8' ***	20	0.40	17	0.40																										
	0.00° 1,870	0° - 20° 552 45%	5.50'	62 fc 4.5'	31 fc																											
	5.00° 1,820	0° - 30° 907 75%	6.50'	44 fc 5.3'	22 fc																											
	10.00° 1,659	0° - 40° 1,074 88%	7.50'	33 fc 6.1'	17 fc																											
	15.00° 1,426	0° - 60° 1,183 97%	8.50'	26 fc 6.9'	13 fc																											
	20.00° 1,122	0° - 80° 1,212 100%	10.00'	19 fc 8.1'	9 fc																											
30.00° 447	0° - 90° 1,215 100%	12.00'	13 fc 9.7'	6 fc																												
40.00° 122	Total 1,215 100%	14.00'	10 fc 11.4'	5 fc																												
50.00° 65		16.00'	7 fc 13.0'	4 fc																												
60.00° 35																																
70.00° 12																																
80.00° 5																																
90.00° 1																																
Delivered Lumens: 1,215 Luminaire Watts: 23.7 LER: 51.27	CP at 0deg (Nadir): 1,870 CRI: 83	Beam Angle: 43.91 Spacing Ratio: 0.72	Lamp Multiplier: 10L x 0.48, 13L x 0.65 CCT Multiplier: LEDXT lumen output is the same for all available CCT's																													

