

Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: LUMARK

Report Number: P1436711

Luminaire Tested: XAS180-SFPM (3000K-180W-T3)

Issue Date: 3/25/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1436711  
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ( )  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 3/25/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: LUMARK  
Catalog Number: XAS180-SFPM (3000K-180W-T3)  
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.  
LUMEN OUTPUT - 100% (180W)  
OPTICS - TYPE 3  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

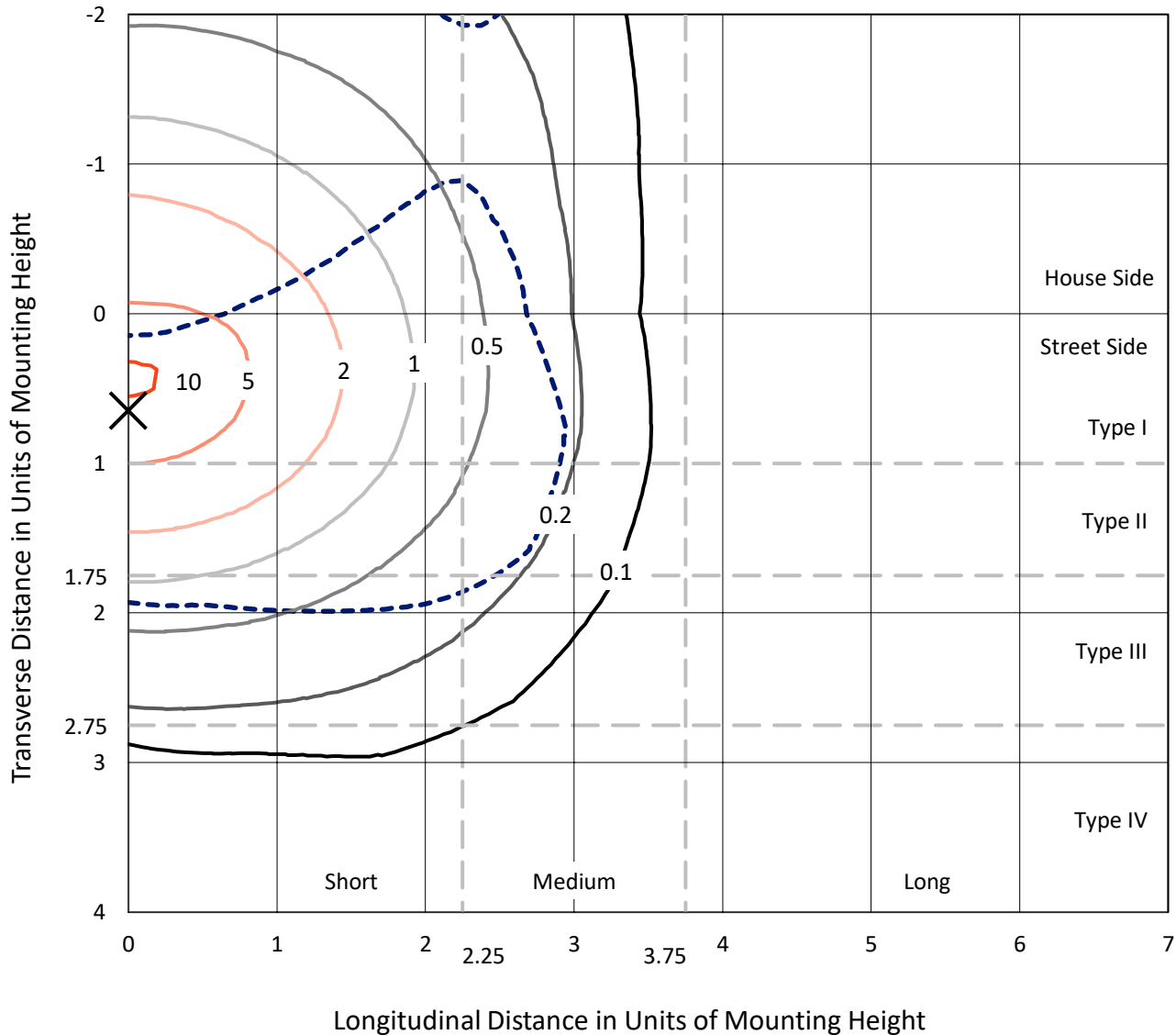
Lumens per Lamp: 27928 (1 lamp)  
Luminaire Lumens: 25386.4 lumens  
Efficiency: 90.9%  
Efficacy: 140.4 lumens/watt  
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G4

Input Watts (W): 180.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT

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### Iso-Footcandle Lines of Horizontal Illumination

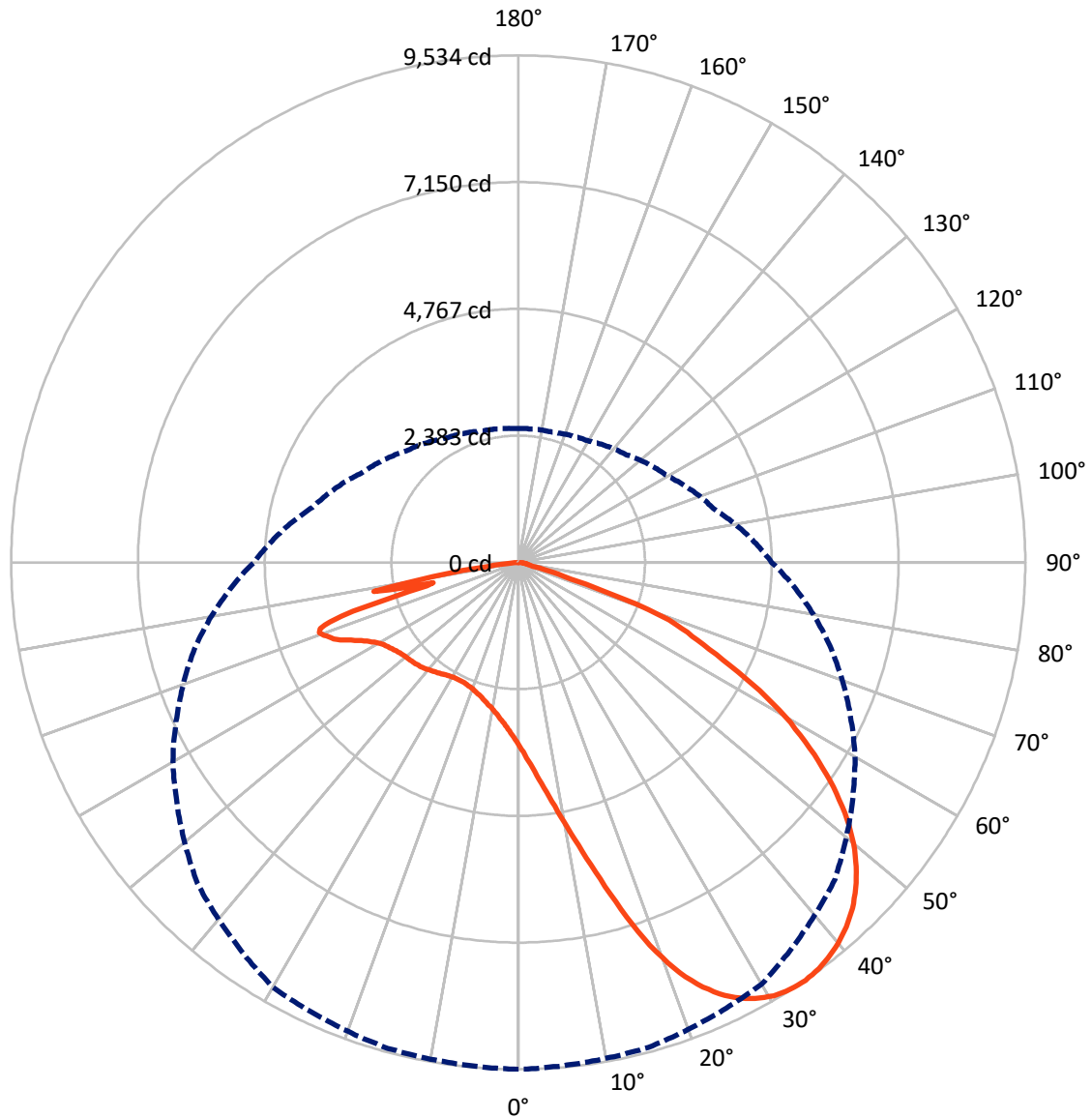
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.7 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 33-Deg Vertical

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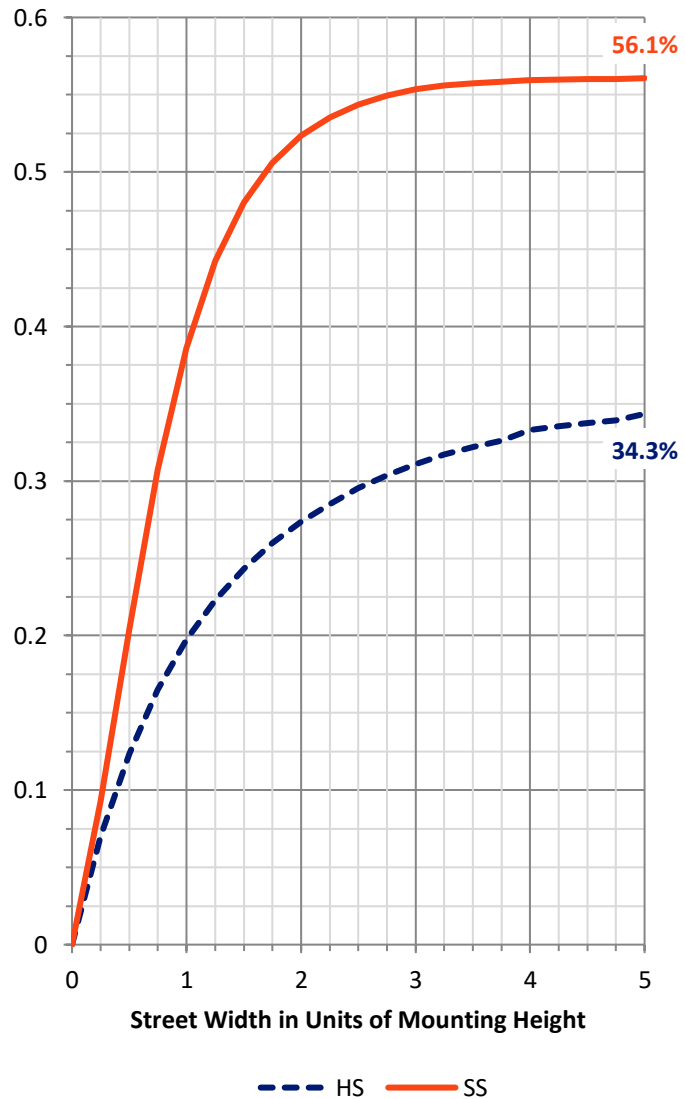
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9714.1	0.0	9714.1
	% Lamp	34.8	0.0	34.8
<b>Street Side</b>	Lumens	15672.3	0.0	15672.3
	% Lamp	56.1	0.0	56.1
<b>Total</b>	Lumens	25386.4	0.0	25386.4
	% Lamp	90.9	0.0	90.9

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	346.3	1.4	1.2
10°-20°	1206.8	4.8	4.3
20°-30°	2370.9	9.3	8.5
30°-40°	3549.2	14.0	12.7
40°-50°	4519.0	17.8	16.2
50°-60°	5052.5	19.9	18.1
60°-70°	4881.4	19.2	17.5
70°-80°	3044.2	12.0	10.9
80°-90°	416.2	1.6	1.5
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	25386.4	100.0	90.9
0°-180°	25386.4	100.0	90.9

**Coefficient of Utilization**



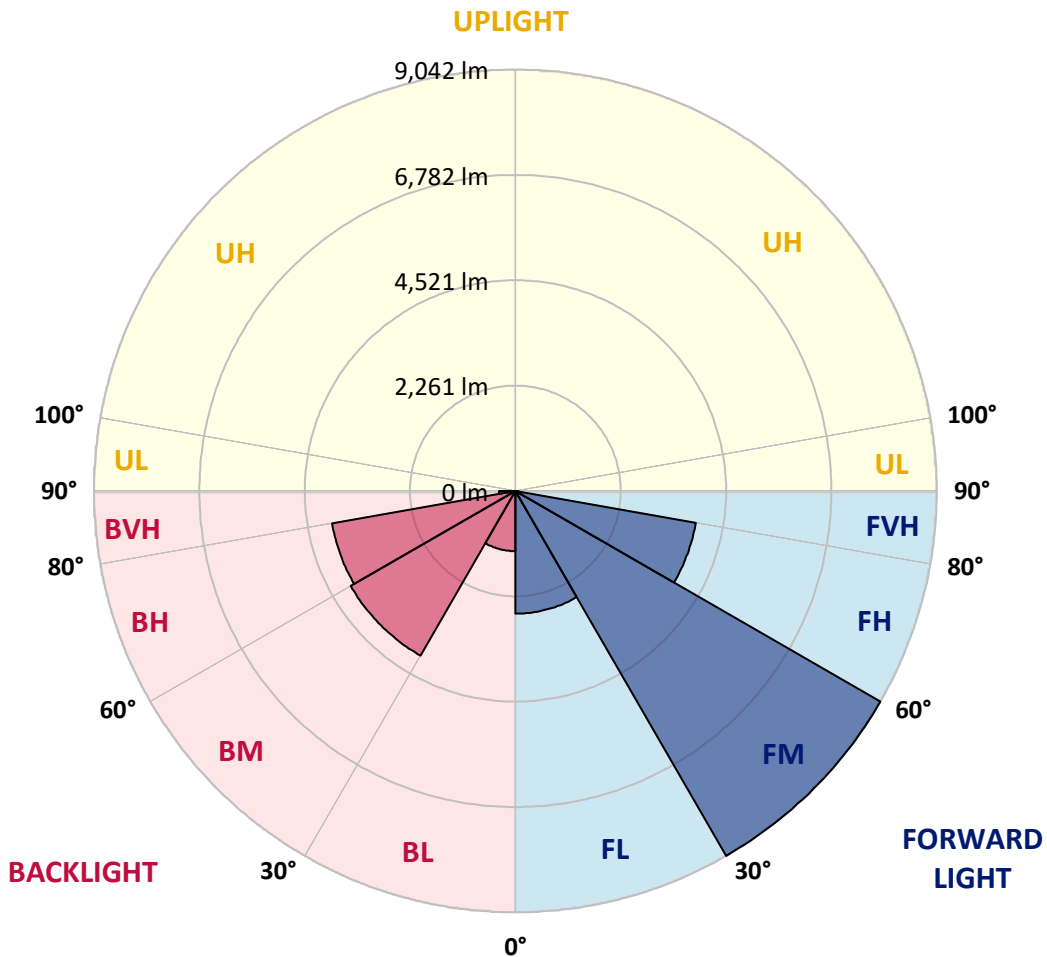
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2632.5	9.4			
FM (30°-60°)	9042.3	32.4			
FH (60°-80°)	3931.5	14.1			G2/5000
FVH (80°-90°)	66.0	0.2			G1/100
BL (0°-30°)	1291.4	4.6	B3/2500		
BM (30°-60°)	4078.3	14.6	B3/5000		
BH (60°-80°)	3994.1	14.3	B4/5000		G4/5000
BVH (80°-90°)	350.2	1.3			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	2541.6	9.1			

**BUG Rating: B4-U0-G4**  
 Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	3464.7	3464.7	3464.7	3464.7	3464.7	3464.7	3464.7	3464.7	3464.7	3464.7	3464.7
1°	3567.9	3565.2	3558.1	3543.1	3523.8	3500.3	3456.1	3430.7	3408.3	3390.2	3379.6
2°	3682.8	3676.6	3658.1	3622.4	3579.4	3528.1	3457.8	3407.9	3364.7	3328.7	3304.4
3°	3808.9	3798.4	3763.0	3708.3	3639.3	3561.1	3464.1	3389.8	3325.2	3273.8	3235.3
4°	3948.6	3932.2	3878.7	3801.2	3705.3	3597.7	3471.7	3374.1	3289.7	3222.1	3173.9
5°	4099.8	4078.2	4006.7	3902.1	3774.3	3636.4	3482.1	3361.1	3257.4	3176.9	3118.6
6°	4266.0	4233.9	4144.8	4012.8	3851.7	3680.3	3495.2	3351.0	3229.0	3135.1	3066.2
7°	4442.4	4404.4	4296.1	4131.4	3934.0	3728.6	3514.5	3346.5	3204.5	3096.7	3018.1
8°	4635.7	4586.4	4456.4	4257.8	4023.3	3781.6	3535.8	3344.7	3184.4	3061.3	2974.9
9°	4845.6	4785.8	4629.2	4393.8	4119.9	3838.2	3560.3	3345.0	3166.9	3029.8	2934.0
10°	5070.1	4997.6	4813.7	4539.1	4222.0	3899.7	3589.2	3348.2	3152.4	3002.6	2896.4
11°	5309.6	5228.0	5010.6	4695.4	4328.5	3964.5	3621.4	3354.9	3139.8	2977.6	2864.4
12°	5569.4	5472.4	5220.1	4858.0	4440.5	4034.1	3655.2	3363.5	3130.1	2955.8	2835.2
13°	5848.6	5736.5	5448.2	5031.2	4561.6	4106.8	3689.9	3373.9	3122.7	2936.2	2808.9
14°	6149.8	6023.5	5693.7	5217.3	4686.0	4182.5	3726.9	3384.2	3115.7	2919.2	2783.7
15°	6470.7	6322.7	5951.0	5411.8	4818.2	4260.7	3765.5	3396.1	3110.9	2904.4	2760.1
16°	6803.9	6639.5	6214.6	5621.0	4959.0	4342.8	3808.1	3410.5	3107.2	2890.2	2738.6
17°	7135.0	6950.6	6479.2	5834.6	5102.8	4428.3	3852.0	3426.4	3106.3	2877.2	2718.6
18°	7460.9	7258.0	6742.4	6049.2	5254.7	4516.1	3898.2	3443.9	3105.4	2865.8	2700.1
19°	7765.4	7550.6	7003.1	6257.2	5414.2	4607.5	3945.6	3463.6	3105.4	2855.9	2684.7
20°	8044.5	7827.2	7252.8	6464.6	5575.6	4702.5	3995.5	3484.8	3106.1	2847.0	2672.0
21°	8294.2	8078.5	7493.8	6669.7	5735.3	4800.8	4046.4	3507.6	3108.2	2838.7	2660.7
22°	8513.5	8303.7	7714.7	6863.6	5892.3	4904.3	4099.1	3529.5	3113.2	2832.5	2650.7
23°	8707.4	8505.0	7922.5	7050.9	6049.6	5008.9	4153.6	3552.8	3118.2	2827.8	2642.6
24°	8874.7	8684.1	8115.6	7227.7	6202.7	5117.1	4210.3	3578.5	3124.7	2824.8	2634.7
25°	9019.3	8842.2	8292.3	7393.8	6350.0	5226.6	4266.2	3604.1	3132.2	2824.0	2628.7
26°	9141.9	8976.6	8452.0	7551.5	6494.1	5337.1	4323.8	3630.4	3141.5	2825.2	2623.8
27°	9245.5	9091.9	8596.8	7703.4	6629.9	5448.0	4384.1	3656.0	3152.5	2826.7	2620.2
28°	9330.9	9191.8	8725.4	7845.7	6759.4	5556.7	4445.4	3682.0	3164.1	2829.8	2618.4
29°	9401.8	9270.0	8839.2	7978.2	6881.4	5662.8	4508.7	3708.3	3177.5	2834.6	2618.5
30°	9456.4	9334.6	8938.8	8103.9	7000.7	5766.9	4571.7	3736.5	3192.1	2840.5	2619.5
31°	9494.5	9385.5	9023.0	8219.1	7109.2	5868.9	4635.8	3764.6	3208.1	2848.3	2622.7
32°	9520.9	9420.0	9092.8	8323.7	7213.1	5968.7	4701.2	3794.4	3225.3	2856.9	2627.9
33°	9533.6	9441.8	9154.6	8422.2	7311.1	6066.5	4766.2	3825.5	3243.5	2866.3	2635.0
34°	9533.6	9450.9	9201.8	8510.2	7402.5	6158.9	4830.8	3855.6	3263.3	2877.2	2643.7
35°	9523.6	9449.1	9236.4	8589.1	7488.7	6246.7	4896.3	3888.1	3283.4	2890.2	2654.5
36°	9501.8	9437.3	9258.2	8659.1	7570.3	6332.6	4960.6	3921.4	3304.7	2904.4	2667.0
37°	9470.0	9416.4	9267.3	8719.1	7647.3	6415.1	5025.6	3954.8	3326.4	2920.8	2680.9
38°	9428.2	9386.4	9268.2	8768.3	7717.8	6493.2	5089.1	3989.8	3349.7	2938.4	2696.2
39°	9380.0	9349.1	9257.3	8810.6	7785.3	6568.8	5154.6	4025.3	3373.5	2957.8	2711.9
40°	9323.7	9302.7	9236.4	8843.7	7847.0	6640.7	5218.6	4063.3	3398.4	2978.8	2728.5
41°	9257.3	9246.4	9205.5	8867.8	7904.4	6708.9	5279.6	4103.1	3423.9	3000.3	2745.4
42°	9179.1	9185.5	9164.6	8884.5	7957.0	6774.4	5338.8	4142.1	3450.9	3023.4	2764.0
43°	9091.9	9111.9	9114.6	8890.1	8006.3	6837.8	5395.9	4182.4	3480.0	3048.4	2782.6
44°	8993.9	9027.6	9056.5	8885.8	8049.0	6898.0	5450.2	4224.8	3509.8	3073.7	2801.6

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CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	8881.5	8936.2	8986.3	8871.7	8087.4	6955.2	5502.3	4267.3	3541.6	3099.9	2820.7
46°	8755.1	8830.7	8908.3	8849.4	8123.9	7013.5	5555.0	4312.5	3575.7	3125.5	2840.5
47°	8621.7	8712.5	8822.4	8817.0	8153.7	7065.4	5605.5	4357.0	3610.8	3152.1	2861.3
48°	8476.4	8582.4	8725.2	8771.0	8177.8	7113.4	5652.5	4404.9	3646.7	3180.3	2884.0
49°	8317.4	8435.1	8616.0	8718.3	8196.8	7156.4	5695.4	4453.2	3685.6	3210.6	2907.4
50°	8139.5	8273.3	8492.2	8652.2	8207.7	7195.4	5737.2	4502.6	3725.7	3241.8	2933.5
51°	7944.7	8094.2	8356.8	8572.8	8211.0	7228.5	5778.3	4554.4	3767.6	3276.0	2961.1
52°	7734.9	7902.5	8205.9	8478.1	8205.5	7255.9	5815.4	4607.8	3811.6	3311.2	2989.3
53°	7511.5	7692.1	8044.8	8373.3	8190.5	7277.2	5849.0	4659.4	3857.8	3348.8	3019.3
54°	7275.9	7461.7	7864.3	8253.8	8162.2	7293.8	5877.7	4708.9	3908.0	3389.1	3051.2
55°	7027.2	7224.9	7670.3	8121.6	8120.4	7303.4	5903.3	4755.3	3960.1	3432.4	3086.5
56°	6767.7	6968.9	7458.2	7972.9	8065.5	7302.4	5922.9	4798.0	4013.3	3479.9	3123.6
57°	6501.4	6714.6	7237.7	7813.0	7994.9	7289.4	5939.5	4838.3	4068.2	3529.6	3165.0
58°	6224.6	6441.7	7003.3	7635.5	7905.1	7265.8	5948.8	4874.9	4124.8	3586.9	3211.3
59°	5941.2	6167.2	6764.4	7442.6	7800.1	7228.1	5948.4	4908.4	4183.1	3648.4	3263.1
60°	5635.6	5881.2	6513.4	7239.4	7678.5	7175.5	5939.2	4940.0	4242.9	3712.3	3319.6
61°	5311.1	5584.4	6254.6	7019.8	7536.2	7108.6	5919.6	4964.5	4301.1	3781.3	3381.5
62°	4965.8	5272.1	5991.1	6789.2	7384.0	7023.1	5888.2	4980.5	4360.7	3854.9	3446.9
63°	4613.6	4943.9	5722.5	6547.0	7216.8	6918.3	5840.6	4987.9	4419.0	3936.5	3518.3
64°	4265.4	4617.4	5449.8	6297.6	7032.8	6794.5	5775.2	4984.9	4476.2	4021.7	3600.5
65°	3946.4	4293.0	5168.7	6043.9	6834.3	6649.4	5696.2	4971.4	4530.7	4112.1	3693.6
66°	3670.6	3995.3	4887.4	5790.1	6615.1	6485.7	5595.3	4940.2	4580.4	4212.1	3794.2
67°	3440.2	3731.2	4610.6	5538.2	6385.4	6296.5	5465.6	4893.6	4622.8	4314.4	3912.7
68°	3203.1	3494.5	4343.6	5284.0	6130.0	6085.2	5264.4	4819.3	4657.8	4419.8	4049.2
69°	2856.7	3254.1	4093.2	5030.2	5862.3	5837.1	4968.0	4666.6	4675.3	4533.3	4203.1
70°	2344.8	2944.3	3856.7	4775.2	5574.8	5524.3	4574.5	4424.6	4679.9	4651.9	4365.5
71°	1661.3	2498.9	3625.6	4522.7	5251.4	5145.7	4094.1	4109.1	4649.7	4775.0	4487.1
72°	1035.5	1894.8	3368.5	4268.4	4884.5	4697.3	3644.7	3771.5	4569.8	4892.1	4606.6
73°	780.3	1246.5	3066.8	4000.5	4474.6	4206.7	3253.0	3485.5	4433.4	4996.8	4764.2
74°	527.7	924.9	2658.2	3693.5	4024.1	3698.1	2777.6	3242.1	4268.0	5055.9	4910.7
75°	275.1	614.0	2077.9	3302.6	3543.6	3149.0	2102.7	2902.6	4097.2	5080.5	5024.6
76°	234.8	303.1	1446.4	2815.6	3045.8	2471.4	1427.8	2240.0	3966.5	5013.7	5055.9
77°	203.4	250.0	927.1	2213.9	2526.1	1675.9	753.6	1577.4	3827.5	4846.1	4968.3
78°	178.0	213.4	711.7	1490.1	1959.8	963.2	398.3	916.5	3545.4	4499.2	4538.6
79°	156.5	184.6	502.3	803.5	1372.4	730.2	267.4	467.1	2930.4	4012.3	3906.4
80°	136.7	160.1	293.0	536.8	841.6	509.4	231.7	284.6	2004.3	3430.0	3250.1
81°	118.7	138.2	234.6	273.5	540.9	288.6	195.9	236.0	1084.0	2640.3	2989.0
82°	102.1	118.5	197.4	225.9	248.6	245.0	160.4	187.4	516.9	2107.3	2880.3
83°	87.3	99.9	165.7	193.0	183.4	200.6	134.7	138.8	336.6	1574.1	2244.0
84°	72.3	84.0	134.4	164.1	146.5	152.0	110.6	110.7	274.8	1043.3	1607.6
85°	57.2	68.2	101.2	136.7	113.2	114.4	87.2	86.6	228.1	656.1	972.3
86°	43.5	52.3	78.6	110.7	83.9	85.3	64.9	66.3	181.3	466.0	564.4
87°	30.0	38.3	55.9	82.5	61.1	62.5	44.7	48.3	134.6	275.8	452.0
88°	18.0	25.1	33.3	50.1	38.4	39.8	31.0	34.1	86.8	90.4	339.5
89°	8.3	11.9	15.0	17.6	18.3	19.4	17.4	19.9	58.8	61.0	227.0



REPORT NUMBER: P1436711

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1436711

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1436711

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1436711

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3464.7	3464.7	3464.7	3464.7	3464.7	3464.7	3464.7	3464.7	3464.7	3464.7	3464.7
1°	3371.9	3371.1	3377.8	3390.1	3407.7	3429.9	3453.9	3461.8	3487.2	3510.5	3532.8
2°	3290.7	3287.2	3297.3	3319.0	3350.8	3390.8	3437.8	3470.0	3521.2	3571.6	3616.1
3°	3214.9	3209.6	3222.6	3252.3	3298.5	3356.8	3424.7	3481.8	3558.7	3636.4	3706.2
4°	3146.3	3140.2	3156.3	3192.5	3250.4	3326.0	3415.6	3496.4	3601.9	3707.0	3804.0
5°	3084.9	3076.7	3094.0	3138.7	3207.6	3299.2	3408.4	3514.6	3646.9	3782.4	3909.4
6°	3026.9	3015.9	3036.3	3088.7	3169.3	3275.4	3405.1	3535.6	3697.7	3865.5	4022.8
7°	2973.0	2960.3	2983.5	3041.3	3133.2	3255.4	3405.2	3560.3	3752.3	3954.9	4146.1
8°	2924.2	2910.2	2934.1	2999.3	3101.8	3238.8	3407.9	3588.0	3809.9	4049.2	4279.1
9°	2878.0	2862.4	2889.5	2960.1	3072.3	3224.1	3412.0	3616.7	3872.8	4151.8	4421.2
10°	2836.7	2819.2	2848.9	2924.1	3045.9	3210.6	3419.2	3650.9	3940.7	4259.8	4569.7
11°	2799.6	2780.2	2812.3	2893.1	3023.4	3200.6	3429.2	3688.6	4013.1	4374.9	4731.6
12°	2765.3	2744.8	2778.1	2865.5	3003.3	3193.1	3442.0	3727.6	4087.2	4494.8	4900.3
13°	2734.2	2710.8	2746.3	2840.0	2987.1	3188.0	3457.8	3769.2	4166.1	4623.9	5086.1
14°	2703.7	2679.1	2716.8	2816.2	2972.8	3185.6	3474.2	3813.4	4249.5	4756.8	5279.9
15°	2676.1	2650.8	2689.7	2793.3	2961.4	3185.6	3491.1	3859.1	4335.6	4899.6	5486.8
16°	2650.6	2622.9	2664.4	2772.4	2949.5	3186.5	3509.9	3907.8	4425.1	5051.7	5703.9
17°	2627.5	2598.9	2641.5	2753.8	2939.1	3188.7	3531.0	3957.6	4519.0	5209.9	5927.0
18°	2606.5	2575.5	2620.2	2736.2	2930.6	3193.0	3553.3	4009.1	4616.5	5374.1	6153.4
19°	2587.3	2554.8	2600.6	2722.1	2922.0	3198.4	3577.9	4062.6	4717.7	5542.8	6376.4
20°	2569.8	2536.3	2582.9	2709.8	2914.6	3203.8	3603.7	4117.5	4822.2	5715.4	6595.7
21°	2555.5	2519.9	2568.7	2699.4	2908.6	3210.6	3630.8	4176.0	4930.2	5889.5	6804.9
22°	2542.4	2505.9	2555.8	2691.1	2905.6	3218.4	3658.9	4234.5	5043.2	6061.8	7000.8
23°	2531.0	2494.5	2545.4	2683.9	2903.5	3227.6	3687.6	4296.1	5162.1	6228.5	7188.9
24°	2521.6	2485.7	2536.9	2678.2	2903.5	3237.8	3716.3	4359.0	5282.9	6388.8	7363.7
25°	2515.1	2478.9	2531.6	2673.7	2905.1	3249.1	3745.5	4422.8	5402.9	6544.0	7529.1
26°	2510.2	2474.5	2528.2	2671.6	2907.6	3261.4	3777.2	4487.6	5524.0	6689.4	7685.1
27°	2506.9	2472.1	2525.8	2670.0	2912.1	3274.2	3807.4	4553.5	5645.6	6827.5	7833.1
28°	2505.8	2473.0	2526.2	2670.7	2918.0	3288.7	3839.4	4621.5	5765.7	6955.7	7971.1
29°	2507.1	2476.9	2529.2	2672.6	2925.5	3304.0	3870.9	4691.2	5882.5	7079.3	8102.4
30°	2510.4	2483.1	2535.1	2676.5	2933.6	3321.3	3904.1	4761.0	5995.2	7194.9	8221.9
31°	2515.9	2491.4	2541.8	2682.4	2943.2	3339.8	3936.2	4830.4	6104.2	7301.2	8334.6
32°	2522.7	2502.1	2549.9	2690.7	2955.2	3359.8	3969.3	4900.0	6207.0	7402.3	8436.5
33°	2531.0	2514.5	2558.8	2700.4	2968.0	3379.9	4002.0	4970.2	6305.8	7497.6	8532.5
34°	2540.5	2527.3	2568.3	2711.0	2981.6	3400.9	4036.5	5040.3	6399.8	7587.4	8618.2
35°	2550.4	2542.3	2578.6	2723.1	2997.2	3423.3	4071.6	5111.5	6488.9	7671.5	8695.7
36°	2560.2	2558.3	2589.3	2736.6	3012.6	3446.4	4109.2	5181.7	6575.3	7749.3	8763.8
37°	2570.7	2574.3	2600.7	2752.1	3029.5	3469.6	4146.5	5250.9	6654.5	7822.2	8822.4
38°	2580.6	2591.0	2613.3	2768.2	3048.2	3493.8	4185.9	5319.0	6731.7	7891.3	8874.3
39°	2591.1	2607.8	2625.8	2785.8	3068.2	3519.8	4225.7	5385.5	6802.4	7955.7	8914.9
40°	2602.5	2624.1	2639.0	2804.9	3089.4	3546.8	4267.1	5451.5	6870.3	8014.4	8946.8
41°	2613.9	2640.4	2652.2	2824.5	3111.3	3575.0	4308.6	5512.3	6935.4	8068.0	8966.9
42°	2625.0	2656.7	2666.3	2844.5	3135.1	3605.1	4350.7	5572.9	6998.5	8117.3	8976.2
43°	2637.3	2672.5	2681.1	2865.7	3159.4	3636.7	4395.3	5632.1	7058.7	8159.9	8978.6
44°	2651.1	2688.0	2697.7	2886.9	3185.2	3669.5	4440.5	5692.5	7114.6	8197.9	8971.5



REPORT NUMBER: P1436711

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2665.8	2701.7	2714.7	2908.6	3212.1	3703.1	4486.2	5749.2	7166.9	8231.2	8951.4
46°	2681.6	2713.1	2732.5	2931.4	3240.6	3737.0	4533.2	5799.7	7213.2	8258.3	8921.1
47°	2698.6	2723.3	2751.6	2954.0	3269.5	3774.2	4580.6	5846.2	7255.8	8279.0	8879.7
48°	2717.5	2734.3	2771.6	2977.3	3301.1	3812.9	4627.2	5890.4	7291.7	8291.8	8828.5
49°	2738.6	2745.3	2793.0	3000.7	3332.1	3853.7	4675.2	5930.8	7321.3	8296.7	8765.8
50°	2762.2	2755.5	2816.8	3026.5	3365.5	3898.6	4724.4	5967.6	7344.8	8293.2	8693.3
51°	2789.4	2767.4	2842.5	3053.3	3400.3	3944.8	4773.3	5998.9	7362.0	8282.1	8606.8
52°	2818.3	2783.0	2870.1	3082.4	3438.0	3991.4	4822.4	6027.1	7372.6	8260.2	8506.1
53°	2847.4	2802.5	2899.4	3113.1	3478.8	4039.8	4866.4	6048.5	7376.1	8228.8	8394.3
54°	2878.5	2822.5	2932.4	3147.3	3523.7	4089.1	4908.9	6064.8	7371.4	8187.5	8270.8
55°	2914.3	2846.1	2968.4	3184.4	3572.0	4139.1	4946.9	6076.6	7356.6	8133.2	8133.6
56°	2952.4	2874.1	3005.5	3224.4	3623.8	4191.8	4981.2	6080.5	7327.8	8065.9	7981.4
57°	2992.1	2905.3	3045.9	3270.1	3679.3	4245.3	5011.9	6077.9	7287.2	7983.5	7816.3
58°	3032.2	2932.1	3087.8	3319.8	3737.5	4298.2	5038.0	6068.9	7235.3	7882.8	7633.4
59°	3071.2	2961.5	3127.6	3374.7	3802.3	4346.5	5057.5	6051.1	7173.0	7771.7	7439.8
60°	3115.0	3005.9	3172.4	3435.2	3868.4	4394.8	5074.2	6021.7	7096.2	7641.2	7231.3
61°	3172.2	3066.6	3231.3	3502.3	3940.0	4444.0	5084.4	5980.0	7004.7	7494.9	7008.0
62°	3239.1	3130.1	3301.0	3574.6	4013.5	4492.5	5086.1	5925.7	6897.2	7335.7	6774.6
63°	3314.5	3204.2	3377.3	3648.9	4092.5	4539.6	5077.7	5856.4	6773.0	7155.9	6534.8
64°	3401.2	3297.5	3468.7	3732.4	4174.1	4583.3	5062.0	5767.4	6633.4	6959.5	6284.9
65°	3502.4	3402.0	3572.0	3829.1	4262.0	4624.0	5032.1	5660.7	6471.1	6752.0	6030.5
66°	3619.6	3521.8	3688.0	3934.3	4351.9	4657.2	4984.5	5528.7	6286.8	6528.6	5774.9
67°	3746.9	3650.8	3811.6	4049.5	4440.4	4687.0	4915.3	5350.9	6084.1	6285.9	5519.4
68°	3882.9	3754.8	3941.0	4181.8	4533.9	4706.8	4789.2	5082.1	5842.4	6028.0	5260.3
69°	3966.7	3822.8	4017.2	4330.4	4638.3	4710.9	4573.9	4709.5	5548.6	5744.0	5004.3
70°	4038.1	3908.0	4084.8	4482.6	4742.3	4698.1	4260.8	4239.8	5181.8	5424.7	4742.8
71°	4139.3	3968.6	4179.0	4597.1	4849.4	4644.7	3893.8	3755.7	4730.7	5056.6	4469.0
72°	4204.1	3927.0	4237.9	4717.9	4947.5	4532.4	3558.4	3307.0	4225.5	4648.4	4191.4
73°	4184.5	3711.9	4219.9	4870.4	5025.3	4357.9	3263.5	2868.6	3698.7	4195.1	3884.4
74°	4051.7	3236.4	4092.4	5006.0	5048.1	4175.2	2940.4	2320.0	3177.1	3696.1	3533.0
75°	3666.6	2477.1	3727.0	5093.6	5010.3	3995.9	2308.8	1600.5	2592.0	3169.6	3108.0
76°	2993.4	1773.9	3067.3	5105.2	4849.6	3810.5	1677.2	909.3	1881.4	2650.6	2595.8
77°	2296.7	1644.8	2433.9	4996.4	4612.7	3557.9	1048.5	677.8	1142.9	2136.1	1974.1
78°	2205.3	2210.2	2410.3	4535.6	4241.0	3043.7	529.6	458.3	859.9	1589.1	1283.9
79°	2767.0	2769.0	2959.3	3839.5	3811.7	2221.0	304.9	238.7	588.7	1040.2	940.2
80°	3227.6	2194.2	3291.3	3114.1	3215.4	1398.2	253.2	202.6	317.5	766.5	600.5
81°	2485.9	1619.3	2494.6	2881.6	2534.7	591.9	201.5	173.3	264.4	495.1	260.8
82°	1744.3	1046.0	1697.8	2883.0	1853.8	358.1	150.4	146.4	225.4	223.7	219.5
83°	1005.4	537.9	913.1	2168.4	1175.8	276.6	122.9	121.9	182.6	171.1	188.7
84°	559.4	378.0	539.0	1453.9	690.6	228.4	99.0	98.3	140.3	135.9	159.8
85°	402.5	218.2	352.7	755.7	494.4	180.2	77.3	77.8	104.9	102.7	132.3
86°	245.6	62.4	229.0	604.5	298.2	132.2	58.6	57.2	81.0	79.1	105.8
87°	89.7	42.1	106.1	453.3	107.2	92.5	42.0	36.7	57.1	55.7	75.1
88°	60.8	21.8	57.4	302.1	72.4	62.8	29.1	20.6	33.3	32.2	44.2
89°	31.8	1.5	8.7	150.9	37.6	33.2	16.2	7.6	14.0	13.4	13.4



REPORT NUMBER: P1436711

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1436711

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1436711

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1436711

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
0°	3464.7	3464.7	3464.7
1°	3549.8	3561.7	3567.9
2°	3652.7	3674.7	3682.8
3°	3760.7	3797.8	3808.9
4°	3881.1	3932.6	3948.6
5°	4011.3	4077.5	4099.8
6°	4152.9	4237.3	4266.0
7°	4306.5	4409.3	4442.4
8°	4467.4	4592.9	4635.7
9°	4647.0	4794.4	4845.6
10°	4833.4	5010.7	5070.1
11°	5036.9	5244.8	5309.6
12°	5256.7	5491.6	5569.4
13°	5489.6	5762.0	5848.6
14°	5740.9	6051.1	6149.8
15°	6000.2	6349.4	6470.7
16°	6269.4	6658.9	6803.9
17°	6543.3	6975.6	7135.0
18°	6818.3	7290.9	7460.9
19°	7079.8	7588.5	7765.4
20°	7337.0	7865.0	8044.5
21°	7570.1	8122.2	8294.2
22°	7791.2	8348.6	8513.5
23°	8004.0	8550.4	8707.4
24°	8197.5	8725.5	8874.7
25°	8375.6	8880.1	9019.3
26°	8538.9	9011.8	9141.9
27°	8682.1	9122.8	9245.5
28°	8809.8	9216.4	9330.9
29°	8923.9	9295.5	9401.8
30°	9020.3	9356.4	9456.4
31°	9103.7	9403.6	9494.5
32°	9170.9	9439.1	9520.9
33°	9225.5	9460.9	9533.6
34°	9269.1	9470.0	9533.6
35°	9300.9	9466.4	9523.6
36°	9319.1	9451.8	9501.8
37°	9326.4	9428.2	9470.0
38°	9322.7	9396.4	9428.2
39°	9308.2	9357.3	9380.0
40°	9284.6	9310.0	9323.7
41°	9250.0	9254.6	9257.3
42°	9206.4	9190.9	9179.1
43°	9152.8	9118.2	9091.9
44°	9090.9	9039.5	8993.9



REPORT NUMBER: P1436711

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
45°	9020.2	8947.9	8881.5
46°	8942.1	8844.3	8755.1
47°	8851.6	8729.4	8621.7
48°	8753.5	8602.4	8476.4
49°	8645.2	8456.6	8317.4
50°	8522.4	8300.9	8139.5
51°	8386.6	8125.6	7944.7
52°	8233.5	7935.2	7734.9
53°	8069.1	7728.4	7511.5
54°	7890.6	7504.1	7275.9
55°	7699.8	7265.9	7027.2
56°	7488.4	7013.4	6767.7
57°	7265.7	6750.6	6501.4
58°	7030.3	6476.6	6224.6
59°	6787.6	6196.6	5941.2
60°	6533.8	5913.7	5635.6
61°	6274.4	5612.6	5311.1
62°	6008.0	5298.2	4965.8
63°	5740.4	4979.9	4613.6
64°	5471.6	4655.3	4265.4
65°	5200.9	4338.2	3946.4
66°	4932.3	4042.3	3670.6
67°	4660.9	3779.6	3440.2
68°	4394.3	3546.4	3203.1
69°	4141.7	3303.0	2856.7
70°	3905.7	3006.0	2344.8
71°	3663.5	2583.0	1661.3
72°	3391.9	1995.8	1035.5
73°	3071.3	1346.7	780.3
74°	2625.0	784.9	527.7
75°	2044.9	551.6	275.1
76°	1445.9	320.4	234.8
77°	941.1	258.6	203.4
78°	724.8	219.8	178.0
79°	508.5	189.7	156.5
80°	292.2	164.2	136.7
81°	235.3	141.6	118.7
82°	196.5	121.4	102.1
83°	164.0	102.7	87.3
84°	131.9	86.7	72.3
85°	98.5	70.2	57.2
86°	75.9	53.8	43.5
87°	53.4	39.0	30.0
88°	30.9	25.0	18.0
89°	13.1	11.5	8.3



REPORT NUMBER: P1436711

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
90°	0.0	0.0	0.0
91°	0.0	0.0	0.0
92°	0.0	0.0	0.0
93°	0.0	0.0	0.0
94°	0.0	0.0	0.0
95°	0.0	0.0	0.0
96°	0.0	0.0	0.0
97°	0.0	0.0	0.0
98°	0.0	0.0	0.0
99°	0.0	0.0	0.0
100°	0.0	0.0	0.0
101°	0.0	0.0	0.0
102°	0.0	0.0	0.0
103°	0.0	0.0	0.0
104°	0.0	0.0	0.0
105°	0.0	0.0	0.0
106°	0.0	0.0	0.0
107°	0.0	0.0	0.0
108°	0.0	0.0	0.0
109°	0.0	0.0	0.0
110°	0.0	0.0	0.0
111°	0.0	0.0	0.0
112°	0.0	0.0	0.0
113°	0.0	0.0	0.0
114°	0.0	0.0	0.0
115°	0.0	0.0	0.0
116°	0.0	0.0	0.0
117°	0.0	0.0	0.0
118°	0.0	0.0	0.0
119°	0.0	0.0	0.0
120°	0.0	0.0	0.0
121°	0.0	0.0	0.0
122°	0.0	0.0	0.0
123°	0.0	0.0	0.0
124°	0.0	0.0	0.0
125°	0.0	0.0	0.0
126°	0.0	0.0	0.0
127°	0.0	0.0	0.0
128°	0.0	0.0	0.0
129°	0.0	0.0	0.0
130°	0.0	0.0	0.0
131°	0.0	0.0	0.0
132°	0.0	0.0	0.0
133°	0.0	0.0	0.0
134°	0.0	0.0	0.0



REPORT NUMBER: P1436711

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
135°	0.0	0.0	0.0
136°	0.0	0.0	0.0
137°	0.0	0.0	0.0
138°	0.0	0.0	0.0
139°	0.0	0.0	0.0
140°	0.0	0.0	0.0
141°	0.0	0.0	0.0
142°	0.0	0.0	0.0
143°	0.0	0.0	0.0
144°	0.0	0.0	0.0
145°	0.0	0.0	0.0
146°	0.0	0.0	0.0
147°	0.0	0.0	0.0
148°	0.0	0.0	0.0
149°	0.0	0.0	0.0
150°	0.0	0.0	0.0
151°	0.0	0.0	0.0
152°	0.0	0.0	0.0
153°	0.0	0.0	0.0
154°	0.0	0.0	0.0
155°	0.0	0.0	0.0
156°	0.0	0.0	0.0
157°	0.0	0.0	0.0
158°	0.0	0.0	0.0
159°	0.0	0.0	0.0
160°	0.0	0.0	0.0
161°	0.0	0.0	0.0
162°	0.0	0.0	0.0
163°	0.0	0.0	0.0
164°	0.0	0.0	0.0
165°	0.0	0.0	0.0
166°	0.0	0.0	0.0
167°	0.0	0.0	0.0
168°	0.0	0.0	0.0
169°	0.0	0.0	0.0
170°	0.0	0.0	0.0
171°	0.0	0.0	0.0
172°	0.0	0.0	0.0
173°	0.0	0.0	0.0
174°	0.0	0.0	0.0
175°	0.0	0.0	0.0
176°	0.0	0.0	0.0
177°	0.0	0.0	0.0
178°	0.0	0.0	0.0
179°	0.0	0.0	0.0



REPORT NUMBER: P1436711  
CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)