

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: P1436737

Luminaire Tested: XAS180-SFPM (4000K-180W-T4)

Issue Date: 3/25/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1436737  
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 (4000K-180W-T4)  
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.  
LUMEN OUTPUT - 100% (180W)  
OPTICS - TYPE 4  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

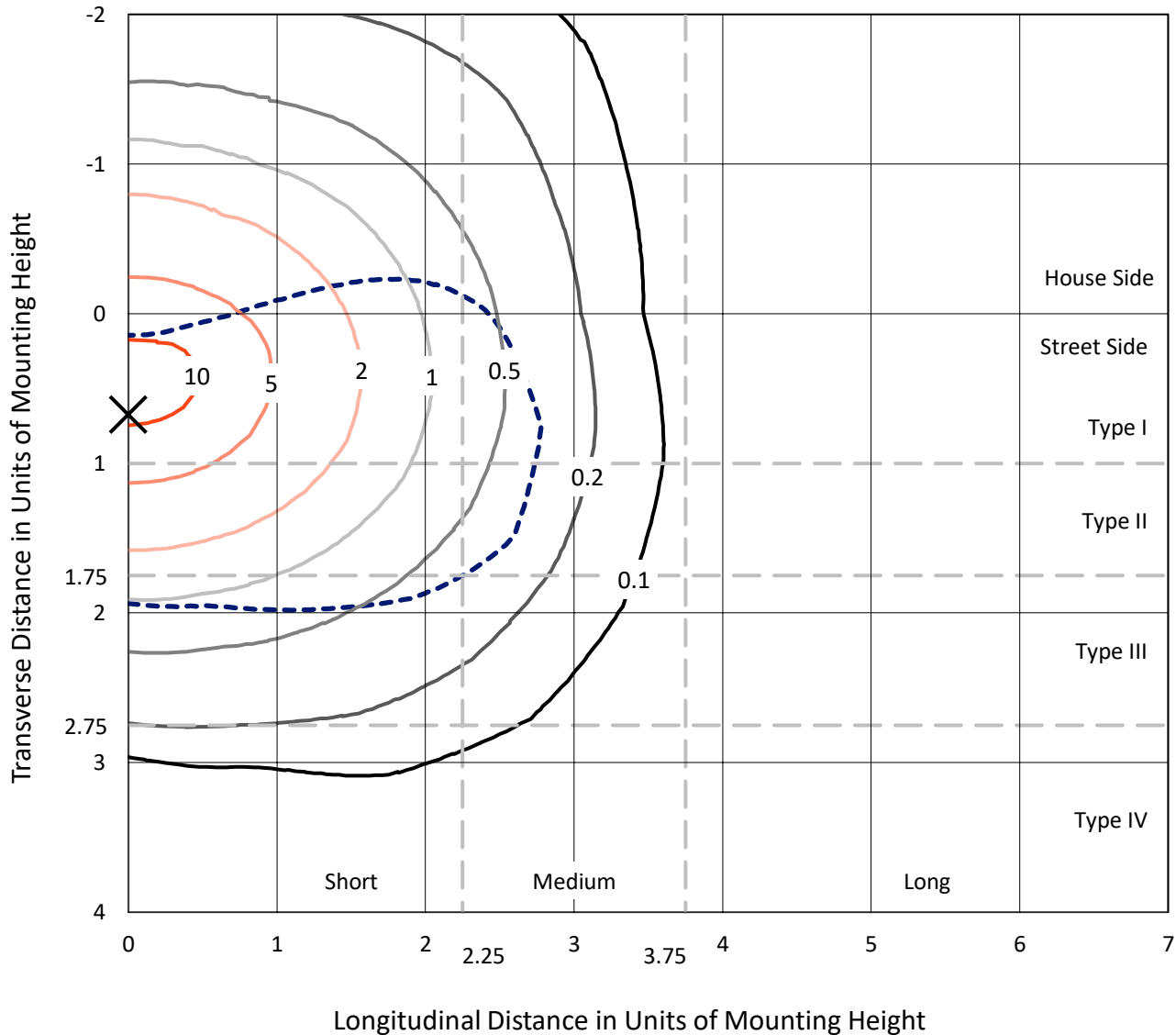
Lumens per Lamp: 24407 (1 lamp)  
Luminaire Lumens: 28198.8 lumens  
Efficiency: 115.5%  
Efficacy: 165.3 lumens/watt  
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B4 - U0 - G4

Input Watts (W): 170.6  
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

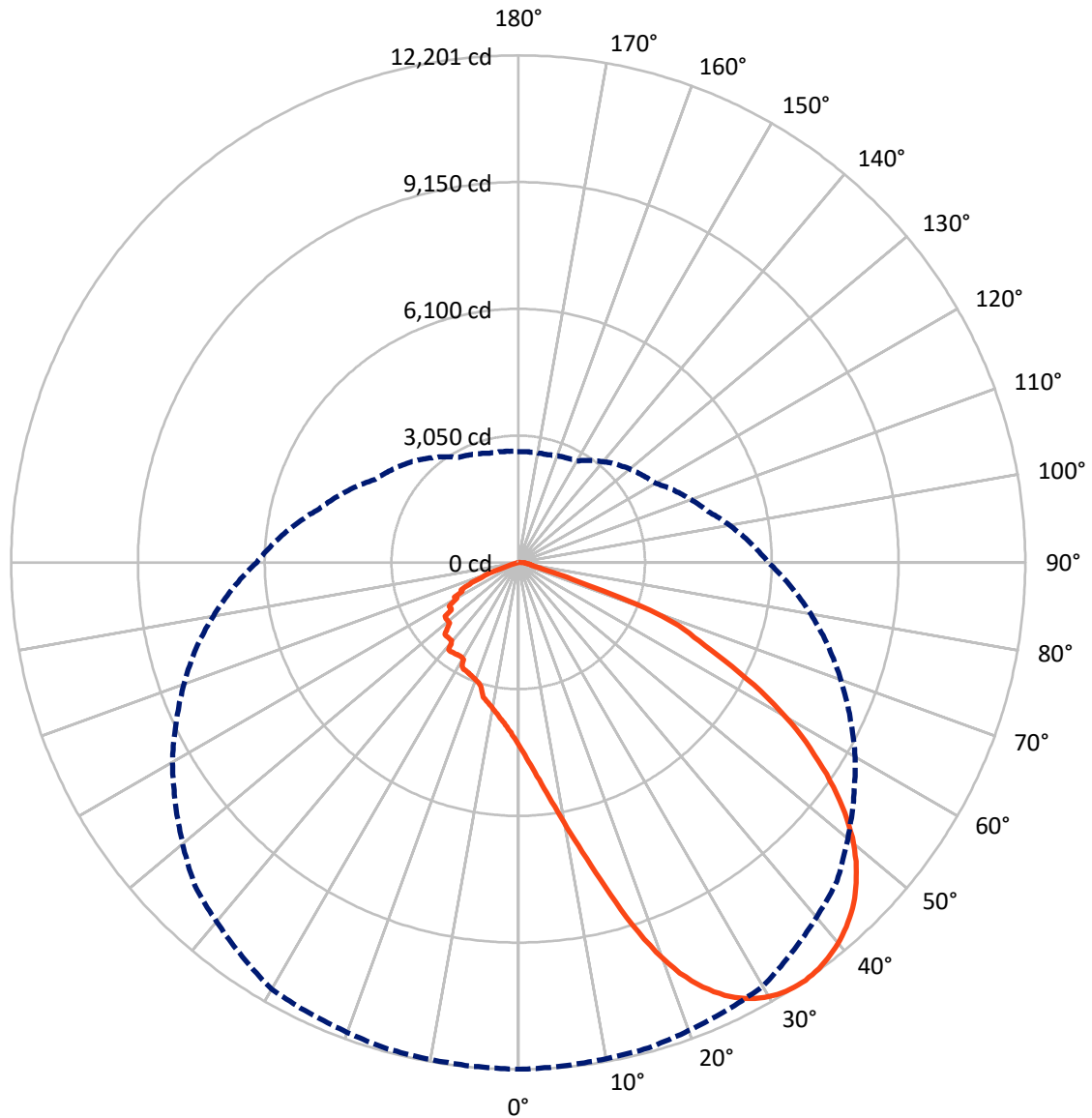
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.8 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 34-Deg Vertical

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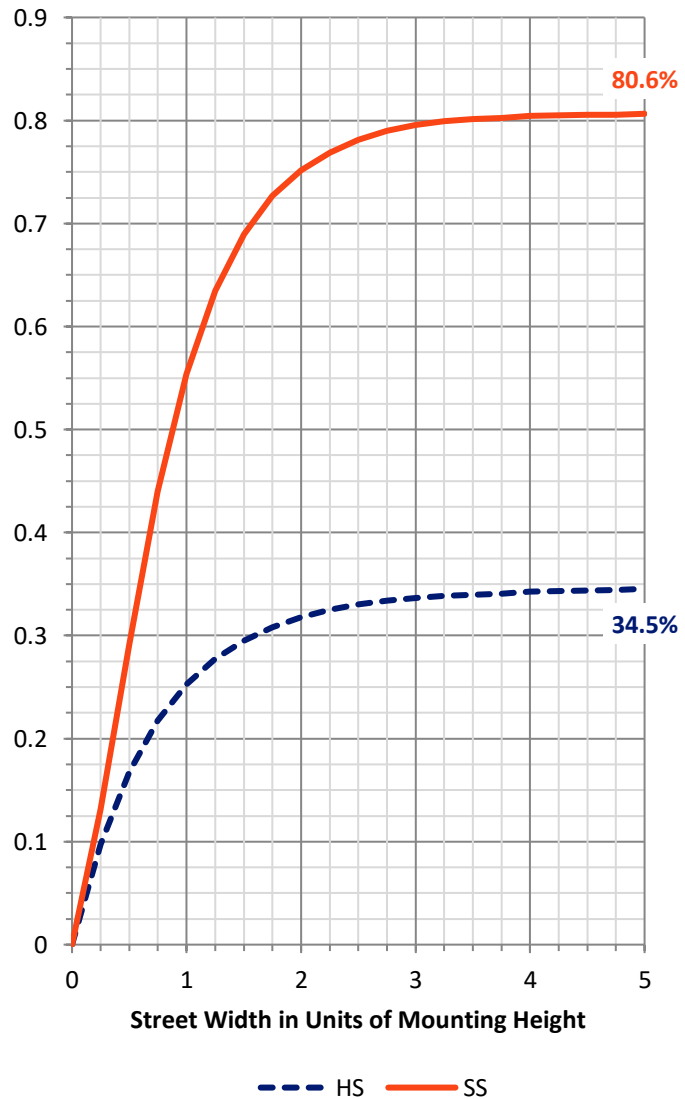
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8480.7	0.0	8480.7
	% Lamp	34.7	0.0	34.7
<b>Street Side</b>	Lumens	19718.1	0.0	19718.1
	% Lamp	80.8	0.0	80.8
<b>Total</b>	Lumens	28198.8	0.0	28198.8
	% Lamp	115.5	0.0	115.5

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	442.9	1.6	1.8
10°-20°	1538.5	5.5	6.3
20°-30°	2985.0	10.6	12.2
30°-40°	4388.4	15.6	18.0
40°-50°	5445.3	19.3	22.3
50°-60°	5802.1	20.6	23.8
60°-70°	5044.0	17.9	20.7
70°-80°	2333.4	8.3	9.6
80°-90°	219.2	0.8	0.9
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°	28198.8	100.0	115.5
0°-180°	28198.8	100.0	115.5

**Coefficient of Utilization**



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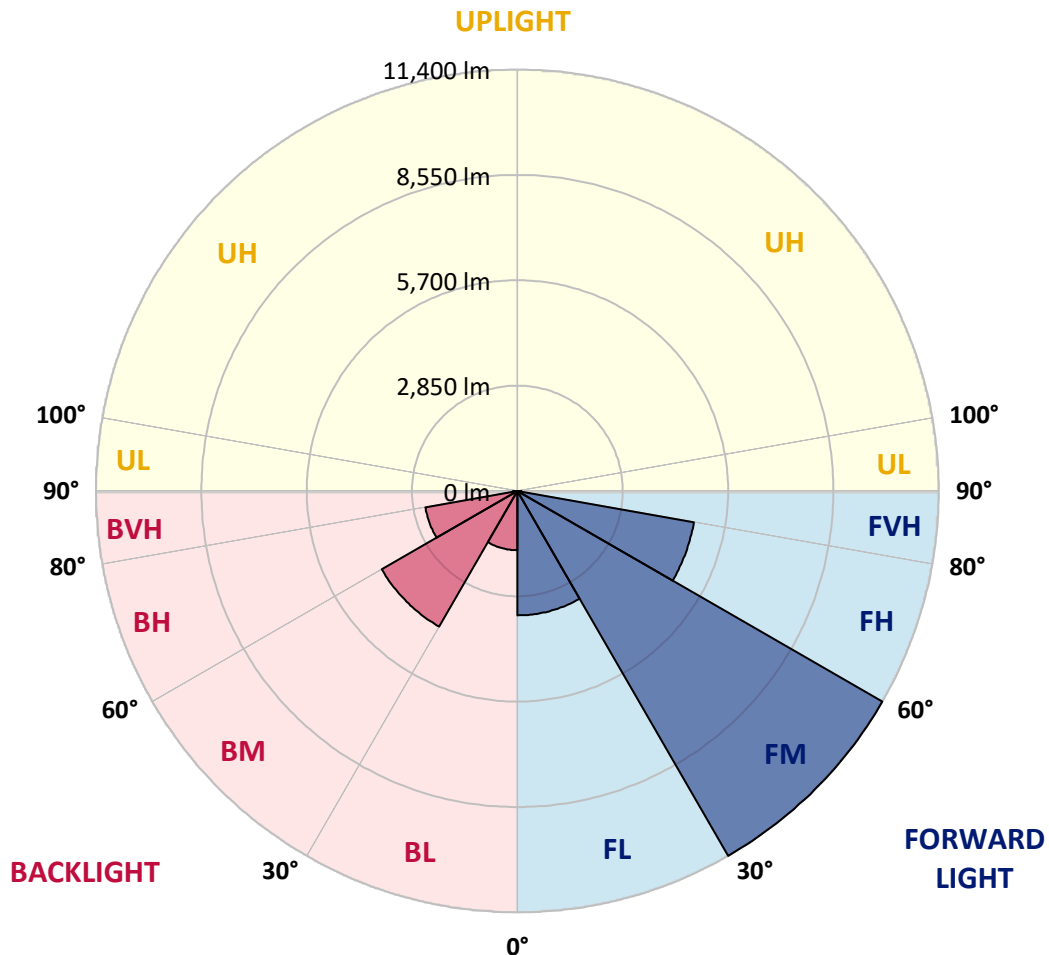
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

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

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3365.4	13.8			
FM (30°-60°)	11399.6	46.7			
FH (60°-80°)	4850.2	19.9			G2/5000
FVH (80°-90°)	102.9	0.4			G2/225
BL (0°-30°)	1601.0	6.6	B3/2500		
BM (30°-60°)	4236.2	17.4	B3/5000		
BH (60°-80°)	2527.2	10.4	B4/5000		G4/5000
BVH (80°-90°)	116.3	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	-3791.8	-15.5			

**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°	4431.4	4431.4	4431.4	4431.4	4431.4	4431.4	4431.4	4431.4	4431.4	4431.4	4431.4
1°	4569.7	4567.1	4556.0	4535.2	4507.4	4475.0	4416.3	4385.9	4358.5	4336.7	4320.8
2°	4719.7	4713.5	4683.9	4638.7	4578.8	4511.3	4418.4	4355.5	4299.9	4255.7	4221.1
3°	4882.8	4866.6	4820.5	4748.2	4658.1	4555.4	4425.6	4332.0	4248.8	4181.1	4131.1
4°	5062.2	5038.1	4972.6	4870.5	4742.4	4602.7	4436.2	4311.8	4202.6	4113.4	4050.0
5°	5257.8	5227.0	5135.5	5002.3	4833.6	4655.0	4450.6	4294.3	4160.9	4053.5	3978.1
6°	5472.6	5428.3	5315.7	5145.8	4936.1	4712.3	4468.1	4281.7	4122.4	4000.3	3912.1
7°	5700.0	5646.1	5507.7	5299.2	5043.2	4776.0	4492.4	4275.1	4091.2	3951.4	3849.7
8°	5948.6	5886.0	5716.5	5463.4	5159.2	4844.3	4521.4	4272.8	4064.4	3906.8	3794.2
9°	6219.3	6144.2	5938.9	5640.6	5282.6	4917.7	4553.2	4272.5	4043.3	3866.1	3741.6
10°	6502.3	6411.8	6177.3	5824.9	5413.6	4997.7	4590.0	4276.7	4023.4	3831.4	3692.3
11°	6809.6	6705.9	6430.7	6023.9	5552.5	5082.5	4630.2	4284.3	4007.3	3799.5	3647.8
12°	7143.2	7021.2	6698.4	6237.5	5697.4	5171.6	4673.1	4294.5	3995.2	3770.5	3607.9
13°	7498.0	7354.8	6988.5	6460.1	5852.2	5266.4	4718.8	4306.6	3984.8	3743.4	3571.1
14°	7883.7	7724.4	7299.7	6696.5	6013.7	5364.0	4764.1	4318.9	3975.5	3719.2	3536.5
15°	8296.5	8110.8	7629.6	6948.0	6183.3	5464.6	4814.2	4333.6	3968.3	3696.8	3501.9
16°	8722.3	8512.2	7971.3	7215.4	6360.5	5568.8	4867.2	4351.3	3962.8	3675.6	3470.5
17°	9141.2	8910.6	8307.1	7490.1	6548.0	5677.3	4921.9	4369.6	3958.9	3656.1	3438.9
18°	9558.9	9301.7	8644.4	7760.7	6745.3	5789.9	4977.3	4385.8	3956.1	3638.1	3390.4
19°	9946.6	9678.5	8976.8	8027.7	6948.1	5906.5	5016.1	4389.7	3948.1	3621.9	3276.9
20°	10301.8	10026.9	9299.8	8294.2	7150.6	6017.2	5064.6	4400.8	3929.9	3605.7	3196.4
21°	10620.3	10345.9	9603.6	8551.3	7356.3	6117.9	5113.7	4425.6	3916.3	3587.8	3174.9
22°	10897.5	10632.0	9889.5	8799.4	7557.1	6237.0	5178.0	4451.3	3918.6	3523.8	3155.4
23°	11142.6	10891.2	10150.5	9038.6	7756.3	6352.4	5246.2	4474.8	3921.1	3442.1	3138.8
24°	11356.8	11118.7	10397.3	9262.5	7931.6	6486.0	5309.7	4488.8	3915.8	3376.8	3126.4
25°	11542.4	11318.4	10619.9	9478.3	8100.1	6625.5	5363.4	4508.3	3910.4	3366.2	3114.2
26°	11699.0	11490.5	10822.9	9676.6	8266.6	6762.1	5419.8	4527.5	3907.0	3353.4	3104.6
27°	11830.7	11640.1	11010.7	9871.3	8427.0	6896.0	5483.0	4557.6	3914.8	3336.3	3094.2
28°	11939.4	11763.7	11173.8	10053.9	8576.5	7014.9	5548.1	4587.8	3926.2	3324.0	3084.8
29°	12029.5	11864.3	11316.6	10221.4	8723.1	7127.2	5624.6	4618.0	3936.0	3323.7	3077.3
30°	12097.6	11947.4	11443.4	10380.3	8872.0	7244.5	5701.1	4650.5	3922.9	3326.5	3070.0
31°	12150.8	12011.0	11552.4	10524.9	9009.9	7362.8	5780.8	4683.8	3864.4	3330.6	3055.9
32°	12183.1	12057.2	11642.4	10644.4	9139.3	7475.9	5859.7	4712.9	3852.0	3334.6	3037.2
33°	12199.3	12084.9	11719.8	10750.5	9256.9	7594.3	5939.3	4721.7	3805.9	3338.4	2918.6
34°	12200.5	12096.5	11779.9	10846.2	9359.6	7710.1	6016.1	4731.0	3811.0	3338.6	2816.6
35°	12186.6	12095.3	11825.0	10937.2	9451.2	7820.4	6072.7	4754.4	3818.5	3335.9	2810.6
36°	12160.0	12081.5	11851.5	11017.2	9537.0	7926.1	6119.5	4781.4	3828.4	3334.6	2812.8
37°	12119.6	12054.9	11864.3	11083.8	9620.9	8027.3	6172.9	4809.8	3845.5	3339.2	2814.8
38°	12068.8	12015.6	11865.4	11135.0	9702.9	8127.7	6239.2	4842.2	3856.1	3340.3	2812.8
39°	12006.4	11968.2	11852.7	11177.5	9775.6	8218.9	6298.8	4876.9	3858.7	3180.9	2811.0
40°	11934.7	11909.3	11823.8	11210.8	9845.6	8294.8	6362.8	4902.4	3875.5	3107.8	2818.0
41°	11849.2	11837.7	11785.7	11236.8	9906.4	8348.8	6424.4	4925.4	3900.8	3118.4	2824.8
42°	11751.0	11758.0	11733.7	11259.2	9970.9	8401.2	6487.4	4945.5	3926.3	3133.3	2832.6
43°	11639.0	11664.4	11669.0	11266.0	10031.6	8455.1	6546.7	4956.8	3953.4	3150.2	2835.5
44°	11512.7	11560.4	11593.9	11258.4	10086.2	8514.0	6596.2	4991.0	3982.4	3168.4	2744.3

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CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	11369.8	11441.1	11504.4	11234.7	10134.6	8570.6	6635.4	5038.5	4012.6	3184.1	2620.1
46°	11206.2	11306.1	11405.4	11197.9	10179.8	8626.7	6671.0	5087.3	4025.3	3183.8	2623.3
47°	11033.8	11151.8	11293.9	11144.9	10218.6	8680.0	6693.6	5137.8	4023.8	3192.0	2631.0
48°	10852.3	10985.8	11169.1	11078.2	10247.7	8724.1	6710.3	5190.6	4037.6	3210.8	2634.7
49°	10646.4	10795.3	11028.4	11002.0	10264.3	8767.7	6745.1	5235.7	3967.7	3222.6	2631.3
50°	10417.8	10590.6	10868.2	10911.2	10265.1	8808.0	6793.4	5245.3	3905.5	3120.5	2631.8
51°	10170.5	10361.7	10686.8	10802.1	10246.0	8833.8	6841.7	5211.3	3848.0	2995.5	2635.9
52°	9904.3	10113.1	10489.2	10676.3	10219.3	8847.5	6885.4	5242.7	3876.8	3005.2	2517.7
53°	9620.9	9843.0	10269.5	10537.5	10176.5	8853.5	6923.9	5253.0	3902.5	3023.9	2390.2
54°	9316.3	9549.3	10034.1	10378.1	10120.3	8852.3	6958.1	5247.4	3916.4	3049.1	2402.4
55°	9005.6	9246.8	9779.0	10201.9	10045.5	8828.0	6985.9	5278.8	3938.3	3062.9	2419.5
56°	8669.7	8929.2	9503.0	10010.7	9961.4	8785.5	6991.8	5299.1	3973.8	3073.0	2438.9
57°	8335.5	8596.7	9219.2	9798.8	9864.5	8731.1	6984.9	5299.0	4002.4	3068.7	2457.8
58°	7987.8	8255.3	8921.6	9569.5	9749.2	8680.7	6957.2	5317.3	4015.2	2904.2	2467.6
59°	7625.1	7908.7	8608.6	9330.5	9614.1	8627.8	6930.9	5334.5	4042.0	2865.1	2272.3
60°	7237.4	7546.4	8287.8	9069.5	9454.4	8562.5	6906.2	5321.5	3932.6	2904.4	2288.6
61°	6823.2	7163.7	7951.9	8797.7	9272.9	8482.1	6862.5	5275.7	3870.5	2951.1	2295.3
62°	6390.6	6765.8	7612.9	8509.1	9080.4	8379.6	6813.7	5261.6	3895.8	3001.0	2228.8
63°	5937.0	6349.8	7269.0	8207.2	8864.2	8253.4	6746.0	5223.8	3914.9	3038.9	2162.6
64°	5497.9	5939.4	6925.0	7899.0	8622.8	8104.4	6652.6	5163.7	3929.2	2897.3	2148.1
65°	5099.8	5530.3	6568.1	7581.4	8363.4	7927.9	6538.6	5094.0	3910.3	2912.4	2172.3
66°	4749.9	5159.9	6219.8	7259.0	8086.5	7722.3	6389.0	4990.5	3803.3	2949.5	2045.2
67°	4462.3	4822.3	5873.7	6938.9	7790.0	7483.2	6231.2	4881.3	3685.2	2925.6	2015.6
68°	4153.5	4526.2	5536.7	6610.2	7455.9	7215.7	5995.0	4721.0	3713.9	2853.2	2066.8
69°	3700.1	4214.2	5219.9	6290.1	7102.8	6894.8	5637.4	4530.1	3731.0	2872.9	1890.7
70°	3035.2	3802.1	4924.3	5966.3	6740.9	6497.1	5119.9	4272.9	3738.6	2795.9	1882.2
71°	2160.8	3226.5	4628.1	5644.4	6330.8	6025.6	4526.2	3937.3	3662.4	2802.4	1629.0
72°	1375.3	2443.3	4294.9	5310.3	5875.6	5471.6	4017.4	3563.8	3523.7	2786.5	1570.9
73°	1058.4	1617.4	3895.3	4966.5	5366.9	4870.6	3533.9	3236.7	3385.3	2745.1	1457.2
74°	751.5	983.2	3355.5	4578.6	4827.3	4260.2	2859.8	2995.1	3234.7	2768.4	1320.7
75°	444.5	724.4	2606.8	4082.3	4239.5	3602.8	2185.8	2533.8	3063.1	2710.9	1271.9
76°	392.1	473.4	1819.6	3469.7	3633.7	2784.2	1511.3	2072.5	2911.8	2636.8	1239.7
77°	350.7	406.6	1187.0	2711.0	3004.5	1832.0	825.4	1610.0	2786.3	2384.8	1169.9
78°	317.0	359.0	928.0	1809.5	2332.4	1053.8	430.6	929.1	2422.4	2132.5	1055.3
79°	287.1	320.6	680.7	986.7	1622.3	731.1	352.2	680.5	2058.6	1877.9	896.1
80°	260.0	287.4	433.3	681.1	1014.1	410.9	273.8	432.0	1689.0	1532.1	767.5
81°	235.0	257.5	366.4	388.4	665.7	346.8	196.4	187.5	937.8	1146.4	693.7
82°	211.7	230.0	317.8	332.2	323.8	296.3	165.7	145.6	687.3	913.3	691.0
83°	189.4	204.1	275.1	289.9	251.4	240.5	138.1	112.4	436.9	723.5	567.5
84°	167.9	179.9	232.8	251.9	204.3	182.4	112.0	88.1	187.3	516.6	422.3
85°	147.2	157.3	188.1	215.7	162.7	139.2	86.7	68.0	164.5	382.3	298.3
86°	126.8	135.8	153.4	180.6	126.8	107.9	63.6	51.5	131.7	248.0	175.0
87°	109.1	115.5	124.2	142.3	99.1	81.3	48.8	40.0	97.6	115.2	107.4
88°	91.6	98.3	101.7	109.4	71.6	54.8	34.0	28.4	74.1	78.4	73.2
89°	74.0	81.2	79.4	76.5	44.2	32.0	19.3	16.8	50.5	41.6	39.0



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**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: P1436737

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

**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: P1436737

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

**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: P1436737

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	4431.4	4431.4	4431.4	4431.4	4431.4	4431.4	4431.4	4431.4	4431.4	4431.4	4431.4
1°	4313.5	4313.7	4320.0	4336.0	4357.2	4384.7	4414.3	4423.5	4458.8	4491.9	4520.8
2°	4204.2	4201.2	4214.0	4241.3	4281.5	4331.6	4391.5	4433.5	4503.3	4570.8	4630.5
3°	4104.9	4098.2	4114.8	4153.2	4211.8	4285.9	4373.0	4449.0	4552.6	4653.5	4744.3
4°	4015.1	4008.0	4026.4	4073.6	4147.9	4245.2	4359.9	4467.5	4606.6	4743.3	4870.6
5°	3935.7	3925.6	3946.3	4002.9	4090.5	4209.5	4351.0	4490.4	4666.3	4842.9	5006.5
6°	3860.2	3848.0	3873.0	3938.2	4040.9	4177.2	4345.3	4517.3	4731.6	4951.6	5154.7
7°	3791.5	3776.5	3804.1	3877.6	3994.4	4150.9	4344.6	4550.7	4801.4	5065.6	5313.2
8°	3728.0	3709.9	3740.7	3823.2	3952.8	4127.6	4347.2	4584.1	4876.8	5187.2	5483.5
9°	3667.5	3646.7	3681.2	3772.2	3915.9	4108.3	4352.2	4622.5	4959.1	5317.8	5666.6
10°	3611.3	3588.9	3626.6	3725.8	3880.9	4091.5	4359.7	4665.2	5044.1	5455.7	5858.0
11°	3559.4	3534.2	3575.9	3683.8	3851.7	4077.9	4371.0	4713.5	5137.8	5602.9	6064.1
12°	3511.9	3485.1	3527.3	3644.1	3825.1	4067.3	4386.3	4763.5	5232.4	5759.1	6282.4
13°	3468.6	3438.1	3484.1	3607.8	3801.4	4060.4	4404.2	4817.2	5334.0	5922.7	6516.5
14°	3426.9	3392.8	3442.6	3574.1	3781.1	4055.7	4423.9	4872.0	5438.9	6092.8	6764.4
15°	3386.0	3348.5	3401.9	3541.7	3762.6	4054.7	4444.7	4930.7	5548.8	6278.4	7030.5
16°	3338.8	3249.6	3356.7	3511.0	3744.6	4055.0	4466.3	4992.0	5663.0	6468.8	7310.5
17°	3210.6	3138.8	3234.7	3480.7	3728.2	4055.8	4492.3	5053.5	5782.5	6672.9	7592.7
18°	3120.2	3081.0	3142.1	3433.5	3714.1	4058.5	4518.3	5117.7	5906.1	6883.8	7878.7
19°	3087.2	3047.3	3107.1	3329.2	3699.9	4058.8	4528.7	5172.8	6033.6	7098.0	8167.1
20°	3058.8	3017.0	3078.4	3251.3	3686.0	4046.0	4546.6	5223.7	6167.1	7315.3	8446.9
21°	3033.8	2991.8	3053.0	3222.1	3669.8	4037.5	4573.0	5281.3	6288.6	7535.4	8715.4
22°	3013.6	2968.8	3032.9	3204.7	3606.9	4043.6	4606.7	5351.8	6411.7	7755.7	8969.4
23°	2996.2	2949.5	3016.7	3189.6	3531.4	4052.1	4640.3	5427.9	6552.1	7966.8	9205.1
24°	2979.9	2931.7	3001.6	3177.7	3476.3	4060.8	4669.7	5505.9	6692.1	8174.9	9430.2
25°	2965.4	2914.6	2987.3	3167.8	3461.3	4058.5	4690.4	5579.7	6843.6	8354.9	9640.3
26°	2950.8	2900.6	2975.0	3160.1	3455.1	4058.2	4717.2	5642.3	6995.7	8519.9	9840.4
27°	2938.6	2888.9	2963.8	3153.3	3440.9	4060.5	4742.5	5712.3	7149.4	8683.6	10028.8
28°	2928.7	2878.9	2954.7	3146.6	3430.5	4074.3	4779.4	5785.3	7293.2	8840.3	10208.1
29°	2918.5	2836.1	2944.9	3141.3	3429.4	4087.6	4817.4	5866.7	7419.9	8980.4	10371.5
30°	2839.3	2681.8	2878.1	3137.1	3434.8	4077.2	4855.9	5951.8	7547.4	9123.4	10526.7
31°	2705.4	2652.1	2742.0	3124.3	3441.5	4044.6	4893.5	6037.1	7674.7	9260.4	10671.4
32°	2683.3	2652.9	2717.6	3109.6	3450.2	4013.0	4929.9	6123.9	7794.1	9390.0	10802.3
33°	2681.4	2656.5	2716.5	3020.9	3458.8	3982.1	4945.9	6209.6	7911.5	9506.0	10911.6
34°	2682.6	2663.1	2717.7	2914.2	3467.2	3983.4	4962.2	6296.5	8029.8	9609.2	11005.1
35°	2684.9	2671.9	2721.2	2899.7	3468.7	3992.9	4989.5	6370.1	8142.7	9698.3	11087.4
36°	2689.1	2679.6	2726.5	2903.6	3469.4	4004.7	5020.2	6427.1	8248.3	9781.0	11165.3
37°	2690.6	2686.2	2730.0	2909.2	3470.2	4019.9	5054.3	6488.0	8348.3	9862.3	11233.0
38°	2691.0	2692.2	2732.3	2908.5	3470.8	4037.4	5092.4	6555.9	8444.0	9941.4	11289.1
39°	2690.2	2692.5	2734.2	2907.3	3340.5	4044.8	5133.6	6621.6	8534.1	10011.4	11329.6
40°	2684.8	2544.7	2731.0	2913.3	3264.0	4057.5	5172.5	6691.1	8612.6	10076.0	11363.8
41°	2533.0	2468.6	2597.9	2922.7	3265.5	4085.7	5199.2	6757.4	8669.7	10137.0	11384.6
42°	2449.2	2469.8	2499.7	2932.4	3279.9	4115.2	5219.9	6821.4	8716.7	10198.7	11396.3
43°	2447.7	2473.9	2498.7	2939.3	3296.8	4146.5	5233.1	6887.6	8765.5	10251.2	11397.0
44°	2449.8	2477.1	2502.9	2877.2	3316.1	4179.0	5273.1	6950.2	8811.5	10299.3	11386.7



REPORT NUMBER: P1436737

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2452.8	2477.1	2507.9	2737.5	3334.6	4210.1	5323.6	6997.1	8860.1	10338.2	11357.6
46°	2455.5	2473.4	2511.8	2730.5	3339.2	4226.6	5375.8	7032.2	8908.8	10372.4	11309.5
47°	2457.1	2384.4	2514.8	2739.3	3343.9	4228.9	5428.6	7054.2	8949.8	10398.8	11243.1
48°	2375.6	2295.4	2514.6	2744.1	3366.0	4245.4	5480.6	7066.2	8987.0	10413.6	11167.3
49°	2294.3	2208.0	2367.4	2739.6	3378.9	4233.5	5531.0	7097.5	9013.7	10417.8	11076.8
50°	2213.3	2203.0	2261.2	2739.1	3310.2	4139.3	5562.4	7137.4	9033.5	10400.4	10977.5
51°	2221.6	2200.6	2268.5	2744.8	3159.9	4082.9	5537.6	7172.7	9044.2	10360.7	10863.0
52°	2233.5	2200.9	2279.7	2655.2	3161.5	4102.5	5521.6	7205.0	9042.3	10310.2	10732.0
53°	2246.2	2200.2	2291.7	2505.1	3185.1	4131.9	5541.9	7229.8	9025.5	10245.5	10584.9
54°	2256.4	2190.2	2237.8	2518.0	3215.0	4146.5	5533.9	7246.2	8997.6	10168.1	10416.4
55°	2261.0	1982.9	2183.7	2537.3	3232.5	4156.1	5529.8	7257.2	8946.3	10078.6	10237.8
56°	2065.1	1950.6	2129.9	2560.1	3247.3	4194.1	5536.8	7245.4	8869.7	9979.9	10040.2
57°	2028.9	1959.4	2085.7	2583.6	3245.0	4222.3	5525.1	7210.6	8786.3	9870.8	9831.8
58°	2037.9	1969.4	2095.2	2600.3	3105.0	4231.2	5525.4	7158.3	8700.7	9738.4	9605.0
59°	2051.2	1882.6	2107.0	2410.4	3058.1	4249.0	5528.1	7107.3	8618.1	9593.9	9363.6
60°	1902.3	1710.6	1973.8	2413.2	3101.0	4158.3	5495.8	7051.3	8523.5	9426.8	9100.5
61°	1813.4	1729.6	1878.6	2426.6	3148.2	4056.3	5427.1	6980.7	8408.5	9239.4	8819.5
62°	1835.3	1747.3	1902.9	2452.3	3197.0	4059.0	5395.0	6897.9	8277.8	9033.7	8534.1
63°	1858.0	1529.9	1922.8	2303.1	3235.9	4060.8	5352.7	6801.6	8128.1	8800.4	8232.3
64°	1617.3	1510.2	1675.1	2283.8	3095.5	4061.5	5274.0	6672.5	7956.1	8555.8	7926.4
65°	1632.6	1528.6	1682.5	2240.6	3098.6	4035.0	5192.7	6510.8	7756.8	8287.9	7604.8
66°	1643.9	1276.9	1704.0	2197.4	3118.2	3936.6	5073.5	6330.0	7519.7	8007.9	7272.9
67°	1361.2	1235.5	1412.9	2156.6	3096.8	3785.3	4938.4	6112.6	7263.2	7699.8	6944.0
68°	1384.3	953.7	1429.3	2203.4	3016.7	3794.7	4739.8	5787.6	6955.6	7362.4	6609.9
69°	1106.9	860.3	1150.0	2026.6	3011.9	3793.8	4482.6	5323.3	6589.4	6999.4	6288.8
70°	1057.2	588.8	1085.4	2006.5	2939.4	3785.0	4148.4	4710.5	6134.8	6597.0	5946.8
71°	700.0	317.3	702.4	1748.4	2907.2	3694.9	3762.2	4130.6	5591.0	6148.4	5594.4
72°	434.3	48.4	411.0	1689.7	2886.6	3529.0	3383.1	3616.1	4976.7	5650.1	5236.1
73°	358.6	0.6	326.9	1533.1	2825.5	3358.6	3035.0	3075.0	4343.2	5102.9	4848.3
74°	323.7	0.4	301.5	1363.7	2819.9	3189.2	2605.3	2462.0	3717.3	4513.8	4421.9
75°	265.8	0.4	258.1	1282.6	2676.0	3007.3	2175.5	1702.4	3044.5	3871.9	3893.5
76°	207.9	0.4	214.6	1237.8	2455.1	2803.0	1744.0	989.5	2218.5	3233.4	3264.5
77°	150.6	0.5	171.4	1165.9	2234.2	2456.8	1074.7	655.9	1361.6	2624.9	2499.1
78°	112.1	0.5	138.2	1050.2	2012.8	2110.7	560.6	326.8	1030.5	1985.7	1645.6
79°	110.6	0.5	138.1	888.8	1741.9	1756.8	376.3	255.4	709.9	1325.3	1218.1
80°	150.7	0.6	168.8	775.4	1437.6	1064.2	196.4	215.9	389.3	986.3	801.5
81°	185.8	0.7	177.3	723.1	1087.5	768.3	155.5	184.0	333.3	650.8	385.0
82°	167.4	0.8	109.0	680.4	839.8	472.4	126.4	154.5	284.8	315.3	331.8
83°	103.9	0.9	76.9	566.6	598.2	180.5	102.0	127.4	232.3	246.6	291.3
84°	56.6	1.0	44.7	406.7	431.3	152.7	81.1	103.7	180.8	201.0	252.9
85°	42.2	1.1	12.8	246.9	264.5	121.3	63.5	79.9	137.9	159.2	216.0
86°	27.8	1.2	11.3	90.9	101.7	89.3	48.3	56.2	109.5	123.1	180.1
87°	13.6	1.4	11.3	63.1	52.2	63.9	36.6	37.1	81.2	96.3	140.5
88°	9.3	1.5	9.8	35.3	36.1	44.3	24.9	21.4	52.9	69.7	108.0
89°	6.7	1.7	5.4	8.0	20.1	24.7	13.3	14.8	30.7	43.1	75.7



REPORT NUMBER: P1436737

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

**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: P1436737

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

**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: P1436737

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

**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: P1436737

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
0°	4431.4	4431.4	4431.4
1°	4544.8	4561.9	4569.7
2°	4675.9	4708.0	4719.7
3°	4817.3	4865.0	4882.8
4°	4974.0	5040.7	5062.2
5°	5139.8	5228.6	5257.8
6°	5324.0	5435.7	5472.6
7°	5520.1	5652.9	5700.0
8°	5729.0	5891.2	5948.6
9°	5955.5	6150.4	6219.3
10°	6195.5	6424.4	6502.3
11°	6459.3	6723.1	6809.6
12°	6736.5	7042.1	7143.2
13°	7037.6	7388.0	7498.0
14°	7353.3	7752.8	7883.7
15°	7692.2	8140.6	8296.5
16°	8032.7	8534.9	8722.3
17°	8382.4	8941.5	9141.2
18°	8732.5	9342.4	9558.9
19°	9069.2	9720.0	9946.6
20°	9392.3	10075.0	10301.8
21°	9696.8	10399.9	10620.3
22°	9978.6	10686.5	10897.5
23°	10247.2	10947.9	11142.6
24°	10497.7	11171.9	11356.8
25°	10724.6	11368.3	11542.4
26°	10930.2	11533.5	11699.0
27°	11115.7	11677.1	11830.7
28°	11279.9	11797.2	11939.4
29°	11422.3	11895.4	12029.5
30°	11547.0	11975.2	12097.6
31°	11652.8	12037.6	12150.8
32°	11739.5	12083.8	12183.1
33°	11808.8	12110.3	12199.3
34°	11865.4	12121.9	12200.5
35°	11905.8	12118.4	12186.6
36°	11930.1	12101.1	12160.0
37°	11939.4	12072.2	12119.6
38°	11935.9	12031.8	12068.8
39°	11917.4	11980.9	12006.4
40°	11886.2	11920.9	11934.7
41°	11844.6	11851.5	11849.2
42°	11790.3	11771.8	11751.0
43°	11722.1	11681.7	11639.0
44°	11641.3	11576.6	11512.7



REPORT NUMBER: P1436737

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
45°	11552.8	11460.3	11369.8
46°	11452.8	11329.8	11206.2
47°	11339.1	11178.1	11033.8
48°	11215.9	11019.3	10852.3
49°	11074.7	10834.5	10646.4
50°	10917.7	10636.1	10417.8
51°	10738.7	10413.9	10170.5
52°	10539.8	10168.7	9904.3
53°	10318.5	9903.3	9620.9
54°	10082.2	9617.7	9316.3
55°	9832.3	9317.8	9005.6
56°	9557.7	8993.6	8669.7
57°	9273.6	8651.8	8335.5
58°	8974.7	8312.3	7987.8
59°	8662.0	7960.2	7625.1
60°	8334.8	7597.9	7237.4
61°	8000.1	7212.4	6823.2
62°	7659.9	6820.9	6390.6
63°	7321.4	6412.4	5937.0
64°	6987.0	6006.2	5497.9
65°	6646.1	5601.6	5099.8
66°	6302.8	5233.8	4749.9
67°	5960.4	4897.4	4462.3
68°	5622.7	4605.7	4153.5
69°	5301.8	4292.7	3700.1
70°	5000.3	3901.8	3035.2
71°	4689.4	3363.8	2160.8
72°	4344.9	2606.9	1375.3
73°	3932.0	1767.3	1058.4
74°	3371.4	1079.1	751.5
75°	2641.9	786.4	444.5
76°	1880.6	495.3	392.1
77°	1260.3	420.9	350.7
78°	983.9	370.4	317.0
79°	715.4	329.5	287.1
80°	447.0	294.5	260.0
81°	373.2	263.5	235.0
82°	321.5	235.6	211.7
83°	276.8	209.1	189.4
84°	233.9	184.8	167.9
85°	189.4	160.8	147.2
86°	154.2	138.8	126.8
87°	124.3	117.4	109.1
88°	101.9	99.6	91.6
89°	79.6	81.8	74.0



REPORT NUMBER: P1436737  
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

**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: P1436737

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

**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: P1436737  
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)