

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: P1436761

Luminaire Tested: XAS180-SFPM (5000K-180W-T4)

Issue Date: 3/25/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1436761  
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 (5000K-180W-T4)  
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.  
LUMEN OUTPUT - 100% (180W)  
OPTICS - TYPE 4  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

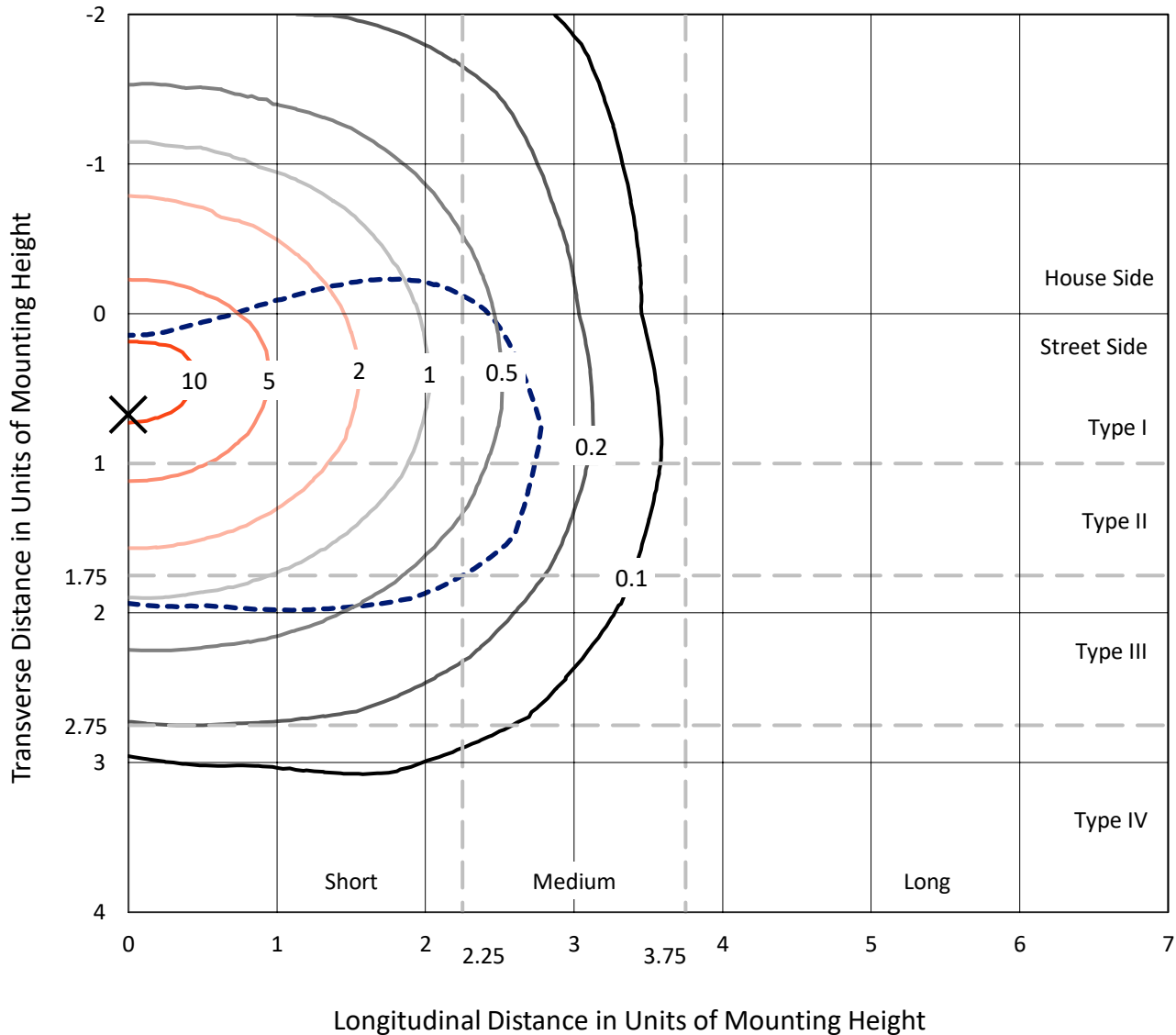
Lumens per Lamp: 24407 (1 lamp)  
Luminaire Lumens: 27519.9 lumens  
Efficiency: 112.8%  
Efficacy: 155.4 lumens/watt  
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 177.1  
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

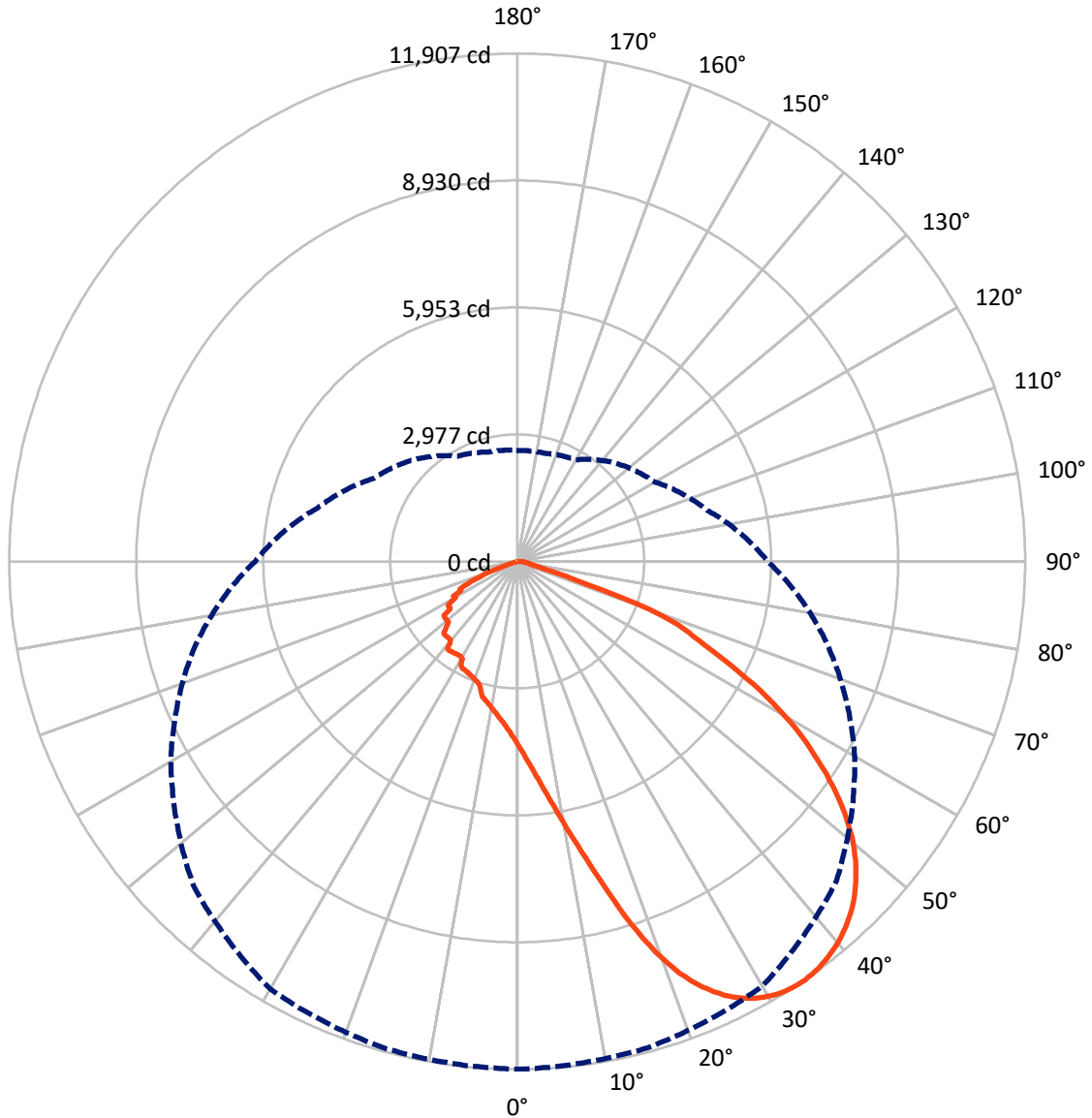
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.4 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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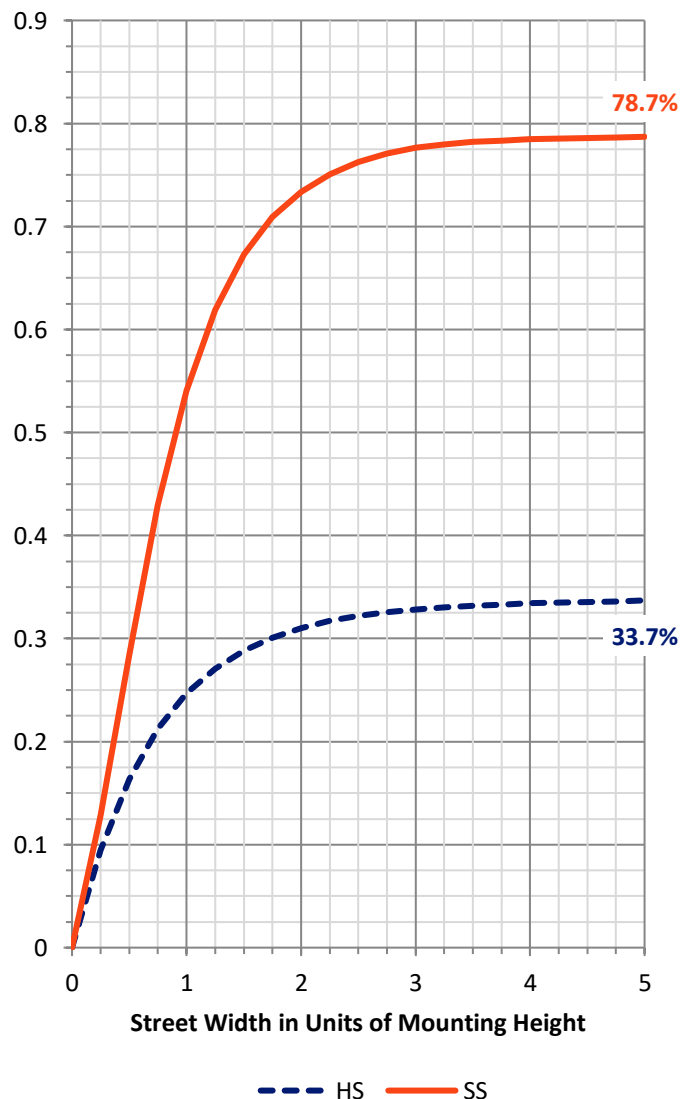
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8276.5	0.0	8276.5
	% Lamp	33.9	0.0	33.9
<b>Street Side</b>	Lumens	19243.4	0.0	19243.4
	% Lamp	78.8	0.0	78.8
<b>Total</b>	Lumens	27519.9	0.0	27519.9
	% Lamp	112.8	0.0	112.8

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	432.2	1.6	1.8
10°-20°	1501.5	5.5	6.2
20°-30°	2913.1	10.6	11.9
30°-40°	4282.7	15.6	17.5
40°-50°	5314.2	19.3	21.8
50°-60°	5662.4	20.6	23.2
60°-70°	4922.6	17.9	20.2
70°-80°	2277.2	8.3	9.3
80°-90°	213.9	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°	27519.9	100.0	112.8
0°-180°	27519.9	100.0	112.8

**Coefficient of Utilization**



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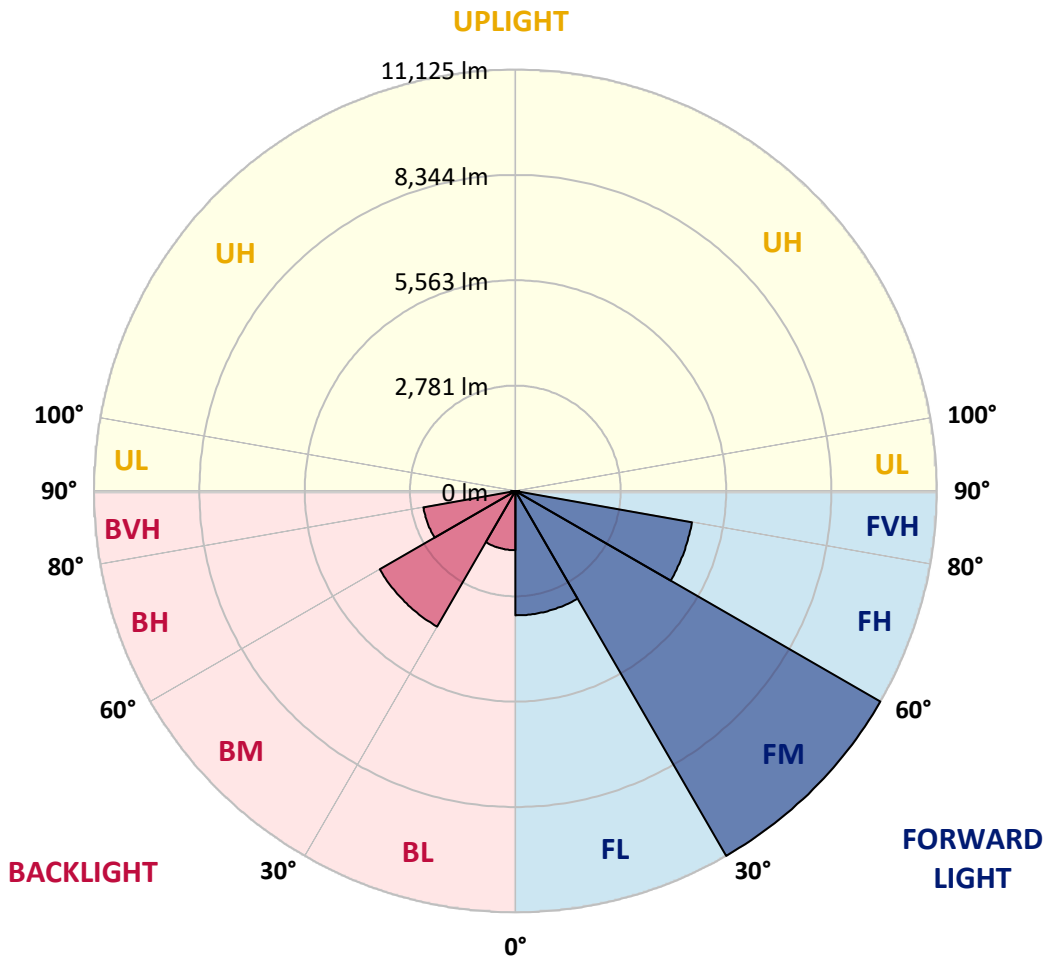
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3284.4	13.5			
FM (30°-60°)	11125.2	45.6			
FH (60°-80°)	4733.4	19.4			G2/5000
FVH (80°-90°)	100.4	0.4			G2/225
BL (0°-30°)	1562.4	6.4	B3/2500		
BM (30°-60°)	4134.2	16.9	B3/5000		
BH (60°-80°)	2466.4	10.1	B3/2500		G3/2500
BVH (80°-90°)	113.5	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	-3112.9	-12.8			

**BUG Rating: B3-U0-G3**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	4324.8	4324.8	4324.8	4324.8	4324.8	4324.8	4324.8	4324.8	4324.8	4324.8	4324.8
1°	4459.7	4457.1	4446.3	4426.0	4398.8	4367.3	4310.0	4280.3	4253.6	4232.3	4216.7
2°	4606.1	4600.0	4571.1	4527.0	4468.5	4402.7	4312.0	4250.7	4196.3	4153.3	4119.4
3°	4765.3	4749.4	4704.4	4633.9	4546.0	4445.7	4319.0	4227.7	4146.5	4080.4	4031.6
4°	4940.3	4916.8	4852.9	4753.2	4628.2	4491.9	4329.4	4207.9	4101.4	4014.3	3952.4
5°	5131.2	5101.2	5011.9	4881.9	4717.2	4542.9	4343.5	4190.9	4060.7	3955.9	3882.3
6°	5340.9	5297.6	5187.8	5021.9	4817.3	4598.9	4360.5	4178.6	4023.1	3904.0	3817.9
7°	5562.8	5510.1	5375.1	5171.6	4921.8	4661.0	4384.3	4172.2	3992.7	3856.3	3757.0
8°	5805.4	5744.3	5578.9	5331.9	5035.0	4727.6	4412.6	4169.9	3966.5	3812.7	3702.8
9°	6069.6	5996.3	5796.0	5504.8	5155.4	4799.3	4443.6	4169.6	3945.9	3773.1	3651.5
10°	6345.7	6257.5	6028.6	5684.7	5283.3	4877.4	4479.5	4173.8	3926.5	3739.1	3603.4
11°	6645.7	6544.4	6275.8	5878.8	5418.8	4960.1	4518.7	4181.1	3910.8	3708.0	3560.0
12°	6971.2	6852.1	6537.1	6087.3	5560.2	5047.1	4560.6	4191.1	3899.0	3679.7	3521.1
13°	7317.4	7177.7	6820.2	6304.6	5711.3	5139.6	4605.2	4202.9	3888.9	3653.3	3485.1
14°	7693.9	7538.4	7124.0	6535.3	5868.9	5234.9	4649.4	4214.9	3879.8	3629.6	3451.4
15°	8096.8	7915.5	7445.9	6780.7	6034.4	5333.0	4698.3	4229.3	3872.7	3607.8	3417.5
16°	8512.3	8307.3	7779.4	7041.7	6207.4	5434.7	4750.1	4246.5	3867.4	3587.1	3387.0
17°	8921.1	8696.1	8107.1	7309.8	6390.4	5540.6	4803.4	4264.4	3863.6	3568.1	3356.1
18°	9328.7	9077.7	8436.3	7573.8	6582.9	5650.5	4857.5	4280.2	3860.9	3550.5	3308.7
19°	9707.1	9445.4	8760.7	7834.4	6780.9	5764.3	4895.3	4284.1	3853.0	3534.7	3198.0
20°	10053.7	9785.5	9075.9	8094.5	6978.4	5872.3	4942.6	4294.9	3835.3	3518.9	3119.4
21°	10364.6	10096.8	9372.4	8345.4	7179.2	5970.6	4990.6	4319.0	3822.0	3501.4	3098.5
22°	10635.1	10376.0	9651.4	8587.5	7375.2	6086.9	5053.4	4344.1	3824.2	3439.0	3079.4
23°	10874.4	10629.0	9906.1	8821.0	7569.6	6199.5	5119.9	4367.0	3826.7	3359.3	3063.3
24°	11083.4	10851.0	10147.0	9039.5	7740.6	6329.8	5181.9	4380.7	3821.5	3295.5	3051.1
25°	11264.5	11045.9	10364.3	9250.1	7905.1	6465.9	5234.2	4399.7	3816.2	3285.2	3039.3
26°	11417.4	11213.9	10562.4	9443.6	8067.6	6599.3	5289.4	4418.5	3813.0	3272.7	3029.9
27°	11545.9	11359.9	10745.6	9633.6	8224.1	6730.0	5351.0	4447.9	3820.5	3256.0	3019.8
28°	11651.9	11480.5	10904.8	9811.9	8370.0	6846.0	5414.5	4477.3	3831.7	3244.0	3010.5
29°	11739.8	11578.6	11044.2	9975.3	8513.1	6955.6	5489.2	4506.9	3841.3	3243.7	3003.2
30°	11806.4	11659.8	11167.9	10130.4	8658.4	7070.1	5563.8	4538.5	3828.4	3246.4	2996.1
31°	11858.2	11721.8	11274.3	10271.5	8792.9	7185.5	5641.6	4571.0	3771.4	3250.4	2982.3
32°	11889.8	11766.9	11362.1	10388.2	8919.2	7295.9	5718.6	4599.4	3759.3	3254.3	2964.1
33°	11905.6	11794.0	11437.7	10491.7	9034.0	7411.5	5796.3	4608.0	3714.3	3258.0	2848.4
34°	11906.7	11805.2	11496.3	10585.0	9134.2	7524.5	5871.3	4617.1	3719.3	3258.2	2748.8
35°	11893.2	11804.1	11540.3	10673.9	9223.7	7632.1	5926.5	4639.9	3726.6	3255.6	2742.9
36°	11867.3	11790.6	11566.2	10751.9	9307.4	7735.3	5972.2	4666.3	3736.2	3254.3	2745.1
37°	11827.8	11764.7	11578.6	10817.0	9389.3	7834.1	6024.3	4694.0	3752.9	3258.8	2747.0
38°	11778.2	11726.3	11579.7	10866.9	9469.3	7932.1	6089.0	4725.6	3763.2	3259.9	2745.1
39°	11717.3	11680.1	11567.3	10908.4	9540.3	8021.0	6147.2	4759.5	3765.8	3104.3	2743.3
40°	11647.4	11622.6	11539.1	10940.9	9608.6	8095.1	6209.6	4784.3	3782.2	3032.9	2750.2
41°	11564.0	11552.7	11501.9	10966.2	9667.9	8147.8	6269.7	4806.8	3806.9	3043.3	2756.8
42°	11468.1	11474.9	11451.2	10988.1	9730.8	8199.0	6331.2	4826.4	3831.8	3057.9	2764.4
43°	11358.7	11383.5	11388.1	10994.8	9790.1	8251.5	6389.0	4837.4	3858.2	3074.3	2767.2
44°	11235.5	11282.1	11314.8	10987.3	9843.3	8309.0	6437.4	4870.8	3886.5	3092.1	2678.2



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CATALOG NUMBER: XAS180-SFPM (5000K-180W-T4)

**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	11096.0	11165.6	11227.4	10964.2	9890.6	8364.2	6475.6	4917.2	3916.0	3107.5	2557.0
46°	10936.4	11033.9	11130.8	10928.3	9934.7	8419.0	6510.4	4964.9	3928.4	3107.1	2560.2
47°	10768.1	10883.3	11021.9	10876.6	9972.6	8471.0	6532.5	5014.1	3927.0	3115.1	2567.6
48°	10591.0	10721.3	10900.2	10811.4	10001.0	8514.1	6548.7	5065.7	3940.4	3133.5	2571.2
49°	10390.1	10535.4	10762.8	10737.1	10017.2	8556.6	6582.7	5109.6	3872.2	3145.0	2568.0
50°	10166.9	10335.6	10606.6	10648.5	10018.0	8596.0	6629.9	5119.0	3811.5	3045.3	2568.4
51°	9925.7	10112.3	10429.5	10542.1	9999.3	8621.1	6677.0	5085.8	3755.4	2923.3	2572.5
52°	9665.9	9869.6	10236.6	10419.3	9973.2	8634.5	6719.6	5116.5	3783.4	2932.8	2457.1
53°	9389.3	9606.0	10022.3	10283.8	9931.5	8640.4	6757.2	5126.5	3808.6	2951.1	2332.6
54°	9092.0	9319.4	9792.5	10128.3	9876.6	8639.1	6790.6	5121.0	3822.1	2975.7	2344.6
55°	8788.8	9024.2	9543.5	9956.3	9803.7	8615.5	6817.7	5151.7	3843.5	2989.2	2361.3
56°	8461.0	8714.2	9274.2	9769.7	9721.6	8574.0	6823.5	5171.5	3878.1	2999.0	2380.2
57°	8134.8	8389.7	8997.2	9562.9	9627.0	8520.9	6816.7	5171.4	3906.0	2994.8	2398.6
58°	7795.5	8056.5	8706.8	9339.1	9514.4	8471.7	6789.7	5189.2	3918.5	2834.3	2408.2
59°	7441.5	7718.3	8401.3	9105.8	9382.6	8420.1	6764.1	5206.0	3944.7	2796.2	2217.6
60°	7063.2	7364.7	8088.2	8851.1	9226.8	8356.4	6739.9	5193.4	3837.9	2834.5	2233.5
61°	6659.0	6991.3	7760.5	8585.9	9049.7	8277.9	6697.3	5148.6	3777.3	2880.1	2240.1
62°	6236.7	6602.9	7429.6	8304.3	8861.8	8177.9	6649.6	5134.9	3802.0	2928.8	2175.1
63°	5794.0	6196.9	7094.0	8009.6	8650.8	8054.7	6583.5	5098.0	3820.6	2965.7	2110.5
64°	5365.6	5796.4	6758.3	7708.8	8415.2	7909.3	6492.4	5039.4	3834.6	2827.5	2096.4
65°	4977.0	5397.2	6410.0	7398.9	8162.1	7737.0	6381.1	4971.4	3816.1	2842.3	2120.0
66°	4635.5	5035.7	6070.1	7084.3	7891.8	7536.4	6235.1	4870.4	3711.7	2878.5	1996.0
67°	4354.9	4706.2	5732.3	6771.8	7602.5	7303.0	6081.2	4763.8	3596.5	2855.1	1967.1
68°	4053.5	4417.2	5403.4	6451.1	7276.4	7042.0	5850.6	4607.3	3624.4	2784.5	2017.0
69°	3611.0	4112.8	5094.2	6138.6	6931.8	6728.8	5501.7	4421.0	3641.1	2803.7	1845.2
70°	2962.1	3710.6	4805.8	5822.7	6578.6	6340.7	4996.7	4170.1	3648.6	2728.6	1836.9
71°	2108.8	3148.9	4516.7	5508.6	6178.4	5880.5	4417.2	3842.5	3574.3	2734.9	1589.8
72°	1342.2	2384.5	4191.5	5182.5	5734.2	5339.9	3920.6	3478.0	3438.9	2719.4	1533.1
73°	1033.0	1578.4	3801.5	4846.9	5237.7	4753.3	3448.8	3158.8	3303.8	2679.0	1422.2
74°	733.4	959.6	3274.7	4468.4	4711.0	4157.7	2791.0	2923.0	3156.9	2701.8	1288.9
75°	433.8	707.0	2544.0	3984.0	4137.5	3516.1	2133.2	2472.8	2989.3	2645.6	1241.3
76°	382.6	462.0	1775.7	3386.2	3546.2	2717.1	1474.9	2022.6	2841.7	2573.4	1209.8
77°	342.3	396.8	1158.4	2645.8	2932.1	1787.9	805.5	1571.2	2719.3	2327.3	1141.7
78°	309.4	350.3	905.7	1765.9	2276.3	1028.4	420.2	906.7	2364.1	2081.2	1029.9
79°	280.2	312.9	664.3	963.0	1583.3	713.5	343.7	664.2	2009.0	1832.7	874.5
80°	253.8	280.5	422.9	664.7	989.7	401.0	267.2	421.6	1648.3	1495.2	749.1
81°	229.4	251.3	357.6	379.0	649.7	338.5	191.7	183.0	915.2	1118.8	677.0
82°	206.6	224.5	310.1	324.2	316.0	289.2	161.7	142.1	670.8	891.3	674.3
83°	184.8	199.2	268.5	282.9	245.3	234.7	134.8	109.7	426.3	706.1	553.8
84°	163.8	175.6	227.2	245.8	199.3	178.0	109.3	85.9	182.8	504.1	412.1
85°	143.7	153.5	183.6	210.5	158.8	135.9	84.6	66.3	160.5	373.1	291.1
86°	123.7	132.5	149.7	176.2	123.7	105.3	62.1	50.3	128.5	242.0	170.8
87°	106.5	112.7	121.2	138.9	96.7	79.3	47.6	39.0	95.3	112.4	104.8
88°	89.4	96.0	99.2	106.7	69.9	53.5	33.2	27.7	72.3	76.5	71.4
89°	72.3	79.3	77.5	74.6	43.1	31.2	18.8	16.4	49.3	40.6	38.0



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CATALOG NUMBER: XAS180-SFPM (5000K-180W-T4)

**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: P1436761

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436761

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436761

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T4)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	4324.8	4324.8	4324.8	4324.8	4324.8	4324.8	4324.8	4324.8	4324.8	4324.8	4324.8
1°	4209.6	4209.9	4215.9	4231.6	4252.3	4279.1	4308.1	4317.0	4351.5	4383.7	4411.9
2°	4103.0	4100.0	4112.6	4139.2	4178.4	4227.3	4285.7	4326.8	4394.9	4460.7	4519.0
3°	4006.1	3999.6	4015.7	4053.2	4110.4	4182.7	4267.7	4341.9	4443.0	4541.5	4630.1
4°	3918.4	3911.5	3929.4	3975.6	4048.1	4143.0	4255.0	4359.9	4495.7	4629.1	4753.3
5°	3840.9	3831.1	3851.3	3906.6	3992.0	4108.2	4246.3	4382.3	4554.0	4726.3	4885.9
6°	3767.3	3755.4	3779.7	3843.4	3943.7	4076.6	4240.6	4408.5	4617.7	4832.4	5030.6
7°	3700.2	3685.6	3712.5	3784.2	3898.2	4051.0	4240.0	4441.1	4685.8	4943.7	5185.3
8°	3638.2	3620.6	3650.6	3731.1	3857.6	4028.2	4242.6	4473.7	4759.4	5062.3	5351.5
9°	3579.2	3558.9	3592.5	3681.4	3821.7	4009.4	4247.4	4511.2	4839.7	5189.8	5530.2
10°	3524.3	3502.4	3539.3	3636.1	3787.5	3993.0	4254.7	4552.9	4922.7	5324.3	5716.9
11°	3473.7	3449.1	3489.8	3595.1	3759.0	3979.7	4265.8	4600.0	5014.1	5468.0	5918.1
12°	3427.4	3401.2	3442.4	3556.3	3733.0	3969.4	4280.7	4648.8	5106.5	5620.4	6131.2
13°	3385.1	3355.3	3400.2	3520.9	3709.9	3962.6	4298.1	4701.2	5205.6	5780.1	6359.6
14°	3344.4	3311.1	3359.7	3488.0	3690.1	3958.1	4317.4	4754.7	5308.0	5946.1	6601.6
15°	3304.5	3267.9	3320.0	3456.4	3672.0	3957.1	4337.7	4812.0	5415.2	6127.2	6861.2
16°	3258.5	3171.4	3275.9	3426.5	3654.4	3957.4	4358.8	4871.8	5526.7	6313.0	7134.4
17°	3133.3	3063.3	3156.9	3396.9	3638.4	3958.2	4384.2	4931.8	5643.3	6512.3	7409.9
18°	3045.1	3006.8	3066.4	3350.8	3624.7	3960.8	4409.5	4994.5	5763.9	6718.1	7689.0
19°	3012.9	2974.0	3032.3	3249.1	3610.8	3961.1	4419.7	5048.3	5888.3	6927.1	7970.5
20°	2985.1	2944.3	3004.3	3173.0	3597.3	3948.6	4437.2	5097.9	6018.6	7139.2	8243.5
21°	2960.8	2919.7	2979.5	3144.6	3581.5	3940.3	4462.9	5154.2	6137.1	7354.0	8505.5
22°	2941.1	2897.3	2959.9	3127.5	3520.0	3946.2	4495.8	5222.9	6257.3	7569.0	8753.5
23°	2924.0	2878.5	2944.1	3112.8	3446.4	3954.6	4528.6	5297.3	6394.3	7775.0	8983.5
24°	2908.1	2861.1	2929.3	3101.2	3392.6	3963.0	4557.3	5373.4	6531.0	7978.1	9203.1
25°	2894.0	2844.4	2915.3	3091.6	3378.0	3960.8	4577.4	5445.4	6678.8	8153.7	9408.2
26°	2879.7	2830.8	2903.4	3084.0	3371.9	3960.5	4603.6	5506.4	6827.3	8314.7	9603.5
27°	2867.9	2819.4	2892.5	3077.4	3358.0	3962.7	4628.3	5574.7	6977.3	8474.5	9787.3
28°	2858.2	2809.6	2883.5	3070.8	3347.9	3976.2	4664.4	5646.0	7117.6	8627.4	9962.3
29°	2848.3	2767.9	2874.0	3065.6	3346.8	3989.2	4701.5	5725.5	7241.2	8764.2	10121.8
30°	2770.9	2617.2	2808.8	3061.6	3352.1	3979.1	4739.0	5808.5	7365.7	8903.8	10273.3
31°	2640.2	2588.2	2676.0	3049.1	3358.7	3947.3	4775.7	5891.8	7490.0	9037.5	10414.4
32°	2618.7	2589.0	2652.2	3034.7	3367.1	3916.4	4811.2	5976.5	7606.4	9163.9	10542.2
33°	2616.9	2592.5	2651.0	2948.2	3375.5	3886.3	4826.8	6060.1	7721.0	9277.1	10648.8
34°	2618.0	2599.0	2652.3	2844.1	3383.7	3887.5	4842.7	6144.9	7836.5	9377.9	10740.2
35°	2620.3	2607.5	2655.7	2829.9	3385.2	3896.7	4869.4	6216.8	7946.6	9464.8	10820.5
36°	2624.3	2615.1	2660.9	2833.7	3385.9	3908.2	4899.3	6272.3	8049.7	9545.6	10896.5
37°	2625.8	2621.5	2664.2	2839.1	3386.7	3923.1	4932.6	6331.8	8147.3	9624.8	10962.5
38°	2626.2	2627.4	2666.5	2838.4	3387.2	3940.2	4969.8	6398.1	8240.7	9702.1	11017.3
39°	2625.5	2627.7	2668.4	2837.3	3260.0	3947.4	5010.0	6462.2	8328.6	9770.4	11056.8
40°	2620.2	2483.4	2665.3	2843.2	3185.4	3959.8	5048.0	6530.0	8405.3	9833.4	11090.2
41°	2472.0	2409.2	2535.4	2852.3	3186.9	3987.3	5074.0	6594.7	8461.0	9893.0	11110.5
42°	2390.3	2410.3	2439.5	2861.8	3200.9	4016.2	5094.2	6657.2	8506.9	9953.2	11122.0
43°	2388.8	2414.4	2438.5	2868.6	3217.4	4046.7	5107.1	6721.8	8554.5	10004.4	11122.6
44°	2390.8	2417.4	2442.7	2807.9	3236.2	4078.4	5146.2	6782.9	8599.3	10051.4	11112.6

REPORT NUMBER: P1436761

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T4)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2393.7	2417.4	2447.5	2671.6	3254.3	4108.7	5195.4	6828.7	8646.8	10089.3	11084.2
46°	2396.3	2413.8	2451.4	2664.8	3258.8	4124.8	5246.4	6862.9	8694.3	10122.6	11037.2
47°	2397.9	2327.0	2454.3	2673.4	3263.4	4127.1	5297.9	6884.4	8734.3	10148.5	10972.5
48°	2318.4	2240.2	2454.1	2678.0	3284.9	4143.2	5348.7	6896.1	8770.6	10162.9	10898.5
49°	2239.1	2154.8	2310.4	2673.6	3297.6	4131.6	5397.8	6926.6	8796.7	10166.9	10810.1
50°	2160.0	2150.0	2206.8	2673.1	3230.5	4039.6	5428.5	6965.5	8816.0	10150.0	10713.2
51°	2168.1	2147.6	2213.9	2678.7	3083.8	3984.6	5404.3	7000.0	8826.4	10111.2	10601.5
52°	2179.7	2147.9	2224.8	2591.3	3085.4	4003.7	5388.7	7031.5	8824.6	10062.0	10473.6
53°	2192.1	2147.3	2236.6	2444.8	3108.4	4032.4	5408.4	7055.7	8808.2	9998.8	10330.1
54°	2202.1	2137.5	2183.9	2457.3	3137.6	4046.7	5400.6	7071.8	8781.0	9923.3	10165.6
55°	2206.6	1935.2	2131.1	2476.2	3154.7	4056.1	5396.7	7082.5	8730.9	9835.9	9991.3
56°	2015.3	1903.6	2078.6	2498.5	3169.2	4093.2	5403.5	7071.0	8656.2	9739.6	9798.5
57°	1980.1	1912.2	2035.5	2521.4	3166.9	4120.7	5392.1	7037.0	8574.8	9633.2	9595.1
58°	1988.9	1922.0	2044.8	2537.7	3030.2	4129.4	5392.4	6986.0	8491.2	9504.0	9373.7
59°	2001.8	1837.3	2056.3	2352.4	2984.5	4146.7	5395.0	6936.2	8410.6	9362.9	9138.2
60°	1856.5	1669.4	1926.3	2355.1	3026.3	4058.2	5363.4	6881.5	8318.2	9199.9	8881.4
61°	1769.8	1687.9	1833.4	2368.2	3072.4	3958.6	5296.5	6812.7	8206.1	9017.0	8607.1
62°	1791.1	1705.3	1857.0	2393.3	3120.0	3961.2	5265.1	6731.8	8078.5	8816.2	8328.6
63°	1813.3	1493.1	1876.5	2247.6	3158.0	3963.0	5223.8	6637.9	7932.4	8588.5	8034.1
64°	1578.3	1473.8	1634.8	2228.8	3021.0	3963.7	5147.1	6511.8	7764.5	8349.8	7735.5
65°	1593.3	1491.8	1642.0	2186.6	3024.0	3937.9	5067.7	6354.1	7570.0	8088.3	7421.7
66°	1604.4	1246.1	1663.0	2144.5	3043.1	3841.8	4951.3	6177.6	7338.6	7815.1	7097.8
67°	1328.5	1205.8	1378.9	2104.6	3022.2	3694.1	4819.5	5965.4	7088.3	7514.4	6776.8
68°	1351.0	930.8	1394.9	2150.3	2944.1	3703.4	4625.7	5648.3	6788.2	7185.2	6450.7
69°	1080.3	839.6	1122.3	1977.8	2939.4	3702.5	4374.7	5195.1	6430.8	6830.9	6137.4
70°	1031.8	574.6	1059.3	1958.2	2868.7	3693.9	4048.5	4597.1	5987.1	6438.2	5803.6
71°	683.2	309.6	685.5	1706.3	2837.2	3606.0	3671.6	4031.1	5456.3	6000.4	5459.7
72°	423.9	47.2	401.1	1649.0	2817.1	3444.0	3301.6	3529.1	4856.8	5514.1	5110.1
73°	349.9	0.6	319.1	1496.2	2757.5	3277.7	2961.9	3000.9	4238.6	4980.1	4731.6
74°	315.9	0.4	294.2	1330.8	2752.0	3112.4	2542.6	2402.8	3627.8	4405.1	4315.4
75°	259.4	0.4	251.8	1251.7	2611.6	2934.8	2123.1	1661.4	2971.2	3778.7	3799.8
76°	202.9	0.4	209.5	1208.0	2396.0	2735.5	1702.0	965.7	2165.1	3155.5	3186.0
77°	146.9	0.5	167.2	1137.8	2180.4	2397.7	1048.9	640.1	1328.8	2561.7	2439.0
78°	109.4	0.5	134.9	1024.9	1964.4	2059.9	547.1	318.9	1005.6	1937.9	1605.9
79°	107.9	0.5	134.8	867.4	1700.0	1714.5	367.2	249.3	692.8	1293.4	1188.8
80°	147.1	0.6	164.7	756.8	1403.0	1038.6	191.7	210.7	379.9	962.6	782.2
81°	181.4	0.7	173.1	705.6	1061.3	749.8	151.7	179.6	325.2	635.1	375.7
82°	163.4	0.7	106.4	664.0	819.6	461.1	123.4	150.8	278.0	307.7	323.8
83°	101.4	0.8	75.0	552.9	583.8	176.2	99.5	124.4	226.7	240.7	284.3
84°	55.3	0.9	43.6	396.9	420.9	149.0	79.2	101.2	176.5	196.1	246.8
85°	41.2	1.1	12.5	240.9	258.1	118.4	62.0	78.0	134.6	155.4	210.8
86°	27.1	1.2	11.0	88.7	99.3	87.2	47.2	54.8	106.8	120.2	175.8
87°	13.3	1.3	11.0	61.6	50.9	62.4	35.7	36.2	79.2	94.0	137.2
88°	9.1	1.5	9.6	34.5	35.3	43.3	24.3	20.9	51.6	68.0	105.4
89°	6.5	1.7	5.3	7.9	19.6	24.2	13.0	14.5	30.0	42.0	73.9



REPORT NUMBER: P1436761

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436761

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436761

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436761  
 CATALOG NUMBER: XAS180-SFPM (5000K-180W-T4)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
0°	4324.8	4324.8	4324.8
1°	4435.4	4452.1	4459.7
2°	4563.3	4594.7	4606.1
3°	4701.4	4747.9	4765.3
4°	4854.2	4919.3	4940.3
5°	5016.0	5102.8	5131.2
6°	5195.8	5304.8	5340.9
7°	5387.2	5516.8	5562.8
8°	5591.1	5749.4	5805.4
9°	5812.1	6002.3	6069.6
10°	6046.4	6269.7	6345.7
11°	6303.8	6561.2	6645.7
12°	6574.3	6872.5	6971.2
13°	6868.1	7210.1	7317.4
14°	7176.3	7566.2	7693.9
15°	7507.0	7944.6	8096.8
16°	7839.3	8329.4	8512.3
17°	8180.6	8726.2	8921.1
18°	8522.2	9117.4	9328.7
19°	8850.9	9486.0	9707.1
20°	9166.1	9832.4	10053.7
21°	9463.4	10149.5	10364.6
22°	9738.4	10429.2	10635.1
23°	10000.5	10684.4	10874.4
24°	10245.0	10902.9	11083.4
25°	10466.4	11094.6	11264.5
26°	10667.0	11255.8	11417.4
27°	10848.1	11396.0	11545.9
28°	11008.3	11513.2	11651.9
29°	11147.3	11609.1	11739.8
30°	11269.0	11686.9	11806.4
31°	11372.3	11747.7	11858.2
32°	11456.8	11792.8	11889.8
33°	11524.5	11818.8	11905.6
34°	11579.7	11830.1	11906.7
35°	11619.2	11826.7	11893.2
36°	11642.9	11809.8	11867.3
37°	11651.9	11781.6	11827.8
38°	11648.5	11742.1	11778.2
39°	11630.5	11692.5	11717.3
40°	11600.0	11633.9	11647.4
41°	11559.4	11566.2	11564.0
42°	11506.4	11488.4	11468.1
43°	11439.9	11400.5	11358.7
44°	11361.0	11297.9	11235.5



REPORT NUMBER: P1436761  
 CATALOG NUMBER: XAS180-SFPM (5000K-180W-T4)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
45°	11274.6	11184.4	11096.0
46°	11177.1	11057.0	10936.4
47°	11066.1	10909.0	10768.1
48°	10945.8	10754.0	10591.0
49°	10808.1	10573.6	10390.1
50°	10654.8	10380.0	10166.9
51°	10480.2	10163.2	9925.7
52°	10286.0	9923.8	9665.9
53°	10070.1	9664.9	9389.3
54°	9839.5	9386.1	9092.0
55°	9595.6	9093.4	8788.8
56°	9327.6	8777.0	8461.0
57°	9050.3	8443.5	8134.8
58°	8758.7	8112.1	7795.5
59°	8453.4	7768.6	7441.5
60°	8134.1	7415.0	7063.2
61°	7807.5	7038.7	6659.0
62°	7475.5	6656.7	6236.7
63°	7145.2	6258.0	5794.0
64°	6818.7	5861.6	5365.6
65°	6486.1	5466.7	4977.0
66°	6151.0	5107.8	4635.5
67°	5816.9	4779.5	4354.9
68°	5487.4	4494.8	4053.5
69°	5174.1	4189.3	3611.0
70°	4880.0	3807.9	2962.1
71°	4576.5	3282.8	2108.8
72°	4240.3	2544.2	1342.2
73°	3837.3	1724.8	1033.0
74°	3290.2	1053.1	733.4
75°	2578.3	767.5	433.8
76°	1835.3	483.3	382.6
77°	1229.9	410.7	342.3
78°	960.3	361.5	309.4
79°	698.2	321.6	280.2
80°	436.2	287.4	253.8
81°	364.2	257.2	229.4
82°	313.7	229.9	206.6
83°	270.2	204.1	184.8
84°	228.3	180.3	163.8
85°	184.8	157.0	143.7
86°	150.5	135.4	123.7
87°	121.4	114.5	106.5
88°	99.4	97.2	89.4
89°	77.7	79.8	72.3



REPORT NUMBER: P1436761

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436761

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436761  
CATALOG NUMBER: XAS180-SFPM (5000K-180W-T4)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)