

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: P1436754

Luminaire Tested: XAS180-SFPM (5000K-144W-T3-HSS)

Issue Date: 3/25/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1436754  
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-144W-T3-HSS)  
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.  
LUMEN OUTPUT - 80% (144W)  
OPTICS - TYPE 3 WITH HOUSE SIDE SHIELD  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: 24748 (1 lamp)  
Luminaire Lumens: 19720.9 lumens  
Efficiency: 79.7%  
Efficacy: 135.0 lumens/watt  
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)  
IES Classification: Type IV - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

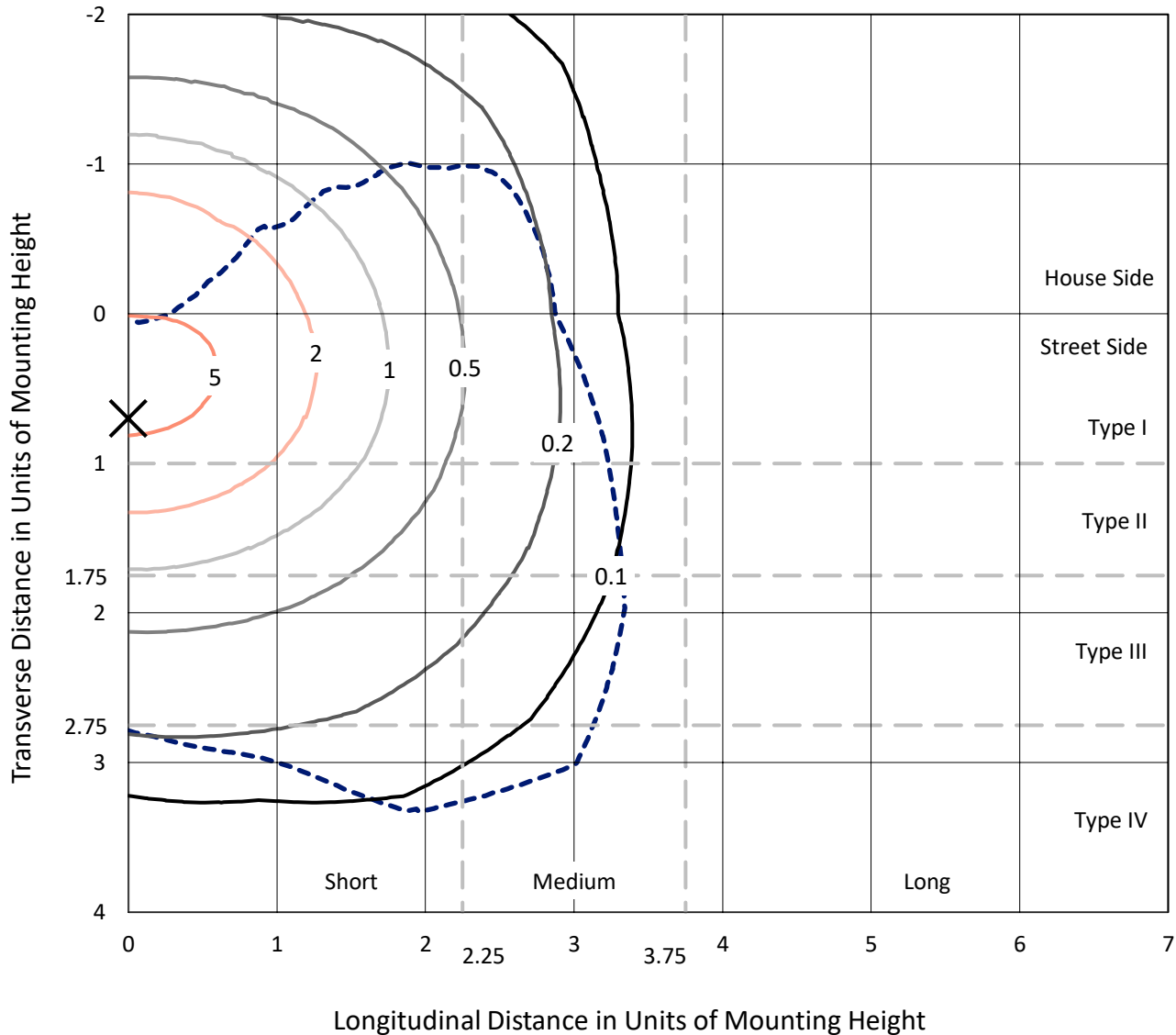
Input Watts (W): 146.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT

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### Iso-Footcandle Lines of Horizontal Illumination

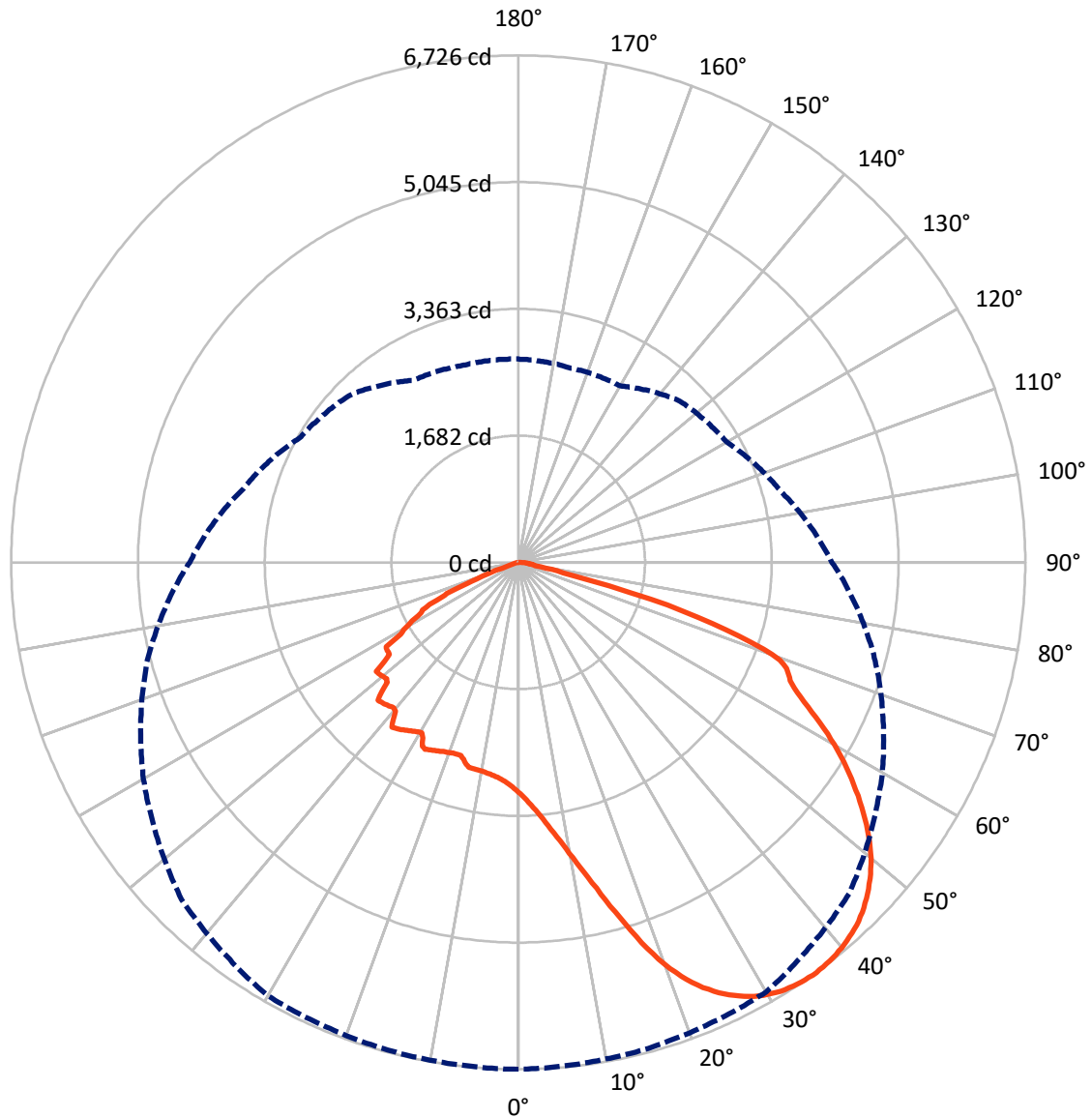
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc  
 Type IV - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 35-Deg Vertical

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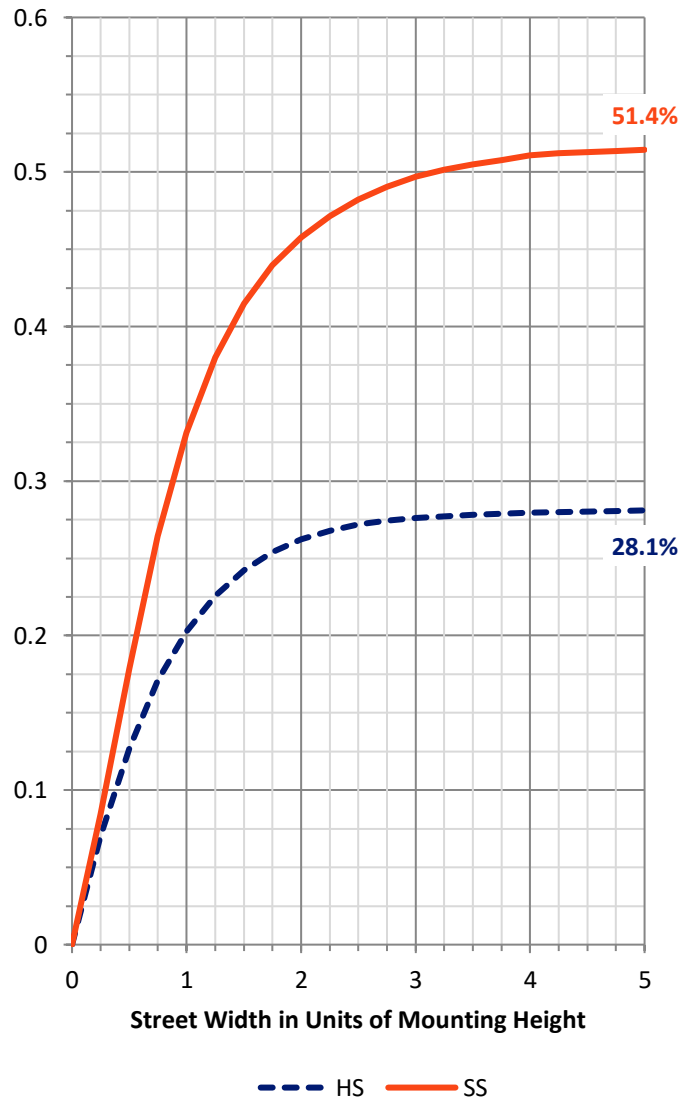
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6986.4	0.0	6986.4
	% Lamp	28.2	0.0	28.2
<b>Street Side</b>	Lumens	12734.5	0.0	12734.5
	% Lamp	51.5	0.0	51.5
<b>Total</b>	Lumens	19720.9	0.0	19720.9
	% Lamp	79.7	0.0	79.7

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	304.4	1.5	1.2
10°-20°	1028.7	5.2	4.2
20°-30°	1945.1	9.9	7.9
30°-40°	2859.7	14.5	11.6
40°-50°	3612.3	18.3	14.6
50°-60°	3999.8	20.3	16.2
60°-70°	3763.3	19.1	15.2
70°-80°	2051.0	10.4	8.3
80°-90°	156.5	0.8	0.6
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°	19720.9	100.0	79.7
0°-180°	19720.9	100.0	79.7

**Coefficient of Utilization**



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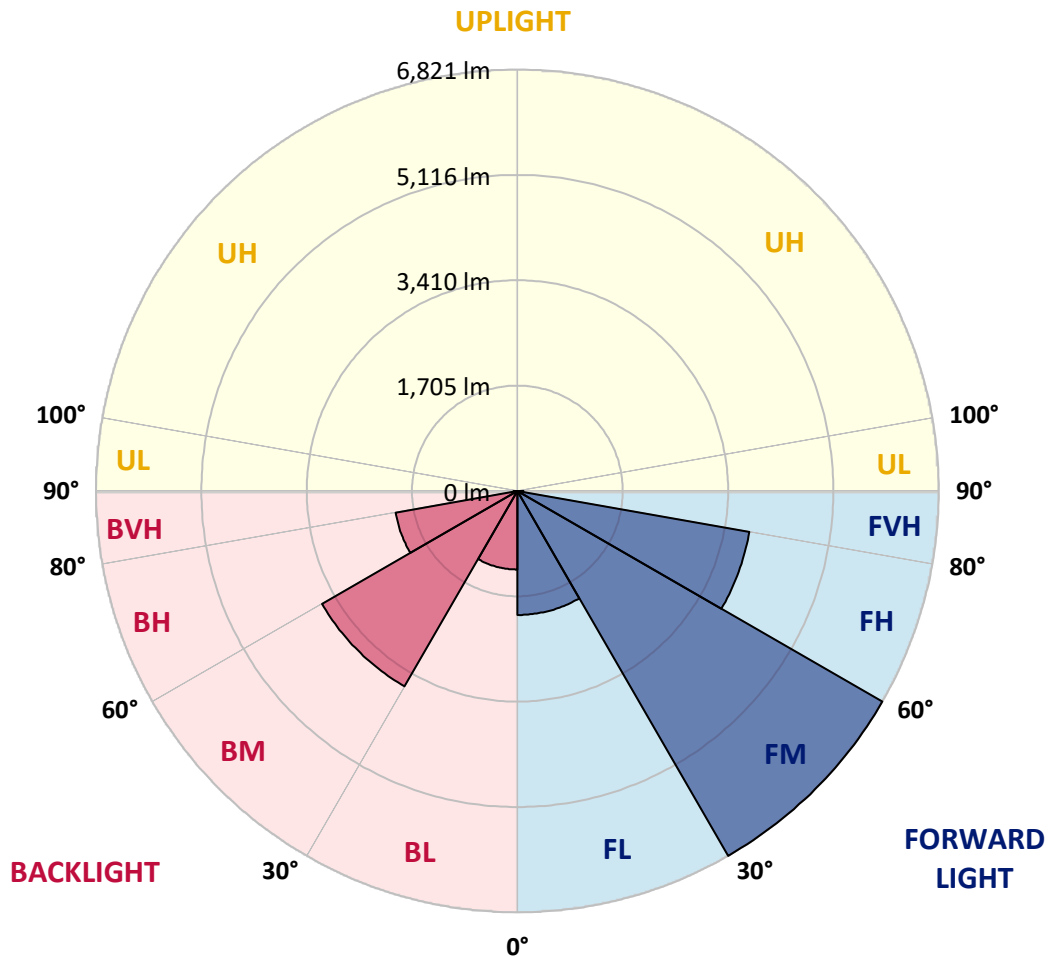
CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

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

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2006.5	8.1			
FM (30°-60°)	6821.0	27.6			
FH (60°-80°)	3812.4	15.4			G2/5000
FVH (80°-90°)	94.6	0.4			G1/100
BL (0°-30°)	1271.8	5.1	B3/2500		
BM (30°-60°)	3650.8	14.8	B3/5000		
BH (60°-80°)	2001.9	8.1	B3/2500		G3/2500
BVH (80°-90°)	61.9	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	5027.1	20.3			

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

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	3069.4	3069.4	3069.4	3069.4	3069.4	3069.4	3069.4	3069.4	3069.4	3069.4	3069.4
1°	3124.5	3123.2	3119.6	3111.8	3099.7	3087.2	3061.7	3049.9	3040.4	3031.3	3025.2
2°	3187.9	3184.3	3173.7	3154.9	3129.8	3102.6	3063.1	3038.7	3017.1	2999.9	2987.4
3°	3257.1	3252.0	3232.6	3202.0	3164.3	3122.8	3069.1	3031.2	2998.8	2973.3	2954.1
4°	3334.7	3325.5	3296.9	3255.2	3203.1	3146.8	3076.9	3027.3	2984.3	2950.5	2926.3
5°	3422.8	3409.1	3371.1	3313.5	3245.6	3172.6	3087.1	3024.9	2973.1	2932.1	2904.6
6°	3517.7	3500.0	3452.0	3379.4	3292.5	3201.2	3099.6	3025.1	2964.1	2918.5	2886.6
7°	3620.6	3598.3	3540.9	3452.2	3343.8	3234.3	3115.3	3028.8	2958.0	2908.0	2872.6
8°	3732.9	3705.9	3634.9	3528.8	3399.3	3269.9	3135.6	3035.9	2956.5	2899.7	2861.4
9°	3854.5	3821.1	3737.3	3611.0	3461.2	3308.7	3157.7	3044.5	2957.4	2894.4	2852.1
10°	3986.4	3946.9	3848.1	3700.0	3526.1	3350.4	3181.2	3055.5	2961.4	2893.1	2845.2
11°	4129.0	4082.7	3966.1	3794.7	3594.8	3397.0	3207.9	3069.3	2966.8	2894.0	2841.7
12°	4281.8	4227.5	4091.9	3894.5	3666.8	3444.7	3236.5	3084.5	2974.9	2896.6	2841.0
13°	4446.4	4383.3	4226.3	4003.3	3743.4	3496.3	3266.5	3101.2	2984.1	2900.9	2842.6
14°	4623.6	4553.7	4372.5	4116.0	3823.4	3549.2	3297.1	3118.0	2993.4	2906.8	2843.9
15°	4813.5	4730.2	4527.3	4237.6	3907.3	3601.6	3329.1	3137.2	3005.4	2913.7	2847.8
16°	5009.2	4919.0	4685.7	4363.5	3996.7	3658.6	3364.1	3156.9	3018.4	2920.7	2851.8
17°	5208.4	5105.7	4845.4	4493.5	4089.4	3717.4	3399.7	3178.5	3032.4	2929.1	2836.6
18°	5399.7	5286.2	5003.5	4623.9	4187.5	3778.5	3435.0	3196.0	3047.2	2939.4	2787.0
19°	5582.9	5461.3	5161.1	4752.8	4287.4	3839.8	3459.5	3208.7	3055.0	2950.1	2752.0
20°	5751.6	5627.3	5311.5	4880.0	4387.0	3898.3	3490.5	3224.7	3060.0	2958.2	2732.2
21°	5900.5	5776.1	5456.0	5004.3	4489.5	3952.0	3524.9	3251.9	3068.2	2920.2	2740.3
22°	6030.3	5914.7	5590.8	5124.0	4590.2	4013.8	3568.3	3278.5	3087.1	2889.1	2750.1
23°	6150.4	6037.3	5717.2	5237.5	4690.3	4077.9	3612.1	3302.0	3104.8	2870.7	2761.7
24°	6254.5	6147.2	5835.8	5347.5	4777.0	4149.2	3652.5	3321.4	3116.9	2858.4	2775.3
25°	6345.5	6245.3	5944.0	5452.2	4859.6	4225.0	3688.8	3344.9	3129.9	2871.3	2789.2
26°	6423.0	6330.4	6043.0	5552.5	4944.4	4299.2	3728.0	3370.8	3145.1	2878.2	2805.4
27°	6491.2	6405.4	6133.6	5650.2	5025.5	4371.0	3770.2	3402.1	3167.5	2886.6	2820.9
28°	6549.2	6468.9	6217.6	5741.4	5104.3	4433.4	3816.3	3434.8	3180.7	2898.6	2836.0
29°	6598.1	6523.3	6291.2	5826.3	5181.7	4497.6	3867.1	3466.9	3163.4	2919.6	2852.7
30°	6638.7	6568.4	6359.0	5909.8	5259.7	4562.7	3919.1	3500.2	3164.4	2940.6	2866.2
31°	6670.7	6605.8	6417.3	5985.6	5333.3	4627.1	3972.2	3532.9	3155.3	2962.7	2870.5
32°	6693.7	6633.3	6466.6	6048.6	5403.1	4693.1	4025.7	3557.6	3162.7	2983.8	2785.8
33°	6711.0	6653.9	6511.9	6108.0	5466.5	4760.4	4078.5	3570.8	3156.3	3001.0	2715.5
34°	6722.3	6667.4	6547.8	6160.6	5523.0	4826.5	4127.6	3586.6	3173.7	3015.7	2688.1
35°	6726.4	6674.1	6579.5	6209.9	5576.1	4891.8	4162.8	3612.5	3192.2	3029.0	2703.2
36°	6724.6	6677.1	6602.4	6257.1	5628.5	4953.4	4194.4	3639.9	3214.2	3044.3	2718.8
37°	6716.0	6672.5	6620.3	6299.5	5678.5	5013.2	4232.5	3668.4	3235.9	3040.8	2730.9
38°	6702.9	6664.7	6631.7	6336.4	5726.8	5072.1	4279.2	3699.9	3251.1	2957.5	2741.2
39°	6685.7	6651.7	6638.2	6369.0	5773.4	5127.4	4323.1	3727.2	3265.1	2891.7	2756.9
40°	6663.1	6635.6	6636.0	6396.8	5818.4	5171.3	4367.7	3751.9	3289.6	2874.3	2777.2
41°	6633.3	6613.4	6630.9	6422.8	5861.9	5207.8	4412.3	3774.9	3319.7	2896.0	2797.1
42°	6599.8	6587.2	6618.3	6445.6	5904.4	5241.2	4456.9	3792.4	3349.4	2919.2	2814.2
43°	6557.9	6556.3	6601.5	6463.0	5946.9	5280.1	4494.6	3810.6	3379.5	2943.6	2754.7
44°	6508.6	6519.3	6579.7	6472.9	5987.1	5320.8	4529.1	3844.5	3410.8	2966.2	2659.1

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CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	6453.3	6477.6	6550.8	6475.9	6023.7	5363.8	4558.9	3885.2	3435.0	2981.1	2619.4
46°	6388.9	6428.9	6518.1	6471.7	6060.2	5405.8	4581.5	3926.6	3442.7	2990.9	2633.9
47°	6316.5	6371.6	6481.7	6460.8	6095.1	5446.6	4601.4	3964.8	3443.2	3007.4	2646.1
48°	6240.6	6307.7	6437.8	6444.2	6124.6	5484.5	4619.8	3985.9	3387.8	3026.8	2655.9
49°	6155.5	6235.6	6386.1	6424.1	6147.6	5524.6	4650.0	3999.6	3341.7	2966.2	2669.7
50°	6060.4	6155.1	6327.4	6397.4	6162.1	5559.1	4686.3	4008.3	3325.5	2872.3	2684.6
51°	5957.3	6065.7	6257.5	6364.5	6170.4	5587.8	4722.3	4003.0	3313.2	2832.0	2632.7
52°	5843.3	5968.0	6181.3	6323.4	6173.9	5612.1	4756.6	4030.4	3336.5	2853.6	2490.0
53°	5725.4	5860.0	6097.4	6275.9	6170.0	5633.9	4789.2	4046.2	3350.9	2876.2	2444.9
54°	5600.3	5742.6	6004.3	6224.2	6164.1	5644.6	4818.6	4055.5	3366.6	2892.5	2465.7
55°	5469.5	5619.9	5902.7	6163.3	6149.6	5645.1	4838.6	4074.7	3392.5	2907.4	2489.1
56°	5335.8	5491.6	5798.9	6095.4	6132.3	5641.7	4848.0	4086.0	3420.9	2911.7	2512.0
57°	5200.9	5361.0	5687.1	6024.1	6108.8	5628.0	4846.4	4091.6	3435.4	2811.4	2531.2
58°	5062.1	5223.7	5571.8	5945.2	6077.0	5618.8	4837.5	4102.2	3446.9	2720.3	2402.8
59°	4919.8	5090.0	5453.7	5859.9	6036.3	5607.9	4833.0	4102.1	3389.9	2717.4	2302.7
60°	4769.3	4950.6	5331.5	5769.8	5983.1	5588.9	4824.0	4084.4	3318.9	2749.7	2308.9
61°	4614.6	4806.4	5206.5	5673.5	5919.7	5560.8	4804.9	4061.7	3298.1	2784.9	2316.9
62°	4453.0	4659.3	5085.3	5570.9	5845.9	5520.6	4781.5	4049.9	3307.8	2819.0	2223.5
63°	4295.7	4510.6	4966.1	5465.6	5764.8	5465.4	4741.1	4018.3	3316.5	2750.5	2091.7
64°	4144.8	4367.2	4851.7	5356.6	5669.4	5393.1	4686.3	3981.0	3314.7	2664.6	2064.8
65°	4024.8	4235.4	4738.7	5243.0	5565.4	5306.8	4619.3	3925.7	3278.9	2663.6	2039.7
66°	3935.1	4130.1	4630.6	5129.8	5449.5	5199.5	4539.2	3852.3	3164.2	2680.1	1863.5
67°	3884.6	4051.3	4533.8	5014.9	5318.4	5077.6	4447.1	3757.5	3116.9	2570.4	1835.0
68°	3828.3	3997.9	4447.5	4899.4	5167.6	4938.2	4290.5	3656.1	3135.0	2509.8	1719.2
69°	3702.1	3940.0	4376.5	4786.2	5005.3	4748.8	4034.8	3537.8	3143.8	2501.6	1603.3
70°	3458.5	3835.9	4319.2	4672.7	4841.5	4495.3	3677.3	3365.4	3136.6	2380.1	1486.9
71°	3083.5	3635.1	4265.3	4559.4	4644.9	4175.6	3281.8	3129.8	3035.2	2341.7	1300.4
72°	2699.4	3310.9	4199.6	4439.8	4417.7	3811.1	2924.4	2852.5	2910.5	2252.6	1165.3
73°	2289.6	2900.1	4094.6	4321.5	4156.0	3437.0	2598.0	2581.0	2771.6	2181.7	1039.1
74°	1824.7	2459.2	3896.3	4179.2	3860.6	3077.2	2216.1	2340.5	2610.1	2056.6	878.1
75°	1241.3	1980.7	3556.3	3979.8	3528.6	2665.7	1687.0	2077.7	2403.4	1931.0	783.7
76°	688.1	1405.3	3117.1	3688.2	3180.8	2108.7	1158.0	1667.8	2218.2	1711.6	701.3
77°	531.8	803.1	2647.3	3270.6	2794.8	1392.0	629.4	1254.7	2035.4	1492.2	618.0
78°	379.1	612.0	2079.2	2697.9	2315.7	774.5	303.1	724.0	1683.5	1272.0	531.5
79°	226.4	422.2	1364.2	2027.7	1688.6	513.2	227.9	525.2	1331.6	1003.8	440.9
80°	200.4	232.5	743.2	1334.4	1040.7	262.0	153.2	326.3	978.2	764.5	372.7
81°	179.2	201.6	563.6	697.0	757.5	217.1	129.9	128.0	526.5	562.2	335.2
82°	159.9	178.2	390.1	462.2	479.2	185.4	110.2	102.0	386.9	448.9	331.0
83°	141.9	157.0	216.5	242.0	201.0	152.0	91.9	80.7	247.2	355.8	272.1
84°	125.0	137.0	180.6	198.0	162.9	118.4	75.0	64.2	111.5	273.6	209.3
85°	108.7	118.7	146.8	167.9	129.3	92.7	58.6	50.5	95.5	191.4	146.4
86°	93.0	102.0	119.7	139.9	99.5	74.6	43.7	38.8	75.3	109.8	84.0
87°	77.6	86.0	96.3	109.0	76.7	56.7	30.3	28.6	55.6	62.1	52.3
88°	67.1	72.3	74.8	75.4	55.8	38.8	21.3	20.3	38.6	42.6	35.9
89°	56.6	58.6	57.6	53.7	34.9	23.6	12.3	12.0	21.6	23.1	19.5



REPORT NUMBER: P1436754

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**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: P1436754

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**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: P1436754

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**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: P1436754

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3069.4	3069.4	3069.4	3069.4	3069.4	3069.4	3069.4	3069.4	3069.4	3069.4	3069.4
1°	3022.0	3022.3	3025.8	3032.4	3041.8	3051.3	3064.8	3067.0	3080.5	3094.1	3106.1
2°	2980.5	2980.2	2985.5	2997.6	3013.3	3034.3	3058.4	3073.6	3101.2	3127.7	3152.1
3°	2944.3	2942.9	2949.8	2965.2	2989.2	3018.7	3054.7	3083.5	3124.1	3166.1	3203.2
4°	2913.3	2911.7	2920.4	2939.6	2969.2	3008.2	3054.5	3095.7	3151.8	3208.6	3259.8
5°	2890.1	2887.6	2896.6	2919.2	2953.0	2999.8	3056.8	3111.4	3182.4	3255.0	3321.8
6°	2869.9	2866.2	2877.3	2903.4	2941.3	2994.0	3061.9	3130.1	3216.5	3306.1	3388.6
7°	2852.7	2848.5	2860.7	2889.7	2934.1	2993.0	3070.4	3152.3	3253.9	3362.2	3464.7
8°	2839.5	2834.7	2847.4	2880.3	2929.3	2994.9	3081.7	3175.9	3294.6	3424.0	3545.2
9°	2827.7	2823.1	2837.3	2873.6	2927.2	2999.0	3094.1	3201.2	3338.6	3489.1	3632.2
10°	2819.3	2813.3	2829.6	2869.9	2927.5	3004.7	3108.6	3230.4	3385.6	3558.6	3724.7
11°	2812.7	2806.6	2824.9	2868.4	2930.8	3014.1	3126.2	3263.2	3438.2	3632.3	3823.4
12°	2808.7	2802.6	2821.8	2869.4	2936.8	3025.1	3146.7	3296.3	3490.9	3711.1	3928.5
13°	2808.2	2801.0	2821.5	2871.9	2945.1	3038.6	3168.0	3331.9	3547.6	3794.3	4042.1
14°	2808.4	2800.0	2823.4	2877.2	2955.3	3053.3	3191.0	3368.9	3605.2	3881.2	4161.5
15°	2805.3	2765.8	2820.7	2883.4	2966.0	3070.3	3214.9	3409.1	3666.1	3975.0	4289.2
16°	2745.8	2709.3	2766.1	2889.8	2977.4	3089.0	3240.6	3448.4	3730.0	4070.1	4423.6
17°	2701.8	2676.0	2723.6	2878.9	2990.1	3108.0	3268.7	3490.6	3795.3	4172.3	4561.4
18°	2678.6	2670.1	2701.0	2830.5	3005.1	3127.9	3293.4	3532.6	3864.1	4278.8	4700.3
19°	2682.0	2674.1	2704.2	2799.1	3018.5	3142.7	3310.6	3568.0	3934.4	4386.7	4838.7
20°	2688.1	2679.9	2710.9	2783.1	3030.7	3152.7	3331.3	3603.1	4006.8	4496.7	4972.5
21°	2696.0	2689.0	2719.9	2790.2	3005.7	3165.4	3360.8	3643.3	4072.5	4609.1	5102.1
22°	2707.3	2699.2	2731.6	2802.5	2969.4	3188.7	3393.6	3689.8	4139.4	4717.9	5224.5
23°	2719.1	2712.7	2746.2	2816.2	2952.6	3213.0	3427.2	3740.5	4213.4	4826.2	5341.5
24°	2731.9	2725.7	2761.2	2831.9	2947.6	3233.2	3454.2	3791.2	4291.4	4929.3	5452.4
25°	2745.4	2738.1	2775.6	2848.7	2961.1	3248.8	3479.9	3837.4	4373.7	5020.5	5555.8
26°	2759.5	2752.8	2791.2	2868.2	2973.7	3265.1	3507.8	3880.8	4457.5	5103.8	5655.0
27°	2773.6	2768.1	2806.2	2886.1	2983.7	3285.2	3538.4	3927.3	4540.3	5186.8	5750.6
28°	2788.2	2752.7	2821.8	2904.5	2996.3	3302.2	3574.3	3977.6	4617.9	5266.5	5842.0
29°	2744.0	2654.8	2787.6	2922.6	3017.0	3296.9	3610.9	4030.8	4686.3	5343.7	5928.6
30°	2652.0	2602.2	2693.9	2937.7	3040.0	3292.8	3647.4	4086.7	4758.2	5421.1	6009.4
31°	2607.1	2608.8	2648.3	2943.8	3063.6	3292.5	3683.6	4144.6	4828.5	5494.1	6086.6
32°	2616.0	2629.3	2655.5	2875.6	3088.1	3293.5	3712.6	4202.3	4895.4	5563.9	6156.6
33°	2634.4	2650.7	2673.9	2806.3	3110.2	3292.9	3731.2	4258.8	4964.6	5631.1	6217.9
34°	2652.5	2672.8	2692.8	2775.8	3128.0	3310.5	3749.9	4315.2	5030.8	5689.8	6270.6
35°	2671.2	2697.2	2711.7	2787.7	3145.5	3330.0	3778.6	4360.4	5097.9	5741.3	6320.7
36°	2691.6	2719.5	2732.0	2806.6	3159.3	3351.9	3809.6	4397.7	5160.7	5792.4	6368.3
37°	2709.6	2740.6	2752.0	2820.7	3167.4	3376.4	3841.0	4439.8	5221.2	5841.3	6412.8
38°	2727.2	2757.4	2771.1	2832.7	3086.5	3395.4	3876.7	4487.4	5279.7	5890.7	6450.1
39°	2739.9	2656.6	2786.3	2845.8	3023.2	3412.0	3911.9	4534.6	5335.2	5937.2	6482.2
40°	2636.0	2559.9	2694.1	2866.2	3004.3	3436.1	3941.5	4581.1	5382.6	5980.9	6510.0
41°	2542.2	2539.4	2595.5	2888.2	3023.1	3468.0	3967.7	4628.2	5419.1	6024.5	6534.1
42°	2520.5	2553.9	2568.3	2908.1	3046.8	3501.5	3986.2	4674.6	5452.1	6067.8	6552.7
43°	2537.6	2569.8	2585.7	2869.1	3072.1	3534.6	4006.6	4718.2	5487.3	6108.8	6567.6
44°	2556.3	2584.8	2605.6	2766.6	3096.5	3568.7	4045.3	4757.8	5523.7	6146.1	6576.5

REPORT NUMBER: P1436754

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2575.5	2599.8	2624.8	2718.3	3114.0	3596.0	4088.6	4792.9	5562.7	6180.9	6576.5
46°	2595.1	2608.8	2644.6	2729.0	3125.6	3606.4	4132.2	4816.0	5603.5	6211.9	6568.5
47°	2613.8	2503.7	2660.7	2740.7	3140.8	3613.5	4175.0	4834.9	5641.4	6241.2	6552.7
48°	2513.9	2359.8	2577.0	2750.7	3161.1	3584.3	4208.1	4851.2	5676.9	6266.5	6533.8
49°	2373.5	2331.9	2433.7	2764.2	3122.8	3535.9	4217.4	4879.3	5708.9	6283.7	6509.2
50°	2348.8	2343.5	2399.4	2777.5	3025.1	3501.7	4224.1	4912.9	5737.5	6291.2	6479.1
51°	2368.2	2356.4	2418.6	2741.3	2970.3	3486.5	4218.3	4942.9	5757.9	6289.5	6444.2
52°	2388.6	2369.2	2436.7	2597.0	2987.1	3504.0	4219.6	4971.3	5773.4	6282.9	6400.5
53°	2406.8	2375.1	2454.0	2541.2	3010.6	3518.2	4236.5	4995.1	5782.0	6269.0	6352.4
54°	2415.9	2204.0	2464.1	2560.7	3025.9	3531.3	4240.9	5014.4	5778.3	6254.2	6295.9
55°	2261.0	2098.7	2309.9	2583.5	3040.2	3548.4	4243.9	5023.9	5765.5	6232.0	6235.9
56°	2146.3	2091.3	2193.8	2607.2	3045.0	3574.7	4244.3	5018.8	5743.7	6207.2	6170.0
57°	2138.6	2095.0	2181.5	2624.2	2970.6	3584.9	4238.8	5001.7	5715.0	6175.2	6096.0
58°	2142.0	2077.4	2184.0	2502.5	2864.2	3590.0	4236.4	4979.5	5684.8	6130.8	6017.0
59°	2101.8	1831.0	2151.0	2393.6	2853.5	3550.3	4230.2	4957.5	5654.1	6080.6	5931.5
60°	1884.9	1763.5	1932.2	2394.2	2884.6	3462.5	4200.7	4931.6	5615.7	6022.2	5837.5
61°	1843.0	1659.9	1884.7	2401.1	2917.9	3420.0	4165.4	4898.5	5568.8	5952.7	5737.4
62°	1837.4	1556.4	1872.9	2321.3	2947.4	3418.9	4145.0	4857.1	5511.8	5871.4	5633.3
63°	1730.5	1453.9	1763.1	2175.7	2886.9	3417.9	4108.6	4802.2	5441.9	5776.2	5524.4
64°	1623.5	1424.5	1653.3	2146.8	2783.7	3408.4	4060.7	4730.3	5357.3	5673.6	5414.1
65°	1516.4	1301.4	1542.6	2128.8	2768.5	3369.2	3993.5	4641.4	5253.0	5561.0	5295.1
66°	1348.9	1088.4	1379.0	1939.8	2769.3	3255.3	3909.3	4535.3	5129.0	5439.1	5169.9
67°	1178.6	1037.7	1202.8	1898.9	2655.2	3180.8	3808.9	4407.1	4993.7	5298.9	5045.3
68°	1060.2	724.6	1087.9	1824.4	2591.1	3183.8	3671.8	4185.6	4820.9	5143.8	4921.8
69°	863.9	598.3	887.5	1665.0	2566.8	3177.3	3506.5	3858.8	4581.6	4973.1	4802.5
70°	691.8	412.2	711.7	1505.6	2436.7	3152.0	3277.7	3430.8	4280.8	4784.9	4675.3
71°	475.7	226.2	475.3	1346.6	2378.6	3024.1	2990.8	3035.2	3903.6	4562.1	4542.0
72°	262.9	41.4	245.8	1210.4	2278.6	2859.1	2685.0	2672.5	3503.3	4309.5	4408.5
73°	221.3	0.5	199.3	1068.0	2176.8	2689.0	2388.5	2311.2	3111.4	4004.5	4259.1
74°	179.8	0.4	153.3	878.3	2026.0	2502.0	2113.3	1881.6	2723.2	3657.9	4084.4
75°	138.4	0.4	133.0	770.7	1857.6	2282.7	1697.9	1318.2	2260.4	3273.9	3840.8
76°	105.3	0.4	106.0	685.1	1619.6	2064.4	1282.5	763.7	1635.9	2868.6	3513.9
77°	74.1	0.5	83.9	604.0	1381.6	1749.5	866.9	490.6	974.4	2437.5	3057.7
78°	55.4	0.5	67.9	523.4	1143.8	1434.7	446.3	224.2	729.1	1909.5	2466.2
79°	54.6	0.6	67.5	435.1	915.0	1117.5	291.4	171.1	487.5	1291.2	1787.8
80°	73.2	0.7	81.4	376.8	710.7	639.0	138.3	145.1	245.9	754.6	1112.4
81°	89.5	0.8	84.2	350.1	534.0	463.5	110.9	123.5	209.0	500.9	815.3
82°	79.0	0.9	52.5	326.3	414.3	287.9	91.2	103.8	178.5	251.0	525.5
83°	49.3	1.0	37.3	247.4	311.0	113.4	74.4	86.3	147.3	191.6	235.6
84°	36.1	1.1	22.1	168.5	207.7	94.4	59.8	70.7	116.6	157.9	195.9
85°	23.0	1.2	7.4	90.4	105.6	74.5	47.6	55.1	91.0	124.0	166.5
86°	10.1	1.3	6.6	45.9	58.8	55.4	36.7	39.5	73.1	96.1	138.6
87°	7.5	1.5	6.5	32.4	33.5	39.8	27.0	26.5	55.3	74.2	107.6
88°	5.5	1.6	5.8	18.8	23.4	27.8	19.0	15.5	37.6	53.9	74.8
89°	4.2	1.8	3.6	5.4	13.3	15.8	11.1	6.6	22.9	33.7	53.4



REPORT NUMBER: P1436754

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**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: P1436754

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**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: P1436754

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**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: P1436754

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
0°	3069.4	3069.4	3069.4
1°	3115.0	3121.5	3124.5
2°	3170.6	3183.2	3187.9
3°	3231.8	3250.6	3257.1
4°	3300.4	3326.8	3334.7
5°	3375.0	3411.4	3422.8
6°	3457.4	3504.0	3517.7
7°	3548.0	3602.8	3620.6
8°	3645.7	3711.2	3732.9
9°	3751.3	3829.4	3854.5
10°	3861.8	3957.4	3986.4
11°	3985.4	4093.9	4129.0
12°	4116.4	4243.5	4281.8
13°	4257.6	4400.9	4446.4
14°	4408.6	4571.0	4623.6
15°	4566.7	4750.8	4813.5
16°	4727.6	4934.5	5009.2
17°	4891.3	5123.4	5208.4
18°	5055.9	5310.5	5399.7
19°	5215.0	5490.9	5582.9
20°	5368.8	5658.1	5751.6
21°	5512.9	5810.4	5900.5
22°	5647.4	5949.5	6030.3
23°	5776.4	6070.8	6150.4
24°	5896.1	6179.2	6254.5
25°	6006.8	6274.3	6345.5
26°	6107.9	6358.2	6423.0
27°	6203.0	6430.6	6491.2
28°	6285.1	6493.6	6549.2
29°	6360.3	6545.8	6598.1
30°	6425.4	6589.0	6638.7
31°	6484.2	6625.7	6670.7
32°	6534.9	6655.0	6693.7
33°	6578.4	6675.7	6711.0
34°	6612.8	6690.0	6722.3
35°	6641.1	6697.4	6726.4
36°	6663.1	6696.6	6724.6
37°	6679.8	6692.4	6716.0
38°	6689.8	6684.3	6702.9
39°	6693.3	6669.7	6685.7
40°	6691.3	6652.2	6663.1
41°	6684.5	6631.4	6633.3
42°	6671.7	6605.2	6599.8
43°	6652.8	6574.9	6557.9
44°	6629.9	6539.2	6508.6

REPORT NUMBER: P1436754

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
45°	6601.2	6497.8	6453.3
46°	6568.9	6450.6	6388.9
47°	6530.4	6394.3	6316.5
48°	6488.9	6332.5	6240.6
49°	6439.2	6262.9	6155.5
50°	6380.6	6186.5	6060.4
51°	6313.7	6100.5	5957.3
52°	6235.9	6003.1	5843.3
53°	6151.8	5900.9	5725.4
54°	6059.8	5787.1	5600.3
55°	5964.4	5669.7	5469.5
56°	5860.4	5541.4	5335.8
57°	5751.5	5410.9	5200.9
58°	5636.0	5276.2	5062.1
59°	5516.1	5139.7	4919.8
60°	5395.2	4998.6	4769.3
61°	5274.3	4855.4	4614.6
62°	5153.1	4707.3	4453.0
63°	5036.3	4564.4	4295.7
64°	4926.5	4426.0	4144.8
65°	4819.8	4298.5	4024.8
66°	4716.5	4191.3	3935.1
67°	4618.2	4113.5	3884.6
68°	4527.7	4059.5	3828.3
69°	4447.3	4001.5	3702.1
70°	4383.9	3906.7	3458.5
71°	4319.2	3721.5	3083.5
72°	4239.5	3402.2	2699.4
73°	4121.8	2988.2	2289.6
74°	3906.5	2531.5	1824.7
75°	3563.6	2049.3	1241.3
76°	3126.8	1499.6	688.1
77°	2631.5	894.5	531.8
78°	2038.7	671.4	379.1
79°	1340.0	454.9	226.4
80°	752.4	238.4	200.4
81°	566.4	207.8	179.2
82°	394.0	183.7	159.9
83°	221.5	161.7	141.9
84°	183.4	140.9	125.0
85°	148.7	121.9	108.7
86°	121.5	104.5	93.0
87°	97.4	88.0	77.6
88°	74.6	73.7	67.1
89°	57.6	59.4	56.6



REPORT NUMBER: P1436754

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**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: P1436754

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**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: P1436754

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3-HSS)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)