

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: P1436753

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

Issue Date: 3/25/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1436753  
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)  
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.  
LUMEN OUTPUT - 80% (144W)  
OPTICS - TYPE 3  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

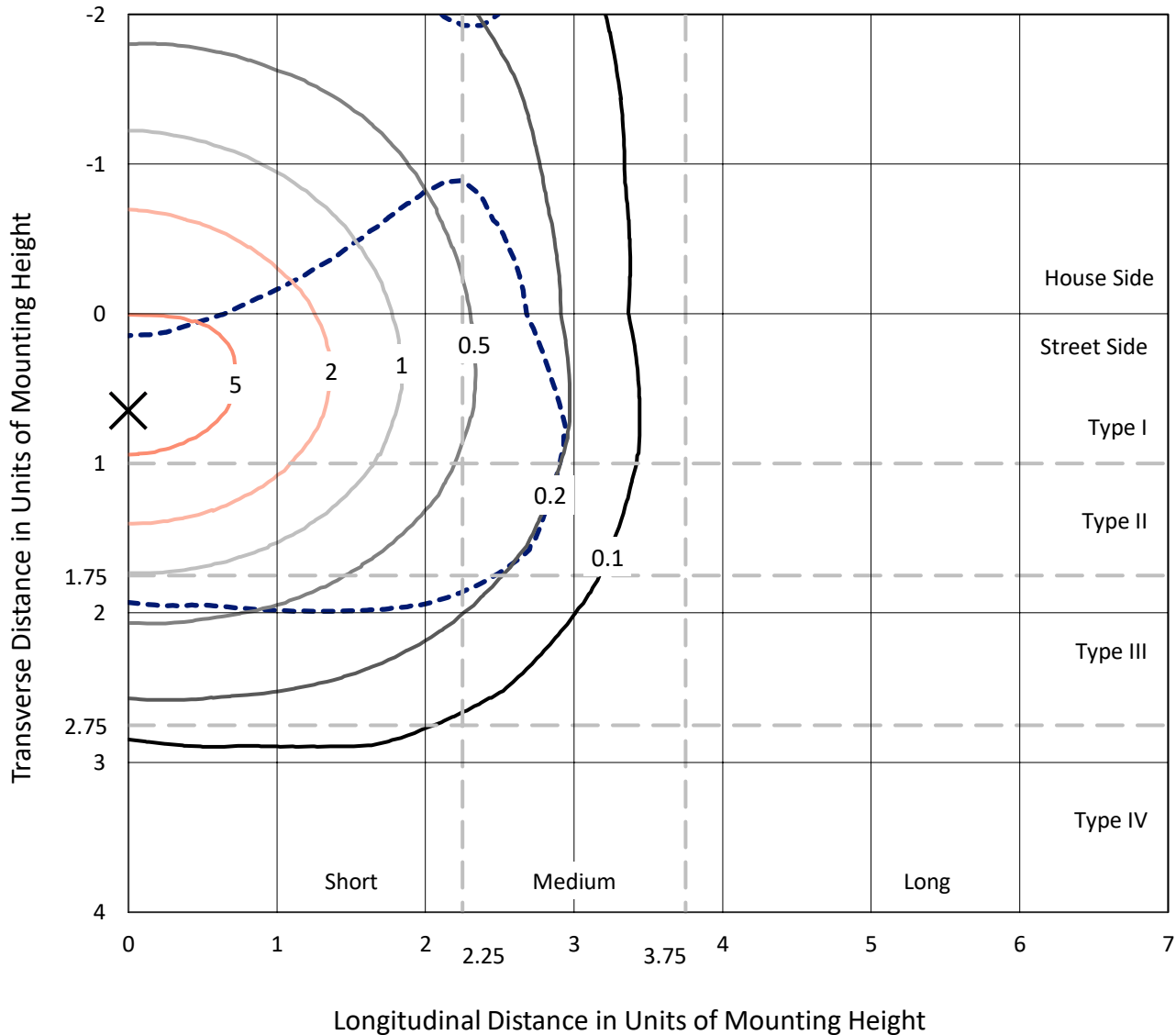
Lumens per Lamp: 27928 (1 lamp)  
Luminaire Lumens: 22565.4 lumens  
Efficiency: 80.8%  
Efficacy: 154.5 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.35m x L: 0.35m x H: 0.35m)  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G4

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

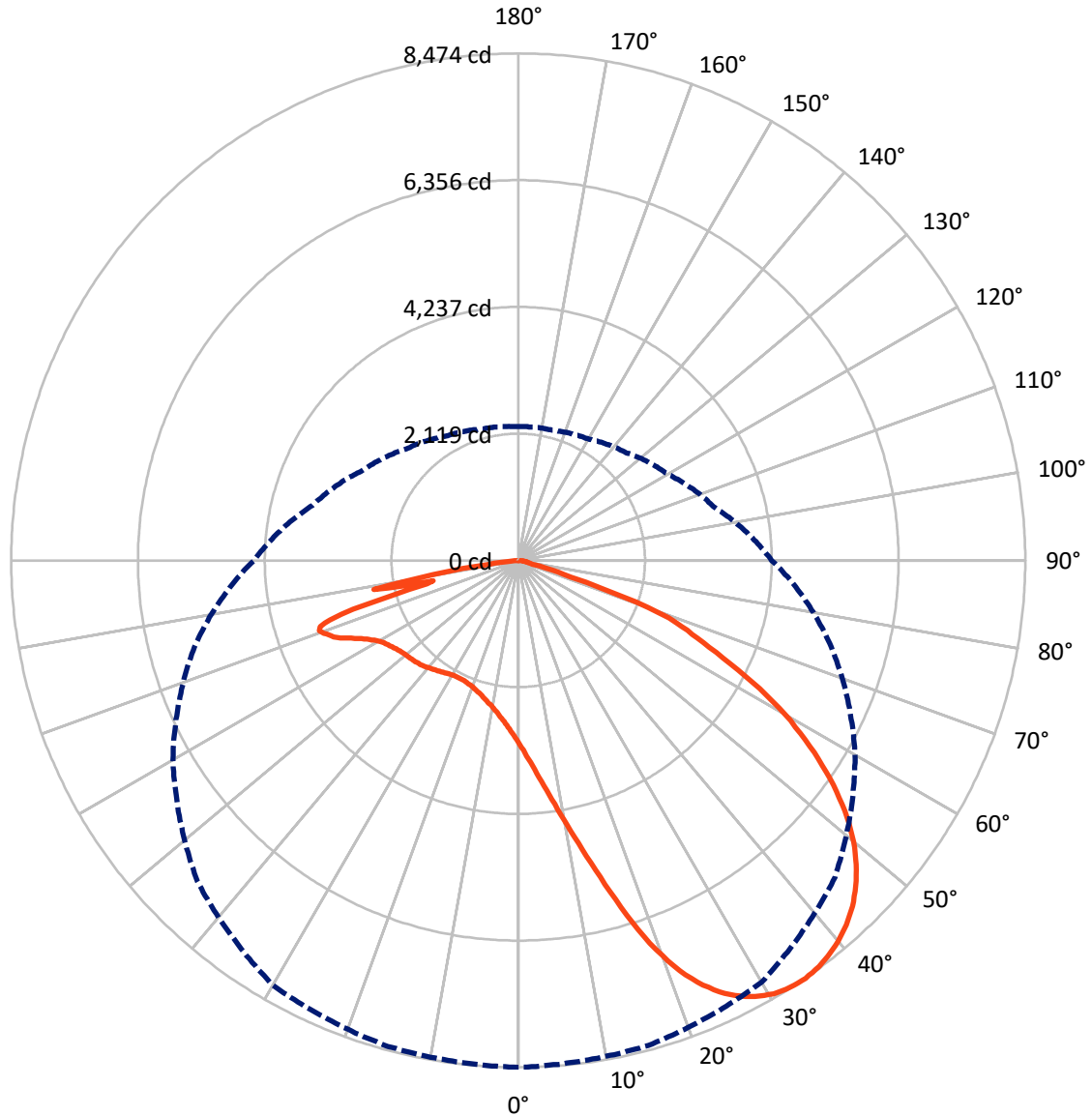
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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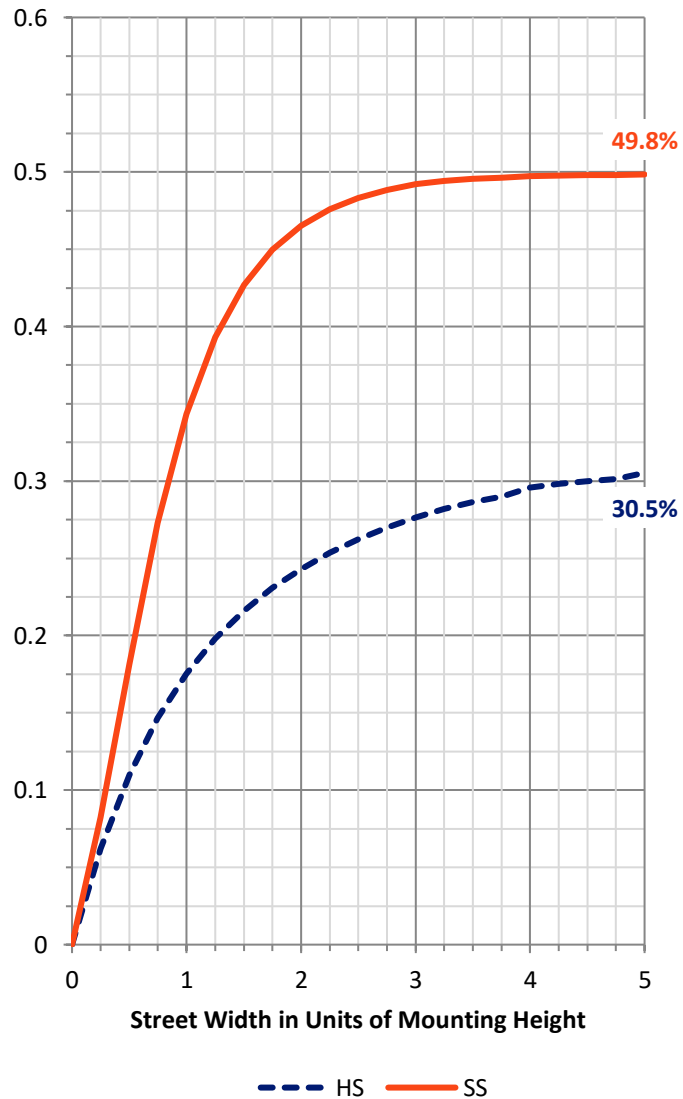
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8634.7	0.0	8634.7
	% Lamp	30.9	0.0	30.9
<b>Street Side</b>	Lumens	13930.7	0.0	13930.7
	% Lamp	49.9	0.0	49.9
<b>Total</b>	Lumens	22565.4	0.0	22565.4
	% Lamp	80.8	0.0	80.8

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	307.8	1.4	1.1
10°-20°	1072.7	4.8	3.8
20°-30°	2107.4	9.3	7.5
30°-40°	3154.8	14.0	11.3
40°-50°	4016.8	17.8	14.4
50°-60°	4491.0	19.9	16.1
60°-70°	4339.0	19.2	15.5
70°-80°	2705.9	12.0	9.7
80°-90°	369.9	1.6	1.3
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°	22565.4	100.0	80.8
0°-180°	22565.4	100.0	80.8

**Coefficient of Utilization**



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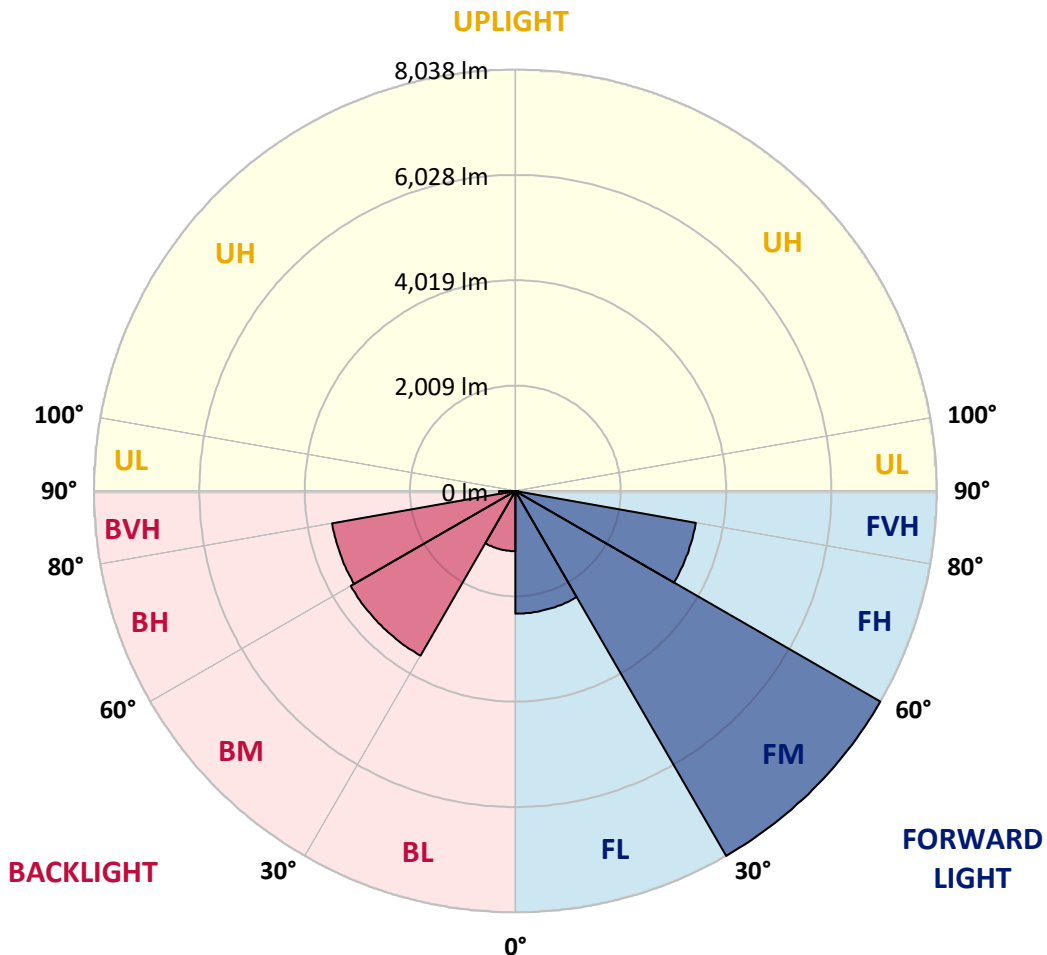
CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3)

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

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2339.9	8.4			
FM (30°-60°)	8037.5	28.8			
FH (60°-80°)	3494.6	12.5			G2/5000
FVH (80°-90°)	58.6	0.2			G1/100
BL (0°-30°)	1147.9	4.1	B3/2500		
BM (30°-60°)	3625.1	13.0	B3/5000		
BH (60°-80°)	3550.3	12.7	B4/5000		G4/5000
BVH (80°-90°)	311.3	1.1			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	5362.6	19.2			

**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°	3079.7	3079.7	3079.7	3079.7	3079.7	3079.7	3079.7	3079.7	3079.7	3079.7	3079.7
1°	3171.5	3169.0	3162.7	3149.4	3132.2	3111.3	3072.1	3049.5	3029.6	3013.5	3004.0
2°	3273.6	3268.0	3251.6	3219.9	3181.6	3136.1	3073.5	3029.3	2990.8	2958.8	2937.2
3°	3385.7	3376.3	3344.9	3296.2	3234.9	3165.4	3079.2	3013.1	2955.7	2910.0	2875.8
4°	3509.8	3495.2	3447.7	3378.8	3293.5	3198.0	3085.9	2999.2	2924.1	2864.1	2821.2
5°	3644.2	3625.0	3561.5	3468.5	3354.9	3232.3	3095.2	2987.6	2895.4	2823.9	2772.1
6°	3791.9	3763.4	3684.2	3566.9	3423.7	3271.3	3106.8	2978.6	2870.2	2786.7	2725.4
7°	3948.7	3915.0	3818.7	3672.3	3496.8	3314.3	3123.9	2974.6	2848.4	2752.6	2682.7
8°	4120.6	4076.7	3961.2	3784.6	3576.2	3361.4	3142.9	2973.0	2830.6	2721.2	2644.3
9°	4307.2	4254.0	4114.8	3905.5	3662.1	3411.7	3164.7	2973.3	2815.0	2693.1	2608.0
10°	4506.7	4442.3	4278.8	4034.7	3752.8	3466.4	3190.4	2976.2	2802.1	2669.0	2574.6
11°	4719.6	4647.1	4453.8	4173.6	3847.5	3524.0	3219.0	2982.1	2790.9	2646.7	2546.1
12°	4950.5	4864.3	4640.1	4318.2	3947.1	3585.8	3249.0	2989.7	2782.2	2627.4	2520.1
13°	5198.7	5099.0	4842.8	4472.2	4054.7	3650.4	3279.9	2999.0	2775.7	2609.9	2496.8
14°	5466.4	5354.2	5061.0	4637.6	4165.3	3717.7	3312.8	3008.2	2769.5	2594.8	2474.4
15°	5751.7	5620.1	5289.7	4810.4	4282.8	3787.2	3347.1	3018.7	2765.2	2581.7	2453.4
16°	6047.8	5901.8	5524.0	4996.4	4407.9	3860.2	3384.9	3031.5	2762.0	2569.0	2434.3
17°	6342.1	6178.2	5759.2	5186.3	4535.8	3936.2	3424.0	3045.7	2761.2	2557.5	2416.5
18°	6631.9	6451.5	5993.2	5377.0	4670.8	4014.3	3465.0	3061.2	2760.4	2547.4	2400.1
19°	6902.5	6711.6	6224.9	5561.9	4812.6	4095.5	3507.2	3078.7	2760.4	2538.6	2386.4
20°	7150.6	6957.4	6446.8	5746.2	4956.0	4180.0	3551.5	3097.5	2760.9	2530.6	2375.1
21°	7372.5	7180.8	6661.1	5928.6	5098.0	4267.3	3596.8	3117.8	2762.9	2523.3	2365.0
22°	7567.5	7380.9	6857.4	6100.9	5237.6	4359.4	3643.6	3137.3	2767.2	2517.7	2356.1
23°	7739.9	7559.9	7042.2	6267.4	5377.4	4452.3	3692.0	3158.0	2771.7	2513.6	2348.9
24°	7888.5	7719.1	7213.8	6424.5	5513.4	4548.4	3742.5	3180.8	2777.5	2510.9	2341.9
25°	8017.1	7859.6	7370.8	6572.2	5644.4	4645.8	3792.2	3203.6	2784.1	2510.2	2336.6
26°	8126.0	7979.1	7512.8	6712.3	5772.5	4744.1	3843.3	3227.0	2792.4	2511.2	2332.3
27°	8218.1	8081.6	7641.5	6847.3	5893.2	4842.6	3897.0	3249.8	2802.2	2512.6	2329.0
28°	8294.1	8170.4	7755.9	6973.9	6008.3	4939.3	3951.4	3272.9	2812.5	2515.4	2327.4
29°	8357.1	8239.9	7856.9	7091.7	6116.8	5033.6	4007.7	3296.2	2824.4	2519.6	2327.5
30°	8405.6	8297.3	7945.5	7203.4	6222.8	5126.1	4063.6	3321.3	2837.4	2524.9	2328.4
31°	8439.5	8342.5	8020.4	7305.8	6319.2	5216.7	4120.7	3346.3	2851.6	2531.8	2331.2
32°	8462.9	8373.2	8082.4	7398.8	6411.6	5305.5	4178.8	3372.7	2866.9	2539.4	2335.9
33°	8474.2	8392.6	8137.3	7486.3	6498.7	5392.4	4236.6	3400.4	2883.1	2547.8	2342.2
34°	8474.2	8400.7	8179.3	7564.5	6579.9	5474.5	4294.0	3427.2	2900.7	2557.5	2349.9
35°	8465.4	8399.1	8210.0	7634.7	6656.6	5552.5	4352.3	3456.0	2918.6	2569.0	2359.5
36°	8446.0	8388.6	8229.4	7696.9	6729.1	5628.9	4409.4	3485.6	2937.5	2581.7	2370.7
37°	8417.7	8370.0	8237.5	7750.2	6797.5	5702.3	4467.2	3515.3	2956.8	2596.2	2383.0
38°	8380.5	8343.3	8238.3	7794.0	6860.2	5771.7	4523.6	3546.4	2977.5	2611.8	2396.6
39°	8337.7	8310.2	8228.6	7831.6	6920.1	5838.9	4581.8	3578.0	2998.6	2629.1	2410.6
40°	8287.6	8269.0	8210.0	7861.0	6975.0	5902.8	4638.7	3611.8	3020.8	2647.8	2425.3
41°	8228.6	8218.9	8182.6	7882.4	7026.1	5963.4	4692.9	3647.1	3043.4	2666.9	2440.3
42°	8159.1	8164.8	8146.2	7897.3	7072.8	6021.7	4745.5	3681.9	3067.5	2687.5	2456.9
43°	8081.6	8099.3	8101.8	7902.3	7116.7	6078.0	4796.3	3717.7	3093.3	2709.7	2473.4
44°	7994.5	8024.4	8050.1	7898.4	7154.6	6131.5	4844.6	3755.3	3119.7	2732.2	2490.3



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

**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	7894.6	7943.2	7987.8	7885.9	7188.7	6182.4	4890.9	3793.1	3148.0	2755.4	2507.3
46°	7782.2	7849.4	7918.4	7866.1	7221.2	6234.2	4937.7	3833.3	3178.3	2778.2	2524.8
47°	7663.7	7744.4	7842.1	7837.2	7247.6	6280.3	4982.6	3872.9	3209.6	2801.8	2543.3
48°	7534.5	7628.7	7755.6	7796.3	7269.0	6323.0	5024.4	3915.4	3241.5	2826.9	2563.5
49°	7393.1	7497.8	7658.6	7749.6	7285.9	6361.2	5062.5	3958.4	3276.1	2853.8	2584.4
50°	7235.0	7354.0	7548.5	7690.7	7295.6	6395.8	5099.7	4002.2	3311.7	2881.6	2607.6
51°	7061.9	7194.8	7428.2	7620.2	7298.6	6425.3	5136.2	4048.3	3349.0	2911.9	2632.0
52°	6875.4	7024.4	7294.1	7536.0	7293.7	6449.7	5169.1	4095.8	3388.1	2943.3	2657.2
53°	6676.8	6837.3	7150.8	7442.8	7280.4	6468.6	5199.0	4141.6	3429.1	2976.7	2683.8
54°	6467.4	6632.6	6990.4	7336.7	7255.2	6483.3	5224.6	4185.7	3473.7	3012.5	2712.1
55°	6246.4	6422.0	6817.9	7219.1	7218.1	6491.8	5247.3	4226.9	3520.0	3051.0	2743.5
56°	6015.7	6194.5	6629.4	7086.9	7169.3	6490.9	5264.7	4264.8	3567.3	3093.2	2776.5
57°	5778.9	5968.5	6433.4	6944.8	7106.5	6479.4	5279.5	4300.6	3616.2	3137.4	2813.3
58°	5532.9	5725.9	6225.1	6787.1	7026.6	6458.4	5287.8	4333.2	3666.4	3188.3	2854.5
59°	5281.1	5481.9	6012.8	6615.5	6933.3	6424.9	5287.4	4363.0	3718.2	3243.0	2900.5
60°	5009.4	5227.6	5789.6	6434.9	6825.3	6378.1	5279.2	4391.0	3771.4	3299.8	2950.7
61°	4720.9	4963.8	5559.6	6239.7	6698.8	6318.7	5261.8	4412.9	3823.2	3361.1	3005.7
62°	4414.0	4686.3	5325.3	6034.7	6563.5	6242.7	5233.9	4427.1	3876.1	3426.5	3063.9
63°	4101.0	4394.5	5086.6	5819.5	6414.8	6149.6	5191.6	4433.6	3928.0	3499.1	3127.3
64°	3791.4	4104.3	4844.2	5597.8	6251.3	6039.5	5133.4	4431.0	3978.8	3574.8	3200.4
65°	3507.9	3815.9	4594.3	5372.3	6074.8	5910.5	5063.2	4419.0	4027.2	3655.1	3283.2
66°	3262.7	3551.4	4344.3	5146.7	5880.0	5765.0	4973.5	4391.2	4071.4	3744.1	3372.6
67°	3057.9	3316.6	4098.2	4922.8	5675.8	5596.8	4858.2	4349.8	4109.1	3835.0	3477.9
68°	2847.1	3106.2	3860.9	4696.9	5448.9	5409.0	4679.4	4283.7	4140.2	3928.7	3599.2
69°	2539.3	2892.5	3638.3	4471.2	5210.8	5188.5	4415.9	4148.1	4155.8	4029.5	3736.0
70°	2084.2	2617.1	3428.2	4244.6	4955.3	4910.4	4066.2	3932.9	4159.9	4135.0	3880.4
71°	1476.7	2221.3	3222.7	4020.1	4667.9	4573.9	3639.1	3652.5	4133.1	4244.4	3988.5
72°	920.5	1684.3	2994.2	3794.1	4341.8	4175.3	3239.7	3352.4	4062.0	4348.5	4094.7
73°	693.6	1108.0	2726.0	3556.0	3977.4	3739.2	2891.5	3098.2	3940.7	4441.5	4234.8
74°	469.1	822.1	2362.8	3283.0	3576.9	3287.2	2468.9	2881.9	3793.8	4494.1	4365.0
75°	244.6	545.8	1847.0	2935.6	3149.8	2799.1	1869.1	2580.1	3641.9	4516.0	4466.3
76°	208.7	269.4	1285.7	2502.8	2707.3	2196.8	1269.1	1991.1	3525.8	4456.6	4494.1
77°	180.8	222.2	824.1	1967.9	2245.4	1489.7	669.9	1402.1	3402.1	4307.6	4416.3
78°	158.3	189.7	632.6	1324.5	1742.0	856.2	354.0	814.6	3151.4	3999.2	4034.2
79°	139.1	164.1	446.5	714.2	1219.9	649.0	237.7	415.2	2604.7	3566.5	3472.4
80°	121.5	142.3	260.4	477.2	748.1	452.8	205.9	253.0	1781.5	3048.9	2889.0
81°	105.5	122.8	208.6	243.1	480.8	256.5	174.1	209.8	963.5	2346.9	2656.8
82°	90.8	105.3	175.5	200.8	221.0	217.8	142.6	166.6	459.5	1873.1	2560.2
83°	77.6	88.8	147.3	171.6	163.0	178.3	119.8	123.4	299.2	1399.2	1994.6
84°	64.2	74.6	119.5	145.9	130.2	135.1	98.3	98.4	244.3	927.3	1428.9
85°	50.9	60.6	90.0	121.5	100.6	101.7	77.5	77.0	202.7	583.2	864.2
86°	38.6	46.5	69.9	98.4	74.5	75.9	57.7	58.9	161.2	414.2	501.7
87°	26.7	34.1	49.7	73.4	54.3	55.5	39.7	43.0	119.6	245.2	401.8
88°	16.0	22.3	29.6	44.6	34.1	35.4	27.6	30.3	77.2	80.4	301.8
89°	7.4	10.5	13.3	15.6	16.2	17.3	15.4	17.7	52.3	54.2	201.8



REPORT NUMBER: P1436753

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

**CANDELA DISTRIBUTION (continued):**

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



REPORT NUMBER: P1436753

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

**CANDELA DISTRIBUTION (continued):**

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



REPORT NUMBER: P1436753

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

**CANDELA DISTRIBUTION (continued):**

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



REPORT NUMBER: P1436753

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

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3079.7	3079.7	3079.7	3079.7	3079.7	3079.7	3079.7	3079.7	3079.7	3079.7	3079.7
1°	2997.2	2996.5	3002.4	3013.4	3029.0	3048.8	3070.1	3077.2	3099.7	3120.4	3140.2
2°	2925.0	2921.9	2930.9	2950.1	2978.4	3014.0	3055.8	3084.4	3129.9	3174.7	3214.3
3°	2857.6	2852.9	2864.5	2890.9	2932.0	2983.8	3044.1	3094.9	3163.3	3232.3	3294.4
4°	2796.7	2791.2	2805.6	2837.8	2889.2	2956.5	3036.0	3107.9	3201.7	3295.1	3381.3
5°	2742.1	2734.8	2750.2	2789.9	2851.2	2932.6	3029.7	3124.0	3241.7	3362.1	3474.9
6°	2690.5	2680.8	2698.9	2745.5	2817.2	2911.4	3026.7	3142.7	3286.8	3436.0	3575.8
7°	2642.6	2631.3	2652.0	2703.4	2785.1	2893.7	3026.8	3164.7	3335.3	3515.4	3685.3
8°	2599.2	2586.8	2608.0	2666.1	2757.1	2878.9	3029.2	3189.3	3386.5	3599.2	3803.6
9°	2558.2	2544.3	2568.4	2631.2	2730.9	2865.8	3032.9	3214.8	3442.5	3690.4	3929.9
10°	2521.5	2505.9	2532.3	2599.2	2707.4	2853.8	3039.3	3245.2	3502.8	3786.4	4061.9
11°	2488.5	2471.3	2499.8	2571.6	2687.5	2844.9	3048.2	3278.8	3567.1	3888.7	4205.9
12°	2458.0	2439.8	2469.4	2547.0	2669.5	2838.3	3059.6	3313.3	3633.0	3995.4	4355.7
13°	2430.4	2409.6	2441.1	2524.4	2655.2	2833.7	3073.5	3350.3	3703.2	4110.1	4520.9
14°	2403.3	2381.4	2414.9	2503.2	2642.5	2831.6	3088.2	3389.6	3777.3	4228.2	4693.2
15°	2378.7	2356.3	2390.9	2482.9	2632.3	2831.6	3103.2	3430.3	3853.8	4355.2	4877.1
16°	2356.0	2331.5	2368.3	2464.3	2621.8	2832.4	3119.9	3473.6	3933.4	4490.3	5070.1
17°	2335.5	2310.1	2348.0	2447.8	2612.5	2834.4	3138.7	3517.8	4016.9	4630.9	5268.4
18°	2316.8	2289.3	2329.0	2432.1	2605.0	2838.2	3158.4	3563.6	4103.5	4776.9	5469.6
19°	2299.8	2270.9	2311.6	2419.6	2597.3	2843.0	3180.3	3611.2	4193.5	4926.9	5667.8
20°	2284.2	2254.5	2295.9	2408.7	2590.8	2847.8	3203.3	3660.0	4286.3	5080.3	5862.8
21°	2271.5	2239.9	2283.2	2399.4	2585.4	2853.8	3227.4	3711.9	4382.3	5235.1	6048.7
22°	2259.9	2227.4	2271.8	2392.1	2582.8	2860.8	3252.3	3764.0	4482.8	5388.2	6222.8
23°	2249.8	2217.3	2262.5	2385.7	2580.9	2868.9	3277.8	3818.7	4588.4	5536.4	6390.0
24°	2241.4	2209.5	2255.0	2380.6	2580.9	2878.0	3303.3	3874.7	4695.9	5678.8	6545.4
25°	2235.6	2203.5	2250.3	2376.6	2582.3	2888.1	3329.3	3931.4	4802.6	5816.8	6692.5
26°	2231.3	2199.5	2247.3	2374.7	2584.5	2899.0	3357.5	3988.9	4910.2	5946.0	6831.1
27°	2228.4	2197.4	2245.2	2373.3	2588.5	2910.4	3384.3	4047.5	5018.3	6068.8	6962.6
28°	2227.3	2198.2	2245.5	2373.9	2593.7	2923.2	3412.7	4107.9	5125.0	6182.8	7085.4
29°	2228.5	2201.6	2248.2	2375.6	2600.4	2936.8	3440.8	4169.9	5228.9	6292.7	7202.1
30°	2231.4	2207.2	2253.4	2379.1	2607.6	2952.2	3470.3	4232.0	5329.0	6395.4	7308.3
31°	2236.4	2214.6	2259.4	2384.3	2616.1	2968.7	3498.8	4293.6	5425.9	6489.9	7408.4
32°	2242.3	2224.1	2266.6	2391.7	2626.8	2986.4	3528.2	4355.5	5517.2	6579.7	7499.0
33°	2249.8	2235.1	2274.5	2400.3	2638.2	3004.4	3557.3	4417.9	5605.1	6664.5	7584.4
34°	2258.2	2246.5	2282.9	2409.8	2650.3	3022.9	3588.0	4480.2	5688.6	6744.2	7660.5
35°	2267.0	2259.8	2292.0	2420.5	2664.1	3042.9	3619.2	4543.5	5767.9	6819.1	7729.4
36°	2275.7	2274.0	2301.6	2432.5	2677.9	3063.4	3652.5	4605.9	5844.6	6888.2	7790.0
37°	2285.0	2288.2	2311.7	2446.3	2692.9	3084.0	3685.7	4667.4	5915.1	6953.0	7842.1
38°	2293.8	2303.1	2322.9	2460.6	2709.4	3105.6	3720.7	4728.0	5983.7	7014.4	7888.2
39°	2303.2	2318.0	2334.1	2476.3	2727.2	3128.7	3756.1	4787.0	6046.5	7071.6	7924.2
40°	2313.3	2332.5	2345.8	2493.2	2746.1	3152.7	3793.0	4845.7	6106.8	7123.8	7952.6
41°	2323.5	2347.0	2357.5	2510.7	2765.6	3177.8	3829.8	4899.8	6164.8	7171.5	7970.5
42°	2333.3	2361.5	2370.0	2528.4	2786.7	3204.5	3867.2	4953.7	6220.8	7215.3	7978.8
43°	2344.2	2375.5	2383.2	2547.3	2808.3	3232.6	3906.9	5006.3	6274.3	7253.1	7980.9
44°	2356.5	2389.3	2398.0	2566.1	2831.3	3261.7	3947.1	5060.0	6324.0	7286.9	7974.6



REPORT NUMBER: P1436753

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

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2369.6	2401.5	2413.1	2585.4	2855.2	3291.6	3987.7	5110.3	6370.6	7316.6	7956.7
46°	2383.6	2411.6	2428.8	2605.7	2880.5	3321.7	4029.5	5155.2	6411.7	7340.6	7929.8
47°	2398.7	2420.7	2445.8	2625.7	2906.2	3354.8	4071.6	5196.5	6449.6	7359.1	7893.0
48°	2415.5	2430.4	2463.6	2646.4	2934.3	3389.2	4113.0	5235.9	6481.4	7370.4	7847.5
49°	2434.2	2440.2	2482.6	2667.3	2961.9	3425.5	4155.7	5271.8	6507.7	7374.7	7791.7
50°	2455.3	2449.3	2503.8	2690.2	2991.5	3465.4	4199.4	5304.5	6528.6	7371.7	7727.3
51°	2479.4	2459.9	2526.6	2714.0	3022.5	3506.5	4242.9	5332.3	6543.9	7361.8	7650.4
52°	2505.1	2473.8	2551.2	2739.9	3056.0	3547.9	4286.6	5357.4	6553.3	7342.3	7560.9
53°	2531.0	2491.0	2577.3	2767.1	3092.2	3590.9	4325.6	5376.4	6556.5	7314.4	7461.5
54°	2558.6	2508.9	2606.6	2797.6	3132.1	3634.7	4363.4	5390.9	6552.3	7277.7	7351.7
55°	2590.4	2529.8	2638.5	2830.6	3175.1	3679.1	4397.2	5401.4	6539.1	7229.4	7229.8
56°	2624.3	2554.7	2671.6	2866.1	3221.2	3726.0	4427.7	5404.8	6513.6	7169.6	7094.5
57°	2659.6	2582.4	2707.4	2906.7	3270.4	3773.6	4455.0	5402.5	6477.4	7096.4	6947.8
58°	2695.2	2606.3	2744.7	2950.9	3322.1	3820.6	4478.1	5394.5	6431.3	7006.8	6785.1
59°	2729.9	2632.4	2780.1	2999.7	3379.8	3863.5	4495.5	5378.7	6376.0	6908.1	6613.1
60°	2768.8	2671.9	2819.9	3053.5	3438.6	3906.4	4510.4	5352.6	6307.7	6792.1	6427.8
61°	2819.7	2725.8	2872.3	3113.1	3502.2	3950.2	4519.4	5315.5	6226.3	6662.1	6229.2
62°	2879.2	2782.2	2934.2	3177.4	3567.5	3993.3	4521.0	5267.2	6130.7	6520.5	6021.8
63°	2946.2	2848.2	3002.0	3243.5	3637.8	4035.1	4513.5	5205.7	6020.4	6360.7	5808.7
64°	3023.3	2931.1	3083.2	3317.6	3710.2	4074.0	4499.5	5126.6	5896.3	6186.2	5586.5
65°	3113.2	3024.0	3175.1	3403.6	3788.4	4110.2	4472.9	5031.7	5752.0	6001.7	5360.4
66°	3217.4	3130.5	3278.2	3497.1	3868.3	4139.7	4430.6	4914.4	5588.2	5803.1	5133.2
67°	3330.6	3245.1	3388.1	3599.5	3947.0	4166.2	4369.1	4756.3	5408.1	5587.4	4906.1
68°	3451.4	3337.6	3503.1	3717.1	4030.1	4183.8	4257.0	4517.3	5193.2	5358.1	4675.8
69°	3525.9	3398.0	3570.8	3849.2	4122.9	4187.4	4065.7	4186.2	4932.0	5105.7	4448.3
70°	3589.4	3473.7	3630.9	3984.5	4215.3	4176.0	3787.3	3768.6	4606.0	4821.9	4215.8
71°	3679.4	3527.6	3714.6	4086.3	4310.6	4128.6	3461.1	3338.4	4205.0	4494.7	3972.4
72°	3737.0	3490.6	3767.0	4193.7	4397.8	4028.7	3163.0	2939.5	3756.0	4131.8	3725.7
73°	3719.5	3299.4	3751.0	4329.2	4466.9	3873.7	2900.9	2549.9	3287.7	3729.0	3452.8
74°	3601.5	2876.8	3637.7	4449.7	4487.1	3711.3	2613.6	2062.2	2824.0	3285.4	3140.4
75°	3259.2	2201.9	3312.9	4527.6	4453.6	3551.9	2052.2	1422.6	2304.0	2817.4	2762.6
76°	2660.8	1576.8	2726.5	4537.9	4310.7	3387.0	1490.8	808.2	1672.3	2356.0	2307.3
77°	2041.5	1462.1	2163.4	4441.2	4100.2	3162.6	932.0	602.5	1015.9	1898.7	1754.7
78°	1960.3	1964.6	2142.5	4031.6	3769.7	2705.5	470.8	407.3	764.4	1412.5	1141.2
79°	2459.5	2461.3	2630.4	3412.8	3388.2	1974.2	271.0	212.2	523.3	924.6	835.7
80°	2868.9	1950.3	2925.6	2768.0	2858.1	1242.9	225.1	180.1	282.2	681.3	533.8
81°	2209.7	1439.4	2217.4	2561.4	2253.0	526.2	179.1	154.1	235.1	440.1	231.8
82°	1550.5	929.8	1509.2	2562.6	1647.8	318.3	133.7	130.2	200.3	198.8	195.1
83°	893.6	478.1	811.6	1927.5	1045.1	245.8	109.2	108.4	162.3	152.1	167.7
84°	497.2	336.0	479.1	1292.3	613.9	203.0	88.0	87.4	124.7	120.8	142.1
85°	357.8	193.9	313.5	671.7	439.5	160.2	68.7	69.1	93.2	91.3	117.6
86°	218.3	55.5	203.5	537.3	265.1	117.5	52.1	50.9	72.0	70.3	94.0
87°	79.7	37.4	94.3	402.9	95.3	82.2	37.4	32.7	50.8	49.5	66.7
88°	54.0	19.3	51.0	268.5	64.4	55.8	25.9	18.3	29.6	28.6	39.3
89°	28.3	1.4	7.7	134.1	33.4	29.5	14.4	6.7	12.4	11.9	11.9



REPORT NUMBER: P1436753

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

**CANDELA DISTRIBUTION (continued):**

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



REPORT NUMBER: P1436753

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

**CANDELA DISTRIBUTION (continued):**

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



REPORT NUMBER: P1436753

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

**CANDELA DISTRIBUTION (continued):**

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

REPORT NUMBER: P1436753

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

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
0°	3079.7	3079.7	3079.7
1°	3155.4	3166.0	3171.5
2°	3246.8	3266.4	3273.6
3°	3342.8	3375.8	3385.7
4°	3449.8	3495.6	3509.8
5°	3565.5	3624.4	3644.2
6°	3691.4	3766.5	3791.9
7°	3828.0	3919.3	3948.7
8°	3971.0	4082.6	4120.6
9°	4130.6	4261.7	4307.2
10°	4296.3	4453.9	4506.7
11°	4477.2	4662.0	4719.6
12°	4672.6	4881.3	4950.5
13°	4879.6	5121.7	5198.7
14°	5103.0	5378.7	5466.4
15°	5333.4	5643.8	5751.7
16°	5572.7	5919.0	6047.8
17°	5816.2	6200.5	6342.1
18°	6060.6	6480.8	6631.9
19°	6293.1	6745.2	6902.5
20°	6521.7	6991.0	7150.6
21°	6728.9	7219.7	7372.5
22°	6925.4	7420.9	7567.5
23°	7114.6	7600.2	7739.9
24°	7286.6	7755.9	7888.5
25°	7444.9	7893.3	8017.1
26°	7590.1	8010.4	8126.0
27°	7717.3	8109.0	8218.1
28°	7830.8	8192.3	8294.1
29°	7932.2	8262.5	8357.1
30°	8018.0	8316.7	8405.6
31°	8092.1	8358.7	8439.5
32°	8151.9	8390.2	8462.9
33°	8200.3	8409.6	8474.2
34°	8239.1	8417.7	8474.2
35°	8267.4	8414.5	8465.4
36°	8283.6	8401.5	8446.0
37°	8290.0	8380.5	8417.7
38°	8286.8	8352.2	8380.5
39°	8273.9	8317.5	8337.7
40°	8252.9	8275.5	8287.6
41°	8222.2	8226.2	8228.6
42°	8183.4	8169.6	8159.1
43°	8135.7	8105.0	8081.6
44°	8080.8	8035.0	7994.5

REPORT NUMBER: P1436753

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

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
45°	8017.9	7953.6	7894.6
46°	7948.4	7861.5	7782.2
47°	7868.0	7759.4	7663.7
48°	7780.8	7646.5	7534.5
49°	7684.5	7516.9	7393.1
50°	7575.4	7378.5	7235.0
51°	7454.6	7222.7	7061.9
52°	7318.6	7053.5	6875.4
53°	7172.5	6869.6	6676.8
54°	7013.8	6670.2	6467.4
55°	6844.2	6458.5	6246.4
56°	6656.3	6234.1	6015.7
57°	6458.3	6000.5	5778.9
58°	6249.1	5756.9	5532.9
59°	6033.4	5508.0	5281.1
60°	5807.8	5256.6	5009.4
61°	5577.2	4989.0	4720.9
62°	5340.4	4709.5	4414.0
63°	5102.6	4426.5	4101.0
64°	4863.6	4138.0	3791.4
65°	4622.9	3856.2	3507.9
66°	4384.2	3593.2	3262.7
67°	4143.0	3359.6	3057.9
68°	3906.0	3152.3	2847.1
69°	3681.5	2936.0	2539.3
70°	3471.7	2672.0	2084.2
71°	3256.4	2296.0	1476.7
72°	3014.9	1774.0	920.5
73°	2730.1	1197.0	693.6
74°	2333.3	697.7	469.1
75°	1817.7	490.3	244.6
76°	1285.2	284.8	208.7
77°	836.5	229.9	180.8
78°	644.2	195.4	158.3
79°	452.0	168.6	139.1
80°	259.8	145.9	121.5
81°	209.1	125.9	105.5
82°	174.6	107.9	90.8
83°	145.7	91.3	77.6
84°	117.2	77.1	64.2
85°	87.5	62.4	50.9
86°	67.5	47.8	38.6
87°	47.4	34.7	26.7
88°	27.4	22.3	16.0
89°	11.6	10.2	7.4



REPORT NUMBER: P1436753  
CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3)

**CANDELA DISTRIBUTION (continued):**

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



REPORT NUMBER: P1436753

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

**CANDELA DISTRIBUTION (continued):**

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



REPORT NUMBER: P1436753  
CATALOG NUMBER: XAS180-SFPM (5000K-144W-T3)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)