

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: P1444975

Luminaire Tested: XAS180-SFPM (3000K-144W-T4-HSS)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1444975
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/5/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: XAS180-SFPM (3000K-144W-T4-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 80% (144W)
OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 24748 (1 lamp)
Luminaire Lumens: 18877.1 lumens
Efficiency: 76.3%
Efficacy: 131.9 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

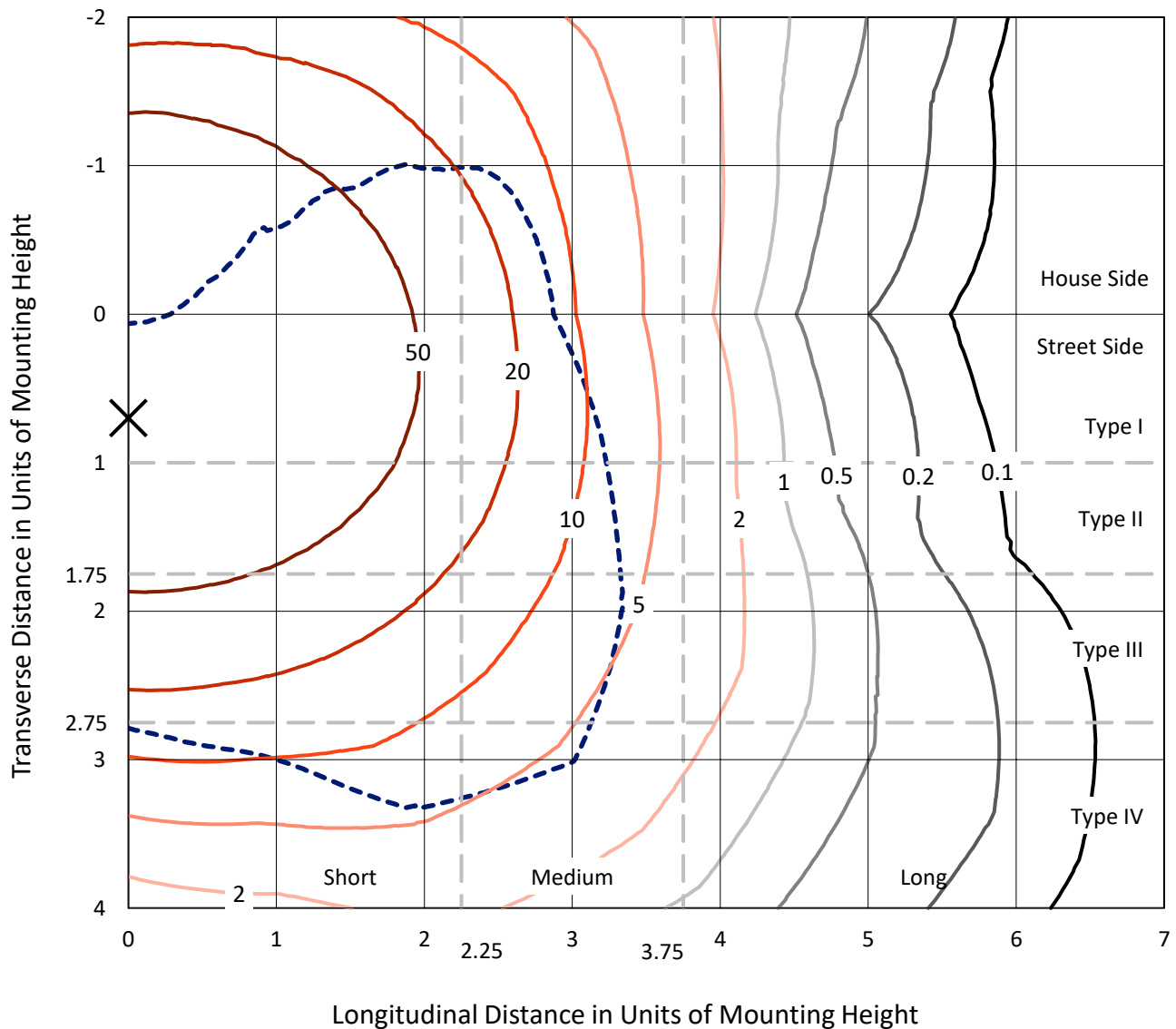
Input Watts (W): 143.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

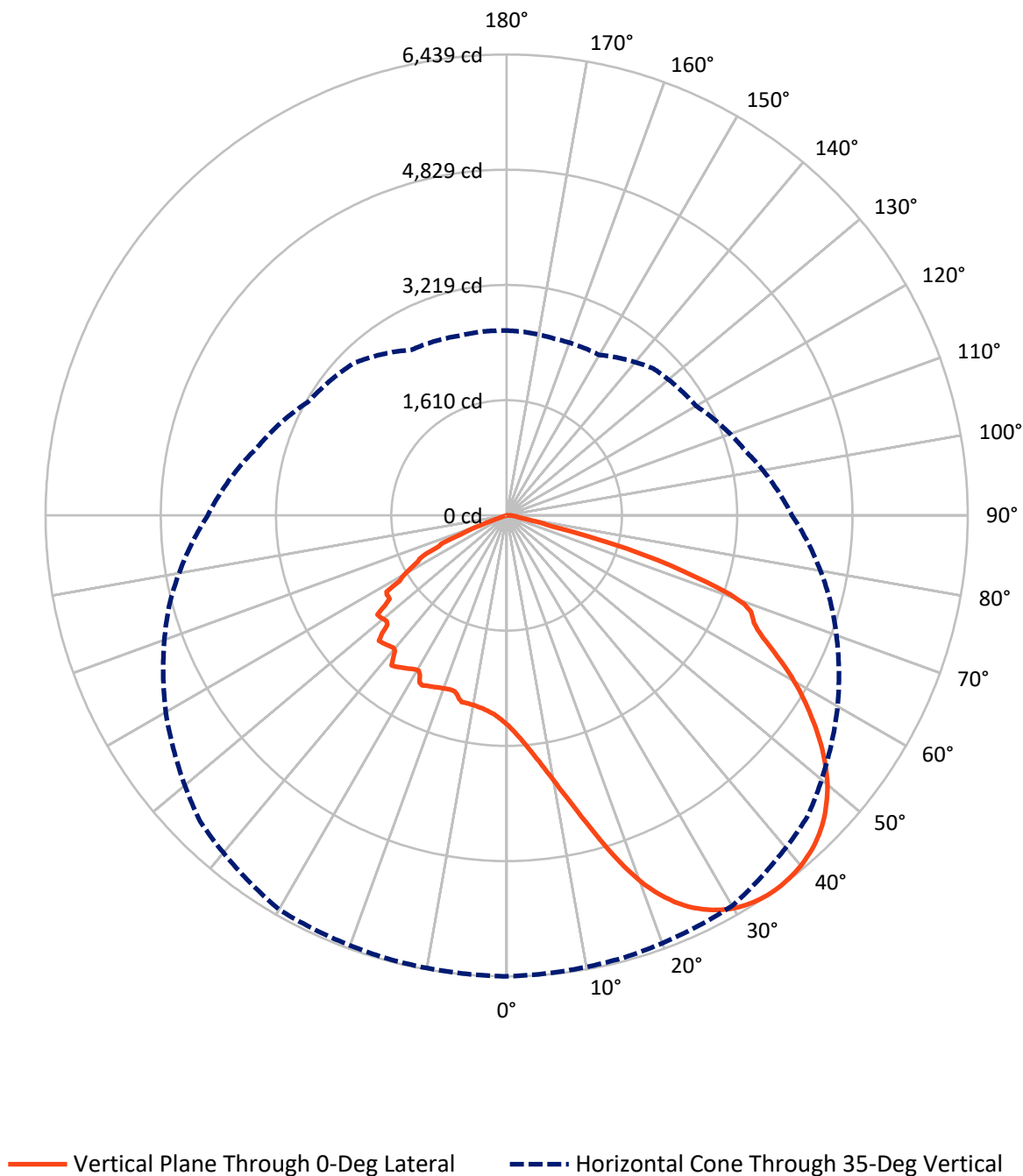


Based on 3 foot mounting height. Maximum calculated value = 509.4 fc
Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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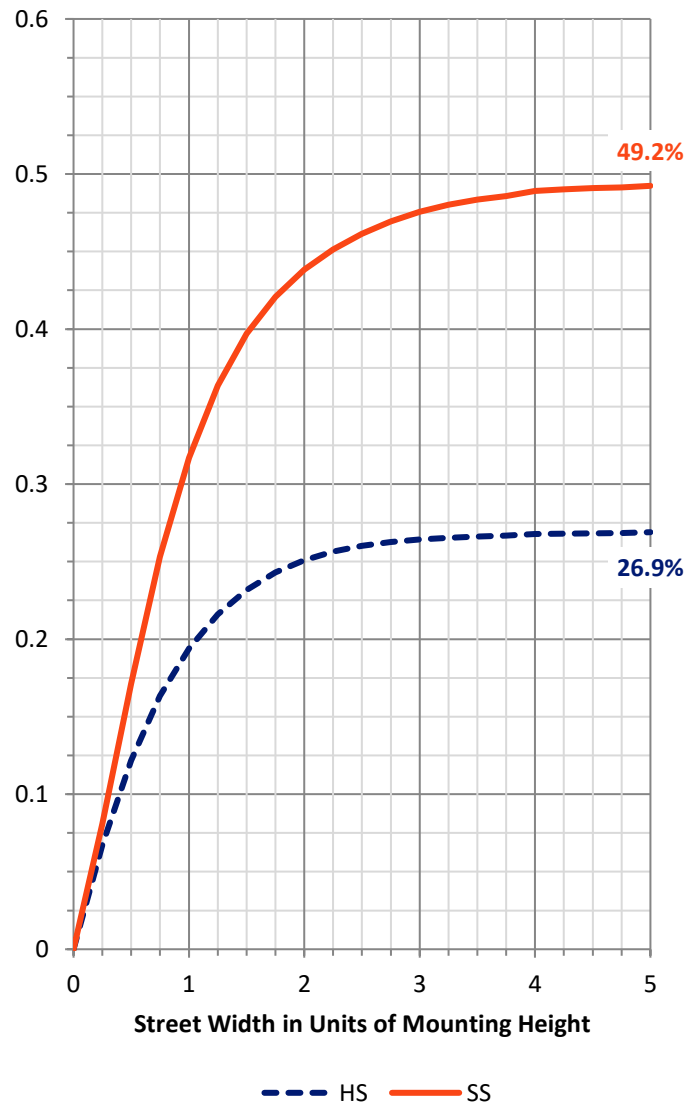
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6687.5	0.0	6687.5
	% Lamp	27.0	0.0	27.0
Street Side	Lumens	12189.6	0.0	12189.6
	% Lamp	49.3	0.0	49.3
Total	Lumens	18877.1	0.0	18877.1
	% Lamp	76.3	0.0	76.3

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	291.4	1.5	1.2
10°-20°	984.7	5.2	4.0
20°-30°	1861.9	9.9	7.5
30°-40°	2737.3	14.5	11.1
40°-50°	3457.7	18.3	14.0
50°-60°	3828.7	20.3	15.5
60°-70°	3602.3	19.1	14.6
70°-80°	1963.3	10.4	7.9
80°-90°	149.8	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°	18877.1	100.0	76.3
0°-180°	18877.1	100.0	76.3

Coefficient of Utilization



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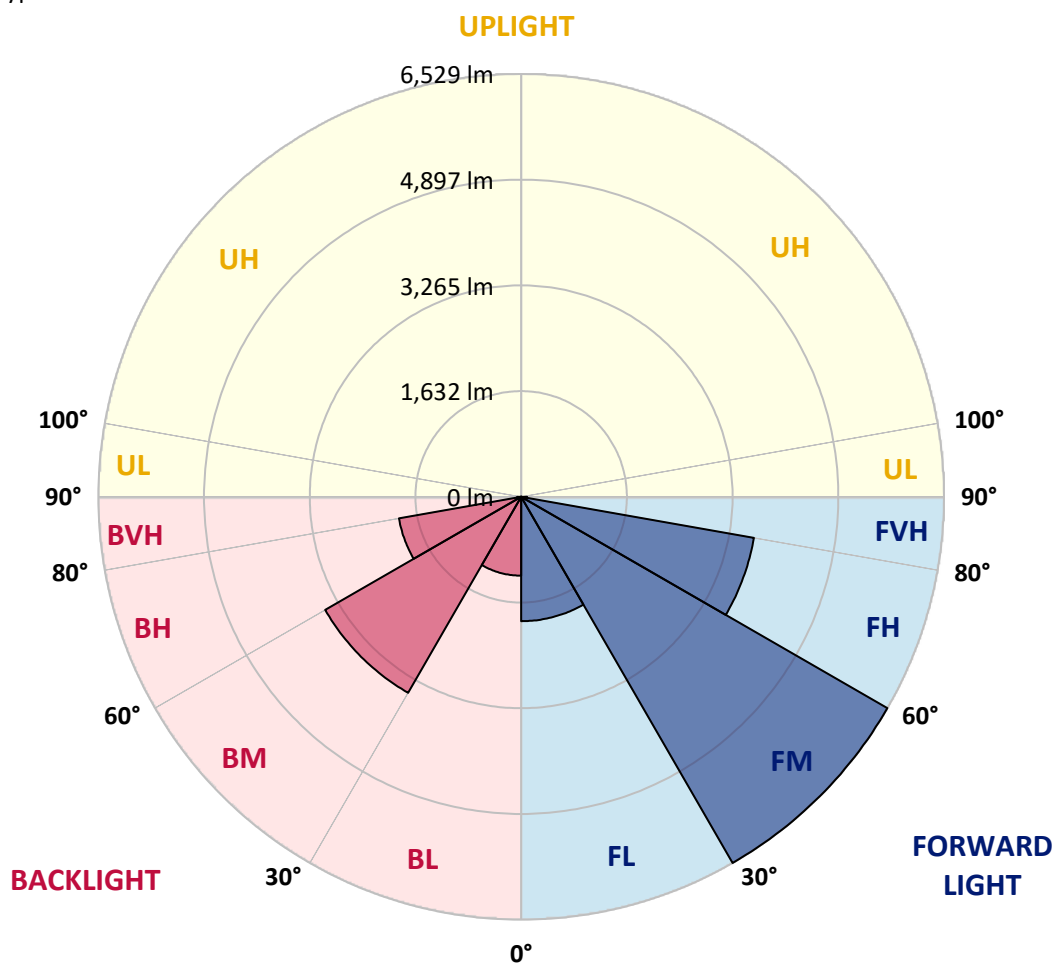
CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1920.7	7.8			
FM	(30°-60°)	6529.1	26.4			
FH	(60°-80°)	3649.3	14.7			G2/5000
FVH	(80°-90°)	90.6	0.4			G1/100
BL	(0°-30°)	1217.3	4.9	B3/2500		
BM	(30°-60°)	3494.6	14.1	B3/5000		
BH	(60°-80°)	1916.3	7.7	B3/2500		G3/2500
BVH	(80°-90°)	59.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		5870.9	23.7			

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°	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0
1°	2990.8	2989.6	2986.2	2978.6	2967.1	2955.1	2930.7	2919.4	2910.3	2901.6	2895.8
2°	3051.5	3048.0	3038.0	3020.0	2995.9	2969.8	2932.1	2908.7	2888.0	2871.5	2859.5
3°	3117.7	3112.9	3094.3	3065.0	3028.9	2989.1	2937.8	2901.5	2870.5	2846.0	2827.7
4°	3192.0	3183.2	3155.9	3115.9	3066.0	3012.2	2945.2	2897.8	2856.6	2824.2	2801.1
5°	3276.3	3263.2	3226.9	3171.7	3106.8	3036.9	2955.0	2895.5	2845.9	2806.6	2780.4
6°	3367.2	3350.2	3304.3	3234.8	3151.6	3064.3	2967.0	2895.6	2837.3	2793.6	2763.1
7°	3465.7	3444.4	3389.4	3304.5	3200.7	3095.9	2982.0	2899.2	2831.5	2783.6	2749.7
8°	3573.2	3547.3	3479.4	3377.8	3253.9	3129.9	3001.4	2906.0	2830.0	2775.6	2739.0
9°	3689.6	3657.6	3577.4	3456.5	3313.1	3167.2	3022.5	2914.2	2830.9	2770.6	2730.1
10°	3815.8	3778.1	3683.4	3541.7	3375.3	3207.1	3045.1	2924.8	2834.7	2769.3	2723.5
11°	3952.3	3908.0	3796.4	3632.3	3441.0	3251.6	3070.7	2938.0	2839.9	2770.1	2720.1
12°	4098.6	4046.6	3916.8	3727.9	3510.0	3297.3	3098.1	2952.5	2847.6	2772.7	2719.4
13°	4256.2	4195.8	4045.5	3832.0	3583.3	3346.7	3126.7	2968.5	2856.4	2776.8	2721.0
14°	4425.7	4358.8	4185.4	3939.9	3659.8	3397.3	3156.0	2984.6	2865.3	2782.4	2722.2
15°	4607.6	4527.8	4333.6	4056.3	3740.2	3447.5	3186.7	3002.9	2876.8	2789.1	2726.0
16°	4794.9	4708.6	4485.2	4176.8	3825.7	3502.1	3220.2	3021.8	2889.3	2795.7	2729.8
17°	4985.5	4887.3	4638.1	4301.3	3914.5	3558.3	3254.2	3042.5	2902.6	2803.8	2715.2
18°	5168.7	5060.0	4789.4	4426.0	4008.4	3616.8	3288.1	3059.2	2916.8	2813.6	2667.7
19°	5344.0	5227.6	4940.3	4549.5	4103.9	3675.6	3311.5	3071.4	2924.3	2823.9	2634.2
20°	5505.5	5386.5	5084.2	4671.2	4199.3	3731.5	3341.2	3086.7	2929.0	2831.6	2615.3
21°	5648.0	5528.9	5222.6	4790.2	4297.4	3783.0	3374.1	3112.8	2936.9	2795.2	2623.1
22°	5772.3	5661.7	5351.6	4904.8	4393.8	3842.1	3415.6	3138.2	2955.0	2765.5	2632.5
23°	5887.2	5779.0	5472.6	5013.5	4489.6	3903.4	3457.6	3160.8	2972.0	2747.9	2643.5
24°	5986.9	5884.2	5586.1	5118.7	4572.6	3971.7	3496.2	3179.3	2983.5	2736.1	2656.6
25°	6074.0	5978.1	5689.6	5218.9	4651.7	4044.2	3531.0	3201.8	2996.0	2748.5	2669.8
26°	6148.2	6059.5	5784.5	5315.0	4732.8	4115.3	3568.5	3226.6	3010.6	2755.0	2685.3
27°	6213.4	6131.3	5871.2	5408.5	4810.5	4183.9	3608.9	3256.6	3032.0	2763.1	2700.2
28°	6269.0	6192.2	5951.6	5495.8	4885.9	4243.7	3653.0	3287.8	3044.6	2774.6	2714.6
29°	6315.8	6244.2	6022.0	5577.0	4960.0	4305.1	3701.6	3318.6	3028.0	2794.7	2730.6
30°	6354.6	6287.4	6086.9	5656.9	5034.7	4367.5	3751.4	3350.5	3029.0	2814.8	2743.6
31°	6385.3	6323.2	6142.7	5729.5	5105.1	4429.1	3802.3	3381.7	3020.3	2835.9	2747.6
32°	6407.3	6349.4	6189.9	5789.8	5171.9	4492.3	3853.4	3405.4	3027.4	2856.1	2666.6
33°	6423.9	6369.2	6233.3	5846.6	5232.6	4556.7	3904.0	3418.0	3021.3	2872.6	2599.3
34°	6434.6	6382.1	6267.6	5897.0	5286.7	4620.0	3951.0	3433.1	3038.0	2886.6	2573.0
35°	6438.6	6388.5	6298.0	5944.2	5337.6	4682.5	3984.7	3457.9	3055.7	2899.4	2587.5
36°	6436.9	6391.4	6319.9	5989.3	5387.7	4741.5	4014.9	3484.2	3076.7	2914.1	2602.5
37°	6428.6	6387.0	6337.0	6030.0	5435.5	4798.7	4051.4	3511.5	3097.5	2910.7	2614.1
38°	6416.1	6379.6	6347.9	6065.3	5481.8	4855.1	4096.1	3541.6	3112.0	2830.9	2623.9
39°	6399.6	6367.1	6354.2	6096.5	5526.4	4908.0	4138.2	3567.7	3125.4	2767.9	2639.0
40°	6378.0	6351.7	6352.0	6123.1	5569.4	4950.1	4180.8	3591.3	3148.9	2751.3	2658.3
41°	6349.4	6330.5	6347.2	6148.0	5611.1	4985.0	4223.5	3613.4	3177.7	2772.1	2677.4
42°	6317.4	6305.4	6335.1	6169.8	5651.7	5017.0	4266.2	3630.1	3206.1	2794.3	2693.8
43°	6277.3	6275.8	6319.0	6186.5	5692.5	5054.2	4302.2	3647.6	3234.9	2817.7	2636.8
44°	6230.1	6240.4	6298.2	6196.0	5730.9	5093.2	4335.3	3680.0	3264.9	2839.3	2545.3

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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	6177.2	6200.5	6270.5	6198.8	5765.9	5134.3	4363.9	3719.0	3288.0	2853.5	2507.3
46°	6115.6	6153.8	6239.2	6194.8	5800.9	5174.5	4385.5	3758.6	3295.4	2863.0	2521.2
47°	6046.2	6099.0	6204.4	6184.4	5834.3	5213.6	4404.5	3795.2	3295.9	2878.7	2532.9
48°	5973.6	6037.8	6162.3	6168.4	5862.6	5249.8	4422.2	3815.4	3242.8	2897.3	2542.3
49°	5892.2	5968.8	6112.8	6149.2	5884.5	5288.2	4451.1	3828.5	3198.7	2839.3	2555.5
50°	5801.1	5891.8	6056.7	6123.7	5898.5	5321.2	4485.8	3836.8	3183.2	2749.4	2569.7
51°	5702.4	5806.2	5989.7	6092.2	5906.4	5348.7	4520.2	3831.7	3171.4	2710.8	2520.0
52°	5593.3	5712.6	5916.8	6052.8	5909.8	5372.0	4553.0	3857.9	3193.8	2731.5	2383.5
53°	5480.4	5609.3	5836.5	6007.4	5906.0	5392.9	4584.3	3873.1	3207.5	2753.1	2340.3
54°	5360.7	5496.9	5747.4	5957.9	5900.4	5403.1	4612.5	3882.0	3222.5	2768.7	2360.2
55°	5235.5	5379.4	5650.1	5899.6	5886.4	5403.6	4631.5	3900.3	3247.3	2783.0	2382.6
56°	5107.5	5256.6	5550.7	5834.6	5870.0	5400.3	4640.5	3911.2	3274.5	2787.2	2404.6
57°	4978.4	5131.6	5443.8	5766.3	5847.5	5387.2	4639.1	3916.5	3288.5	2691.1	2422.9
58°	4845.5	5000.2	5333.4	5690.9	5817.0	5378.4	4630.5	3926.7	3299.4	2603.9	2300.0
59°	4709.3	4872.2	5220.3	5609.2	5778.1	5368.0	4626.2	3926.6	3244.9	2601.1	2204.2
60°	4565.3	4738.8	5103.4	5522.9	5727.1	5349.8	4617.6	3909.7	3176.9	2632.1	2210.1
61°	4417.2	4600.7	4983.8	5430.8	5666.4	5322.8	4599.3	3887.9	3157.0	2665.7	2217.8
62°	4262.5	4460.0	4867.7	5332.5	5595.8	5284.4	4576.9	3876.6	3166.3	2698.4	2128.4
63°	4111.9	4317.6	4753.6	5231.8	5518.1	5231.5	4538.2	3846.3	3174.6	2632.8	2002.2
64°	3967.5	4180.4	4644.1	5127.4	5426.8	5162.3	4485.8	3810.6	3172.9	2550.6	1976.5
65°	3852.6	4054.2	4536.0	5018.7	5327.3	5079.7	4421.6	3757.7	3138.6	2549.6	1952.4
66°	3766.7	3953.4	4432.5	4910.3	5216.4	4977.0	4345.0	3687.5	3028.8	2565.4	1783.8
67°	3718.3	3877.9	4339.8	4800.3	5090.9	4860.4	4256.8	3596.8	2983.5	2460.5	1756.5
68°	3664.5	3826.8	4257.2	4689.7	4946.5	4726.9	4106.9	3499.7	3000.9	2402.4	1645.6
69°	3543.7	3771.4	4189.2	4581.4	4791.1	4545.6	3862.2	3386.5	3009.3	2394.6	1534.7
70°	3310.6	3671.7	4134.4	4472.7	4634.4	4302.9	3520.0	3221.4	3002.4	2278.2	1423.3
71°	2951.5	3479.5	4082.8	4364.3	4446.2	3996.9	3141.4	2995.9	2905.3	2241.5	1244.8
72°	2583.9	3169.2	4019.9	4249.8	4228.7	3648.0	2799.3	2730.5	2785.9	2156.2	1115.4
73°	2191.7	2776.0	3919.4	4136.6	3978.1	3289.9	2486.9	2470.6	2653.0	2088.4	994.7
74°	1746.7	2354.0	3729.6	4000.4	3695.4	2945.6	2121.3	2240.4	2498.5	1968.6	840.5
75°	1188.2	1895.9	3404.2	3809.5	3377.6	2551.7	1614.9	1988.8	2300.6	1848.3	750.2
76°	658.7	1345.2	2983.7	3530.4	3044.7	2018.4	1108.5	1596.4	2123.3	1638.4	671.3
77°	509.1	768.7	2534.0	3130.6	2675.2	1332.4	602.5	1201.1	1948.3	1428.4	591.5
78°	362.9	585.8	1990.2	2582.5	2216.6	741.4	290.1	693.1	1611.4	1217.5	508.8
79°	216.7	404.2	1305.8	1940.9	1616.3	491.3	218.2	502.7	1274.6	960.9	422.1
80°	191.8	222.5	711.4	1277.3	996.2	250.8	146.7	312.3	936.3	731.8	356.8
81°	171.5	193.0	539.5	667.2	725.1	207.8	124.4	122.5	504.0	538.2	320.9
82°	153.1	170.6	373.4	442.4	458.7	177.5	105.5	97.6	370.3	429.7	316.8
83°	135.8	150.3	207.3	231.6	192.4	145.5	87.9	77.3	236.6	340.6	260.4
84°	119.6	131.1	172.9	189.5	156.0	113.3	71.8	61.4	106.7	261.9	200.3
85°	104.0	113.7	140.5	160.7	123.8	88.7	56.1	48.4	91.4	183.2	140.2
86°	89.0	97.7	114.6	133.9	95.2	71.4	41.8	37.2	72.1	105.1	80.4
87°	74.3	82.3	92.2	104.3	73.4	54.3	29.0	27.3	53.2	59.5	50.1
88°	64.2	69.2	71.6	72.2	53.4	37.1	20.4	19.4	36.9	40.8	34.4
89°	54.2	56.1	55.2	51.4	33.4	22.6	11.7	11.4	20.7	22.1	18.7

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CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-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: P1444975

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-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: P1444975
CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-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: P1444975

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0
1°	2892.7	2893.0	2896.3	2902.6	2911.6	2920.7	2933.7	2935.7	2948.7	2961.7	2973.2
2°	2853.0	2852.7	2857.7	2869.4	2884.4	2904.5	2927.5	2942.1	2968.5	2993.9	3017.2
3°	2818.3	2817.0	2823.6	2838.3	2861.3	2889.5	2924.0	2951.5	2990.4	3030.6	3066.1
4°	2788.6	2787.2	2795.5	2813.8	2842.2	2879.5	2923.8	2963.2	3017.0	3071.3	3120.3
5°	2766.5	2764.0	2772.7	2794.3	2826.7	2871.4	2926.0	2978.3	3046.3	3115.8	3179.7
6°	2747.1	2743.5	2754.2	2779.2	2815.5	2865.9	2930.9	2996.2	3078.9	3164.7	3243.6
7°	2730.6	2726.7	2738.3	2766.1	2808.6	2865.0	2939.0	3017.4	3114.7	3218.4	3316.4
8°	2718.1	2713.4	2725.6	2757.1	2803.9	2866.8	2949.9	3040.0	3153.7	3277.5	3393.5
9°	2706.7	2702.3	2715.9	2750.6	2802.0	2870.7	2961.7	3064.3	3195.8	3339.9	3476.8
10°	2698.7	2693.0	2708.5	2747.1	2802.3	2876.2	2975.6	3092.2	3240.7	3406.3	3565.3
11°	2692.3	2686.5	2704.0	2745.7	2805.4	2885.2	2992.4	3123.6	3291.1	3476.9	3659.8
12°	2688.5	2682.7	2701.0	2746.7	2811.1	2895.7	3012.0	3155.3	3341.5	3552.3	3760.5
13°	2688.1	2681.1	2700.8	2749.0	2819.1	2908.6	3032.5	3189.4	3395.8	3631.9	3869.1
14°	2688.2	2680.2	2702.6	2754.1	2828.9	2922.7	3054.4	3224.8	3450.9	3715.1	3983.5
15°	2685.3	2647.4	2700.1	2760.0	2839.1	2939.0	3077.4	3263.2	3509.2	3804.9	4105.7
16°	2628.4	2593.3	2647.7	2766.2	2850.0	2956.8	3102.0	3300.9	3570.4	3896.0	4234.3
17°	2586.2	2561.5	2607.1	2755.7	2862.1	2975.0	3128.8	3341.2	3632.9	3993.8	4366.2
18°	2564.0	2555.8	2585.4	2709.4	2876.5	2994.1	3152.4	3381.4	3698.7	4095.8	4499.2
19°	2567.3	2559.7	2588.5	2679.4	2889.4	3008.2	3168.9	3415.3	3766.1	4199.0	4631.7
20°	2573.0	2565.2	2594.9	2664.0	2901.0	3017.8	3188.8	3448.9	3835.4	4304.3	4759.8
21°	2580.6	2574.0	2603.5	2670.8	2877.1	3029.9	3217.0	3487.4	3898.2	4411.9	4883.8
22°	2591.4	2583.7	2614.7	2682.6	2842.4	3052.2	3248.4	3531.9	3962.3	4516.1	5000.9
23°	2602.7	2596.6	2628.7	2695.7	2826.3	3075.5	3280.5	3580.4	4033.1	4619.7	5112.9
24°	2615.0	2609.1	2643.1	2710.7	2821.5	3094.9	3306.5	3629.0	4107.8	4718.4	5219.1
25°	2628.0	2621.0	2656.9	2726.8	2834.5	3109.8	3331.0	3673.2	4186.6	4805.7	5318.1
26°	2641.5	2635.1	2671.8	2745.4	2846.5	3125.4	3357.7	3714.8	4266.8	4885.5	5413.1
27°	2654.9	2649.6	2686.2	2762.6	2856.0	3144.7	3387.0	3759.3	4346.0	4964.9	5504.6
28°	2668.9	2634.9	2701.0	2780.2	2868.1	3160.9	3421.3	3807.4	4420.3	5041.1	5592.1
29°	2626.6	2541.2	2668.3	2797.5	2887.9	3155.9	3456.4	3858.3	4485.8	5115.1	5674.9
30°	2538.5	2490.9	2578.6	2812.0	2910.0	3151.9	3491.3	3911.9	4554.6	5189.2	5752.3
31°	2495.6	2497.2	2535.0	2817.8	2932.5	3151.6	3526.0	3967.2	4621.9	5259.1	5826.2
32°	2504.1	2516.8	2541.9	2752.6	2956.0	3152.6	3553.7	4022.5	4685.9	5325.8	5893.2
33°	2521.7	2537.3	2559.5	2686.2	2977.1	3152.0	3571.5	4076.6	4752.2	5390.2	5951.9
34°	2539.0	2558.5	2577.6	2657.0	2994.2	3168.8	3589.4	4130.5	4815.5	5446.3	6002.3
35°	2556.9	2581.8	2595.7	2668.4	3010.9	3187.5	3617.0	4173.8	4879.7	5495.7	6050.3
36°	2576.4	2603.2	2615.2	2686.6	3024.2	3208.5	3646.6	4209.5	4939.8	5544.6	6095.8
37°	2593.6	2623.3	2634.3	2700.1	3031.9	3231.9	3676.6	4249.8	4997.8	5591.3	6138.4
38°	2610.5	2639.4	2652.5	2711.5	2954.4	3250.1	3710.9	4295.4	5053.8	5638.6	6174.1
39°	2622.7	2542.9	2667.1	2724.0	2893.9	3266.0	3744.5	4340.5	5107.0	5683.2	6204.9
40°	2523.2	2450.4	2578.8	2743.6	2875.8	3289.1	3772.9	4385.1	5152.3	5725.0	6231.4
41°	2433.4	2430.8	2484.5	2764.6	2893.7	3319.6	3797.9	4430.2	5187.2	5766.7	6254.6
42°	2412.6	2444.6	2458.4	2783.7	2916.4	3351.7	3815.7	4474.6	5218.8	5808.2	6272.3
43°	2429.0	2459.9	2475.0	2746.4	2940.6	3383.3	3835.1	4516.3	5252.5	5847.5	6286.6
44°	2447.0	2474.2	2494.1	2648.3	2964.0	3416.0	3872.2	4554.2	5287.4	5883.1	6295.1

REPORT NUMBER: P1444975

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2465.3	2488.6	2512.5	2602.0	2980.8	3442.1	3913.7	4587.8	5324.7	5916.4	6295.1
46°	2484.1	2497.2	2531.5	2612.3	2991.9	3452.1	3955.4	4609.9	5363.7	5946.1	6287.5
47°	2502.0	2396.5	2546.9	2623.4	3006.4	3458.9	3996.4	4628.0	5400.0	5974.2	6272.3
48°	2406.4	2258.8	2466.7	2633.0	3025.8	3430.9	4028.0	4643.7	5434.0	5998.4	6254.3
49°	2271.9	2232.2	2329.6	2645.9	2989.2	3384.6	4037.0	4670.5	5464.6	6014.8	6230.7
50°	2248.3	2243.2	2296.7	2658.6	2895.7	3351.8	4043.4	4702.7	5492.0	6022.1	6201.8
51°	2266.9	2255.6	2315.2	2624.0	2843.2	3337.3	4037.8	4731.5	5511.5	6020.4	6168.4
52°	2286.4	2267.9	2332.5	2485.9	2859.3	3354.0	4039.1	4758.6	5526.4	6014.1	6126.6
53°	2303.9	2273.4	2349.0	2432.5	2881.7	3367.6	4055.3	4781.3	5534.7	6000.8	6080.6
54°	2312.6	2109.7	2358.7	2451.2	2896.4	3380.2	4059.5	4799.9	5531.1	5986.6	6026.6
55°	2164.3	2008.9	2211.1	2473.0	2910.1	3396.6	4062.3	4809.0	5518.8	5965.4	5969.1
56°	2054.4	2001.8	2099.9	2495.6	2914.7	3421.7	4062.7	4804.1	5498.0	5941.6	5906.0
57°	2047.1	2005.3	2088.2	2511.9	2843.5	3431.5	4057.4	4787.7	5470.5	5911.0	5835.2
58°	2050.3	1988.5	2090.6	2395.4	2741.7	3436.4	4055.2	4766.5	5441.6	5868.4	5759.6
59°	2011.9	1752.6	2058.9	2291.2	2731.4	3398.4	4049.2	4745.4	5412.2	5820.5	5677.7
60°	1804.3	1688.1	1849.5	2291.7	2761.1	3314.4	4020.9	4720.6	5375.4	5764.6	5587.7
61°	1764.1	1588.9	1804.0	2298.4	2793.0	3273.7	3987.1	4688.9	5330.5	5698.0	5491.9
62°	1758.8	1489.8	1792.8	2222.0	2821.3	3272.7	3967.6	4649.3	5276.0	5620.2	5392.3
63°	1656.4	1391.7	1687.6	2082.6	2763.4	3271.7	3932.8	4596.8	5209.0	5529.1	5288.1
64°	1554.1	1363.5	1582.5	2055.0	2664.6	3262.6	3887.0	4528.0	5128.1	5430.8	5182.5
65°	1451.5	1245.8	1476.6	2037.7	2650.1	3225.1	3822.6	4442.8	5028.3	5323.1	5068.5
66°	1291.1	1041.8	1320.0	1856.8	2650.9	3116.1	3742.1	4341.2	4909.6	5206.4	4948.7
67°	1128.1	993.3	1151.3	1817.7	2541.5	3044.7	3645.9	4218.5	4780.0	5072.2	4829.4
68°	1014.9	693.6	1041.3	1746.4	2480.2	3047.6	3514.7	4006.5	4614.7	4923.8	4711.2
69°	826.9	572.7	849.6	1593.8	2457.0	3041.4	3356.5	3693.7	4385.6	4760.4	4597.0
70°	662.2	394.6	681.2	1441.2	2332.4	3017.1	3137.5	3284.0	4097.6	4580.2	4475.2
71°	455.4	216.5	455.0	1289.0	2276.8	2894.7	2862.8	2905.3	3736.6	4366.9	4347.7
72°	251.6	39.7	235.3	1158.6	2181.1	2736.8	2570.1	2558.2	3353.4	4125.1	4219.9
73°	211.9	0.5	190.8	1022.3	2083.7	2574.0	2286.3	2212.3	2978.3	3833.1	4076.8
74°	172.1	0.3	146.7	840.7	1939.3	2394.9	2022.9	1801.1	2606.7	3501.4	3909.7
75°	132.5	0.4	127.3	737.7	1778.1	2185.0	1625.2	1261.8	2163.7	3133.8	3676.5
76°	100.8	0.4	101.4	655.8	1550.3	1976.1	1227.6	731.0	1565.9	2745.9	3363.6
77°	70.9	0.4	80.3	578.2	1322.5	1674.7	829.8	469.7	932.7	2333.2	2926.9
78°	53.0	0.5	65.0	501.0	1094.9	1373.3	427.2	214.6	697.9	1827.8	2360.7
79°	52.3	0.6	64.6	416.5	875.8	1069.7	278.9	163.7	466.6	1236.0	1711.3
80°	70.0	0.7	77.9	360.6	680.2	611.7	132.4	138.9	235.3	722.3	1064.8
81°	85.7	0.7	80.6	335.1	511.1	443.6	106.1	118.2	200.1	479.4	780.4
82°	75.6	0.8	50.3	312.3	396.5	275.6	87.3	99.4	170.9	240.2	503.0
83°	47.2	0.9	35.7	236.8	297.7	108.5	71.2	82.6	141.0	183.4	225.6
84°	34.6	1.0	21.2	161.3	198.8	90.4	57.3	67.7	111.6	151.1	187.6
85°	22.0	1.2	7.1	86.5	101.1	71.3	45.5	52.7	87.1	118.6	159.3
86°	9.7	1.3	6.3	44.0	56.3	53.0	35.1	37.8	70.0	92.0	132.7
87°	7.2	1.4	6.2	31.0	32.1	38.1	25.8	25.3	52.9	71.0	103.0
88°	5.2	1.5	5.5	18.0	22.4	26.6	18.2	14.8	35.9	51.6	71.6
89°	4.0	1.7	3.4	5.2	12.7	15.1	10.7	6.3	22.0	32.2	51.1

REPORT NUMBER: P1444975

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-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: P1444975

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-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: P1444975
CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-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: P1444975

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2938.0	2938.0	2938.0
1°	2981.7	2987.9	2990.8
2°	3035.0	3047.0	3051.5
3°	3093.5	3111.6	3117.7
4°	3159.2	3184.5	3192.0
5°	3230.6	3265.4	3276.3
6°	3309.4	3354.1	3367.2
7°	3396.2	3448.6	3465.7
8°	3489.7	3552.4	3573.2
9°	3590.8	3665.6	3689.6
10°	3696.6	3788.1	3815.8
11°	3814.9	3918.7	3952.3
12°	3940.3	4061.9	4098.6
13°	4075.5	4212.6	4256.2
14°	4219.9	4375.4	4425.7
15°	4371.4	4547.6	4607.6
16°	4525.4	4723.4	4794.9
17°	4682.0	4904.1	4985.5
18°	4839.5	5083.3	5168.7
19°	4991.9	5255.9	5344.0
20°	5139.1	5416.0	5505.5
21°	5277.1	5561.8	5648.0
22°	5405.7	5694.9	5772.3
23°	5529.2	5811.1	5887.2
24°	5643.8	5914.8	5986.9
25°	5749.8	6005.9	6074.0
26°	5846.6	6086.1	6148.2
27°	5937.6	6155.5	6213.4
28°	6016.2	6215.8	6269.0
29°	6088.2	6265.8	6315.8
30°	6150.5	6307.1	6354.6
31°	6206.8	6342.2	6385.3
32°	6255.3	6370.3	6407.3
33°	6296.9	6390.1	6423.9
34°	6329.8	6403.8	6434.6
35°	6356.9	6410.8	6438.6
36°	6378.0	6410.1	6436.9
37°	6394.0	6406.0	6428.6
38°	6403.6	6398.3	6416.1
39°	6407.0	6384.3	6399.6
40°	6405.0	6367.6	6378.0
41°	6398.5	6347.7	6349.4
42°	6386.2	6322.6	6317.4
43°	6368.1	6293.6	6277.3
44°	6346.2	6259.4	6230.1

REPORT NUMBER: P1444975

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	6318.8	6219.8	6177.2
46°	6287.8	6174.6	6115.6
47°	6251.0	6120.7	6046.2
48°	6211.2	6061.6	5973.6
49°	6163.7	5994.9	5892.2
50°	6107.6	5921.8	5801.1
51°	6043.6	5839.5	5702.4
52°	5969.1	5746.2	5593.3
53°	5888.6	5648.4	5480.4
54°	5800.5	5539.5	5360.7
55°	5709.2	5427.1	5235.5
56°	5609.6	5304.3	5107.5
57°	5505.4	5179.4	4978.4
58°	5394.8	5050.4	4845.5
59°	5280.1	4919.8	4709.3
60°	5164.3	4784.8	4565.3
61°	5048.6	4647.6	4417.2
62°	4932.6	4505.9	4262.5
63°	4820.8	4369.1	4111.9
64°	4715.7	4236.7	3967.5
65°	4613.6	4114.6	3852.6
66°	4514.7	4011.9	3766.7
67°	4420.6	3937.5	3718.3
68°	4334.0	3885.8	3664.5
69°	4257.0	3830.2	3543.7
70°	4196.4	3739.6	3310.6
71°	4134.4	3562.3	2951.5
72°	4058.1	3256.6	2583.9
73°	3945.4	2860.4	2191.7
74°	3739.4	2423.2	1746.7
75°	3411.1	1961.6	1188.2
76°	2993.0	1435.5	658.7
77°	2518.9	856.2	509.1
78°	1951.5	642.7	362.9
79°	1282.7	435.5	216.7
80°	720.2	228.2	191.8
81°	542.2	199.0	171.5
82°	377.1	175.8	153.1
83°	212.0	154.8	135.8
84°	175.5	134.9	119.6
85°	142.3	116.7	104.0
86°	116.3	100.0	89.0
87°	93.3	84.2	74.3
88°	71.4	70.5	64.2
89°	55.2	56.9	54.2

REPORT NUMBER: P1444975

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-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: P1444975

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-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: P1444975

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)