

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: P1444976

Luminaire Tested: XAS180-SFPM (3000K-144W-T5)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1444976
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-T5)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 80% (144W)
OPTICS - TYPE 5
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 28062 (1 lamp)
Luminaire Lumens: 21405.1 lumens
Efficiency: 76.3%
Efficacy: 146.7 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 145.9
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

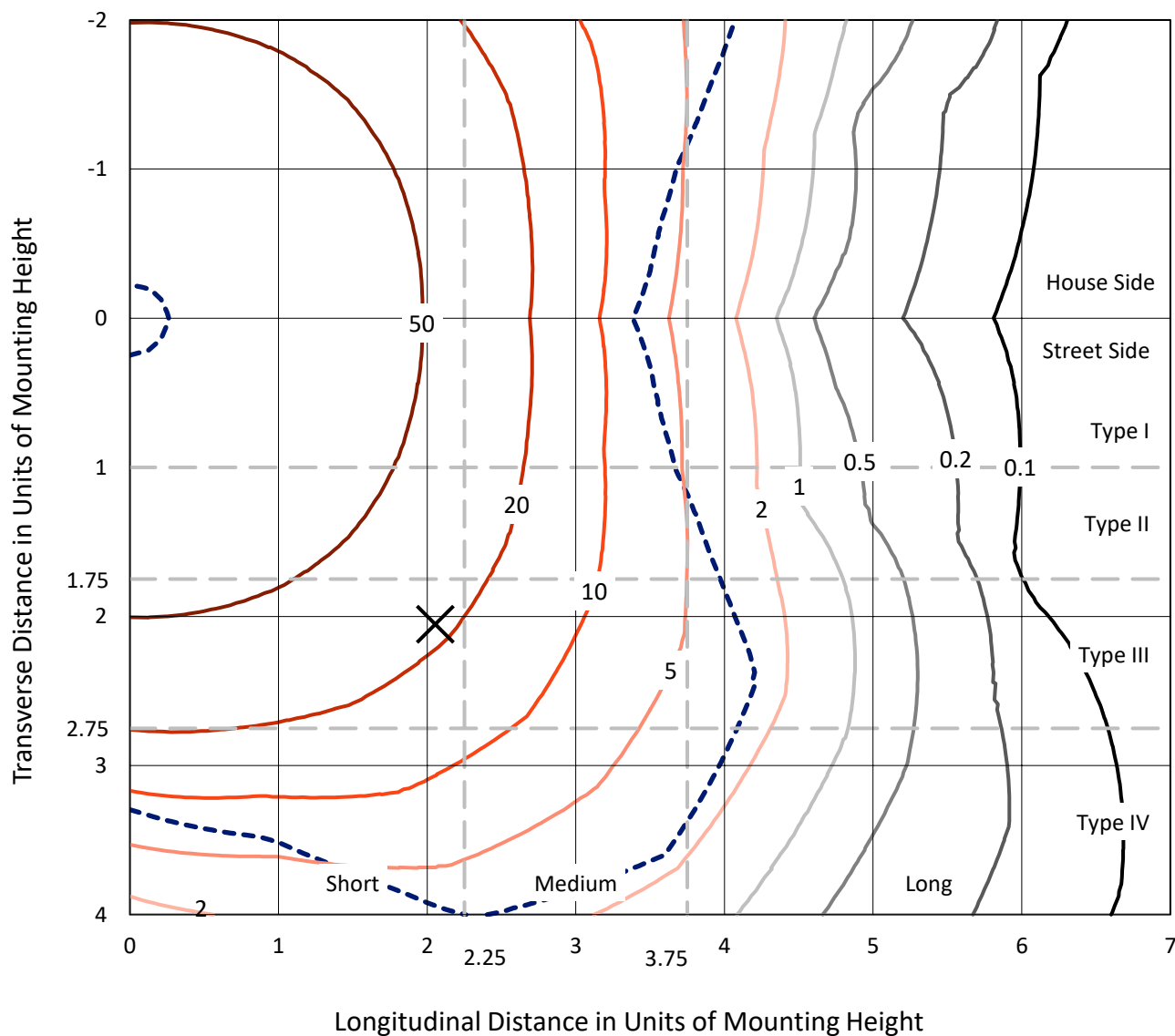
REPORT NUMBER: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

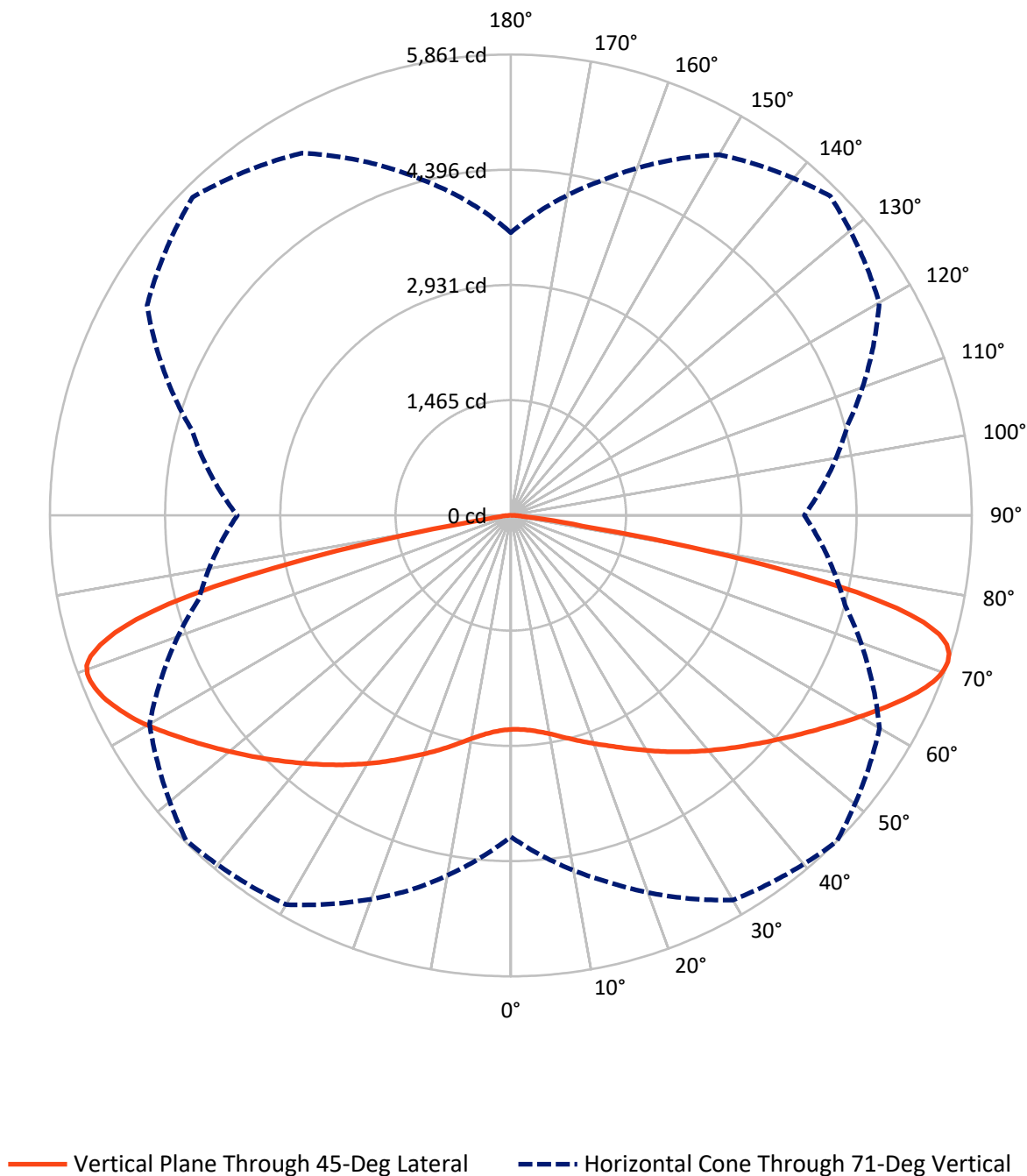


Based on 3 foot mounting height. Maximum calculated value = 302.9 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

Luminous Intensity Polar Plot



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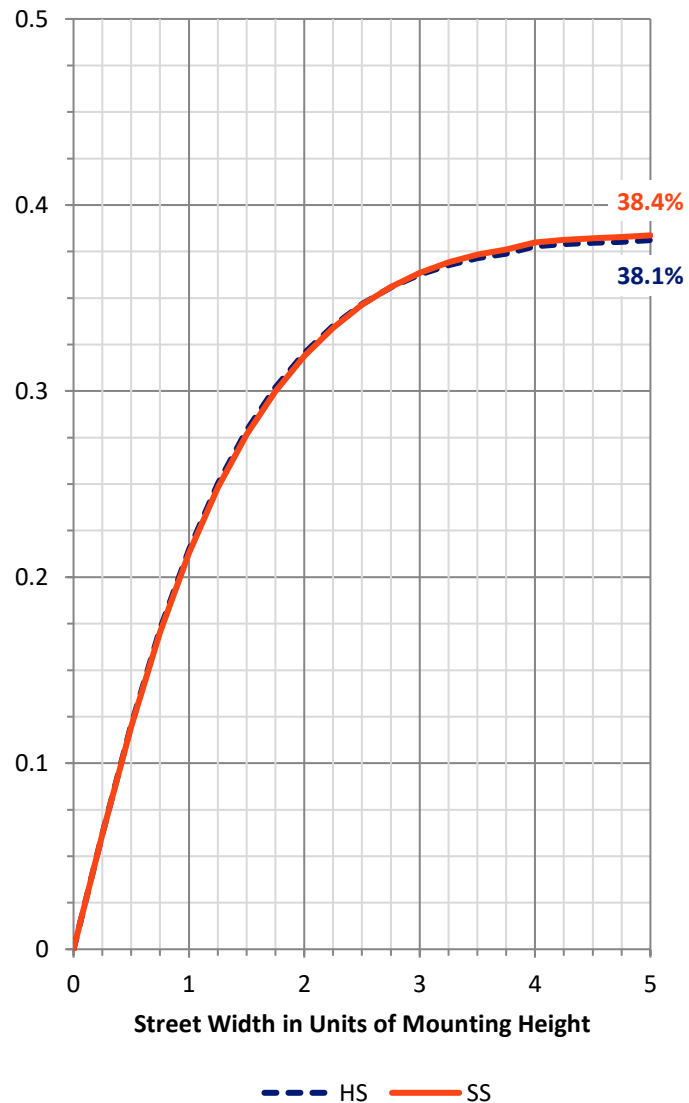
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10651.5	0.0	10651.5
	% Lamp	38.0	0.0	38.0
Street Side	Lumens	10753.6	0.0	10753.6
	% Lamp	38.3	0.0	38.3
Total	Lumens	21405.1	0.0	21405.1
	% Lamp	76.3	0.0	76.3

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	265.7	1.2	0.9
10°-20°	850.4	4.0	3.0
20°-30°	1546.3	7.2	5.5
30°-40°	2368.4	11.1	8.4
40°-50°	3301.1	15.4	11.8
50°-60°	4320.5	20.2	15.4
60°-70°	5163.5	24.1	18.4
70°-80°	3421.0	16.0	12.2
80°-90°	168.2	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°	21405.1	100.0	76.3
0°-180°	21405.1	100.0	76.3

Coefficient of Utilization



REPORT NUMBER: P1444976

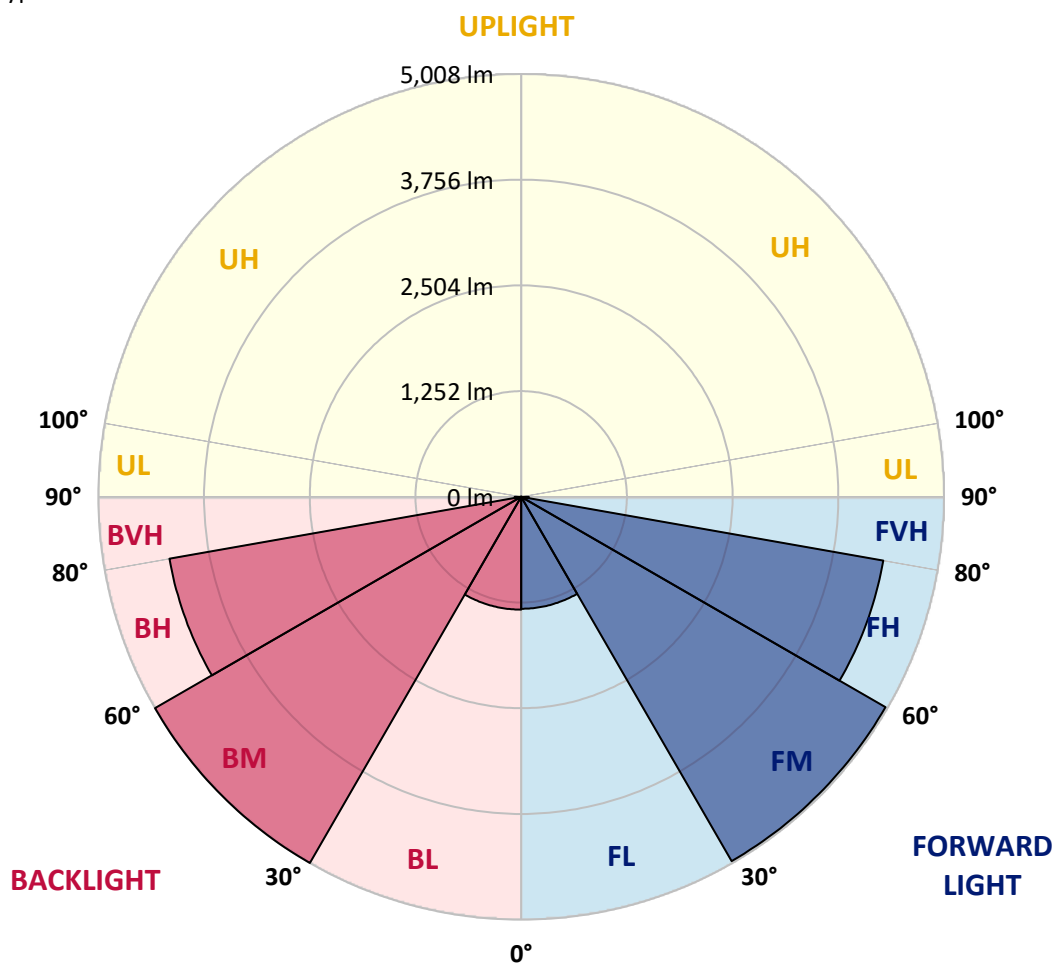
CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1326.1	4.7			
FM	(30°-60°)	4982.3	17.8			
FH	(60°-80°)	4355.0	15.5			G2/5000
FVH	(80°-90°)	90.2	0.3			G1/100
BL	(0°-30°)	1336.4	4.8	B3/2500		
BM	(30°-60°)	5007.7	17.8	B4/8500		
BH	(60°-80°)	4229.4	15.1	B4/5000		G2/5000
BVH	(80°-90°)	78.0	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		6656.9	23.7			

BUG Rating: B4-U0-G2

Type V Short



REPORT NUMBER: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2720.9	2720.9	2720.9	2720.9	2720.9	2720.9	2720.9	2720.9	2720.9	2720.9	2720.9
1°	2722.2	2721.6	2722.2	2721.6	2721.7	2721.4	2719.4	2719.7	2719.7	2720.6	2721.2
2°	2726.4	2725.4	2725.1	2724.5	2723.4	2722.4	2720.7	2720.7	2721.2	2722.6	2724.0
3°	2733.6	2731.9	2730.8	2729.0	2728.4	2727.0	2725.2	2725.0	2725.5	2727.1	2729.3
4°	2743.8	2741.5	2739.5	2737.7	2736.0	2734.1	2732.2	2732.0	2732.7	2735.0	2737.7
5°	2755.4	2752.6	2750.3	2747.3	2744.7	2743.1	2740.6	2741.6	2743.4	2746.0	2748.9
6°	2768.5	2765.1	2763.6	2760.2	2756.0	2753.5	2751.0	2751.8	2754.6	2759.2	2762.9
7°	2782.9	2779.5	2778.5	2774.8	2770.7	2766.9	2763.8	2765.1	2767.6	2774.5	2779.6
8°	2799.7	2796.0	2794.3	2791.2	2786.7	2782.5	2780.4	2781.9	2784.9	2791.1	2798.4
9°	2818.0	2814.6	2812.2	2809.1	2805.2	2800.1	2797.0	2799.3	2804.7	2811.2	2818.6
10°	2838.0	2834.7	2832.5	2829.3	2825.8	2819.9	2817.1	2819.5	2826.1	2834.0	2840.4
11°	2859.9	2856.1	2855.2	2852.1	2847.6	2841.8	2838.3	2842.1	2849.3	2859.2	2864.9
12°	2882.4	2877.3	2878.0	2876.3	2871.3	2865.2	2860.8	2865.8	2874.3	2885.3	2891.8
13°	2904.0	2899.3	2902.3	2902.5	2896.2	2890.4	2884.2	2890.3	2901.4	2912.8	2920.6
14°	2928.0	2922.6	2926.5	2928.9	2922.8	2915.8	2908.7	2916.4	2928.1	2942.3	2949.7
15°	2951.6	2946.6	2951.5	2956.7	2950.2	2941.8	2934.9	2942.2	2956.9	2972.4	2978.8
16°	2977.3	2973.4	2977.5	2984.3	2979.1	2969.8	2963.1	2970.1	2986.5	3003.5	3009.7
17°	3004.9	3001.3	3006.1	3013.1	3009.4	2998.4	2991.2	2998.8	3018.2	3033.5	3040.6
18°	3033.6	3028.7	3034.8	3041.8	3039.3	3028.1	3020.9	3029.2	3049.4	3064.7	3070.3
19°	3063.1	3057.7	3064.8	3071.8	3070.5	3059.2	3051.8	3061.3	3081.7	3096.6	3100.2
20°	3095.2	3088.8	3095.2	3102.3	3102.4	3092.0	3084.7	3095.0	3115.0	3128.3	3130.1
21°	3127.8	3121.3	3125.9	3133.7	3135.4	3125.1	3117.7	3129.8	3148.7	3159.1	3161.4
22°	3162.4	3155.3	3158.6	3165.5	3170.6	3159.9	3153.4	3166.0	3184.6	3192.9	3194.3
23°	3198.9	3191.5	3192.1	3199.5	3206.2	3196.5	3189.8	3204.1	3220.8	3226.8	3229.2
24°	3237.3	3229.0	3227.0	3234.3	3242.5	3233.5	3228.3	3242.9	3258.7	3262.2	3265.0
25°	3277.5	3267.7	3263.4	3271.3	3280.8	3272.3	3268.7	3283.4	3296.1	3298.9	3300.5
26°	3319.3	3307.6	3301.4	3308.7	3319.1	3310.4	3309.7	3324.3	3334.6	3336.3	3336.9
27°	3362.3	3348.3	3339.6	3347.8	3357.2	3349.5	3351.4	3365.8	3373.7	3375.3	3374.6
28°	3407.3	3389.7	3378.8	3387.5	3396.2	3389.5	3394.7	3406.8	3414.3	3415.7	3412.6
29°	3453.2	3431.4	3419.7	3429.1	3435.2	3429.9	3440.1	3448.5	3454.8	3457.6	3452.4
30°	3500.0	3473.1	3461.5	3471.2	3475.2	3471.7	3486.6	3491.2	3496.2	3499.8	3492.4
31°	3547.6	3516.0	3504.9	3514.7	3515.4	3512.2	3533.6	3533.5	3538.0	3543.4	3534.5
32°	3594.9	3558.9	3548.1	3558.7	3556.0	3555.9	3579.8	3577.2	3580.8	3587.5	3576.7
33°	3642.1	3603.0	3593.6	3602.0	3599.0	3598.1	3627.3	3619.6	3624.5	3631.7	3620.3
34°	3689.7	3646.9	3638.1	3646.4	3641.6	3639.3	3673.6	3661.8	3668.4	3675.2	3664.0
35°	3739.9	3690.4	3683.9	3691.4	3685.2	3680.8	3721.6	3703.7	3712.8	3720.6	3710.0
36°	3789.5	3735.4	3730.9	3737.3	3730.4	3724.0	3769.0	3746.8	3759.4	3766.6	3757.1
37°	3839.2	3780.8	3778.6	3784.3	3775.9	3765.6	3816.1	3790.4	3805.5	3813.3	3805.2
38°	3889.7	3828.0	3826.5	3831.1	3821.1	3809.2	3865.0	3833.3	3850.6	3860.1	3852.9
39°	3939.1	3875.2	3874.0	3878.5	3866.6	3854.3	3914.4	3877.6	3897.4	3906.4	3899.7
40°	3988.1	3924.4	3921.5	3926.7	3912.8	3900.0	3963.5	3923.2	3944.5	3954.9	3948.5
41°	4036.2	3974.6	3970.5	3974.8	3960.5	3947.2	4012.5	3970.9	3991.0	4003.3	3995.2
42°	4086.5	4025.9	4020.8	4025.1	4008.6	3995.2	4059.7	4019.0	4039.1	4053.7	4046.3
43°	4135.4	4079.4	4071.7	4076.0	4058.5	4045.3	4105.5	4069.2	4087.7	4104.7	4096.9
44°	4183.1	4134.3	4123.2	4127.6	4108.3	4096.8	4149.5	4120.7	4136.2	4155.0	4148.6

REPORT NUMBER: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	4231.0	4189.1	4176.1	4178.6	4159.0	4150.5	4192.5	4172.9	4185.8	4206.8	4202.0
46°	4279.1	4246.9	4230.9	4231.8	4212.1	4205.8	4236.1	4227.4	4236.1	4259.7	4256.1
47°	4328.7	4308.3	4287.7	4287.5	4267.0	4263.1	4281.2	4282.1	4289.4	4314.8	4313.3
48°	4379.2	4368.7	4345.1	4344.3	4321.6	4321.3	4323.5	4339.0	4344.7	4369.1	4371.3
49°	4431.5	4432.3	4405.7	4402.9	4378.1	4380.0	4365.6	4395.1	4400.4	4425.4	4428.3
50°	4484.8	4494.2	4466.3	4461.7	4434.3	4439.3	4407.8	4451.1	4455.7	4484.8	4488.0
51°	4539.4	4558.4	4528.7	4522.0	4493.9	4497.6	4452.0	4506.0	4513.2	4544.8	4550.9
52°	4595.5	4623.9	4594.5	4586.5	4554.6	4555.2	4497.3	4562.7	4572.3	4608.1	4613.2
53°	4651.7	4688.2	4661.4	4650.1	4614.9	4610.8	4540.5	4618.3	4631.4	4670.1	4676.9
54°	4708.0	4752.3	4729.4	4718.2	4676.2	4664.9	4583.3	4671.4	4692.6	4733.5	4740.8
55°	4762.0	4810.9	4798.9	4785.2	4737.0	4715.8	4625.4	4719.6	4754.3	4801.9	4807.8
56°	4812.7	4869.2	4870.0	4855.9	4799.7	4763.8	4665.8	4768.1	4815.8	4870.7	4876.6
57°	4860.7	4923.8	4941.1	4930.1	4861.4	4808.2	4701.9	4811.6	4876.8	4941.1	4943.5
58°	4905.8	4975.5	5013.6	5005.3	4922.5	4847.7	4732.8	4850.5	4937.9	5013.8	5007.6
59°	4946.3	5023.4	5087.9	5081.4	4984.0	4880.5	4761.5	4886.4	4997.7	5088.0	5069.4
60°	4982.8	5066.8	5160.7	5160.7	5043.0	4908.3	4784.1	4916.9	5054.6	5163.0	5128.9
61°	5012.6	5106.1	5231.3	5239.5	5101.4	4933.2	4801.7	4943.4	5113.7	5236.8	5188.8
62°	5035.9	5138.9	5300.5	5320.7	5157.8	4951.1	4811.6	4962.7	5168.4	5309.7	5246.3
63°	5056.4	5168.6	5368.0	5402.5	5215.7	4960.4	4812.2	4977.8	5223.4	5377.0	5300.0
64°	5074.6	5192.6	5429.6	5483.3	5269.8	4962.3	4804.5	4986.8	5278.1	5442.1	5350.5
65°	5092.5	5213.1	5489.3	5563.0	5321.7	4961.4	4791.0	4988.5	5328.8	5508.7	5394.8
66°	5102.8	5232.5	5542.4	5639.2	5366.6	4951.5	4771.0	4981.3	5374.2	5575.5	5436.0
67°	5102.8	5246.1	5587.7	5710.0	5403.8	4933.7	4738.1	4965.6	5411.6	5637.1	5469.3
68°	5055.8	5243.4	5626.3	5772.3	5429.5	4904.4	4637.0	4933.4	5441.2	5686.0	5448.0
69°	4905.1	5203.7	5651.4	5819.0	5444.5	4824.1	4425.0	4853.1	5455.8	5724.7	5398.1
70°	4587.4	5089.2	5660.9	5848.7	5450.3	4657.8	4115.3	4690.2	5453.4	5746.9	5371.3
71°	4085.2	4830.9	5647.7	5861.0	5413.5	4399.6	3731.9	4434.3	5409.7	5743.3	5297.1
72°	3561.7	4408.7	5602.8	5843.6	5318.9	4069.8	3382.2	4098.7	5295.3	5684.1	5172.6
73°	3007.0	3858.3	5493.2	5782.6	5157.3	3715.7	3112.5	3736.5	5103.9	5555.8	5016.0
74°	2365.7	3257.9	5252.7	5652.4	4931.1	3393.6	2773.7	3403.4	4854.2	5360.5	4757.5
75°	1566.3	2603.9	4812.5	5421.1	4634.1	3035.4	2119.4	3051.5	4536.6	5100.2	4372.3
76°	809.9	1827.4	4218.3	5049.3	4282.6	2497.2	1465.1	2538.0	4186.4	4715.8	3846.6
77°	586.1	983.1	3574.8	4505.4	3851.0	1680.6	811.7	1838.0	3769.3	4173.2	3195.0
78°	374.6	706.7	2794.0	3707.4	3250.8	871.1	349.5	1138.0	3191.4	3451.1	2414.1
79°	163.1	440.0	1812.5	2825.1	2412.0	629.8	275.3	442.9	2380.7	2611.6	1633.1
80°	135.5	173.4	924.8	1839.6	1460.5	394.9	201.1	342.1	1569.9	1766.7	854.9
81°	115.9	142.8	668.8	931.0	717.4	160.0	128.4	241.2	766.9	930.6	392.8
82°	98.7	120.7	423.2	669.4	528.9	136.2	109.7	140.5	341.5	376.4	299.7
83°	82.8	100.7	177.6	425.7	346.2	115.3	92.8	118.5	268.3	293.8	206.5
84°	68.4	82.6	139.2	181.9	163.5	96.0	76.9	98.3	195.2	211.1	114.1
85°	54.1	67.6	106.2	150.0	124.2	78.5	61.9	80.0	122.7	128.9	82.6
86°	39.7	52.6	79.7	120.6	91.2	63.0	48.0	63.5	88.1	101.0	55.3
87°	26.8	37.6	58.0	88.7	67.0	47.6	34.2	48.1	63.6	71.7	34.4
88°	15.4	24.4	36.3	71.1	43.1	32.2	23.9	34.1	44.0	44.7	24.4
89°	6.2	10.5	14.7	53.9	19.2	17.3	13.5	23.6	30.3	30.9	14.4

REPORT NUMBER: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

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: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

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: P1444976
CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

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: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2720.9	2720.9	2720.9	2720.9	2720.9	2720.9	2720.9	2720.9	2720.9	2720.9	2720.9
1°	2721.7	2722.2	2722.8	2723.6	2724.1	2724.5	2724.8	2723.1	2722.7	2722.4	2722.9
2°	2725.1	2726.5	2727.0	2728.6	2729.4	2729.7	2730.1	2728.5	2728.7	2728.0	2728.1
3°	2730.8	2733.2	2734.8	2736.2	2737.7	2738.2	2739.1	2736.9	2737.0	2736.4	2736.8
4°	2740.2	2743.0	2744.9	2746.7	2748.3	2749.1	2750.0	2748.3	2747.8	2747.3	2746.9
5°	2751.8	2755.5	2757.6	2760.3	2761.6	2762.4	2762.8	2760.8	2760.6	2759.9	2759.5
6°	2766.7	2770.4	2773.7	2776.5	2777.8	2777.8	2777.9	2775.6	2775.7	2775.3	2774.8
7°	2784.2	2787.5	2791.7	2794.9	2796.1	2796.9	2797.8	2794.7	2794.3	2793.2	2792.7
8°	2803.1	2807.1	2811.6	2815.7	2817.6	2819.2	2818.4	2814.8	2814.1	2813.0	2811.6
9°	2823.7	2828.3	2833.7	2839.0	2842.0	2842.6	2840.9	2835.7	2835.8	2835.4	2833.9
10°	2846.5	2852.0	2858.2	2864.7	2868.2	2868.2	2865.2	2860.1	2859.7	2860.3	2857.3
11°	2871.7	2877.7	2884.9	2892.8	2896.8	2896.2	2892.4	2886.9	2886.9	2887.5	2883.5
12°	2897.8	2904.0	2912.9	2922.4	2927.3	2926.0	2921.5	2914.8	2915.7	2915.6	2911.0
13°	2924.7	2930.8	2940.8	2954.3	2960.1	2958.3	2951.5	2944.9	2946.0	2946.0	2940.4
14°	2953.0	2958.6	2970.3	2985.8	2993.9	2991.4	2983.9	2975.9	2977.5	2978.5	2971.1
15°	2981.4	2986.5	3000.2	3018.5	3029.0	3026.2	3016.8	3008.2	3010.5	3012.3	3002.4
16°	3010.7	3015.8	3030.3	3051.1	3064.8	3063.5	3051.3	3041.5	3044.2	3046.2	3034.3
17°	3040.0	3045.1	3061.1	3084.0	3100.9	3099.6	3087.6	3076.7	3078.8	3081.0	3067.6
18°	3070.3	3075.3	3092.6	3116.3	3136.5	3137.3	3124.3	3111.9	3115.5	3116.8	3101.1
19°	3100.9	3107.5	3123.9	3149.3	3173.1	3174.7	3161.2	3148.4	3152.3	3152.8	3133.8
20°	3132.2	3139.9	3157.0	3184.7	3208.9	3213.5	3199.7	3186.5	3190.7	3190.1	3168.1
21°	3165.2	3173.2	3191.2	3219.5	3245.6	3253.3	3240.5	3226.1	3229.3	3228.1	3202.1
22°	3199.6	3208.1	3226.8	3256.3	3284.5	3293.6	3282.0	3266.1	3270.1	3266.6	3238.9
23°	3233.7	3243.9	3264.6	3294.8	3323.3	3335.7	3322.6	3308.1	3312.4	3305.6	3276.6
24°	3270.7	3282.0	3302.9	3333.8	3363.9	3377.2	3364.9	3350.9	3354.5	3344.8	3313.4
25°	3307.1	3320.4	3342.1	3373.0	3405.0	3419.0	3409.0	3394.8	3396.8	3385.6	3351.5
26°	3345.7	3362.0	3382.6	3414.2	3447.0	3461.0	3452.6	3440.7	3439.0	3425.8	3392.0
27°	3384.3	3403.2	3423.1	3455.2	3488.4	3502.6	3496.0	3486.3	3481.7	3466.4	3432.1
28°	3423.5	3448.6	3464.6	3497.5	3533.2	3546.5	3540.7	3534.6	3525.4	3508.4	3474.6
29°	3464.0	3493.8	3507.3	3541.1	3576.9	3589.6	3585.9	3582.7	3569.1	3551.8	3519.1
30°	3505.9	3541.5	3550.8	3584.2	3621.6	3633.3	3630.6	3630.8	3612.3	3594.1	3564.2
31°	3548.9	3589.4	3594.8	3627.5	3664.3	3677.2	3674.3	3680.1	3656.1	3636.8	3609.4
32°	3592.0	3638.0	3639.1	3671.2	3709.7	3722.8	3719.7	3729.0	3698.5	3679.4	3654.8
33°	3636.3	3687.2	3683.4	3717.0	3754.9	3768.8	3764.7	3778.2	3742.6	3724.8	3702.2
34°	3680.4	3736.3	3727.1	3763.5	3801.6	3814.4	3810.3	3828.3	3786.3	3769.8	3749.5
35°	3723.7	3787.8	3772.9	3810.9	3848.4	3860.8	3855.0	3878.2	3831.4	3816.8	3799.3
36°	3768.4	3839.2	3819.0	3858.7	3894.7	3906.0	3900.4	3928.9	3876.3	3863.8	3848.1
37°	3812.2	3890.6	3865.8	3906.8	3941.7	3951.9	3947.6	3979.9	3922.7	3911.7	3897.1
38°	3858.4	3941.5	3913.8	3955.7	3990.0	3999.3	3994.3	4030.5	3969.3	3960.1	3947.1
39°	3905.5	3992.9	3962.2	4005.6	4039.5	4046.3	4043.0	4080.4	4016.4	4009.3	3996.3
40°	3954.8	4040.9	4012.9	4056.5	4088.7	4095.2	4091.6	4128.4	4064.6	4059.6	4046.7
41°	4006.1	4089.4	4064.1	4107.7	4140.0	4143.5	4140.3	4174.7	4114.3	4110.3	4097.1
42°	4056.7	4136.5	4117.7	4158.2	4190.6	4193.7	4190.4	4220.8	4166.3	4162.1	4149.6
43°	4109.3	4183.0	4171.4	4209.7	4243.4	4246.6	4243.3	4267.4	4219.9	4213.5	4200.6
44°	4163.5	4229.6	4226.7	4263.0	4296.9	4299.2	4296.6	4315.7	4275.0	4265.3	4253.9

REPORT NUMBER: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	4218.7	4277.2	4282.7	4318.4	4352.1	4352.8	4353.1	4362.4	4331.2	4318.9	4307.5
46°	4276.2	4323.5	4341.2	4372.8	4407.8	4406.3	4409.3	4404.8	4390.0	4373.5	4362.6
47°	4336.4	4368.8	4400.6	4427.8	4464.2	4460.0	4465.5	4447.1	4446.3	4428.6	4420.0
48°	4397.4	4416.4	4461.9	4484.8	4521.2	4515.1	4520.6	4490.3	4503.3	4483.9	4478.4
49°	4458.8	4467.5	4525.0	4542.0	4580.4	4570.7	4575.4	4534.4	4559.2	4540.2	4537.4
50°	4523.3	4517.7	4589.0	4602.2	4639.2	4627.1	4628.9	4579.2	4614.5	4598.4	4597.5
51°	4591.0	4569.4	4653.0	4662.7	4700.0	4682.6	4682.3	4619.6	4668.1	4656.6	4659.1
52°	4655.6	4618.4	4715.3	4723.3	4762.0	4738.4	4733.1	4660.7	4720.2	4714.6	4722.2
53°	4713.7	4659.1	4773.1	4786.3	4825.5	4794.2	4780.3	4699.0	4766.9	4771.0	4785.8
54°	4764.0	4689.3	4825.6	4850.2	4890.0	4851.7	4824.1	4733.1	4811.3	4831.0	4852.5
55°	4809.8	4720.3	4870.9	4914.6	4955.9	4907.1	4865.0	4765.7	4851.8	4888.3	4921.8
56°	4856.5	4755.4	4915.3	4982.0	5022.8	4961.1	4901.6	4795.1	4888.4	4944.8	4993.2
57°	4900.6	4792.1	4958.8	5047.7	5090.0	5015.7	4933.9	4819.6	4919.4	4999.3	5062.1
58°	4942.2	4817.8	5000.9	5115.1	5158.2	5069.4	4961.3	4843.4	4945.3	5053.9	5134.5
59°	4974.2	4835.8	5032.1	5178.7	5229.5	5120.3	4984.4	4863.3	4966.6	5106.2	5206.4
60°	5000.4	4858.1	5058.2	5238.5	5299.6	5169.8	5005.4	4878.4	4984.8	5158.4	5279.7
61°	5025.8	4880.1	5083.4	5299.4	5370.4	5219.5	5022.1	4884.5	5002.1	5208.8	5353.5
62°	5049.9	4898.0	5106.7	5357.2	5435.0	5270.4	5033.2	4886.2	5012.2	5257.0	5428.5
63°	5071.7	4912.8	5128.6	5410.2	5493.7	5316.4	5037.9	4884.7	5014.6	5301.8	5502.5
64°	5091.3	4915.7	5147.1	5458.9	5549.1	5360.6	5040.3	4872.5	5011.6	5342.7	5576.9
65°	5088.4	4869.4	5140.2	5501.9	5603.1	5399.1	5032.8	4851.1	5000.4	5377.3	5646.9
66°	5025.7	4828.7	5071.1	5535.4	5654.5	5429.8	5019.8	4820.3	4983.0	5406.7	5713.4
67°	4985.5	4803.5	5028.1	5554.3	5694.6	5455.5	4993.9	4745.8	4952.4	5428.0	5770.3
68°	4961.4	4721.8	4991.2	5516.4	5726.0	5472.1	4930.5	4568.8	4880.2	5440.2	5817.6
69°	4863.8	4507.8	4883.6	5452.6	5746.8	5467.0	4792.6	4269.0	4725.1	5432.4	5850.5
70°	4680.7	4133.8	4705.7	5410.5	5749.7	5430.8	4542.1	3873.3	4463.4	5398.0	5861.0
71°	4401.3	3596.0	4424.7	5318.5	5722.0	5340.3	4199.3	3477.8	4105.8	5304.2	5841.1
72°	3974.0	3108.7	3990.4	5185.7	5634.4	5171.7	3810.5	3147.5	3715.6	5148.3	5786.3
73°	3451.6	2610.7	3461.1	5004.1	5475.2	4917.6	3434.3	2826.5	3344.5	4910.4	5673.9
74°	2910.5	1956.7	2921.6	4724.7	5246.9	4607.4	3077.3	2388.5	2983.2	4603.8	5488.9
75°	2215.2	1302.8	2229.0	4302.2	4942.2	4230.9	2630.6	1703.5	2515.8	4226.0	5189.7
76°	1520.0	659.1	1536.5	3739.6	4493.3	3820.5	1932.8	965.7	1821.3	3791.7	4759.6
77°	830.9	483.3	850.0	3086.9	3882.0	3325.1	1235.0	693.2	1018.3	3268.4	4141.5
78°	350.6	307.6	367.6	2311.2	3085.9	2634.0	547.0	430.3	737.9	2566.3	3314.3
79°	273.3	136.1	285.1	1535.5	2252.8	1913.0	253.8	167.3	457.8	1701.3	2379.9
80°	196.0	112.2	202.7	765.7	1419.7	1192.1	211.9	139.9	177.6	933.9	1440.9
81°	118.9	93.4	121.4	344.1	600.2	472.8	170.1	119.6	146.1	674.9	678.7
82°	97.0	76.7	99.1	266.6	258.6	249.9	128.6	101.6	123.9	431.6	438.5
83°	77.4	60.9	79.3	189.2	213.6	202.9	108.4	85.2	104.3	188.3	212.6
84°	59.7	47.1	61.0	112.3	168.6	155.9	90.2	70.7	86.1	145.5	171.6
85°	43.5	33.6	44.4	80.0	123.6	109.0	72.9	56.2	70.8	109.0	142.3
86°	30.8	23.2	31.2	52.8	96.3	78.3	57.1	41.8	55.4	79.6	114.0
87°	18.1	12.7	18.1	38.1	67.6	56.6	42.7	28.5	40.0	57.6	80.3
88°	5.5	2.5	4.9	23.3	46.1	38.9	29.4	16.7	26.8	35.7	64.5
89°	4.0	2.3	3.7	8.6	24.7	21.3	16.2	6.7	12.1	13.8	49.0

REPORT NUMBER: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

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: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

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: P1444976
CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

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: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2720.9	2720.9	2720.9
1°	2722.9	2722.2	2722.2
2°	2727.9	2727.4	2726.4
3°	2735.9	2735.1	2733.6
4°	2746.6	2745.3	2743.8
5°	2758.8	2757.2	2755.4
6°	2773.1	2771.4	2768.5
7°	2789.0	2786.7	2782.9
8°	2807.2	2803.3	2799.7
9°	2828.0	2822.8	2818.0
10°	2850.7	2844.1	2838.0
11°	2875.0	2867.2	2859.9
12°	2901.1	2890.9	2882.4
13°	2928.9	2915.0	2904.0
14°	2956.2	2939.8	2928.0
15°	2983.8	2965.2	2951.6
16°	3013.2	2992.1	2977.3
17°	3042.6	3020.9	3004.9
18°	3073.5	3050.2	3033.6
19°	3105.2	3080.1	3063.1
20°	3136.1	3110.3	3095.2
21°	3169.2	3143.3	3127.8
22°	3203.7	3177.5	3162.4
23°	3239.8	3213.0	3198.9
24°	3276.8	3249.7	3237.3
25°	3313.9	3288.5	3277.5
26°	3354.0	3328.2	3319.3
27°	3395.3	3369.0	3362.3
28°	3436.7	3410.1	3407.3
29°	3480.7	3452.4	3453.2
30°	3525.7	3495.0	3500.0
31°	3570.8	3539.9	3547.6
32°	3616.0	3584.6	3594.9
33°	3661.8	3630.1	3642.1
34°	3707.8	3674.0	3689.7
35°	3755.6	3719.1	3739.9
36°	3805.3	3764.0	3789.5
37°	3853.4	3811.1	3839.2
38°	3903.5	3859.2	3889.7
39°	3952.4	3907.1	3939.1
40°	4003.9	3957.6	3988.1
41°	4054.9	4008.9	4036.2
42°	4107.4	4062.7	4086.5
43°	4160.4	4117.4	4135.4
44°	4213.8	4171.7	4183.1

REPORT NUMBER: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	4268.4	4230.4	4231.0
46°	4324.3	4288.5	4279.1
47°	4381.3	4350.1	4328.7
48°	4440.4	4412.8	4379.2
49°	4500.9	4478.1	4431.5
50°	4563.3	4543.4	4484.8
51°	4627.0	4610.8	4539.4
52°	4692.6	4676.8	4595.5
53°	4760.7	4743.2	4651.7
54°	4827.3	4808.3	4708.0
55°	4897.1	4872.9	4762.0
56°	4968.7	4932.9	4812.7
57°	5039.0	4988.2	4860.7
58°	5111.9	5039.0	4905.8
59°	5182.6	5086.1	4946.3
60°	5253.3	5128.9	4982.8
61°	5323.9	5165.2	5012.6
62°	5392.8	5198.0	5035.9
63°	5459.1	5225.5	5056.4
64°	5525.2	5251.8	5074.6
65°	5586.1	5275.5	5092.5
66°	5642.8	5297.9	5102.8
67°	5688.8	5312.4	5102.8
68°	5724.0	5310.6	5055.8
69°	5741.1	5273.9	4905.1
70°	5740.6	5166.5	4587.4
71°	5714.0	4930.9	4085.2
72°	5647.4	4509.9	3561.7
73°	5507.5	3952.4	3007.0
74°	5230.8	3324.9	2365.7
75°	4773.7	2667.8	1566.3
76°	4186.3	1911.5	809.9
77°	3509.3	1059.6	586.1
78°	2670.7	764.1	374.6
79°	1687.9	470.5	163.1
80°	868.0	176.8	135.5
81°	622.8	148.7	115.9
82°	398.5	125.7	98.7
83°	174.2	104.5	82.8
84°	137.7	85.8	68.4
85°	104.2	70.0	54.1
86°	78.2	54.3	39.7
87°	56.4	38.5	26.8
88°	34.6	24.5	15.4
89°	12.8	10.0	6.2

REPORT NUMBER: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

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: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

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: P1444976

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)