Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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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: P1436732

Luminaire Tested: XAS180-SFPM (4000K-144W-T4-HSS)

Issue Date: 3/25/2026

Test Information

Test Method:	LM-79-2024
Report Number:	P1436732
	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 (4000K-144W-T4-HSS)
Description:	XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
	LUMEN OUTPUT - 80% (144W)
	OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source:	4000K CCT, 80 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	28062 (1 lamp)
Luminaire Lumens:	20229.6 lumens
Efficiency:	72.1%
Efficacy:	146.0 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):	138.6
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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Scaled Data Report

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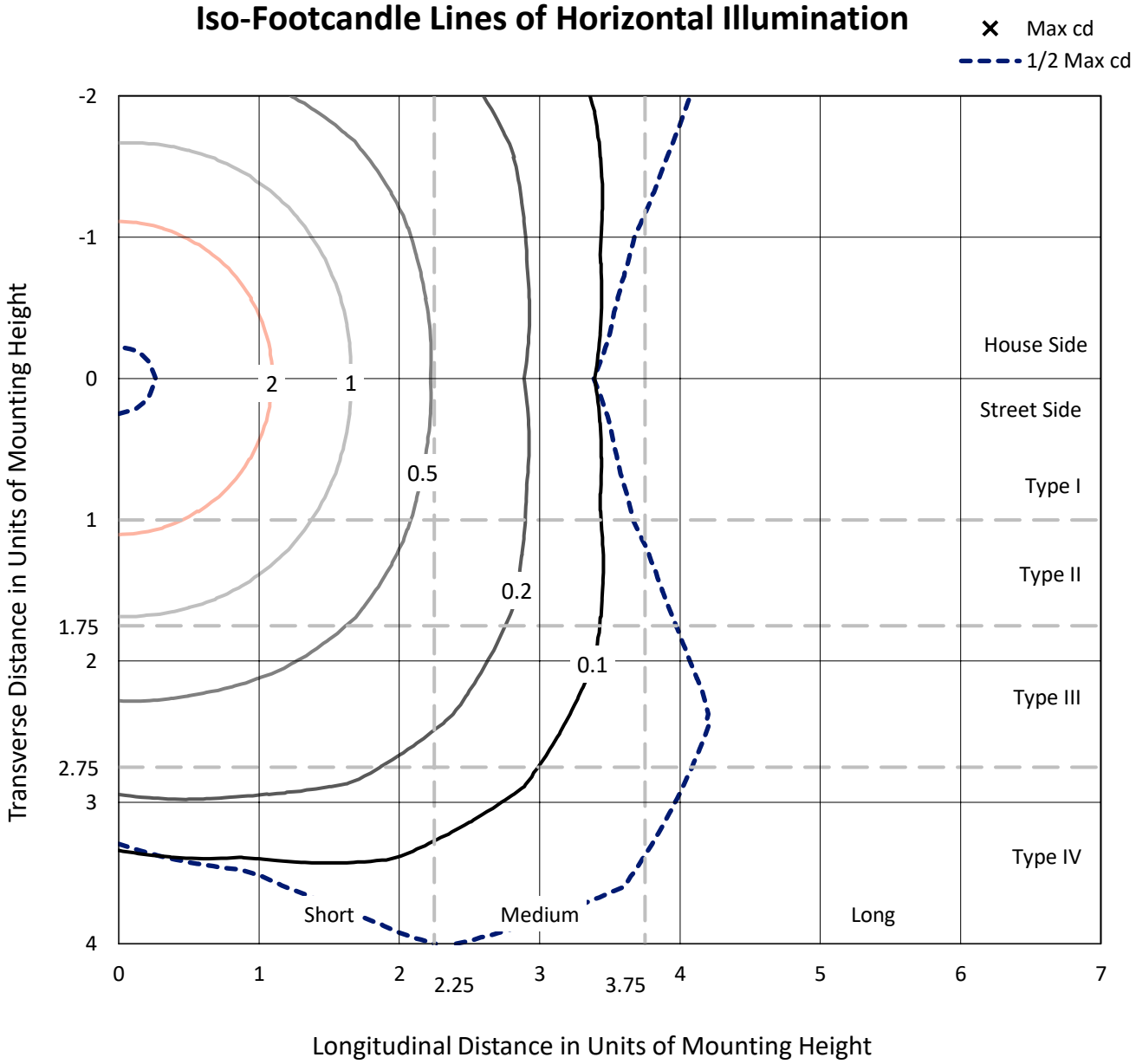
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
Type V - Short - Full Cutoff

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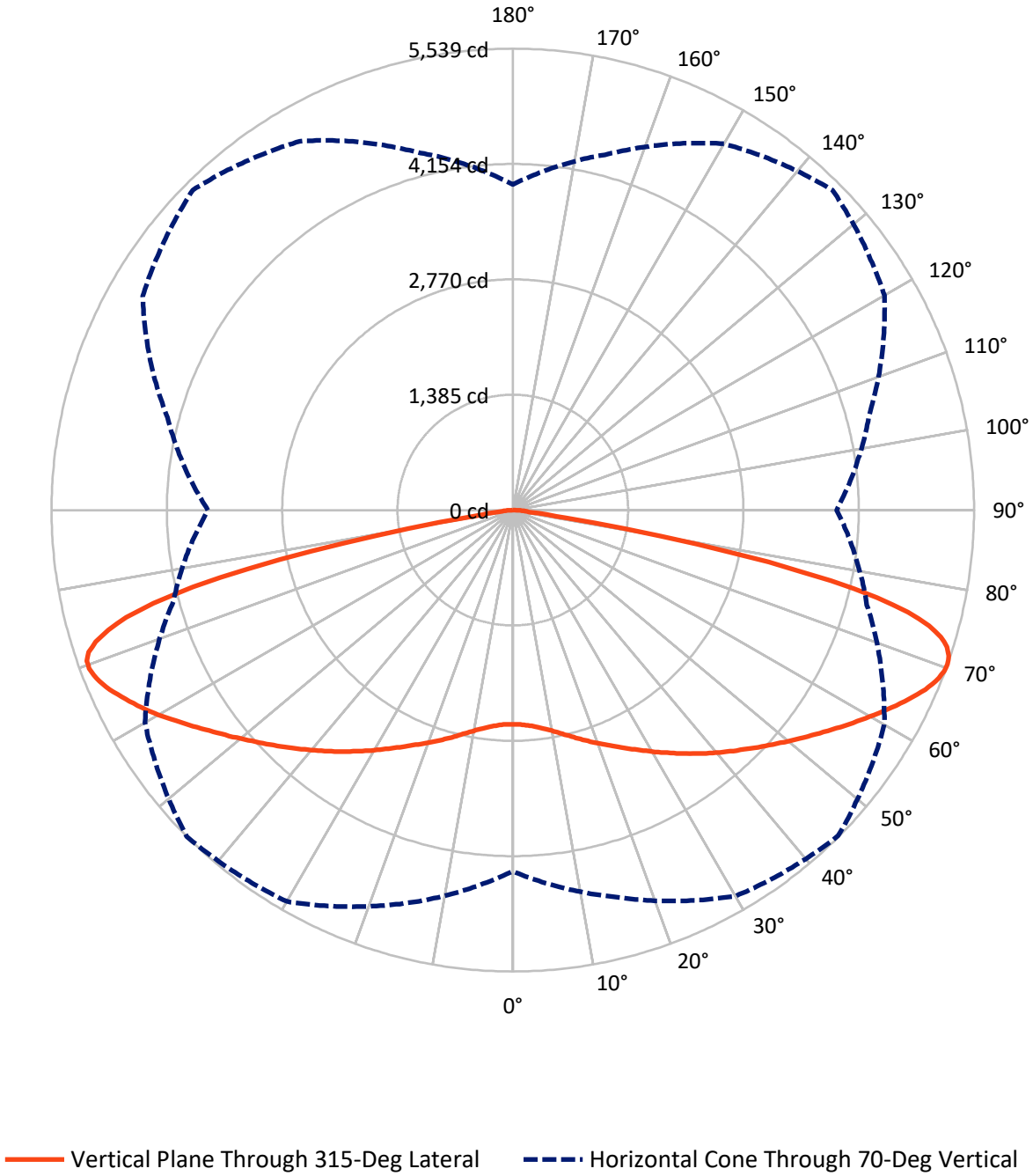
Luminous Intensity Polar Plot



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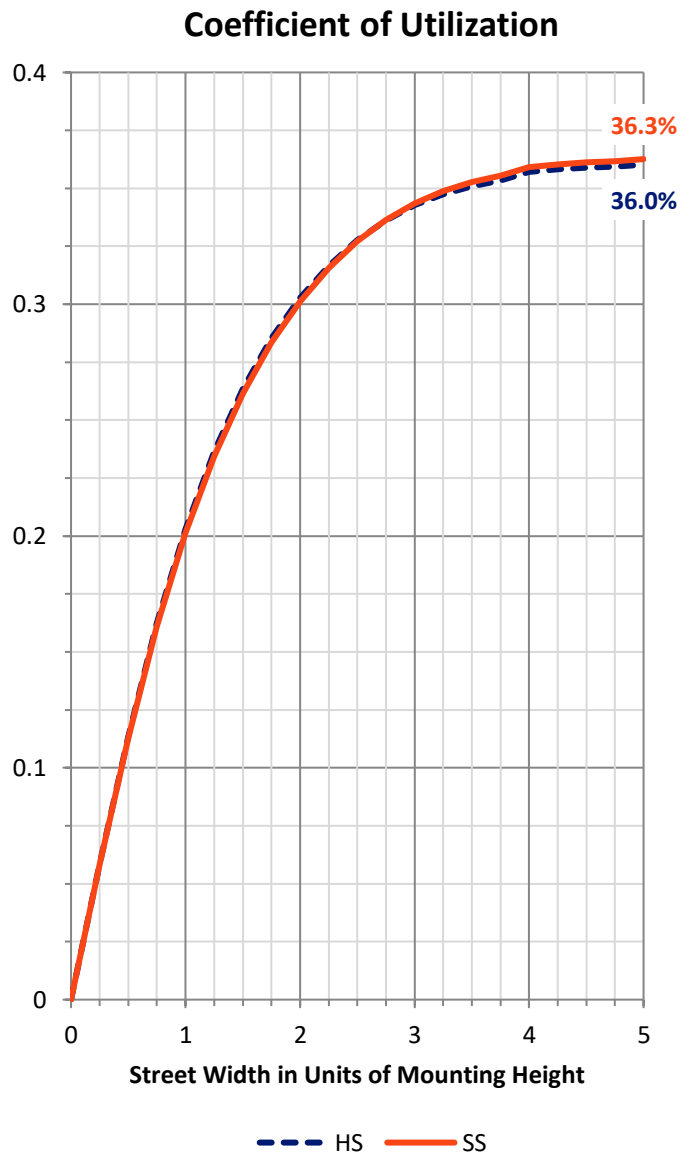
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10066.6	0.0	10066.6
	% Lamp	35.9	0.0	35.9
Street Side	Lumens	10163.0	0.0	10163.0
	% Lamp	36.2	0.0	36.2
Total	Lumens	20229.6	0.0	20229.6
	% Lamp	72.1	0.0	72.1

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	251.2	1.2	0.9
10°-20°	803.7	4.0	2.9
20°-30°	1461.4	7.2	5.2
30°-40°	2238.3	11.1	8.0
40°-50°	3119.8	15.4	11.1
50°-60°	4083.3	20.2	14.6
60°-70°	4879.9	24.1	17.4
70°-80°	3233.1	16.0	11.5
80°-90°	158.9	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°	20229.6	100.0	72.1
0°-180°	20229.6	100.0	72.1



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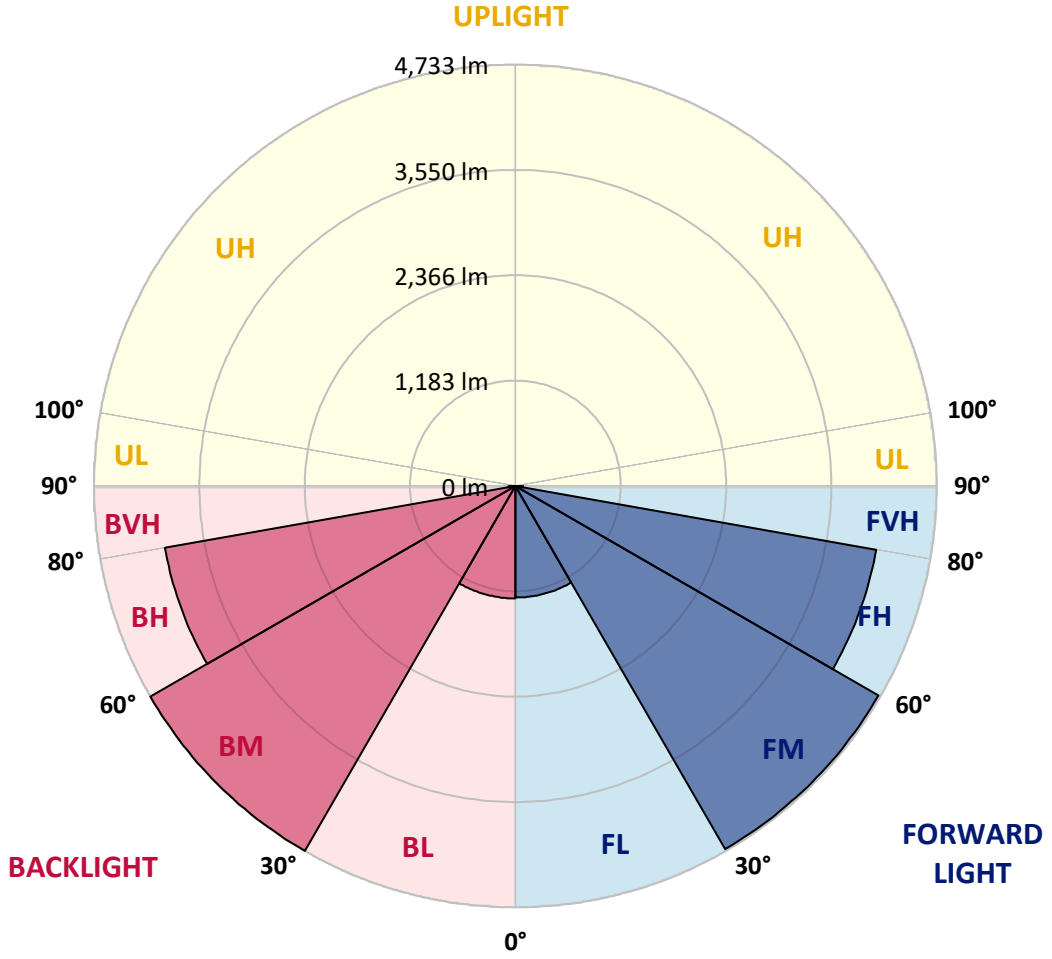
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1253.3	4.5			
FM	(30°-60°)	4708.7	16.8			
FH	(60°-80°)	4115.9	14.7			G2/5000
FVH	(80°-90°)	85.2	0.3			G1/100
BL	(0°-30°)	1263.0	4.5	B3/2500		
BM	(30°-60°)	4732.7	16.9	B3/5000		
BH	(60°-80°)	3997.2	14.2	B4/5000		G2/5000
BVH	(80°-90°)	73.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		7832.4	27.9			

BUG Rating: B4-U0-G2
Type V Short



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CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4-HSS)

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2571.5	2571.5	2571.5	2571.5	2571.5	2571.5	2571.5	2571.5	2571.5	2571.5	2571.5
1°	2572.7	2572.2	2572.7	2572.2	2572.2	2572.0	2570.1	2570.3	2570.3	2571.2	2571.7
2°	2576.7	2575.7	2575.5	2574.8	2573.8	2572.9	2571.3	2571.3	2571.7	2573.0	2574.4
3°	2583.5	2581.8	2580.8	2579.2	2578.6	2577.2	2575.6	2575.3	2575.8	2577.4	2579.5
4°	2593.1	2591.0	2589.0	2587.4	2585.7	2584.0	2582.1	2582.0	2582.6	2584.8	2587.4
5°	2604.0	2601.4	2599.3	2596.5	2594.0	2592.5	2590.1	2591.1	2592.7	2595.2	2597.9
6°	2616.4	2613.3	2611.8	2608.6	2604.7	2602.3	2599.9	2600.7	2603.3	2607.6	2611.2
7°	2630.1	2626.9	2625.9	2622.4	2618.5	2614.9	2612.0	2613.3	2615.6	2622.1	2627.0
8°	2645.9	2642.5	2640.9	2637.9	2633.7	2629.7	2627.7	2629.1	2631.9	2637.8	2644.8
9°	2663.2	2660.0	2657.7	2654.9	2651.2	2646.3	2643.4	2645.6	2650.7	2656.8	2663.8
10°	2682.1	2679.0	2677.0	2673.9	2670.6	2665.0	2662.4	2664.7	2670.9	2678.4	2684.4
11°	2702.9	2699.3	2698.4	2695.5	2691.3	2685.8	2682.4	2686.0	2692.8	2702.2	2707.6
12°	2724.1	2719.3	2720.0	2718.3	2713.6	2707.8	2703.7	2708.4	2716.4	2726.9	2733.0
13°	2744.5	2740.1	2742.9	2743.1	2737.1	2731.6	2725.8	2731.6	2742.1	2752.8	2760.2
14°	2767.2	2762.1	2765.8	2768.0	2762.3	2755.6	2748.9	2756.2	2767.3	2780.7	2787.7
15°	2789.5	2784.8	2789.4	2794.3	2788.2	2780.3	2773.7	2780.6	2794.5	2809.2	2815.2
16°	2813.8	2810.1	2814.0	2820.4	2815.5	2806.7	2800.3	2807.0	2822.5	2838.5	2844.4
17°	2839.9	2836.4	2841.0	2847.6	2844.1	2833.8	2826.9	2834.1	2852.4	2866.9	2873.6
18°	2867.0	2862.3	2868.1	2874.8	2872.3	2861.8	2855.0	2862.8	2881.9	2896.4	2901.7
19°	2894.9	2889.8	2896.5	2903.1	2901.9	2891.2	2884.2	2893.2	2912.5	2926.6	2929.9
20°	2925.2	2919.1	2925.3	2931.9	2932.0	2922.2	2915.3	2925.0	2943.9	2956.5	2958.2
21°	2956.0	2949.9	2954.2	2961.6	2963.2	2953.5	2946.5	2957.9	2975.8	2985.6	2987.8
22°	2988.7	2982.1	2985.1	2991.7	2996.5	2986.4	2980.3	2992.1	3009.7	3017.5	3018.9
23°	3023.2	3016.2	3016.8	3023.8	3030.1	3020.9	3014.6	3028.1	3043.9	3049.6	3051.8
24°	3059.6	3051.6	3049.8	3056.7	3064.4	3056.0	3051.0	3064.8	3079.7	3083.1	3085.7
25°	3097.5	3088.2	3084.2	3091.6	3100.6	3092.6	3089.2	3103.1	3115.1	3117.7	3119.2
26°	3137.0	3126.0	3120.1	3127.0	3136.8	3128.6	3128.0	3141.7	3151.5	3153.1	3153.6
27°	3177.6	3164.4	3156.2	3163.9	3172.8	3165.5	3167.3	3181.0	3188.4	3190.0	3189.2
28°	3220.2	3203.5	3193.3	3201.4	3209.6	3203.4	3208.3	3219.7	3226.8	3228.1	3225.1
29°	3263.6	3242.9	3231.9	3240.8	3246.6	3241.6	3251.2	3259.1	3265.1	3267.7	3262.8
30°	3307.8	3282.4	3271.4	3280.6	3284.3	3281.0	3295.1	3299.5	3304.2	3307.6	3300.6
31°	3352.8	3322.9	3312.4	3321.7	3322.3	3319.4	3339.5	3339.4	3343.7	3348.8	3340.4
32°	3397.5	3363.5	3353.2	3363.3	3360.7	3360.6	3383.2	3380.8	3384.2	3390.5	3380.3
33°	3442.1	3405.1	3396.2	3404.2	3401.3	3400.5	3428.1	3420.8	3425.5	3432.3	3421.4
34°	3487.0	3446.6	3438.3	3446.2	3441.6	3439.5	3471.9	3460.7	3466.9	3473.3	3462.7
35°	3534.5	3487.8	3481.6	3488.7	3482.8	3478.7	3517.2	3500.3	3508.9	3516.2	3506.2
36°	3581.4	3530.2	3526.0	3532.1	3525.5	3519.5	3562.0	3541.0	3552.9	3559.7	3550.8
37°	3628.4	3573.2	3571.1	3576.5	3568.5	3558.8	3606.6	3582.3	3596.5	3603.9	3596.2
38°	3676.1	3617.7	3616.4	3620.7	3611.2	3600.0	3652.7	3622.8	3639.1	3648.1	3641.3
39°	3722.8	3662.4	3661.3	3665.5	3654.2	3642.7	3699.4	3664.7	3683.3	3691.9	3685.5
40°	3769.0	3708.9	3706.1	3711.1	3697.9	3685.8	3745.8	3707.7	3727.9	3737.7	3731.6
41°	3814.5	3756.3	3752.5	3756.5	3743.0	3730.4	3792.2	3752.8	3771.8	3783.5	3775.8
42°	3862.1	3804.8	3800.0	3804.0	3788.4	3775.8	3836.7	3798.3	3817.3	3831.0	3824.1
43°	3908.2	3855.3	3848.1	3852.2	3835.6	3823.1	3880.0	3845.7	3863.2	3879.3	3871.9
44°	3953.4	3907.2	3896.8	3900.9	3882.7	3871.8	3921.7	3894.4	3909.0	3926.8	3920.8

REPORT NUMBER: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3998.6	3959.0	3946.7	3949.1	3930.6	3922.5	3962.2	3943.7	3955.9	3975.8	3971.3
46°	4044.1	4013.7	3998.5	3999.4	3980.8	3974.9	4003.5	3995.3	4003.5	4025.8	4022.4
47°	4091.0	4071.7	4052.2	4052.1	4032.7	4029.0	4046.1	4046.9	4053.9	4077.9	4076.4
48°	4138.7	4128.8	4106.5	4105.7	4084.3	4084.0	4086.1	4100.7	4106.1	4129.1	4131.2
49°	4188.1	4188.9	4163.7	4161.1	4137.7	4139.4	4125.8	4153.7	4158.8	4182.3	4185.1
50°	4238.5	4247.4	4221.0	4216.7	4190.8	4195.5	4165.7	4206.6	4211.0	4238.5	4241.5
51°	4290.1	4308.0	4280.0	4273.7	4247.1	4250.6	4207.5	4258.5	4265.4	4295.2	4301.0
52°	4343.2	4370.0	4342.1	4334.6	4304.4	4305.0	4250.3	4312.1	4321.2	4355.1	4359.9
53°	4396.3	4430.7	4405.4	4394.7	4361.5	4357.6	4291.1	4364.6	4377.0	4413.6	4420.1
54°	4449.5	4491.3	4469.7	4459.1	4419.4	4408.8	4331.6	4414.9	4434.9	4473.6	4480.4
55°	4500.5	4546.7	4535.3	4522.4	4476.9	4456.8	4371.4	4460.4	4493.2	4538.2	4543.8
56°	4548.4	4601.8	4602.5	4589.3	4536.1	4502.2	4409.5	4506.2	4551.3	4603.3	4608.8
57°	4593.8	4653.4	4669.7	4659.3	4594.5	4544.1	4443.7	4547.4	4609.0	4669.7	4672.0
58°	4636.3	4702.2	4738.3	4730.4	4652.2	4581.5	4472.8	4584.1	4666.8	4738.5	4732.6
59°	4674.7	4747.6	4808.5	4802.4	4710.3	4612.5	4500.0	4618.0	4723.2	4808.6	4791.0
60°	4709.1	4788.6	4877.3	4877.3	4766.0	4638.8	4521.4	4646.9	4777.1	4879.4	4847.3
61°	4737.3	4825.7	4944.0	4951.8	4821.2	4662.3	4538.0	4671.9	4832.9	4949.2	4903.9
62°	4759.3	4856.7	5009.4	5028.5	4874.5	4679.2	4547.4	4690.2	4884.5	5018.1	4958.1
63°	4778.7	4884.8	5073.2	5105.8	4929.2	4688.0	4547.9	4704.4	4936.5	5081.7	5008.9
64°	4795.9	4907.5	5131.4	5182.2	4980.4	4689.8	4540.6	4713.0	4988.3	5143.3	5056.7
65°	4812.8	4926.8	5187.8	5257.4	5029.4	4689.0	4527.9	4714.6	5036.1	5206.2	5098.5
66°	4822.5	4945.2	5238.0	5329.5	5071.9	4679.6	4509.0	4707.7	5079.1	5269.3	5137.5
67°	4822.5	4958.0	5280.8	5396.4	5107.0	4662.7	4477.9	4692.9	5114.4	5327.5	5168.9
68°	4778.1	4955.4	5317.4	5455.3	5131.3	4635.0	4382.4	4662.5	5142.4	5373.7	5148.8
69°	4635.7	4917.9	5341.1	5499.4	5145.5	4559.1	4182.0	4586.6	5156.2	5410.3	5101.7
70°	*4335.5*	*4809.7*	*5350.0*	*5527.5*	*5151.0*	*4402.0*	*3889.3*	*4432.6*	*5153.9*	*5431.3*	*5076.4*
71°	3860.8	4565.6	5337.5	5539.1	5116.2	4158.0	3527.0	4190.8	5112.6	5427.9	5006.1
72°	3366.1	4166.5	5295.1	5522.7	5026.8	3846.3	3196.5	3873.6	5004.5	5371.9	4888.5
73°	2841.9	3646.4	5191.6	5465.0	4874.1	3511.6	2941.6	3531.3	4823.6	5250.7	4740.5
74°	2235.7	3079.0	4964.3	5342.0	4660.3	3207.3	2621.4	3216.5	4587.6	5066.1	4496.2
75°	1480.3	2460.9	4548.2	5123.4	4379.6	2868.7	2003.0	2884.0	4287.4	4820.1	4132.2
76°	765.4	1727.0	3986.7	4772.0	4047.5	2360.1	1384.6	2398.7	3956.5	4456.8	3635.3
77°	553.9	929.1	3378.5	4258.0	3639.5	1588.3	767.1	1737.0	3562.3	3944.0	3019.5
78°	354.0	667.9	2640.6	3503.8	3072.3	823.2	330.3	1075.5	3016.1	3261.5	2281.5
79°	154.1	415.9	1713.0	2670.0	2279.6	595.2	260.2	418.6	2249.9	2468.1	1543.4
80°	128.1	163.9	874.0	1738.6	1380.3	373.2	190.0	323.3	1483.7	1669.7	808.0
81°	109.5	135.0	632.1	879.9	678.0	151.3	121.4	228.0	724.8	879.5	371.2
82°	93.3	114.1	400.0	632.7	499.9	128.7	103.6	132.8	322.7	355.7	283.2
83°	78.3	95.2	167.8	402.3	327.2	109.0	87.7	112.0	253.6	277.6	195.2
84°	64.7	78.1	131.5	171.9	154.5	90.7	72.7	92.9	184.5	199.5	107.9
85°	51.1	63.9	100.4	141.8	117.4	74.2	58.5	75.6	116.0	121.8	78.0
86°	37.5	49.7	75.3	114.0	86.2	59.6	45.3	60.0	83.2	95.5	52.3
87°	25.3	35.6	54.8	83.8	63.3	45.0	32.3	45.4	60.1	67.8	32.5
88°	14.5	23.1	34.4	67.2	40.7	30.4	22.5	32.3	41.6	42.2	23.1
89°	5.9	9.9	13.9	50.9	18.2	16.3	12.8	22.3	28.6	29.2	13.6

REPORT NUMBER: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2571.5	2571.5	2571.5	2571.5	2571.5	2571.5	2571.5	2571.5	2571.5	2571.5	*2571.5*
1°	2572.2	2572.7	2573.3	2574.0	2574.5	2574.9	2575.2	2573.5	2573.2	2572.9	*2573.3*
2°	2575.4	2576.8	2577.2	2578.7	2579.5	2579.8	2580.2	2578.7	2578.8	2578.2	*2578.3*
3°	2580.8	2583.1	2584.6	2585.9	2587.3	2587.8	2588.7	2586.6	2586.7	2586.1	*2586.5*
4°	2589.8	2592.4	2594.2	2595.8	2597.4	2598.1	2599.0	2597.4	2596.9	2596.4	*2596.0*
5°	2600.7	2604.2	2606.2	2608.7	2609.9	2610.7	2611.0	2609.2	2609.0	2608.4	*2607.9*
6°	2614.8	2618.2	2621.3	2624.0	2625.2	2625.2	2625.4	2623.2	2623.3	2622.8	*2622.4*
7°	2631.3	2634.5	2638.3	2641.4	2642.5	2643.3	2644.1	2641.2	2640.8	2639.8	*2639.4*
8°	2649.2	2653.0	2657.2	2661.1	2662.9	2664.4	2663.7	2660.3	2659.5	2658.5	*2657.2*
9°	2668.6	2673.0	2678.1	2683.1	2685.9	2686.5	2684.8	2679.9	2680.1	2679.7	*2678.3*
10°	2690.2	2695.4	2701.2	2707.3	2710.7	2710.7	2707.8	2703.0	2702.7	2703.2	*2700.3*
11°	2714.0	2719.7	2726.4	2733.9	2737.8	2737.2	2733.6	2728.4	2728.3	2728.9	*2725.1*
12°	2738.7	2744.5	2753.0	2761.9	2766.5	2765.3	2761.0	2754.8	2755.6	2755.5	*2751.2*
13°	2764.1	2769.8	2779.3	2792.0	2797.5	2795.9	2789.4	2783.2	2784.2	2784.2	*2778.9*
14°	2790.8	2796.1	2807.2	2821.8	2829.5	2827.1	2820.0	2812.5	2814.0	2814.9	*2807.9*
15°	2817.7	2822.5	2835.4	2852.7	2862.7	2860.0	2851.2	2843.0	2845.2	2846.9	*2837.5*
16°	2845.3	2850.1	2863.8	2883.5	2896.5	2895.3	2883.7	2874.4	2877.0	2878.9	*2867.7*
17°	2873.1	2877.8	2893.0	2914.6	2930.6	2929.4	2918.0	2907.7	2909.8	2911.8	*2899.1*
18°	2901.7	2906.4	2922.8	2945.2	2964.3	2965.1	2952.7	2941.0	2944.4	2945.6	*2930.8*
19°	2930.6	2936.9	2952.4	2976.4	2998.9	3000.4	2987.6	2975.5	2979.2	2979.6	*2961.7*
20°	2960.1	2967.4	2983.6	3009.8	3032.7	3037.0	3024.0	3011.5	3015.5	3014.9	*2994.1*
21°	2991.4	2998.9	3015.9	3042.7	3067.3	3074.6	3062.6	3048.9	3051.9	3050.8	*3026.3*
22°	3023.9	3031.9	3049.6	3077.4	3104.1	3112.8	3101.8	3086.7	3090.6	3087.2	*3061.0*
23°	3056.1	3065.8	3085.3	3113.8	3140.8	3152.6	3140.2	3126.5	3130.5	3124.1	*3096.6*
24°	3091.1	3101.8	3121.6	3150.7	3179.2	3191.7	3180.1	3166.9	3170.3	3161.1	*3131.4*
25°	3125.4	3138.1	3158.5	3187.7	3218.0	3231.2	3221.8	3208.3	3210.3	3199.6	*3167.5*
26°	3161.9	3177.3	3196.8	3226.7	3257.7	3270.9	3263.0	3251.7	3250.2	3237.7	*3205.8*
27°	3198.4	3216.3	3235.1	3265.4	3296.9	3310.3	3304.0	3294.9	3290.5	3276.0	*3243.6*
28°	3235.5	3259.2	3274.3	3305.4	3339.2	3351.7	3346.3	3340.5	3331.8	3315.8	*3283.8*
29°	3273.8	3301.9	3314.7	3346.6	3380.4	3392.5	3389.0	3385.9	3373.1	3356.7	*3325.9*
30°	3313.4	3347.0	3355.8	3387.3	3422.7	3433.8	3431.2	3431.4	3413.9	3396.7	*3368.5*
31°	3354.0	3392.3	3397.4	3428.3	3463.0	3475.2	3472.6	3478.0	3455.3	3437.1	*3411.2*
32°	3394.7	3438.2	3439.2	3469.6	3505.9	3518.3	3515.4	3524.2	3495.4	3477.3	*3454.1*
33°	3436.6	3484.7	3481.1	3512.8	3548.7	3561.8	3558.0	3570.7	3537.1	3520.2	*3498.9*
34°	3478.3	3531.2	3522.4	3556.8	3592.9	3604.9	3601.0	3618.0	3578.4	3562.8	*3543.6*
35°	3519.2	3579.7	3565.7	3601.7	3637.1	3648.7	3643.3	3665.2	3621.0	3607.2	*3590.6*
36°	3561.4	3628.4	3609.3	3646.8	3680.8	3691.5	3686.2	3713.2	3663.4	3651.6	*3636.8*
37°	3602.9	3676.9	3653.5	3692.3	3725.2	3734.9	3730.8	3761.3	3707.3	3696.9	*3683.0*
38°	3646.5	3725.0	3698.9	3738.5	3770.9	3779.6	3775.0	3809.2	3751.3	3742.6	*3730.3*
39°	3691.0	3773.6	3744.6	3785.6	3817.6	3824.1	3821.0	3856.3	3795.8	3789.2	*3776.8*
40°	3737.6	3819.0	3792.5	3833.7	3864.2	3870.3	3866.9	3901.7	3841.4	3836.7	*3824.5*
41°	3786.1	3864.8	3840.9	3882.1	3912.6	3916.0	3912.9	3945.4	3888.4	3884.6	*3872.1*
42°	3833.9	3909.3	3891.5	3929.9	3960.4	3963.4	3960.3	3989.0	3937.5	3933.6	*3921.7*
43°	3883.6	3953.3	3942.3	3978.5	4010.4	4013.4	4010.3	4033.0	3988.2	3982.1	*3969.9*
44°	3934.9	3997.4	3994.5	4028.9	4060.9	4063.1	4060.6	4078.7	4040.2	4031.0	*4020.3*

REPORT NUMBER: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	3987.0	4042.3	4047.5	4081.3	4113.1	4113.8	4114.1	4122.9	4093.3	4081.7	4071.0
46°	4041.3	4086.0	4102.8	4132.7	4165.7	4164.3	4167.2	4162.9	4149.0	4133.3	4123.0
47°	4098.3	4128.8	4158.9	4184.6	4219.0	4215.1	4220.2	4202.9	4202.2	4185.4	4177.3
48°	4155.9	4173.8	4216.9	4238.5	4272.9	4267.2	4272.4	4243.7	4256.0	4237.7	4232.5
49°	4214.0	4222.1	4276.5	4292.6	4328.8	4319.7	4324.1	4285.4	4308.8	4290.8	4288.2
50°	4274.9	4269.6	4337.0	4349.5	4384.5	4373.0	4374.7	4327.7	4361.1	4345.9	4345.0
51°	4338.9	4318.5	4397.4	4406.7	4441.9	4425.5	4425.1	4365.9	4411.7	4400.9	4403.3
52°	4400.0	4364.8	4456.3	4463.9	4500.5	4478.2	4473.1	4404.8	4460.9	4455.7	4462.9
53°	4454.8	4403.3	4511.0	4523.4	4560.5	4530.9	4517.8	4441.0	4505.1	4509.0	4522.9
54°	4502.4	4431.8	4560.6	4583.9	4621.4	4585.2	4559.1	4473.2	4547.1	4565.7	4586.0
55°	4545.7	4461.1	4603.4	4644.7	4683.7	4637.6	4597.8	4504.0	4585.4	4619.8	4651.5
56°	4589.8	4494.3	4645.3	4708.4	4747.0	4688.7	4632.4	4531.8	4620.0	4673.2	4719.0
57°	4631.5	4528.9	4686.5	4770.5	4810.4	4740.2	4662.9	4555.0	4649.2	4724.8	4784.1
58°	4670.8	4553.2	4726.3	4834.2	4874.9	4791.0	4688.8	4577.4	4673.7	4776.3	4852.5
59°	4701.0	4570.2	4755.7	4894.3	4942.3	4839.1	4710.7	4596.3	4693.9	4825.8	4920.4
60°	4725.8	4591.3	4780.4	4950.8	5008.5	4885.9	4730.5	4610.5	4711.0	4875.1	4989.7
61°	4749.8	4612.1	4804.2	5008.4	5075.4	4932.8	4746.3	4616.3	4727.4	4922.7	5059.5
62°	4772.6	4629.1	4826.3	5063.0	5136.6	4981.0	4756.8	4617.9	4736.9	4968.3	5130.4
63°	4793.2	4643.0	4847.0	5113.1	5192.0	5024.4	4761.2	4616.4	4739.2	5010.6	5200.4
64°	4811.7	4645.7	4864.4	5159.1	5244.3	5066.2	4763.5	4604.9	4736.4	5049.3	5270.6
65°	4809.0	4602.0	4857.9	5199.7	5295.4	5102.6	4756.4	4584.7	4725.8	5082.0	5336.8
66°	4749.7	4563.5	4792.6	5231.4	5344.0	5131.6	4744.1	4555.6	4709.4	5109.7	5399.7
67°	4711.7	4539.7	4752.0	5249.3	5381.9	5155.9	4719.7	4485.2	4680.5	5129.9	5453.4
68°	4688.9	4462.5	4717.1	5213.5	5411.6	5171.6	4659.8	4317.9	4612.2	5141.5	5498.2
69°	4596.7	4260.3	4615.4	5153.1	5431.2	5166.8	4529.4	4034.5	4465.6	5134.0	5529.2
70°	4423.7	3906.7	4447.3	5113.3	5433.9	5132.6	4292.6	3660.6	4218.3	5101.6	5539.2
71°	4159.5	3398.5	4181.8	5026.4	5407.8	5047.0	3968.7	3286.9	3880.3	5012.9	5520.4
72°	3755.7	2938.0	3771.2	4900.9	5325.0	4887.7	3601.2	2974.6	3511.5	4865.6	5468.5
73°	3262.1	2467.3	3271.0	4729.3	5174.5	4647.5	3245.7	2671.3	3160.8	4640.7	5362.3
74°	2750.7	1849.3	2761.1	4465.2	4958.7	4354.4	2908.3	2257.4	2819.4	4350.9	5187.5
75°	2093.6	1231.3	2106.6	4066.0	4670.8	3998.6	2486.1	1609.9	2377.6	3993.9	4904.7
76°	1436.6	622.9	1452.1	3534.2	4246.6	3610.7	1826.6	912.6	1721.3	3583.4	4498.2
77°	785.3	456.8	803.3	2917.4	3668.8	3142.5	1167.2	655.2	962.4	3088.9	3914.0
78°	331.4	290.7	347.4	2184.3	2916.4	2489.3	517.0	406.6	697.4	2425.3	3132.3
79°	258.3	128.6	269.5	1451.1	2129.0	1808.0	239.8	158.1	432.6	1607.9	2249.2
80°	185.2	106.0	191.5	723.6	1341.7	1126.6	200.3	132.2	167.9	882.6	1361.7
81°	112.3	88.3	114.7	325.2	567.3	446.8	160.8	113.0	138.0	637.8	641.5
82°	91.7	72.4	93.6	252.0	244.4	236.2	121.6	96.0	117.1	407.9	414.4
83°	73.1	57.5	74.9	178.8	201.9	191.8	102.4	80.5	98.6	177.9	200.9
84°	56.4	44.5	57.6	106.1	159.4	147.4	85.2	66.8	81.4	137.5	162.1
85°	41.1	31.7	41.9	75.6	116.8	103.0	68.9	53.1	66.9	103.0	134.5
86°	29.1	21.9	29.5	49.9	91.0	74.0	54.0	39.5	52.3	75.2	107.8
87°	17.1	12.0	17.1	36.0	63.9	53.5	40.3	26.9	37.8	54.4	75.9
88°	5.2	2.4	4.7	22.0	43.6	36.8	27.8	15.8	25.3	33.7	61.0
89°	3.7	2.2	3.5	8.2	23.3	20.1	15.3	6.3	11.5	13.1	46.3

REPORT NUMBER: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2571.5	2571.5	2571.5
1°	2573.4	2572.7	2572.7
2°	2578.1	2577.6	2576.7
3°	2585.7	2584.9	2583.5
4°	2595.7	2594.5	2593.1
5°	2607.3	2605.8	2604.0
6°	2620.8	2619.2	2616.4
7°	2635.8	2633.7	2630.1
8°	2653.1	2649.4	2645.9
9°	2672.7	2667.8	2663.2
10°	2694.1	2687.9	2682.1
11°	2717.1	2709.7	2702.9
12°	2741.8	2732.1	2724.1
13°	2768.0	2754.9	2744.5
14°	2793.8	2778.3	2767.2
15°	2819.9	2802.3	2789.5
16°	2847.8	2827.8	2813.8
17°	2875.5	2855.0	2839.9
18°	2904.7	2882.7	2867.0
19°	2934.7	2911.0	2894.9
20°	2963.9	2939.5	2925.2
21°	2995.1	2970.7	2956.0
22°	3027.8	3003.0	2988.7
23°	3061.9	3036.6	3023.2
24°	3096.8	3071.2	3059.6
25°	3131.9	3107.9	3097.5
26°	3169.8	3145.4	3137.0
27°	3208.9	3184.0	3177.6
28°	3248.0	3222.8	3220.2
29°	3289.6	3262.8	3263.6
30°	3332.1	3303.1	3307.8
31°	3374.7	3345.5	3352.8
32°	3417.4	3387.8	3397.5
33°	3460.7	3430.7	3442.1
34°	3504.2	3472.3	3487.0
35°	3549.3	3514.9	3534.5
36°	3596.3	3557.3	3581.4
37°	3641.7	3601.8	3628.4
38°	3689.1	3647.2	3676.1
39°	3735.3	3692.6	3722.8
40°	3784.0	3740.3	3769.0
41°	3832.2	3788.7	3814.5
42°	3881.9	3839.6	3862.1
43°	3932.0	3891.2	3908.2
44°	3982.4	3942.6	3953.4

REPORT NUMBER: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	4034.0	3998.1	3998.6
46°	4086.8	4053.0	4044.1
47°	4140.7	4111.2	4091.0
48°	4196.5	4170.4	4138.7
49°	4253.8	4232.2	4188.1
50°	4312.7	4293.9	4238.5
51°	4372.9	4357.6	4290.1
52°	4434.9	4420.0	4343.2
53°	4499.3	4482.7	4396.3
54°	4562.2	4544.3	4449.5
55°	4628.1	4605.3	4500.5
56°	4695.8	4662.0	4548.4
57°	4762.3	4714.3	4593.8
58°	4831.2	4762.3	4636.3
59°	4897.9	4806.8	4674.7
60°	4964.8	4847.2	4709.1
61°	5031.5	4881.6	4737.3
62°	5096.6	4912.5	4759.3
63°	5159.3	4938.5	4778.7
64°	5221.8	4963.4	4795.9
65°	5279.3	4985.7	4812.8
66°	5332.9	5006.9	4822.5
67°	5376.4	5020.6	4822.5
68°	5409.6	5019.0	4778.1
69°	5425.8	4984.2	4635.7
70°	*5425.3*	*4882.7*	*4335.5*
71°	5400.2	4660.1	3860.8
72°	5337.3	4262.2	3366.1
73°	5205.0	3735.3	2841.9
74°	4943.5	3142.3	2235.7
75°	4511.6	2521.3	1480.3
76°	3956.4	1806.5	765.4
77°	3316.6	1001.4	553.9
78°	2524.0	722.2	354.0
79°	1595.2	444.7	154.1
80°	820.3	167.1	128.1
81°	588.6	140.6	109.5
82°	376.6	118.8	93.3
83°	164.6	98.7	78.3
84°	130.1	81.1	64.7
85°	98.5	66.2	51.1
86°	73.9	51.3	37.5
87°	53.3	36.4	25.3
88°	32.7	23.1	14.5
89°	12.1	9.4	5.9

REPORT NUMBER: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436732
CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)