

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: P1436756

Luminaire Tested: XAS180-SFPM (5000K-144W-T4-HSS)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436756
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 3/25/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: XAS180-SFPM (5000K-144W-T4-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 80% (144W)
OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 28062 (1 lamp)
Luminaire Lumens: 19996.4 lumens
Efficiency: 71.3%
Efficacy: 139.6 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

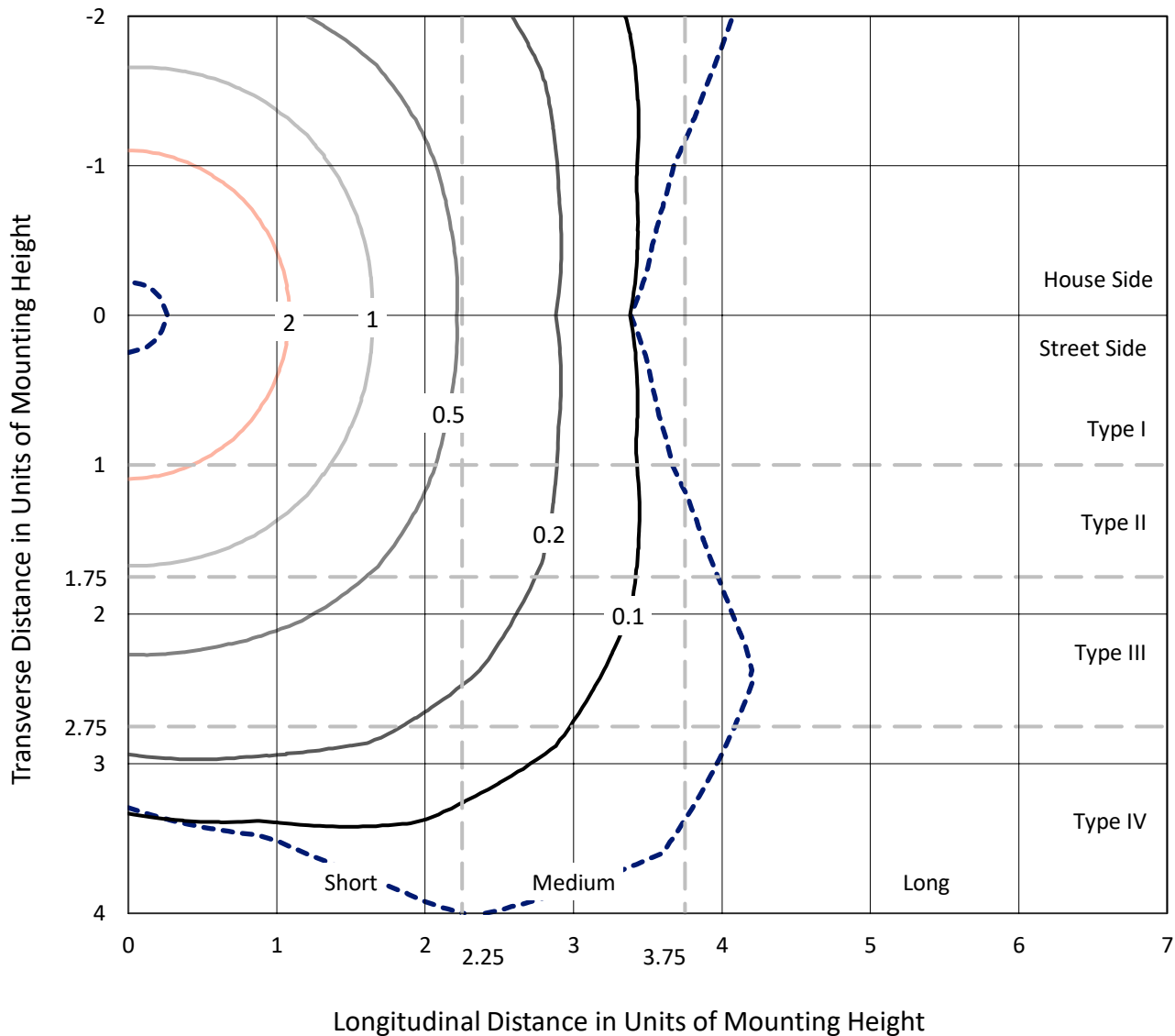
Input Watts (W): 143.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

REPORT NUMBER: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

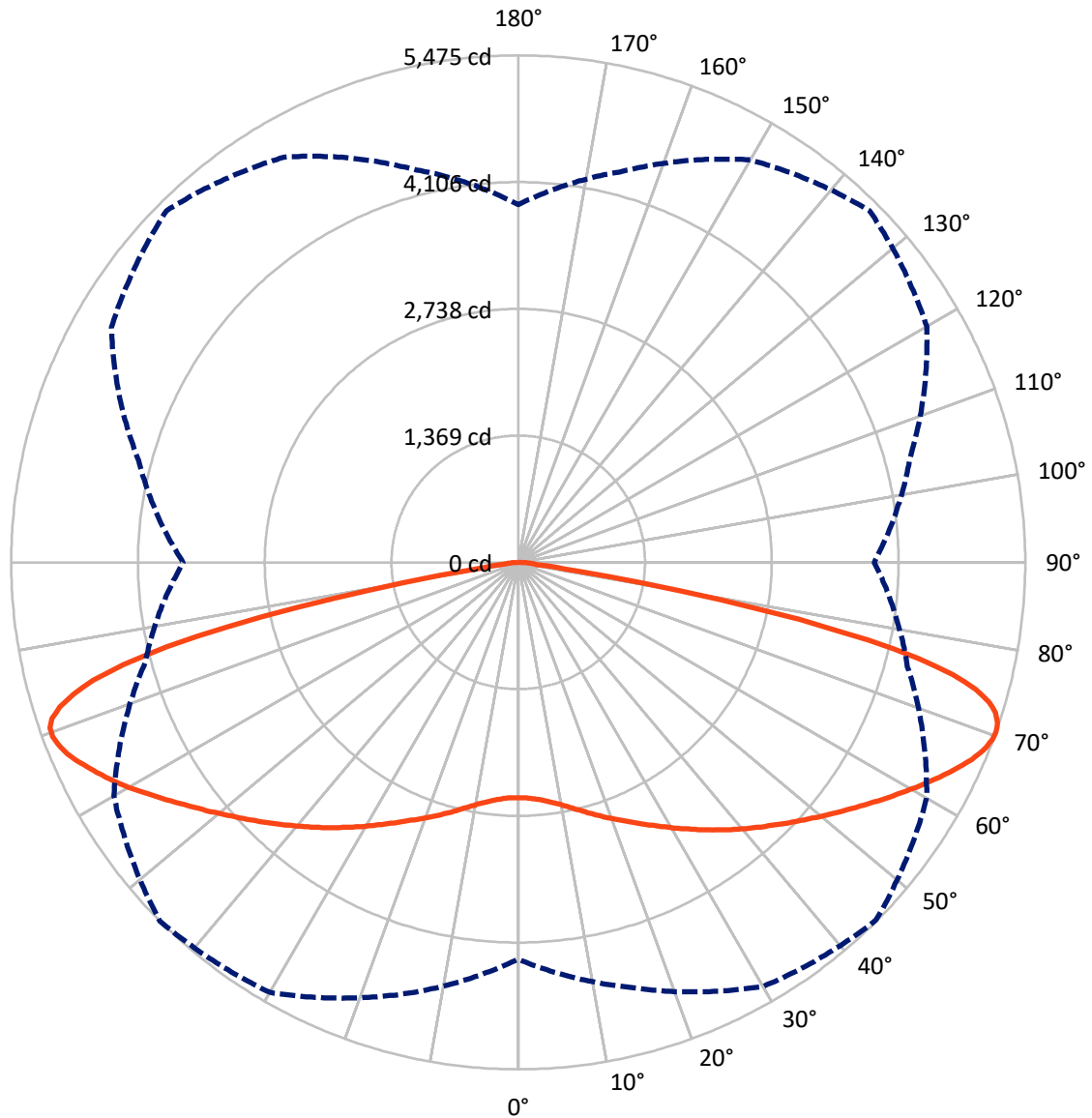


Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

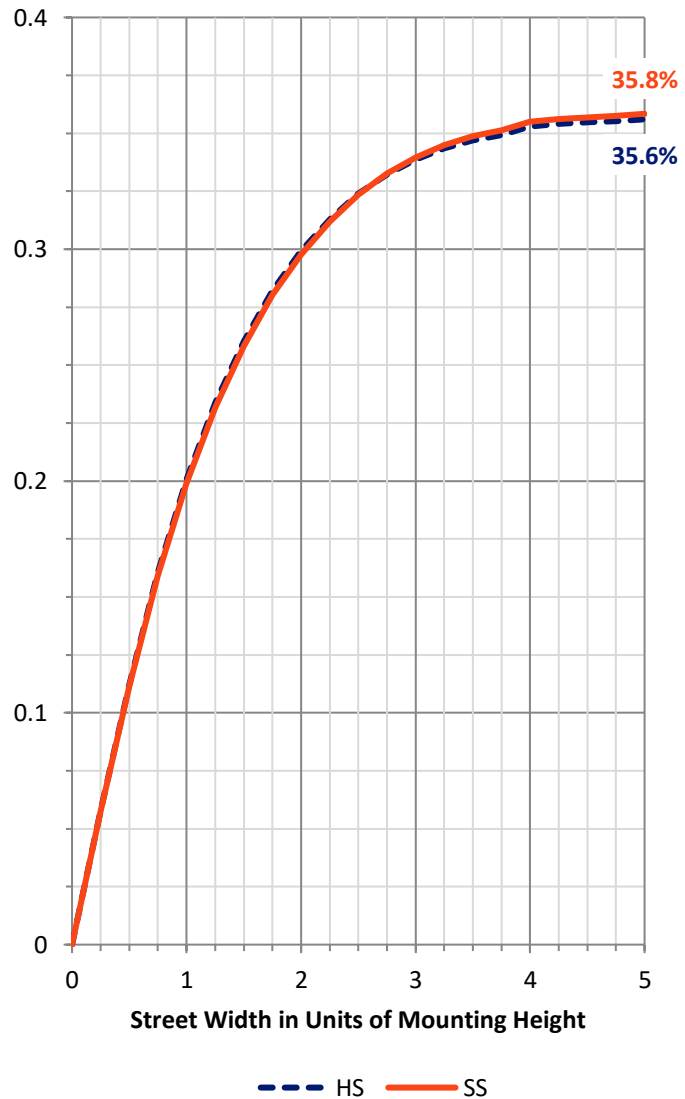
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9950.5	0.0	9950.5
	% Lamp	35.5	0.0	35.5
Street Side	Lumens	10045.9	0.0	10045.9
	% Lamp	35.8	0.0	35.8
Total	Lumens	19996.4	0.0	19996.4
	% Lamp	71.3	0.0	71.3

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	248.3	1.2	0.9
10°-20°	794.5	4.0	2.8
20°-30°	1444.5	7.2	5.1
30°-40°	2212.5	11.1	7.9
40°-50°	3083.8	15.4	11.0
50°-60°	4036.2	20.2	14.4
60°-70°	4823.6	24.1	17.2
70°-80°	3195.8	16.0	11.4
80°-90°	157.1	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°	19996.4	100.0	71.3
0°-180°	19996.4	100.0	71.3

Coefficient of Utilization



REPORT NUMBER: P1436756

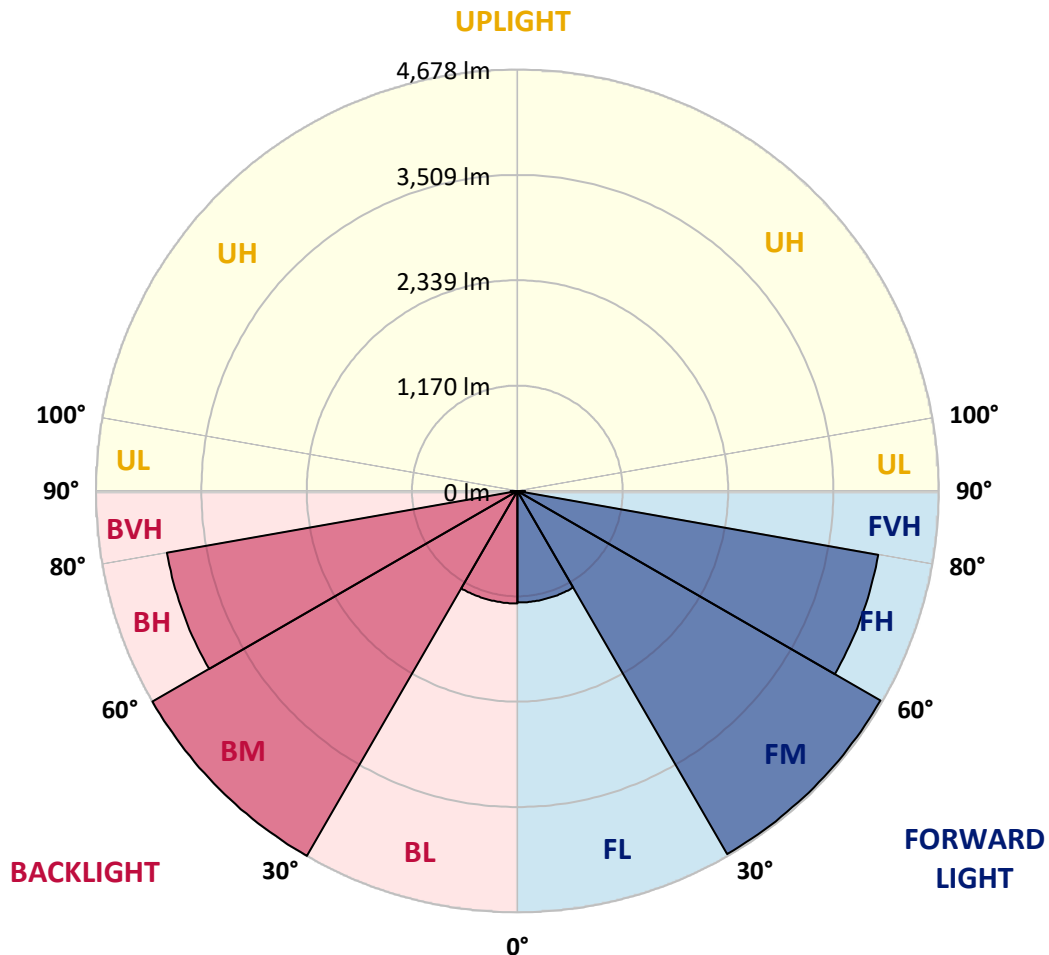
CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1238.8	4.4			
FM (30°-60°)	4654.4	16.6			
FH (60°-80°)	4068.4	14.5			G2/5000
FVH (80°-90°)	84.3	0.3			G1/100
BL (0°-30°)	1248.4	4.4	B3/2500		
BM (30°-60°)	4678.2	16.7	B3/5000		
BH (60°-80°)	3951.1	14.1	B4/5000		G2/5000
BVH (80°-90°)	72.8	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	8065.6	28.7			

BUG Rating: B4-U0-G2

Type V Short





REPORT NUMBER: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8
1°	2543.0	2542.5	2543.0	2542.5	2542.6	2542.3	2540.4	2540.7	2540.7	2541.6	2542.1
2°	2547.0	2546.0	2545.8	2545.2	2544.2	2543.2	2541.7	2541.7	2542.1	2543.4	2544.7
3°	2553.7	2552.1	2551.1	2549.4	2548.9	2547.5	2545.9	2545.7	2546.1	2547.6	2549.7
4°	2563.2	2561.1	2559.2	2557.6	2555.9	2554.2	2552.3	2552.2	2552.8	2555.0	2557.6
5°	2574.0	2571.4	2569.3	2566.5	2564.1	2562.6	2560.3	2561.2	2562.8	2565.2	2568.0
6°	2586.3	2583.1	2581.7	2578.5	2574.7	2572.3	2569.9	2570.7	2573.3	2577.6	2581.1
7°	2599.7	2596.6	2595.7	2592.2	2588.3	2584.8	2581.9	2583.1	2585.5	2591.9	2596.7
8°	2615.4	2612.0	2610.4	2607.5	2603.3	2599.4	2597.4	2598.8	2601.6	2607.4	2614.3
9°	2632.5	2629.4	2627.1	2624.2	2620.6	2615.8	2612.9	2615.1	2620.1	2626.2	2633.1
10°	2651.2	2648.1	2646.1	2643.1	2639.9	2634.3	2631.7	2633.9	2640.1	2647.5	2653.5
11°	2671.7	2668.1	2667.3	2664.4	2660.2	2654.8	2651.5	2655.0	2661.8	2671.1	2676.3
12°	2692.7	2688.0	2688.6	2687.0	2682.3	2676.6	2672.6	2677.2	2685.1	2695.4	2701.5
13°	2712.9	2708.5	2711.3	2711.5	2705.6	2700.1	2694.4	2700.1	2710.5	2721.1	2728.4
14°	2735.3	2730.3	2733.9	2736.1	2730.4	2723.9	2717.2	2724.4	2735.4	2748.7	2755.6
15°	2757.4	2752.7	2757.3	2762.1	2756.1	2748.2	2741.7	2748.6	2762.3	2776.8	2782.7
16°	2781.4	2777.7	2781.6	2787.9	2783.0	2774.4	2768.0	2774.7	2790.0	2805.8	2811.7
17°	2807.2	2803.7	2808.2	2814.8	2811.3	2801.1	2794.3	2801.4	2819.6	2833.9	2840.4
18°	2834.0	2829.3	2835.0	2841.7	2839.2	2828.8	2822.1	2829.8	2848.7	2863.0	2868.2
19°	2861.5	2856.5	2863.1	2869.7	2868.4	2857.8	2851.0	2859.8	2878.9	2892.8	2896.2
20°	2891.5	2885.5	2891.5	2898.1	2898.2	2888.5	2881.7	2891.3	2910.0	2922.5	2924.1
21°	2922.0	2915.9	2920.2	2927.4	2929.0	2919.5	2912.6	2923.8	2941.5	2951.2	2953.3
22°	2954.2	2947.7	2950.7	2957.2	2961.9	2952.0	2945.9	2957.6	2975.0	2982.7	2984.1
23°	2988.4	2981.5	2982.0	2988.9	2995.2	2986.1	2979.9	2993.2	3008.8	3014.4	3016.7
24°	3024.3	3016.4	3014.6	3021.4	3029.1	3020.7	3015.8	3029.5	3044.2	3047.5	3050.1
25°	3061.8	3052.6	3048.7	3056.0	3064.9	3056.9	3053.6	3067.3	3079.2	3081.8	3083.3
26°	3100.8	3089.9	3084.1	3091.0	3100.7	3092.5	3091.9	3105.5	3115.1	3116.7	3117.3
27°	3141.0	3128.0	3119.8	3127.5	3136.2	3129.0	3130.8	3144.3	3151.6	3153.2	3152.5
28°	3183.0	3166.6	3156.5	3164.5	3172.6	3166.4	3171.3	3182.5	3189.6	3190.9	3188.0
29°	3225.9	3205.6	3194.7	3203.4	3209.1	3204.2	3213.7	3221.5	3227.4	3230.0	3225.2
30°	3269.6	3244.5	3233.7	3242.8	3246.5	3243.2	3257.1	3261.4	3266.1	3269.5	3262.6
31°	3314.2	3284.6	3274.3	3283.4	3284.0	3281.1	3301.0	3300.9	3305.2	3310.2	3301.9
32°	3358.3	3324.7	3314.6	3324.5	3321.9	3321.9	3344.2	3341.8	3345.2	3351.4	3341.3
33°	3402.4	3365.9	3357.1	3365.0	3362.1	3361.3	3388.5	3381.4	3386.0	3392.7	3382.0
34°	3446.8	3406.9	3398.7	3406.4	3401.9	3399.8	3431.9	3420.8	3427.0	3433.3	3422.8
35°	3493.8	3447.5	3441.5	3448.5	3442.6	3438.6	3476.6	3459.9	3468.4	3475.7	3465.8
36°	3540.1	3489.5	3485.3	3491.4	3484.9	3478.9	3520.9	3500.2	3512.0	3518.7	3509.8
37°	3586.6	3532.0	3529.9	3535.3	3527.4	3517.7	3565.0	3541.0	3555.1	3562.3	3554.7
38°	3633.7	3576.0	3574.7	3578.9	3569.6	3558.5	3610.6	3581.0	3597.2	3606.0	3599.3
39°	3679.8	3620.1	3619.1	3623.3	3612.1	3600.7	3656.8	3622.4	3640.9	3649.3	3643.0
40°	3725.6	3666.2	3663.4	3668.3	3655.3	3643.3	3702.6	3665.0	3684.9	3694.6	3688.6
41°	3770.6	3713.0	3709.2	3713.2	3699.9	3687.4	3748.5	3709.6	3728.3	3739.8	3732.2
42°	3817.6	3760.9	3756.2	3760.2	3744.8	3732.3	3792.5	3754.5	3773.3	3786.9	3780.0
43°	3863.2	3810.9	3803.8	3807.8	3791.4	3779.0	3835.3	3801.4	3818.7	3834.5	3827.3
44°	3907.8	3862.2	3851.9	3855.9	3837.9	3827.1	3876.4	3849.5	3864.0	3881.5	3875.6



REPORT NUMBER: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3952.5	3913.4	3901.2	3903.6	3885.3	3877.3	3916.6	3898.2	3910.3	3930.0	3925.5
46°	3997.4	3967.4	3952.4	3953.3	3934.9	3929.0	3957.3	3949.2	3957.3	3979.3	3976.0
47°	4043.8	4024.7	4005.5	4005.3	3986.2	3982.5	3999.4	4000.3	4007.1	4030.9	4029.4
48°	4091.0	4081.2	4059.1	4058.4	4037.2	4036.9	4039.0	4053.4	4058.7	4081.5	4083.6
49°	4139.8	4140.6	4115.7	4113.1	4090.0	4091.7	4078.2	4105.8	4110.8	4134.1	4136.9
50°	4189.6	4198.5	4172.4	4168.1	4142.4	4147.1	4117.7	4158.1	4162.5	4189.6	4192.6
51°	4240.6	4258.4	4230.7	4224.4	4198.2	4201.6	4159.0	4209.4	4216.2	4245.7	4251.4
52°	4293.1	4319.6	4292.1	4284.6	4254.8	4255.4	4201.3	4262.4	4271.4	4304.8	4309.6
53°	4345.6	4379.7	4354.6	4344.0	4311.2	4307.3	4241.6	4314.3	4326.6	4362.7	4369.1
54°	4398.2	4439.5	4418.1	4407.7	4368.5	4357.9	4281.7	4364.0	4383.7	4422.0	4428.8
55°	4448.6	4494.3	4483.1	4470.3	4425.3	4405.5	4321.0	4409.0	4441.4	4485.9	4491.4
56°	4495.9	4548.8	4549.5	4536.4	4483.8	4450.3	4358.7	4454.3	4498.9	4550.2	4555.7
57°	4540.8	4599.8	4615.9	4605.6	4541.5	4491.7	4392.5	4495.0	4555.9	4615.9	4618.2
58°	4582.9	4648.0	4683.6	4675.9	4598.6	4528.7	4421.3	4531.2	4613.0	4683.9	4678.0
59°	4620.8	4692.8	4753.0	4747.0	4656.0	4559.3	4448.1	4564.8	4668.7	4753.1	4735.7
60°	4654.9	4733.4	4821.1	4821.1	4711.1	4585.3	4469.2	4593.3	4722.0	4823.2	4791.4
61°	4682.7	4770.1	4887.0	4894.7	4765.7	4608.5	4485.7	4618.0	4777.1	4892.1	4847.3
62°	4704.4	4800.7	4951.6	4970.5	4818.3	4625.2	4495.0	4636.1	4828.2	4960.3	4901.0
63°	4723.6	4828.4	5014.7	5046.9	4872.4	4633.9	4495.5	4650.1	4879.6	5023.1	4951.1
64°	4740.6	4850.9	5072.3	5122.4	4923.0	4635.8	4488.3	4658.6	4930.8	5084.0	4998.4
65°	4757.3	4870.0	5128.0	5196.8	4971.4	4634.9	4475.7	4660.2	4978.1	5146.2	5039.7
66°	4766.9	4888.1	5177.6	5268.1	5013.4	4625.6	4457.0	4653.4	5020.5	5208.5	5078.3
67°	4766.9	4900.8	5219.9	5334.2	5048.1	4609.0	4426.3	4638.8	5055.5	5266.1	5109.3
68°	4723.0	4898.3	5256.0	5392.4	5072.1	4581.6	4331.8	4608.7	5083.1	5311.8	5089.4
69°	4582.2	4861.2	5279.5	5436.0	5086.2	4506.6	4133.8	4533.7	5096.7	5348.0	5042.8
70°	4285.5	4754.3	5288.3	5463.8	5091.6	4351.2	3844.4	4381.5	5094.5	5368.7	5017.8
71°	3816.3	4513.0	5276.0	5475.2	5057.2	4110.0	3486.3	4142.4	5053.7	5365.4	4948.4
72°	3327.3	4118.5	5234.0	5459.0	4968.9	3802.0	3159.6	3828.9	4946.8	5310.0	4832.1
73°	2809.1	3604.4	5131.7	5402.0	4817.9	3471.1	2907.6	3490.6	4768.0	5190.1	4685.8
74°	2210.0	3043.5	4907.0	5280.4	4606.5	3170.3	2591.2	3179.4	4534.7	5007.7	4444.4
75°	1463.3	2432.5	4495.7	5064.3	4329.1	2835.6	1979.9	2850.7	4238.0	4764.5	4084.5
76°	756.6	1707.1	3940.7	4717.0	4000.8	2332.9	1368.6	2371.0	3910.9	4405.5	3593.4
77°	547.5	918.4	3339.5	4208.9	3597.5	1570.0	758.2	1717.0	3521.2	3898.5	2984.7
78°	349.9	660.2	2610.1	3463.4	3036.9	813.8	326.5	1063.1	2981.3	3223.9	2255.2
79°	152.4	411.1	1693.2	2639.2	2253.3	588.3	257.2	413.7	2224.0	2439.7	1525.6
80°	126.6	162.0	863.9	1718.6	1364.4	368.9	187.8	319.6	1466.6	1650.5	798.6
81°	108.2	133.4	624.8	869.8	670.2	149.5	120.0	225.4	716.4	869.3	366.9
82°	92.2	112.7	395.4	625.4	494.1	127.2	102.4	131.2	319.0	351.6	279.9
83°	77.4	94.1	165.9	397.7	323.4	107.7	86.7	110.7	250.7	274.4	192.9
84°	63.9	77.2	130.0	169.9	152.7	89.7	71.9	91.8	182.3	197.2	106.6
85°	50.5	63.1	99.2	140.1	116.0	73.3	57.9	74.7	114.6	120.4	77.1
86°	37.1	49.1	74.4	112.7	85.2	58.9	44.8	59.3	82.3	94.4	51.7
87°	25.0	35.2	54.2	82.8	62.6	44.5	31.9	44.9	59.4	67.0	32.1
88°	14.4	22.8	34.0	66.4	40.3	30.1	22.3	31.9	41.1	41.7	22.8
89°	5.8	9.8	13.7	50.3	18.0	16.1	12.7	22.0	28.3	28.8	13.4



REPORT NUMBER: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8
1°	2542.6	2543.1	2543.6	2544.4	2544.8	2545.2	2545.5	2543.9	2543.5	2543.2	2543.7
2°	2545.7	2547.1	2547.5	2549.0	2549.8	2550.1	2550.4	2548.9	2549.1	2548.4	2548.6
3°	2551.1	2553.3	2554.8	2556.1	2557.5	2558.0	2558.8	2556.8	2556.9	2556.3	2556.7
4°	2559.9	2562.5	2564.2	2565.9	2567.5	2568.2	2569.0	2567.5	2567.0	2566.5	2566.1
5°	2570.7	2574.2	2576.1	2578.6	2579.9	2580.6	2580.9	2579.1	2578.9	2578.3	2577.9
6°	2584.6	2588.0	2591.1	2593.7	2595.0	2595.0	2595.1	2593.0	2593.0	2592.6	2592.2
7°	2600.9	2604.1	2607.9	2610.9	2612.1	2612.8	2613.6	2610.8	2610.4	2609.4	2608.9
8°	2618.6	2622.4	2626.6	2630.4	2632.2	2633.7	2632.9	2629.6	2628.9	2627.9	2626.5
9°	2637.9	2642.1	2647.2	2652.2	2655.0	2655.5	2653.9	2649.0	2649.2	2648.8	2647.4
10°	2659.2	2664.3	2670.1	2676.1	2679.5	2679.5	2676.6	2671.8	2671.5	2672.1	2669.2
11°	2682.7	2688.3	2695.0	2702.4	2706.2	2705.6	2702.1	2696.9	2696.9	2697.4	2693.7
12°	2707.1	2712.9	2721.2	2730.1	2734.6	2733.4	2729.2	2723.0	2723.8	2723.7	2719.4
13°	2732.2	2737.9	2747.2	2759.8	2765.3	2763.6	2757.2	2751.1	2752.1	2752.1	2746.9
14°	2758.6	2763.9	2774.8	2789.3	2796.8	2794.6	2787.5	2780.1	2781.6	2782.4	2775.5
15°	2785.2	2790.0	2802.7	2819.8	2829.7	2827.0	2818.3	2810.2	2812.4	2814.1	2804.8
16°	2812.5	2817.3	2830.8	2850.3	2863.1	2861.9	2850.5	2841.3	2843.9	2845.7	2834.6
17°	2839.9	2844.6	2859.6	2881.0	2896.8	2895.6	2884.4	2874.2	2876.2	2878.2	2865.7
18°	2868.2	2872.9	2889.1	2911.2	2930.1	2930.9	2918.7	2907.1	2910.4	2911.6	2897.0
19°	2896.8	2903.0	2918.3	2942.1	2964.3	2965.8	2953.2	2941.2	2944.8	2945.3	2927.5
20°	2926.0	2933.2	2949.2	2975.1	2997.7	3002.0	2989.2	2976.8	2980.7	2980.1	2959.6
21°	2956.9	2964.4	2981.2	3007.6	3032.0	3039.2	3027.3	3013.7	3016.7	3015.7	2991.4
22°	2989.0	2996.9	3014.4	3042.0	3068.3	3076.9	3066.0	3051.1	3054.9	3051.6	3025.7
23°	3020.9	3030.4	3049.7	3077.9	3104.6	3116.2	3103.9	3090.4	3094.4	3088.1	3060.9
24°	3055.4	3066.0	3085.6	3114.4	3142.5	3154.9	3143.4	3130.4	3133.7	3124.7	3095.3
25°	3089.4	3101.9	3122.1	3151.0	3180.9	3193.9	3184.6	3171.4	3173.3	3162.7	3131.0
26°	3125.5	3140.7	3160.0	3189.5	3220.1	3233.2	3225.4	3214.3	3212.7	3200.4	3168.8
27°	3161.5	3179.3	3197.8	3227.8	3258.9	3272.1	3265.9	3256.9	3252.6	3238.3	3206.2
28°	3198.1	3221.7	3236.6	3267.3	3300.7	3313.1	3307.7	3302.0	3293.3	3277.5	3246.0
29°	3236.1	3263.8	3276.5	3308.0	3341.4	3353.3	3349.9	3346.9	3334.2	3318.0	3287.5
30°	3275.2	3308.4	3317.1	3348.3	3383.3	3394.2	3391.7	3391.8	3374.6	3357.6	3329.6
31°	3315.4	3353.2	3358.2	3388.8	3423.1	3435.1	3432.5	3437.9	3415.5	3397.5	3371.9
32°	3355.6	3398.5	3399.6	3429.6	3465.5	3477.8	3474.9	3483.6	3455.1	3437.2	3414.3
33°	3397.0	3444.6	3441.0	3472.3	3507.8	3520.7	3517.0	3529.6	3496.3	3479.6	3458.5
34°	3438.2	3490.4	3481.8	3515.8	3551.4	3563.3	3559.5	3576.3	3537.1	3521.7	3502.8
35°	3478.6	3538.5	3524.6	3560.1	3595.1	3606.7	3601.3	3623.0	3579.2	3565.6	3549.2
36°	3520.4	3586.6	3567.7	3604.7	3638.4	3648.9	3643.7	3670.4	3621.2	3609.5	3594.8
37°	3561.3	3634.5	3611.4	3649.7	3682.3	3691.8	3687.8	3718.0	3664.5	3654.3	3640.6
38°	3604.5	3682.1	3656.3	3695.4	3727.4	3736.1	3731.4	3765.3	3708.1	3699.4	3687.3
39°	3648.5	3730.1	3701.4	3742.0	3773.6	3780.0	3776.9	3811.9	3752.0	3745.5	3733.3
40°	3694.5	3775.0	3748.8	3789.5	3819.7	3825.7	3822.3	3856.7	3797.1	3792.4	3780.4
41°	3742.5	3820.2	3796.6	3837.3	3867.5	3870.8	3867.8	3900.0	3843.5	3839.8	3827.4
42°	3789.7	3864.3	3846.7	3884.6	3914.8	3917.7	3914.6	3943.0	3892.1	3888.2	3876.5
43°	3838.8	3907.7	3896.9	3932.7	3964.2	3967.1	3964.0	3986.5	3942.2	3936.2	3924.1
44°	3889.5	3951.3	3948.5	3982.4	4014.1	4016.2	4013.8	4031.7	3993.7	3984.5	3973.9



REPORT NUMBER: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	3941.1	3995.7	4000.9	4034.2	4065.7	4066.3	4066.6	4075.3	4046.1	4034.6	4024.0
46°	3994.7	4038.9	4055.5	4085.0	4117.7	4116.3	4119.1	4114.9	4101.1	4085.7	4075.5
47°	4051.0	4081.2	4110.9	4136.4	4170.4	4166.5	4171.6	4154.4	4153.7	4137.1	4129.1
48°	4108.0	4125.7	4168.2	4189.6	4223.7	4218.0	4223.1	4194.7	4206.9	4188.8	4183.7
49°	4165.4	4173.4	4227.2	4243.1	4278.9	4269.9	4274.3	4236.0	4259.2	4241.3	4238.8
50°	4225.6	4220.3	4287.0	4299.4	4333.9	4322.6	4324.3	4277.8	4310.8	4295.8	4294.9
51°	4288.9	4268.7	4346.7	4355.9	4390.7	4374.5	4374.1	4315.6	4360.8	4350.2	4352.5
52°	4349.2	4314.5	4405.0	4412.4	4448.6	4426.5	4421.6	4354.0	4409.5	4404.3	4411.4
53°	4403.5	4352.5	4459.0	4471.3	4507.9	4478.6	4465.7	4389.8	4453.1	4457.0	4470.8
54°	4450.5	4380.7	4508.0	4531.0	4568.1	4532.4	4506.6	4421.6	4494.7	4513.1	4533.1
55°	4493.2	4409.7	4550.3	4591.1	4629.7	4584.2	4544.8	4452.1	4532.5	4566.6	4597.9
56°	4536.9	4442.4	4591.8	4654.1	4692.3	4634.6	4579.0	4479.6	4566.7	4619.4	4664.6
57°	4578.1	4476.7	4632.5	4715.5	4755.0	4685.6	4609.2	4502.4	4595.6	4670.3	4729.0
58°	4616.9	4500.7	4671.8	4778.5	4818.7	4735.7	4634.8	4524.7	4619.8	4721.3	4796.6
59°	4646.8	4517.5	4700.9	4837.9	4885.3	4783.3	4656.3	4543.3	4639.7	4770.1	4863.7
60°	4671.3	4538.3	4725.3	4893.7	4950.8	4829.6	4675.9	4557.4	4656.7	4818.9	4932.2
61°	4695.0	4558.9	4748.8	4950.6	5016.9	4876.0	4691.5	4563.1	4672.9	4866.0	5001.2
62°	4717.6	4575.7	4770.6	5004.6	5077.3	4923.6	4702.0	4564.6	4682.3	4911.0	5071.2
63°	4737.9	4589.4	4791.1	5054.2	5132.1	4966.5	4706.3	4563.2	4684.6	4952.8	5140.4
64°	4756.2	4592.1	4808.3	5099.6	5183.9	5007.8	4708.6	4551.8	4681.8	4991.1	5209.9
65°	4753.5	4549.0	4801.9	5139.8	5234.3	5043.8	4701.6	4531.8	4671.3	5023.4	5275.3
66°	4694.9	4510.9	4737.4	5171.1	5282.3	5072.4	4689.4	4503.1	4655.1	5050.8	5337.4
67°	4657.4	4487.4	4697.2	5188.8	5319.8	5096.4	4665.3	4433.5	4626.5	5070.8	5390.5
68°	4634.8	4411.1	4662.7	5153.4	5349.2	5112.0	4606.0	4268.1	4559.0	5082.2	5434.8
69°	4543.7	4211.1	4562.1	5093.7	5368.6	5107.2	4477.2	3988.0	4414.1	5074.8	5465.5
70°	4372.7	3861.7	4396.0	5054.4	5371.3	5073.4	4243.1	3618.4	4169.7	5042.8	5475.3
71°	4111.6	3359.3	4133.5	4968.5	5345.4	4988.8	3922.9	3249.0	3835.5	4955.1	5456.7
72°	3712.4	2904.1	3727.7	4844.4	5263.6	4831.4	3559.7	2940.3	3471.1	4809.5	5405.5
73°	3224.4	2438.8	3233.3	4674.7	5114.8	4593.9	3208.3	2640.5	3124.4	4587.2	5300.4
74°	2718.9	1828.0	2729.3	4413.7	4901.5	4304.2	2874.8	2231.3	2786.9	4300.8	5127.6
75°	2069.4	1217.1	2082.3	4019.1	4616.9	3952.5	2457.4	1591.4	2350.2	3947.8	4848.1
76°	1420.0	615.7	1435.4	3493.4	4197.6	3569.0	1805.6	902.1	1701.5	3542.1	4446.4
77°	776.2	451.5	794.1	2883.8	3626.5	3106.3	1153.7	647.6	951.3	3053.3	3868.9
78°	327.5	287.4	343.4	2159.1	2882.8	2460.6	511.0	401.9	689.4	2397.4	3096.2
79°	255.3	127.1	266.4	1434.4	2104.5	1787.1	237.1	156.3	427.6	1589.3	2223.3
80°	183.1	104.8	189.3	715.3	1326.2	1113.6	198.0	130.7	165.9	872.4	1346.0
81°	111.0	87.3	113.4	321.5	560.7	441.7	158.9	111.7	136.5	630.5	634.1
82°	90.7	71.6	92.5	249.1	241.6	233.5	120.2	94.9	115.8	403.2	409.6
83°	72.3	56.8	74.1	176.7	199.5	189.6	101.3	79.6	97.4	175.9	198.6
84°	55.8	44.0	57.0	104.9	157.5	145.7	84.2	66.0	80.5	135.9	160.3
85°	40.6	31.4	41.5	74.7	115.5	101.8	68.1	52.5	66.1	101.8	132.9
86°	28.8	21.6	29.2	49.4	90.0	73.2	53.4	39.0	51.7	74.4	106.5
87°	16.9	11.9	16.9	35.6	63.1	52.8	39.8	26.6	37.4	53.8	75.1
88°	5.1	2.4	4.6	21.8	43.1	36.4	27.5	15.6	25.0	33.3	60.3
89°	3.7	2.2	3.4	8.1	23.1	19.9	15.1	6.3	11.3	12.9	45.8



REPORT NUMBER: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2541.8	2541.8	2541.8
1°	2543.7	2543.0	2543.0
2°	2548.4	2547.9	2547.0
3°	2555.8	2555.1	2553.7
4°	2565.8	2564.6	2563.2
5°	2577.2	2575.7	2574.0
6°	2590.6	2589.0	2586.3
7°	2605.4	2603.3	2599.7
8°	2622.5	2618.8	2615.4
9°	2641.9	2637.0	2632.5
10°	2663.1	2657.0	2651.2
11°	2685.8	2678.5	2671.7
12°	2710.2	2700.6	2692.7
13°	2736.1	2723.2	2712.9
14°	2761.6	2746.3	2735.3
15°	2787.4	2770.0	2757.4
16°	2814.9	2795.2	2781.4
17°	2842.4	2822.1	2807.2
18°	2871.2	2849.4	2834.0
19°	2900.9	2877.4	2861.5
20°	2929.7	2905.6	2891.5
21°	2960.6	2936.4	2922.0
22°	2992.9	2968.3	2954.2
23°	3026.6	3001.6	2988.4
24°	3061.1	3035.8	3024.3
25°	3095.8	3072.1	3061.8
26°	3133.2	3109.1	3100.8
27°	3171.9	3147.3	3141.0
28°	3210.5	3185.7	3183.0
29°	3251.7	3225.2	3225.9
30°	3293.7	3265.0	3269.6
31°	3335.7	3307.0	3314.2
32°	3378.0	3348.7	3358.3
33°	3420.8	3391.2	3402.4
34°	3463.8	3432.2	3446.8
35°	3508.4	3474.3	3493.8
36°	3554.9	3516.2	3540.1
37°	3599.8	3560.3	3586.6
38°	3646.6	3605.2	3633.7
39°	3692.2	3650.0	3679.8
40°	3740.4	3697.2	3725.6
41°	3788.0	3745.0	3770.6
42°	3837.1	3795.3	3817.6
43°	3886.6	3846.4	3863.2
44°	3936.4	3897.1	3907.8



REPORT NUMBER: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	3987.5	3952.0	3952.5
46°	4039.7	4006.3	3997.4
47°	4092.9	4063.8	4043.8
48°	4148.1	4122.4	4091.0
49°	4204.7	4183.4	4139.8
50°	4262.9	4244.4	4189.6
51°	4322.4	4307.3	4240.6
52°	4383.7	4369.0	4293.1
53°	4447.4	4431.0	4345.6
54°	4509.6	4491.9	4398.2
55°	4574.8	4552.2	4448.6
56°	4641.7	4608.3	4495.9
57°	4707.4	4659.9	4540.8
58°	4775.5	4707.4	4582.9
59°	4841.5	4751.3	4620.8
60°	4907.5	4791.3	4654.9
61°	4973.5	4825.3	4682.7
62°	5037.9	4855.9	4704.4
63°	5099.8	4881.6	4723.6
64°	5161.6	4906.2	4740.6
65°	5218.4	4928.3	4757.3
66°	5271.4	4949.2	4766.9
67°	5314.4	4962.8	4766.9
68°	5347.3	4961.1	4723.0
69°	5363.2	4926.8	4582.2
70°	5362.8	4826.4	4285.5
71°	5337.9	4606.4	3816.3
72°	5275.7	4213.1	3327.3
73°	5145.0	3692.2	2809.1
74°	4886.5	3106.1	2210.0
75°	4459.5	2492.2	1463.3
76°	3910.8	1785.7	756.6
77°	3278.3	989.9	547.5
78°	2494.9	713.9	349.9
79°	1576.8	439.5	152.4
80°	810.8	165.2	126.6
81°	581.8	138.9	108.2
82°	372.2	117.4	92.2
83°	162.7	97.6	77.4
84°	128.6	80.1	63.9
85°	97.4	65.4	50.5
86°	73.1	50.7	37.1
87°	52.7	36.0	25.0
88°	32.3	22.9	14.4
89°	11.9	9.3	5.8



REPORT NUMBER: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436756

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)