

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: P1436727

Luminaire Tested: XAS180-SFPM (4000K-108W-T5)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436727
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-108W-T5)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 5
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

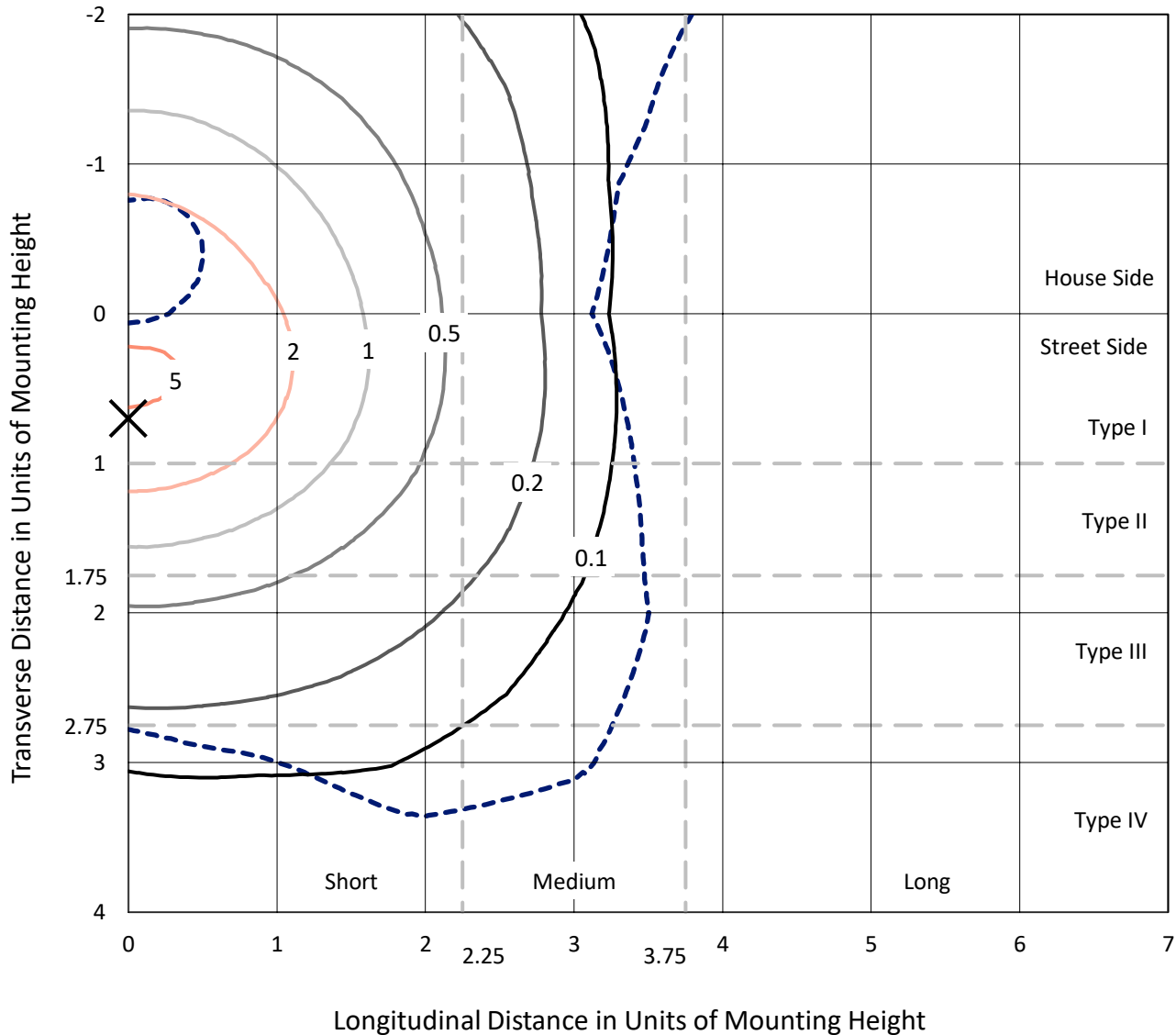
Lumens per Lamp: 28628 (1 lamp)
Luminaire Lumens: 17714.3 lumens
Efficiency: 61.9%
Efficacy: 165.7 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 106.9
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

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Iso-Footcandle Lines of Horizontal Illumination

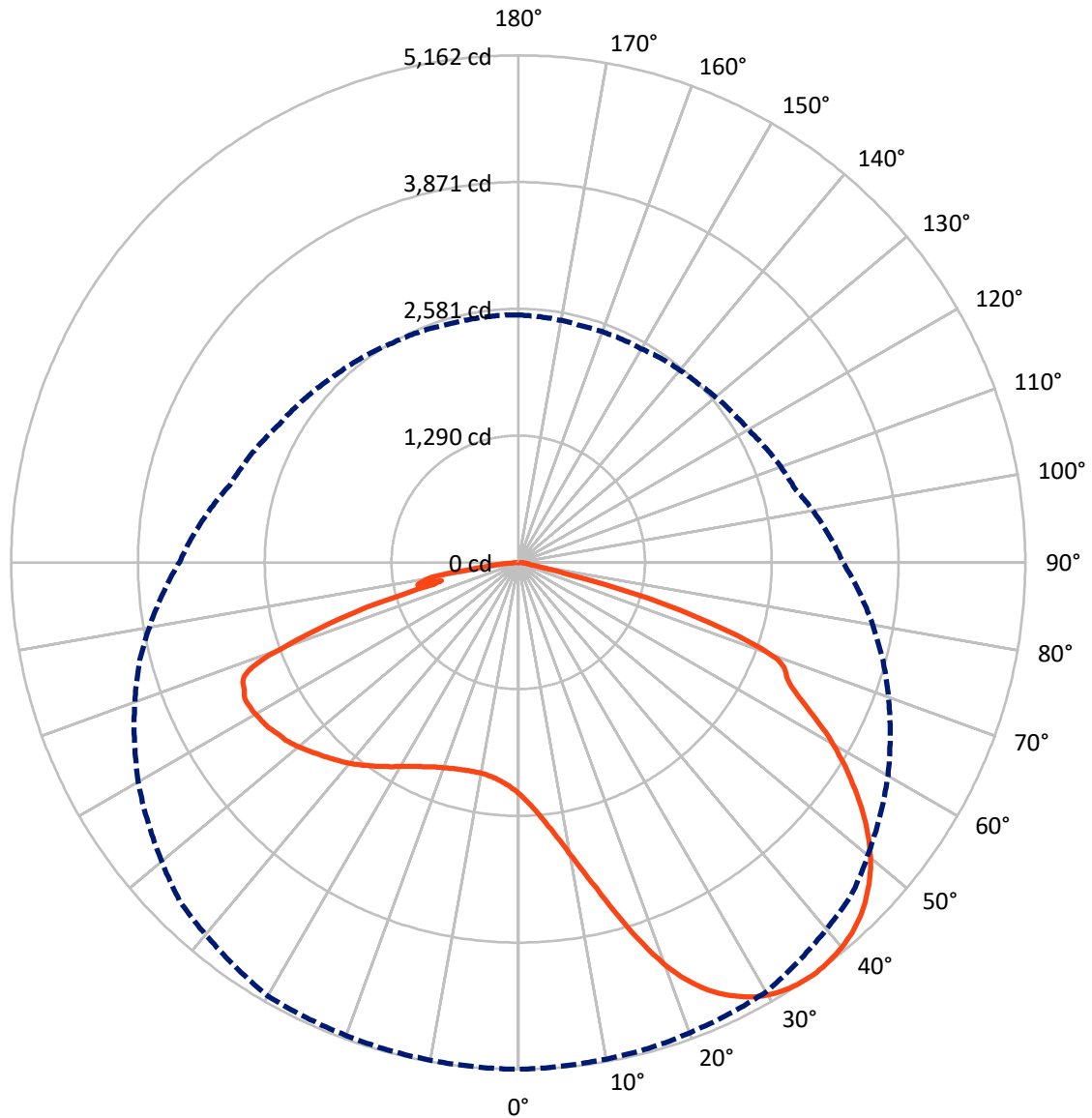
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 35-Deg Vertical

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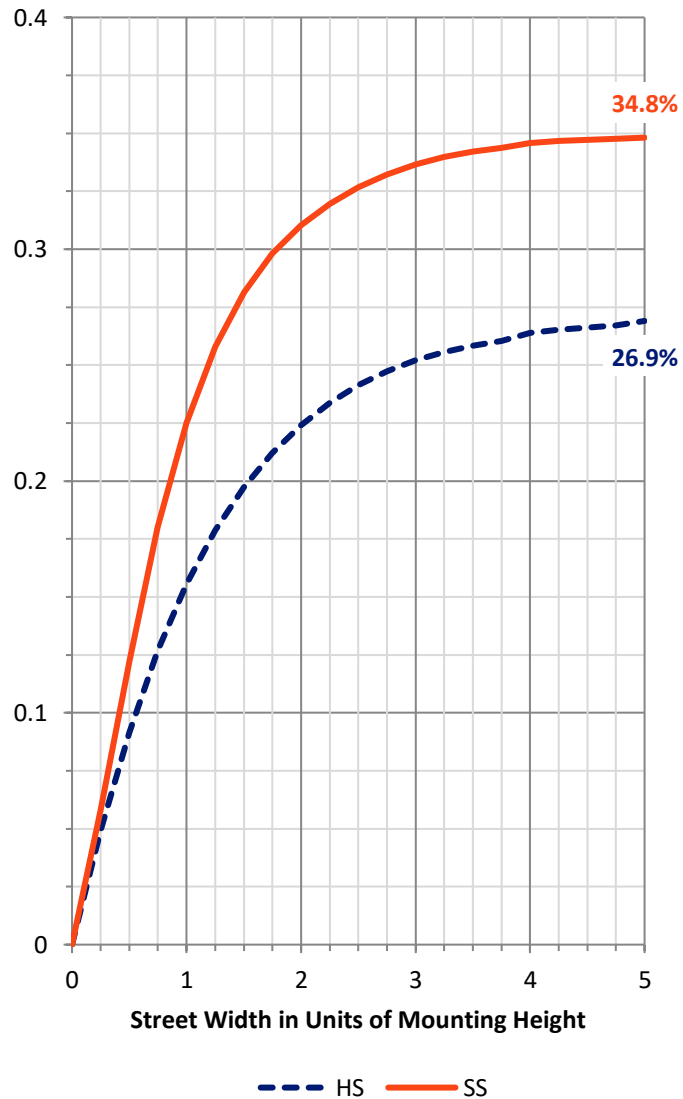
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7755.0	0.0	7755.0
	% Lamp	27.1	0.0	27.1
Street Side	Lumens	9959.2	0.0	9959.2
	% Lamp	34.8	0.0	34.8
Total	Lumens	17714.3	0.0	17714.3
	% Lamp	61.9	0.0	61.9

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	234.7	1.3	0.8
10°-20°	796.4	4.5	2.8
20°-30°	1528.9	8.6	5.3
30°-40°	2303.0	13.0	8.0
40°-50°	3011.8	17.0	10.5
50°-60°	3542.0	20.0	12.4
60°-70°	3695.5	20.9	12.9
70°-80°	2365.9	13.4	8.3
80°-90°	236.1	1.3	0.8
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°	17714.3	100.0	61.9
0°-180°	17714.3	100.0	61.9

Coefficient of Utilization



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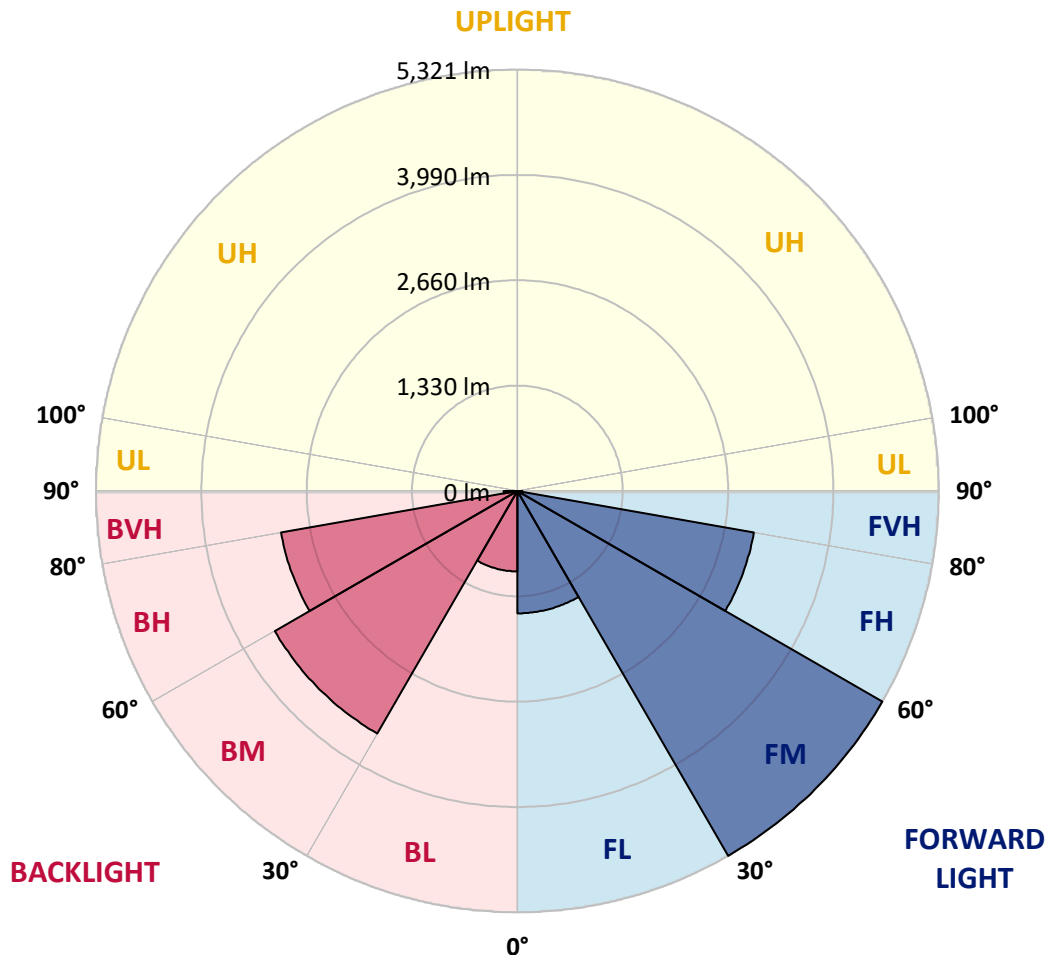
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T5)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1544.8	5.4			
FM (30°-60°)	5320.6	18.6			
FH (60°-80°)	3031.6	10.6			G2/5000
FVH (80°-90°)	62.2	0.2			G1/100
BL (0°-30°)	1015.1	3.5	B3/2500		
BM (30°-60°)	3536.2	12.4	B3/5000		
BH (60°-80°)	3029.8	10.6	B4/5000		G4/5000
BVH (80°-90°)	173.9	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	10913.7	38.1			

BUG Rating: B4-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2365.9	2365.9	2365.9	2365.9	2365.9	2365.9	2365.9	2365.9	2365.9	2365.9	2365.9
1°	2406.0	2405.3	2402.1	2396.4	2388.4	2379.9	2361.7	2352.0	2344.3	2337.7	2333.6
2°	2452.5	2450.3	2442.2	2428.2	2409.9	2390.7	2362.3	2344.1	2328.1	2315.0	2306.6
3°	2504.9	2500.7	2486.0	2463.7	2436.1	2405.5	2366.5	2338.9	2315.0	2296.1	2282.8
4°	2563.2	2556.0	2535.0	2503.6	2464.7	2422.4	2372.1	2335.8	2304.6	2280.5	2263.4
5°	2628.8	2618.9	2590.3	2547.2	2496.9	2442.2	2379.8	2334.2	2296.5	2267.4	2246.8
6°	2701.1	2687.2	2651.5	2596.3	2531.7	2463.5	2388.9	2334.9	2290.7	2257.1	2233.0
7°	2779.8	2762.7	2718.3	2651.1	2569.8	2487.6	2401.4	2338.0	2286.8	2249.1	2222.6
8°	2866.0	2844.4	2790.8	2708.6	2611.0	2515.2	2416.0	2343.7	2285.6	2242.5	2213.9
9°	2959.0	2935.3	2868.9	2771.0	2657.5	2543.9	2432.4	2350.3	2286.7	2238.7	2207.3
10°	3059.6	3028.8	2953.0	2839.0	2707.4	2575.4	2451.1	2359.7	2289.4	2237.9	2202.9
11°	3168.9	3134.3	3043.6	2912.4	2759.7	2609.5	2471.1	2371.1	2293.8	2238.9	2201.1
12°	3286.8	3244.0	3139.7	2988.0	2813.5	2646.8	2493.1	2383.3	2300.1	2241.2	2202.4
13°	3411.7	3364.2	3244.1	3069.3	2871.8	2686.3	2516.2	2396.9	2307.5	2245.6	2205.1
14°	3549.9	3494.3	3355.6	3156.2	2933.6	2725.7	2539.7	2410.4	2315.6	2251.3	2208.3
15°	3697.0	3633.8	3473.3	3247.5	2997.2	2766.8	2564.8	2425.0	2325.2	2258.0	2213.2
16°	3848.7	3775.9	3596.0	3345.7	3065.6	2810.6	2591.8	2441.7	2335.4	2265.6	2219.6
17°	4000.0	3919.7	3718.4	3446.3	3137.0	2856.1	2619.9	2458.4	2347.2	2273.7	2226.8
18°	4149.1	4060.2	3841.2	3547.6	3211.5	2902.5	2649.3	2477.5	2359.9	2283.7	2233.6
19°	4289.2	4195.1	3962.3	3645.8	3288.6	2950.8	2679.8	2497.3	2372.7	2294.2	2242.1
20°	4418.3	4322.5	4077.1	3743.9	3367.1	3001.5	2712.0	2518.4	2386.7	2305.3	2251.8
21°	4534.5	4440.6	4188.4	3839.0	3444.6	3054.0	2744.7	2540.4	2401.3	2316.1	2262.3
22°	4634.8	4541.6	4292.8	3931.7	3522.8	3107.9	2779.0	2563.2	2418.0	2328.6	2274.1
23°	4725.7	4638.9	4389.7	4020.4	3600.1	3164.3	2814.5	2586.6	2436.3	2342.0	2287.1
24°	4805.5	4722.8	4479.7	4103.7	3675.8	3222.2	2850.6	2611.3	2455.0	2357.3	2301.1
25°	4874.1	4797.8	4563.1	4185.4	3750.0	3281.0	2888.8	2636.8	2474.2	2373.7	2315.3
26°	4933.3	4864.0	4641.1	4261.6	3821.4	3339.1	2927.6	2663.2	2494.3	2390.4	2331.0
27°	4986.5	4920.4	4710.1	4334.9	3890.9	3398.5	2966.5	2689.9	2514.7	2408.2	2347.4
28°	5031.3	4968.4	4772.3	4405.2	3956.5	3457.3	3006.9	2715.9	2536.2	2427.7	2364.6
29°	5068.6	5010.4	4829.2	4471.9	4018.8	3516.0	3048.1	2743.2	2557.2	2448.7	2382.8
30°	5097.9	5043.9	4880.2	4536.3	4080.6	3572.7	3090.8	2771.0	2580.0	2469.4	2401.5
31°	5122.0	5070.8	4924.7	4595.6	4137.8	3629.1	3133.3	2798.1	2603.6	2490.6	2421.1
32°	5139.4	5092.8	4964.1	4650.9	4192.7	3684.5	3176.4	2826.7	2627.0	2512.6	2442.2
33°	5152.7	5108.7	4998.5	4703.5	4245.6	3738.3	3219.3	2856.2	2651.7	2534.5	2464.1
34°	5158.7	5118.1	5025.9	4750.6	4296.0	3790.8	3262.5	2884.3	2676.7	2557.1	2486.4
35°	5161.5	5122.7	5049.0	4794.2	4345.7	3841.6	3305.7	2913.0	2702.2	2580.5	2510.2
36°	5160.0	5124.0	5067.3	4834.3	4391.4	3890.8	3348.6	2941.8	2728.2	2604.3	2535.0
37°	5152.9	5119.9	5080.3	4870.7	4435.9	3938.2	3390.6	2971.5	2754.5	2629.2	2560.4
38°	5142.2	5112.6	5089.0	4903.4	4478.5	3984.7	3434.0	3001.8	2780.7	2655.2	2586.2
39°	5129.1	5103.6	5092.1	4931.1	4519.6	4030.3	3477.4	3032.1	2807.7	2681.2	2611.8
40°	5111.7	5090.6	5092.0	4956.3	4558.3	4074.5	3521.5	3064.3	2835.3	2707.9	2637.8
41°	5087.9	5073.0	5086.4	4977.4	4594.4	4116.9	3563.3	3098.1	2863.8	2735.0	2664.2
42°	5061.7	5051.1	5077.1	4995.7	4630.1	4158.7	3603.9	3132.1	2892.6	2763.2	2691.2
43°	5029.5	5027.1	5064.5	5009.1	4662.4	4200.1	3643.9	3165.1	2921.3	2792.7	2718.4
44°	4992.0	4999.3	5047.2	5016.9	4693.1	4239.7	3680.5	3199.6	2950.9	2822.0	2746.8



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CATALOG NUMBER: XAS180-SFPM (4000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	4948.5	4965.0	5023.6	5022.7	4723.1	4279.3	3718.1	3235.9	2982.5	2851.9	2775.3
46°	4897.4	4928.6	4999.5	5023.7	4751.4	4318.5	3754.7	3273.5	3015.0	2882.7	2804.7
47°	4842.5	4884.0	4970.0	5020.3	4778.9	4358.1	3790.1	3311.5	3048.1	2913.6	2835.3
48°	4783.7	4835.4	4935.7	5011.0	4803.3	4394.3	3823.4	3349.9	3082.5	2945.2	2866.1
49°	4716.8	4780.2	4898.3	5000.2	4824.7	4429.3	3855.2	3388.7	3117.9	2978.6	2897.8
50°	4644.6	4718.1	4853.1	4982.3	4843.7	4463.8	3886.0	3427.1	3153.6	3012.2	2931.1
51°	4563.2	4650.1	4803.5	4960.9	4860.1	4495.4	3917.0	3466.0	3191.0	3048.4	2964.4
52°	4476.9	4573.1	4746.8	4932.5	4873.1	4524.4	3946.0	3506.6	3229.4	3085.9	3000.6
53°	4384.8	4491.1	4686.5	4898.7	4882.7	4550.8	3973.3	3544.9	3268.3	3123.2	3035.0
54°	4289.6	4400.6	4619.2	4861.4	4886.3	4574.1	3999.4	3582.4	3309.5	3161.8	3072.0
55°	4189.2	4304.1	4544.7	4817.2	4884.3	4592.9	4022.2	3616.1	3351.1	3202.7	3109.9
56°	4082.3	4205.9	4463.7	4767.3	4877.9	4607.2	4042.9	3648.7	3392.9	3244.5	3148.8
57°	3978.4	4102.9	4381.3	4713.2	4863.0	4616.3	4061.2	3678.5	3434.9	3288.6	3188.8
58°	3868.5	3998.4	4292.8	4653.1	4840.6	4617.9	4073.6	3705.6	3477.1	3334.5	3226.4
59°	3759.9	3891.9	4204.2	4586.3	4810.8	4611.4	4080.9	3729.8	3519.4	3382.9	3263.5
60°	3643.2	3784.6	4110.9	4514.5	4772.9	4597.1	4084.5	3750.5	3561.7	3431.8	3300.2
61°	3522.2	3671.8	4017.6	4440.0	4726.2	4576.0	4080.4	3767.1	3604.1	3481.4	3337.2
62°	3395.6	3556.8	3925.1	4359.8	4673.4	4543.6	4068.9	3778.9	3645.0	3530.6	3373.5
63°	3270.8	3441.0	3833.6	4275.9	4614.7	4499.2	4047.7	3785.5	3685.1	3579.0	3408.6
64°	3153.4	3328.7	3742.9	4190.9	4545.4	4443.1	4016.3	3787.0	3724.5	3627.3	3442.2
65°	3058.6	3226.1	3654.5	4103.7	4470.6	4376.4	3977.0	3780.7	3762.2	3676.4	3473.9
66°	2989.0	3141.6	3569.6	4017.0	4386.1	4296.3	3923.4	3765.0	3794.9	3730.4	3502.7
67°	2949.5	3079.8	3492.7	3931.7	4290.1	4206.3	3854.4	3739.0	3822.4	3781.3	3529.5
68°	2908.5	3037.5	3425.6	3847.3	4183.7	4100.5	3733.6	3693.8	3842.9	3829.3	3528.4
69°	2814.7	2996.5	3371.2	3763.2	4065.2	3961.4	3539.9	3604.1	3850.5	3872.4	3514.0
70°	2629.6	2921.0	3328.1	3678.4	3940.9	3767.0	3271.5	3454.8	3845.6	3907.5	3516.4
71°	2349.2	2771.7	3289.2	3597.9	3792.6	3514.5	2944.5	3239.1	3809.2	3929.8	3496.1
72°	2046.4	2528.5	3242.9	3514.5	3611.1	3215.0	2635.2	2989.3	3720.7	3920.9	3454.8
73°	1733.7	2213.7	3169.3	3425.3	3400.1	2909.1	2375.2	2741.5	3580.9	3873.1	3398.3
74°	1373.1	1874.6	3026.2	3317.8	3163.4	2611.3	2065.2	2506.4	3401.1	3784.5	3287.1
75°	920.9	1508.9	2773.9	3162.2	2894.6	2283.5	1570.6	2230.8	3199.2	3646.3	3120.5
76°	501.2	1070.7	2433.8	2935.3	2614.2	1835.8	1075.9	1727.0	2999.7	3422.2	2894.7
77°	327.8	597.6	2068.9	2611.0	2308.3	1244.2	585.3	1223.2	2774.3	3093.7	2627.4
78°	155.8	440.2	1630.2	2163.3	1920.6	682.0	284.1	722.2	2439.6	2646.9	2299.0
79°	124.1	285.5	1075.0	1639.1	1421.7	506.1	177.0	352.0	1849.1	2159.1	1929.8
80°	107.0	130.9	568.5	1081.3	870.9	341.3	153.1	195.9	1258.7	1723.4	1586.5
81°	92.0	110.5	363.1	566.1	621.7	176.4	129.2	164.0	670.4	1362.6	1439.2
82°	78.6	94.1	161.9	364.5	382.8	148.8	105.4	132.1	321.9	1004.2	1216.9
83°	66.2	78.8	130.0	165.4	143.9	122.5	88.8	100.2	211.7	752.1	994.6
84°	54.9	64.8	105.2	129.6	115.5	94.8	73.0	81.0	169.9	529.4	770.0
85°	43.7	53.1	80.5	106.9	88.9	72.8	57.9	64.5	139.1	341.4	476.1
86°	32.5	41.5	60.3	85.7	65.4	57.3	43.7	50.1	108.4	245.3	336.4
87°	22.1	29.8	43.7	62.5	48.3	41.9	30.4	37.2	79.2	149.1	196.7
88°	12.8	19.5	27.1	50.2	31.2	26.5	21.1	28.4	52.3	55.1	58.5
89°	5.4	8.5	11.3	38.1	14.1	13.3	11.8	19.6	35.6	37.4	39.6



REPORT NUMBER: P1436727

CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1436727

CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1436727

CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1436727

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2365.9	2365.9	2365.9	2365.9	2365.9	2365.9	2365.9	2365.9	2365.9	2365.9	2365.9
1°	2331.5	2331.2	2333.1	2339.3	2345.4	2354.2	2363.5	2365.5	2374.7	2384.6	2392.4
2°	2301.9	2300.8	2305.2	2313.9	2326.1	2340.7	2359.1	2370.3	2390.5	2410.0	2426.8
3°	2276.1	2274.5	2280.2	2291.9	2309.1	2331.2	2357.3	2378.2	2407.9	2438.5	2465.7
4°	2254.6	2252.7	2259.4	2273.9	2295.9	2323.9	2357.8	2387.9	2428.3	2470.1	2508.4
5°	2236.4	2233.6	2241.7	2259.2	2284.7	2319.2	2360.1	2399.6	2452.1	2505.5	2554.1
6°	2221.1	2217.9	2227.3	2246.7	2277.1	2316.6	2364.6	2414.0	2477.2	2543.6	2606.6
7°	2208.0	2205.0	2214.7	2236.8	2270.8	2316.4	2372.2	2431.1	2506.0	2586.5	2663.4
8°	2198.4	2194.8	2205.7	2229.9	2267.2	2318.1	2381.4	2449.3	2536.6	2633.0	2724.8
9°	2190.3	2186.8	2198.5	2225.4	2265.7	2321.7	2392.0	2469.6	2570.2	2682.7	2790.3
10°	2185.1	2181.2	2194.2	2223.0	2266.4	2326.5	2404.0	2491.9	2605.8	2735.4	2861.3
11°	2182.7	2178.3	2192.4	2223.5	2270.0	2333.5	2418.6	2516.9	2645.9	2792.1	2938.4
12°	2181.8	2177.8	2192.6	2226.1	2275.3	2342.9	2435.0	2543.0	2686.8	2852.5	3018.4
13°	2183.8	2178.6	2194.2	2230.1	2282.0	2353.4	2452.7	2571.1	2730.0	2916.3	3105.7
14°	2185.9	2181.5	2198.2	2235.9	2291.1	2365.4	2471.1	2599.9	2775.1	2983.3	3197.6
15°	2189.9	2185.0	2203.3	2242.9	2301.6	2379.4	2490.4	2629.8	2821.8	3054.3	3296.6
16°	2194.7	2189.8	2208.7	2250.1	2312.2	2394.3	2511.0	2661.9	2871.0	3129.7	3400.0
17°	2200.2	2195.3	2215.4	2258.9	2324.3	2410.5	2533.1	2695.0	2922.6	3207.9	3505.5
18°	2207.0	2201.8	2223.6	2268.0	2337.3	2426.4	2555.4	2729.0	2974.6	3289.9	3613.2
19°	2214.4	2209.9	2231.9	2278.5	2350.1	2444.4	2579.2	2763.9	3028.8	3373.3	3719.5
20°	2224.1	2219.0	2242.1	2290.2	2363.9	2462.2	2604.0	2800.2	3086.9	3457.4	3821.2
21°	2234.6	2230.2	2253.3	2302.9	2377.7	2481.1	2630.4	2838.0	3144.3	3545.1	3920.2
22°	2246.1	2241.5	2266.1	2316.9	2393.2	2501.2	2657.2	2877.1	3206.6	3629.4	4015.1
23°	2258.9	2255.1	2279.9	2331.7	2409.9	2522.2	2684.1	2917.4	3270.9	3713.0	4105.5
24°	2272.7	2270.3	2295.1	2347.9	2427.1	2543.0	2711.8	2958.6	3334.5	3792.5	4189.6
25°	2287.7	2285.7	2311.5	2364.9	2446.1	2565.0	2740.8	2999.6	3399.1	3870.5	4269.8
26°	2304.2	2303.2	2329.0	2382.3	2465.6	2587.2	2769.5	3042.5	3464.6	3942.9	4347.4
27°	2320.8	2321.9	2347.3	2400.6	2485.8	2609.0	2798.9	3085.9	3530.2	4012.9	4419.2
28°	2338.5	2343.1	2366.3	2420.3	2506.9	2632.7	2828.5	3131.5	3595.1	4080.2	4488.9
29°	2357.7	2365.0	2386.5	2440.2	2528.7	2656.4	2858.7	3175.6	3657.9	4143.9	4555.4
30°	2378.3	2388.8	2408.2	2460.6	2549.8	2680.9	2888.5	3220.8	3720.5	4204.2	4617.4
31°	2400.0	2412.9	2431.0	2481.6	2572.5	2705.4	2918.1	3266.0	3780.1	4260.8	4675.7
32°	2422.5	2438.9	2453.9	2504.7	2596.2	2731.1	2948.6	3311.8	3837.4	4314.7	4730.5
33°	2446.1	2465.1	2477.2	2527.3	2619.7	2756.6	2978.7	3358.0	3893.5	4368.3	4782.9
34°	2469.4	2491.5	2500.7	2551.1	2644.4	2782.6	3009.1	3404.0	3945.3	4418.3	4831.5
35°	2492.8	2518.6	2524.1	2575.8	2669.0	2809.6	3039.6	3450.4	3997.1	4467.9	4875.0
36°	2517.1	2546.2	2547.7	2601.1	2693.9	2836.6	3072.1	3497.8	4047.2	4512.6	4915.3
37°	2539.4	2573.2	2571.8	2626.2	2719.6	2864.6	3104.7	3543.3	4094.8	4556.8	4951.6
38°	2564.1	2601.5	2597.0	2653.3	2745.9	2891.8	3138.4	3589.7	4142.0	4598.5	4985.4
39°	2588.8	2629.0	2622.3	2679.8	2772.6	2921.3	3172.2	3634.1	4185.8	4638.2	5014.0
40°	2614.2	2655.6	2648.7	2707.1	2800.5	2949.7	3206.5	3677.5	4228.2	4675.9	5038.9
41°	2640.7	2680.9	2675.1	2734.8	2829.1	2979.0	3241.2	3720.6	4268.8	4711.3	5057.6
42°	2667.0	2706.4	2702.5	2762.0	2859.0	3009.9	3276.6	3761.4	4310.0	4746.6	5072.2
43°	2693.6	2731.1	2730.8	2792.0	2888.3	3041.7	3314.1	3801.5	4350.2	4778.0	5084.7
44°	2721.8	2756.9	2759.9	2821.5	2918.8	3075.4	3351.8	3841.1	4389.8	4806.6	5090.9



REPORT NUMBER: P1436727

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2750.7	2782.5	2789.1	2852.2	2950.7	3107.5	3390.1	3879.8	4427.3	4834.3	5094.0
46°	2780.1	2806.6	2819.1	2882.2	2982.3	3142.1	3427.9	3915.4	4463.5	4859.1	5091.4
47°	2811.1	2830.1	2850.7	2912.9	3015.4	3175.6	3466.5	3948.1	4498.3	4882.2	5084.8
48°	2842.6	2855.3	2883.2	2944.5	3048.8	3210.9	3504.9	3980.7	4530.3	4901.2	5074.3
49°	2875.4	2881.4	2915.5	2975.6	3082.6	3246.9	3542.0	4011.4	4560.5	4918.1	5059.0
50°	2908.7	2906.5	2949.4	3008.2	3118.1	3284.6	3579.2	4040.5	4586.7	4933.3	5040.1
51°	2944.4	2932.7	2983.6	3041.4	3152.8	3321.5	3615.7	4066.7	4611.2	4943.3	5015.2
52°	2979.0	2958.0	3017.8	3076.1	3191.0	3358.5	3651.2	4091.0	4631.1	4949.7	4984.1
53°	3011.1	2978.1	3048.9	3110.8	3228.9	3396.5	3683.6	4112.8	4646.2	4950.8	4948.5
54°	3038.8	2992.4	3077.8	3147.1	3269.0	3434.0	3714.5	4129.5	4657.9	4949.6	4908.6
55°	3063.8	3007.5	3102.9	3184.1	3308.9	3472.0	3742.7	4143.5	4664.0	4940.5	4864.9
56°	3089.8	3026.0	3127.5	3222.2	3352.0	3510.6	3766.8	4154.2	4663.4	4926.2	4814.3
57°	3114.5	3045.6	3152.6	3259.7	3394.1	3549.5	3789.5	4159.9	4655.4	4903.6	4758.2
58°	3138.8	3059.8	3176.6	3300.2	3438.6	3586.8	3807.7	4162.4	4640.5	4874.9	4695.6
59°	3158.5	3070.3	3196.2	3337.9	3485.2	3622.5	3822.2	4160.4	4618.4	4838.7	4628.0
60°	3175.5	3082.9	3213.2	3376.0	3532.7	3657.7	3834.6	4152.3	4589.2	4794.8	4554.2
61°	3192.9	3094.8	3230.8	3411.8	3581.1	3693.4	3842.6	4135.0	4553.4	4742.4	4475.9
62°	3210.0	3102.6	3247.7	3449.5	3627.3	3729.6	3845.2	4109.2	4508.2	4681.9	4393.4
63°	3223.2	3108.7	3262.6	3485.3	3671.7	3762.7	3843.1	4076.1	4451.5	4612.9	4307.9
64°	3234.6	3111.3	3275.9	3519.2	3716.3	3793.6	3836.4	4033.4	4386.5	4538.6	4221.4
65°	3235.6	3087.7	3276.9	3550.9	3761.2	3821.1	3819.7	3977.8	4309.0	4454.0	4130.9
66°	3205.0	3067.5	3243.6	3577.1	3805.3	3842.4	3794.9	3908.0	4220.1	4359.8	4039.1
67°	3187.7	3057.3	3225.6	3597.3	3844.6	3859.6	3755.1	3805.7	4119.8	4257.1	3949.7
68°	3180.5	3019.0	3213.1	3589.3	3881.8	3868.7	3680.8	3631.9	3990.3	4145.8	3858.9
69°	3134.9	2910.3	3163.3	3569.1	3912.6	3862.2	3546.7	3376.8	3805.0	4019.0	3768.7
70°	3045.0	2712.6	3074.4	3566.7	3936.2	3834.8	3336.0	3048.0	3558.2	3873.5	3678.2
71°	2902.0	2421.1	2932.2	3541.4	3940.3	3765.6	3071.0	2709.6	3250.0	3697.4	3581.3
72°	2672.8	2149.7	2704.8	3499.5	3912.7	3642.2	2791.9	2411.1	2922.3	3483.6	3480.3
73°	2389.9	1892.2	2413.1	3434.5	3840.6	3463.9	2526.9	2117.2	2605.7	3236.2	3364.4
74°	2112.4	1604.6	2145.3	3318.0	3722.9	3263.0	2255.6	1744.6	2284.1	2954.9	3228.5
75°	1820.5	1221.9	1860.6	3138.6	3545.5	3041.1	1890.1	1213.0	1896.4	2645.8	3036.4
76°	1469.5	882.7	1507.1	2902.0	3271.9	2804.6	1359.3	686.8	1366.7	2322.4	2772.1
77°	1130.9	804.0	1194.5	2630.0	2900.5	2519.2	832.1	503.2	799.4	1966.9	2407.8
78°	1064.0	1048.6	1159.8	2293.2	2445.1	2072.3	410.6	329.4	591.4	1527.0	1925.2
79°	1311.2	997.4	1396.3	1903.3	1997.5	1440.8	218.6	155.7	392.8	1011.3	1390.4
80°	1532.3	946.2	1193.4	1519.0	1621.4	813.9	181.6	132.7	194.1	571.2	855.6
81°	1196.0	890.2	990.5	1378.6	1245.2	390.9	144.7	113.7	161.0	371.1	617.9
82°	859.5	511.0	784.4	1139.7	869.1	231.2	107.8	96.2	136.9	172.3	386.8
83°	489.8	363.3	444.3	900.8	601.3	178.8	89.7	80.3	111.9	131.1	155.7
84°	276.3	215.6	268.3	660.9	364.4	146.7	73.1	65.0	87.3	105.0	123.3
85°	183.3	69.8	215.6	370.6	265.8	114.6	58.2	51.6	66.7	79.4	101.7
86°	91.0	47.3	162.9	296.7	167.1	82.7	44.7	38.3	51.7	57.7	81.2
87°	63.2	24.8	110.1	222.8	69.7	58.4	32.7	24.9	36.9	41.4	56.9
88°	35.4	2.3	57.4	148.9	47.3	39.7	22.5	14.1	22.1	25.2	33.3
89°	7.8	1.5	5.2	75.0	24.9	21.1	12.3	5.3	9.5	10.1	9.6



REPORT NUMBER: P1436727

CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1436727

CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1436727

CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1436727

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2365.9	2365.9	2365.9
1°	2399.3	2404.0	2406.0
2°	2441.2	2450.7	2452.5
3°	2486.9	2500.7	2504.9
4°	2538.0	2558.4	2563.2
5°	2595.3	2621.8	2628.8
6°	2658.7	2691.6	2701.1
7°	2726.5	2768.6	2779.8
8°	2799.9	2851.1	2866.0
9°	2881.1	2939.6	2959.0
10°	2967.1	3037.5	3059.6
11°	3060.8	3145.3	3168.9
12°	3162.5	3257.8	3286.8
13°	3271.5	3380.2	3411.7
14°	3387.0	3512.1	3549.9
15°	3507.6	3648.7	3697.0
16°	3631.4	3791.2	3848.7
17°	3759.5	3936.6	4000.0
18°	3885.2	4080.9	4149.1
19°	4007.4	4217.5	4289.2
20°	4125.5	4347.3	4418.3
21°	4235.8	4464.9	4534.5
22°	4339.4	4570.0	4634.8
23°	4438.1	4663.6	4725.7
24°	4529.6	4747.6	4805.5
25°	4615.6	4820.1	4874.1
26°	4692.7	4884.6	4933.3
27°	4764.6	4939.2	4986.5
28°	4828.1	4986.8	5031.3
29°	4885.6	5026.9	5068.6
30°	4934.6	5061.2	5097.9
31°	4979.4	5087.2	5122.0
32°	5017.4	5109.4	5139.4
33°	5049.8	5124.8	5152.7
34°	5076.2	5134.9	5158.7
35°	5098.5	5138.9	5161.5
36°	5115.4	5138.7	5160.0
37°	5126.2	5135.2	5152.9
38°	5133.2	5127.4	5142.2
39°	5135.5	5116.8	5129.1
40°	5133.9	5102.6	5111.7
41°	5127.5	5085.4	5087.9
42°	5117.2	5064.7	5061.7
43°	5102.9	5041.7	5029.5
44°	5083.7	5013.1	4992.0



REPORT NUMBER: P1436727

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	5062.1	4981.2	4948.5
46°	5035.7	4943.5	4897.4
47°	5005.9	4900.4	4842.5
48°	4972.0	4853.1	4783.7
49°	4933.8	4798.1	4716.8
50°	4890.3	4739.4	4644.6
51°	4840.4	4673.6	4563.2
52°	4784.4	4598.3	4476.9
53°	4721.8	4518.0	4384.8
54°	4656.1	4431.9	4289.6
55°	4584.8	4337.6	4189.2
56°	4506.1	4240.0	4082.3
57°	4422.8	4138.8	3978.4
58°	4334.1	4032.5	3868.5
59°	4244.6	3926.2	3759.9
60°	4154.0	3817.1	3643.2
61°	4060.1	3704.8	3522.2
62°	3968.6	3591.0	3395.6
63°	3878.1	3476.2	3270.8
64°	3790.5	3370.0	3153.4
65°	3706.5	3269.0	3058.6
66°	3627.0	3186.6	2989.0
67°	3551.4	3125.8	2949.5
68°	3483.4	3084.1	2908.5
69°	3424.2	3040.9	2814.7
70°	3379.1	2968.7	2629.6
71°	3332.6	2830.0	2349.2
72°	3273.5	2585.7	2046.4
73°	3182.4	2265.7	1733.7
74°	3016.7	1910.9	1373.1
75°	2755.4	1538.0	920.9
76°	2414.2	1112.8	501.2
77°	2032.5	639.4	327.8
78°	1554.9	472.1	155.8
79°	997.1	304.8	124.1
80°	531.9	137.6	107.0
81°	348.8	114.0	92.0
82°	167.9	96.8	78.6
83°	129.7	81.3	66.2
84°	104.1	67.1	54.9
85°	79.1	54.9	43.7
86°	58.8	42.7	32.5
87°	42.0	30.6	22.1
88°	25.3	19.4	12.8
89°	9.9	8.2	5.4



REPORT NUMBER: P1436727

CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1436727

CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1436727

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)