

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: P1436703

Luminaire Tested: XAS180-SFPM (3000K-108W-T5)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436703
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 (3000K-108W-T5)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 5
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

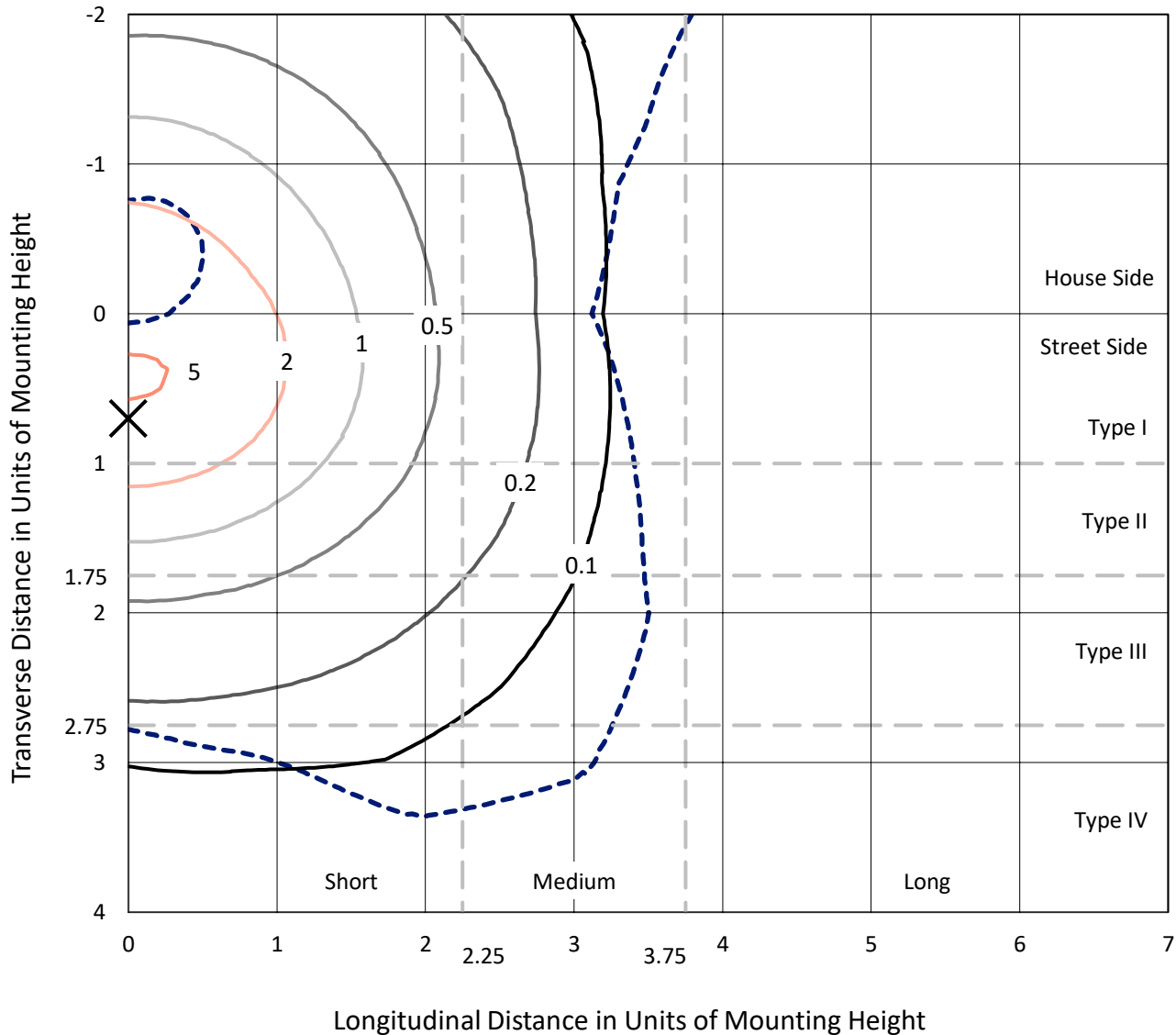
Lumens per Lamp: 28628 (1 lamp)
Luminaire Lumens: 16717.2 lumens
Efficiency: 58.4%
Efficacy: 152.3 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 109.8
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

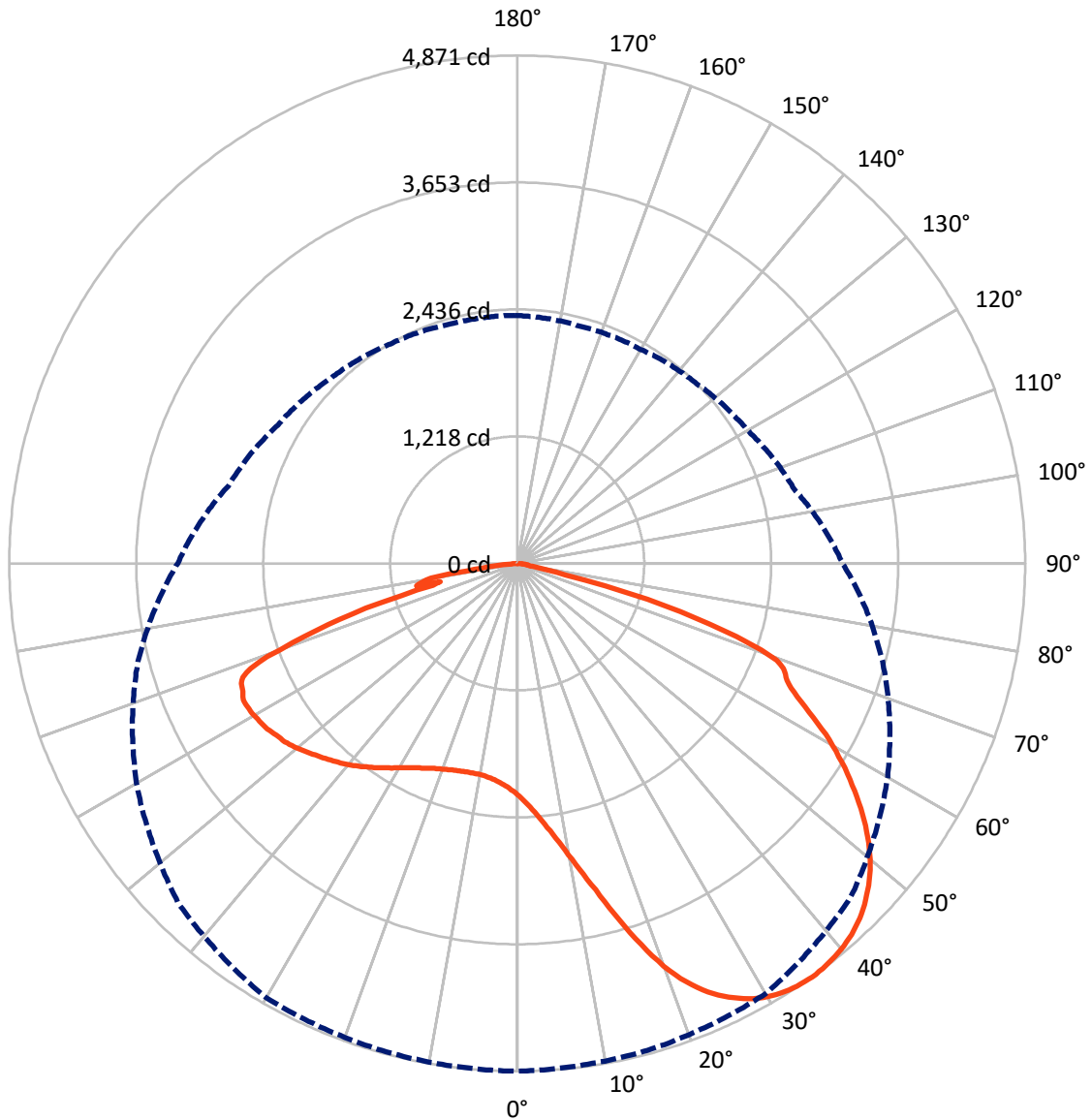
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 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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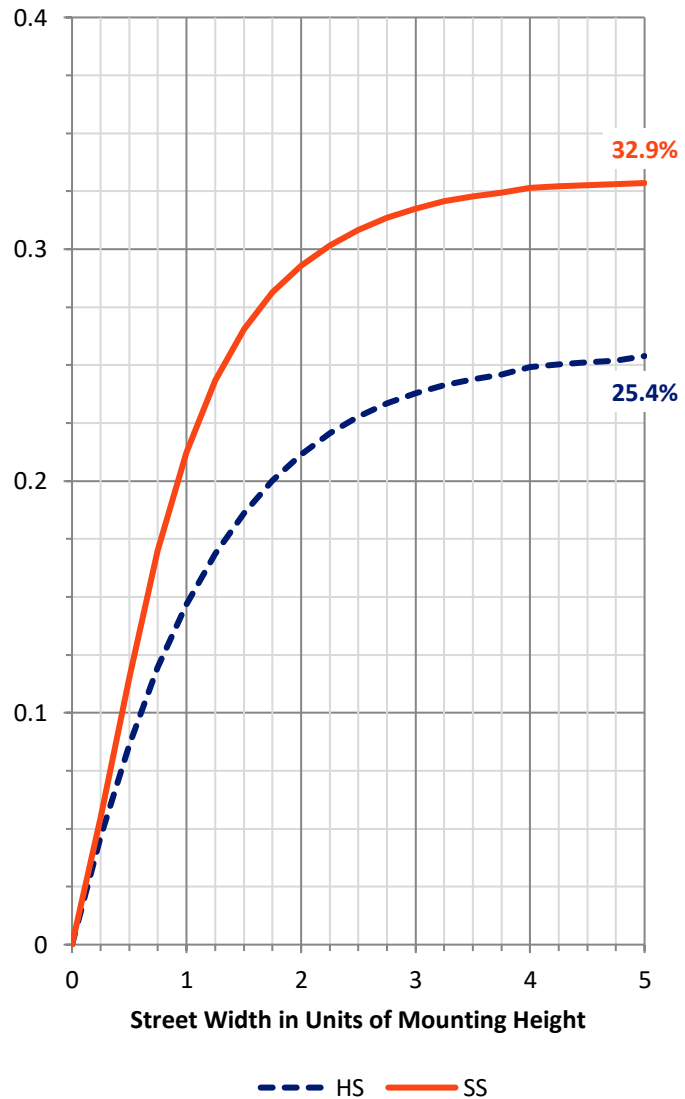
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7318.6	0.0	7318.6
	% Lamp	25.6	0.0	25.6
Street Side	Lumens	9398.7	0.0	9398.7
	% Lamp	32.8	0.0	32.8
Total	Lumens	16717.2	0.0	16717.2
	% Lamp	58.4	0.0	58.4

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	221.5	1.3	0.8
10°-20°	751.6	4.5	2.6
20°-30°	1442.8	8.6	5.0
30°-40°	2173.4	13.0	7.6
40°-50°	2842.3	17.0	9.9
50°-60°	3342.6	20.0	11.7
60°-70°	3487.5	20.9	12.2
70°-80°	2232.8	13.4	7.8
80°-90°	222.8	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°	16717.2	100.0	58.4
0°-180°	16717.2	100.0	58.4

Coefficient of Utilization



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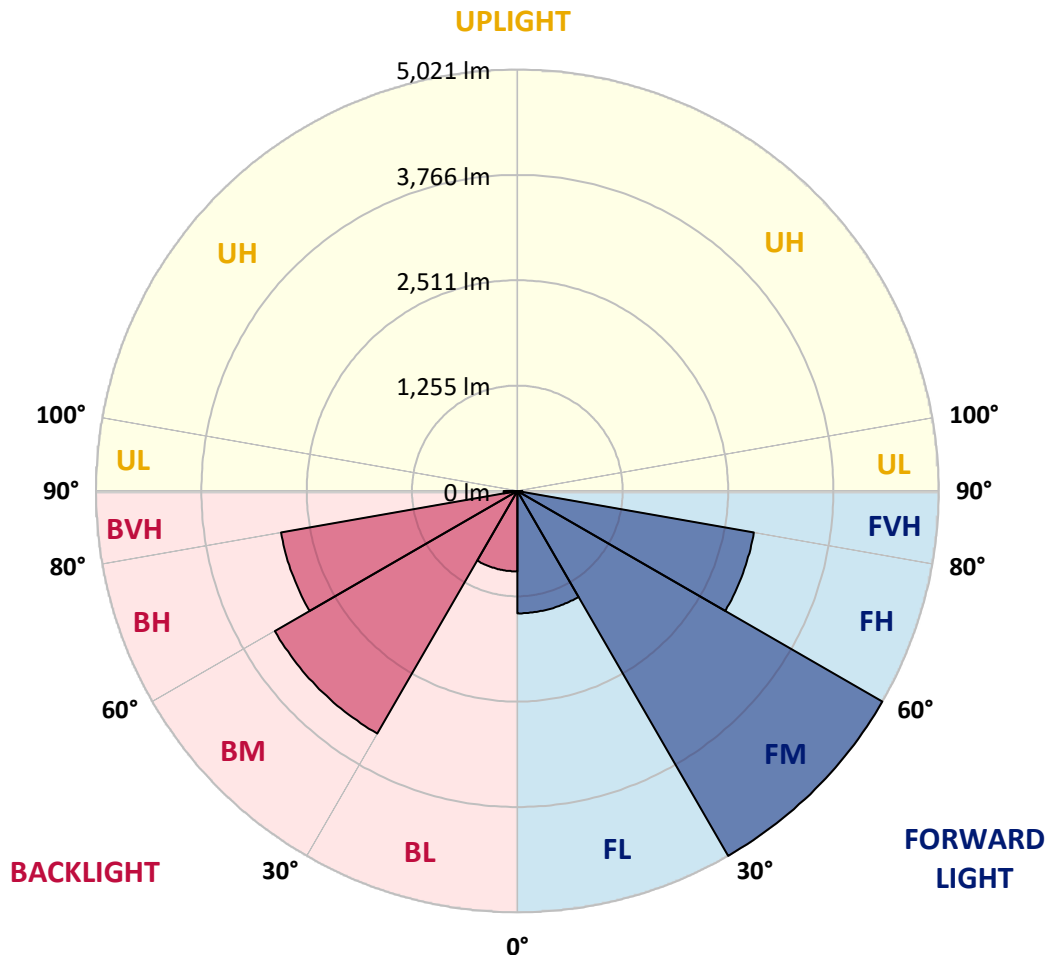
CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1457.9	5.1			
FM (30°-60°)	5021.1	17.5			
FH (60°-80°)	2860.9	10.0			G2/5000
FVH (80°-90°)	58.7	0.2			G1/100
BL (0°-30°)	958.0	3.3	B2/1000		
BM (30°-60°)	3337.2	11.7	B3/5000		
BH (60°-80°)	2859.3	10.0	B4/5000		G4/5000
BVH (80°-90°)	164.1	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	11910.8	41.6			

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°	2232.7	2232.7	2232.7	2232.7	2232.7	2232.7	2232.7	2232.7	2232.7	2232.7	2232.7
1°	2270.6	2270.0	2266.9	2261.5	2254.0	2246.0	2228.7	2219.6	2212.4	2206.1	2202.2
2°	2314.5	2312.4	2304.7	2291.6	2274.3	2256.1	2229.4	2212.2	2197.1	2184.7	2176.8
3°	2363.9	2359.9	2346.1	2325.0	2299.0	2270.1	2233.3	2207.2	2184.7	2166.9	2154.3
4°	2418.9	2412.2	2392.4	2362.7	2326.0	2286.0	2238.5	2204.3	2174.9	2152.2	2136.0
5°	2480.8	2471.5	2444.5	2403.9	2356.3	2304.8	2245.8	2202.8	2167.2	2139.7	2120.3
6°	2549.1	2535.9	2502.3	2450.2	2389.2	2324.9	2254.4	2203.4	2161.8	2130.0	2107.3
7°	2623.4	2607.2	2565.3	2501.8	2425.2	2347.6	2266.2	2206.4	2158.1	2122.5	2097.5
8°	2704.7	2684.3	2633.8	2556.2	2464.1	2373.6	2280.1	2211.7	2157.0	2116.3	2089.3
9°	2792.5	2770.0	2707.4	2615.0	2507.9	2400.7	2295.5	2218.0	2158.0	2112.7	2083.1
10°	2887.4	2858.3	2786.7	2679.2	2555.0	2430.5	2313.1	2226.9	2160.5	2111.9	2078.9
11°	2990.5	2957.8	2872.3	2748.4	2604.4	2462.7	2332.0	2237.7	2164.7	2112.9	2077.2
12°	3101.8	3061.4	2963.0	2819.9	2655.2	2497.9	2352.8	2249.2	2170.6	2115.1	2078.4
13°	3219.7	3174.9	3061.6	2896.6	2710.2	2535.1	2374.6	2262.0	2177.6	2119.2	2081.0
14°	3350.1	3297.6	3166.8	2978.6	2768.5	2572.3	2396.7	2274.7	2185.2	2124.6	2084.0
15°	3488.9	3429.3	3277.8	3064.8	2828.5	2611.1	2420.4	2288.5	2194.3	2130.9	2088.6
16°	3632.1	3563.3	3393.6	3157.4	2893.1	2652.4	2446.0	2304.3	2203.9	2138.1	2094.7
17°	3774.8	3699.0	3509.1	3252.3	2960.4	2695.3	2472.5	2320.1	2215.1	2145.7	2101.4
18°	3915.6	3831.7	3625.0	3347.9	3030.8	2739.1	2500.2	2338.0	2227.0	2155.2	2107.9
19°	4047.8	3959.0	3739.3	3440.6	3103.5	2784.8	2528.9	2356.7	2239.2	2165.1	2115.9
20°	4169.6	4079.2	3847.6	3533.1	3177.6	2832.5	2559.4	2376.6	2252.3	2175.6	2125.1
21°	4279.3	4190.7	3952.7	3623.0	3250.8	2882.1	2590.2	2397.4	2266.1	2185.7	2135.0
22°	4373.9	4286.0	4051.2	3710.4	3324.5	2933.0	2622.5	2418.9	2281.9	2197.6	2146.1
23°	4459.7	4377.8	4142.7	3794.1	3397.4	2986.2	2656.1	2441.0	2299.2	2210.2	2158.4
24°	4535.0	4457.0	4227.6	3872.8	3468.9	3040.9	2690.2	2464.3	2316.8	2224.6	2171.6
25°	4599.8	4527.7	4306.2	3949.8	3538.9	3096.3	2726.2	2488.4	2335.0	2240.1	2185.0
26°	4655.6	4590.3	4379.9	4021.8	3606.3	3151.2	2762.8	2513.3	2353.9	2255.9	2199.8
27°	4705.8	4643.5	4445.0	4090.9	3671.9	3207.2	2799.5	2538.5	2373.1	2272.7	2215.2
28°	4748.2	4688.8	4503.7	4157.3	3733.8	3262.7	2837.7	2563.0	2393.5	2291.0	2231.5
29°	4783.3	4728.4	4557.4	4220.2	3792.6	3318.1	2876.6	2588.8	2413.3	2310.8	2248.6
30°	4811.0	4760.0	4605.5	4281.0	3850.9	3371.6	2916.8	2615.0	2434.8	2330.5	2266.3
31°	4833.7	4785.4	4647.5	4336.9	3904.9	3424.8	2957.0	2640.6	2457.1	2350.4	2284.9
32°	4850.2	4806.1	4684.7	4389.1	3956.7	3477.1	2997.6	2667.6	2479.2	2371.2	2304.8
33°	4862.7	4821.1	4717.1	4438.8	4006.7	3527.9	3038.1	2695.5	2502.5	2391.8	2325.4
34°	4868.4	4830.1	4743.0	4483.2	4054.2	3577.5	3078.9	2722.0	2526.0	2413.2	2346.5
35°	4871.0	4834.3	4764.9	4524.3	4101.1	3625.4	3119.6	2749.1	2550.1	2435.3	2368.9
36°	4869.6	4835.6	4782.1	4562.2	4144.2	3671.8	3160.1	2776.2	2574.6	2457.8	2392.3
37°	4862.8	4831.8	4794.4	4596.6	4186.2	3716.5	3199.8	2804.2	2599.5	2481.2	2416.3
38°	4852.8	4824.9	4802.6	4627.5	4226.5	3760.4	3240.7	2832.9	2624.2	2505.8	2440.6
39°	4840.4	4816.4	4805.5	4653.6	4265.2	3803.5	3281.6	2861.4	2649.6	2530.3	2464.8
40°	4824.0	4804.1	4805.4	4677.3	4301.8	3845.1	3323.3	2891.9	2675.7	2555.5	2489.3
41°	4801.5	4787.5	4800.1	4697.3	4335.8	3885.2	3362.8	2923.7	2702.7	2581.0	2514.3
42°	4776.8	4766.8	4791.4	4714.5	4369.5	3924.6	3401.1	2955.8	2729.8	2607.7	2539.7
43°	4746.5	4744.1	4779.5	4727.2	4400.0	3963.7	3438.8	2986.9	2756.9	2635.5	2565.4
44°	4711.1	4718.0	4763.1	4734.5	4429.0	4001.1	3473.3	3019.5	2784.8	2663.2	2592.2

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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	4670.0	4685.6	4740.9	4740.0	4457.2	4038.4	3508.9	3053.8	2814.6	2691.4	2619.1
46°	4621.8	4651.2	4718.1	4741.0	4484.0	4075.4	3543.4	3089.3	2845.3	2720.4	2646.8
47°	4569.9	4609.1	4690.2	4737.8	4509.9	4112.8	3576.8	3125.1	2876.5	2749.6	2675.7
48°	4514.5	4563.2	4657.9	4729.0	4533.0	4146.9	3608.2	3161.3	2909.0	2779.4	2704.8
49°	4451.3	4511.1	4622.6	4718.8	4553.2	4180.0	3638.3	3198.0	2942.4	2810.9	2734.7
50°	4383.2	4452.5	4579.9	4701.9	4571.1	4212.6	3667.3	3234.2	2976.1	2842.7	2766.1
51°	4306.4	4388.4	4533.1	4681.6	4586.5	4242.4	3696.5	3271.0	3011.4	2876.9	2797.6
52°	4224.9	4315.7	4479.7	4654.9	4598.8	4269.7	3723.9	3309.2	3047.6	2912.2	2831.7
53°	4138.1	4238.3	4422.7	4623.0	4607.9	4294.7	3749.7	3345.4	3084.3	2947.4	2864.2
54°	4048.2	4152.9	4359.2	4587.7	4611.3	4316.6	3774.3	3380.7	3123.3	2983.9	2899.1
55°	3953.4	4061.8	4288.9	4546.1	4609.4	4334.4	3795.8	3412.6	3162.5	3022.4	2934.9
56°	3852.5	3969.2	4212.4	4499.0	4603.3	4347.9	3815.3	3443.3	3201.9	3061.9	2971.6
57°	3754.5	3872.0	4134.7	4447.9	4589.3	4356.5	3832.6	3471.5	3241.6	3103.5	3009.3
58°	3650.8	3773.3	4051.2	4391.2	4568.2	4358.0	3844.3	3497.0	3281.4	3146.9	3044.8
59°	3548.3	3672.8	3967.6	4328.2	4540.0	4351.9	3851.2	3519.9	3321.3	3192.5	3079.8
60°	3438.1	3571.6	3879.5	4260.4	4504.2	4338.3	3854.6	3539.4	3361.2	3238.7	3114.5
61°	3323.9	3465.1	3791.5	4190.1	4460.2	4318.4	3850.8	3555.1	3401.3	3285.5	3149.4
62°	3204.4	3356.6	3704.2	4114.4	4410.4	4287.9	3839.9	3566.2	3439.8	3331.9	3183.6
63°	3086.7	3247.4	3617.9	4035.3	4354.9	4246.0	3819.9	3572.4	3477.7	3377.5	3216.8
64°	2975.9	3141.3	3532.2	3955.0	4289.6	4193.0	3790.3	3573.8	3514.9	3423.2	3248.4
65°	2886.5	3044.5	3448.8	3872.8	4219.0	4130.1	3753.2	3567.9	3550.4	3469.4	3278.4
66°	2820.7	2964.7	3368.6	3791.0	4139.3	4054.5	3702.5	3553.1	3581.3	3520.4	3305.6
67°	2783.5	2906.5	3296.1	3710.4	4048.7	3969.5	3637.5	3528.6	3607.3	3568.5	3330.8
68°	2744.8	2866.6	3232.8	3630.7	3948.3	3869.7	3523.5	3485.9	3626.6	3613.8	3329.8
69°	2656.2	2827.9	3181.4	3551.4	3836.4	3738.5	3340.6	3401.2	3633.8	3654.5	3316.2
70°	2481.6	2756.6	3140.8	3471.4	3719.1	3555.0	3087.4	3260.4	3629.1	3687.6	3318.5
71°	2217.0	2615.7	3104.1	3395.4	3579.1	3316.7	2778.7	3056.8	3594.8	3708.6	3299.3
72°	1931.2	2386.2	3060.4	3316.7	3407.8	3034.0	2486.9	2821.0	3511.2	3700.2	3260.3
73°	1636.1	2089.1	2991.0	3232.5	3208.8	2745.4	2241.5	2587.2	3379.3	3655.1	3207.1
74°	1295.8	1769.1	2855.8	3131.1	2985.3	2464.4	1949.0	2365.3	3209.7	3571.5	3102.1
75°	869.1	1423.9	2617.8	2984.2	2731.7	2155.0	1482.2	2105.3	3019.2	3441.1	2944.9
76°	473.0	1010.5	2296.8	2770.1	2467.1	1732.4	1015.4	1629.8	2830.9	3229.6	2731.7
77°	309.3	564.0	1952.4	2464.1	2178.3	1174.2	552.4	1154.3	2618.1	2919.6	2479.5
78°	147.1	415.4	1538.5	2041.6	1812.5	643.6	268.1	681.6	2302.3	2497.9	2169.6
79°	117.2	269.4	1014.5	1546.9	1341.7	477.6	167.1	332.2	1745.1	2037.6	1821.2
80°	101.0	123.5	536.5	1020.4	821.8	322.0	144.5	184.9	1187.9	1626.4	1497.2
81°	86.9	104.3	342.7	534.2	586.7	166.4	121.9	154.8	632.6	1285.9	1358.2
82°	74.2	88.8	152.8	344.0	361.3	140.5	99.4	124.7	303.7	947.7	1148.4
83°	62.5	74.3	122.7	156.1	135.8	115.6	83.8	94.6	199.8	709.8	938.6
84°	51.8	61.1	99.3	122.3	109.0	89.5	68.9	76.4	160.4	499.6	726.7
85°	41.2	50.1	76.0	100.9	83.9	68.7	54.6	60.9	131.3	322.2	449.3
86°	30.6	39.1	56.9	80.9	61.7	54.1	41.2	47.3	102.3	231.5	317.4
87°	20.9	28.1	41.2	59.0	45.5	39.5	28.7	35.1	74.8	140.7	185.6
88°	12.1	18.4	25.5	47.4	29.4	25.0	19.9	26.8	49.4	52.0	55.3
89°	5.1	8.0	10.7	36.0	13.3	12.6	11.2	18.5	33.6	35.3	37.4



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CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436703

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436703

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436703

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2232.7	2232.7	2232.7	2232.7	2232.7	2232.7	2232.7	2232.7	2232.7	2232.7	2232.7
1°	2200.3	2200.0	2201.8	2207.7	2213.4	2221.7	2230.4	2232.4	2241.0	2250.3	2257.8
2°	2172.3	2171.3	2175.5	2183.7	2195.2	2209.0	2226.3	2236.9	2255.9	2274.3	2290.2
3°	2148.0	2146.5	2151.8	2162.9	2179.2	2200.0	2224.6	2244.3	2272.4	2301.3	2327.0
4°	2127.7	2125.9	2132.3	2145.9	2166.7	2193.1	2225.1	2253.5	2291.6	2331.0	2367.2
5°	2110.5	2107.9	2115.6	2132.0	2156.2	2188.7	2227.3	2264.6	2314.0	2364.4	2410.3
6°	2096.1	2093.1	2101.9	2120.2	2148.9	2186.2	2231.5	2278.1	2337.8	2400.5	2459.9
7°	2083.7	2080.9	2090.0	2110.9	2143.0	2186.0	2238.7	2294.3	2365.0	2440.9	2513.5
8°	2074.7	2071.3	2081.6	2104.4	2139.6	2187.6	2247.4	2311.5	2393.8	2484.9	2571.5
9°	2067.0	2063.7	2074.8	2100.2	2138.2	2191.0	2257.3	2330.6	2425.5	2531.7	2633.3
10°	2062.1	2058.5	2070.7	2097.9	2138.8	2195.6	2268.7	2351.7	2459.2	2581.4	2700.3
11°	2059.9	2055.7	2069.0	2098.3	2142.3	2202.2	2282.5	2375.2	2496.9	2634.9	2773.0
12°	2059.0	2055.2	2069.2	2100.8	2147.2	2211.0	2297.9	2399.9	2535.5	2692.0	2848.5
13°	2060.9	2055.9	2070.7	2104.6	2153.6	2221.0	2314.7	2426.4	2576.4	2752.2	2930.9
14°	2062.8	2058.7	2074.5	2110.1	2162.2	2232.3	2332.0	2453.6	2618.9	2815.4	3017.6
15°	2066.7	2062.0	2079.2	2116.7	2172.1	2245.5	2350.2	2481.8	2663.0	2882.4	3111.0
16°	2071.2	2066.5	2084.4	2123.4	2182.0	2259.6	2369.7	2512.1	2709.4	2953.5	3208.6
17°	2076.4	2071.7	2090.7	2131.8	2193.5	2274.8	2390.5	2543.4	2758.1	3027.4	3308.2
18°	2082.7	2077.9	2098.5	2140.3	2205.7	2289.9	2411.6	2575.4	2807.2	3104.7	3409.8
19°	2089.8	2085.5	2106.3	2150.3	2217.9	2306.8	2434.0	2608.3	2858.3	3183.5	3510.2
20°	2098.9	2094.1	2115.9	2161.3	2230.9	2323.6	2457.4	2642.6	2913.2	3262.8	3606.1
21°	2108.8	2104.6	2126.5	2173.3	2243.9	2341.5	2482.3	2678.3	2967.4	3345.6	3699.6
22°	2119.7	2115.3	2138.5	2186.5	2258.5	2360.4	2507.7	2715.2	3026.1	3425.1	3789.1
23°	2131.8	2128.2	2151.6	2200.5	2274.2	2380.2	2533.0	2753.2	3086.8	3504.0	3874.4
24°	2144.8	2142.5	2166.0	2215.8	2290.5	2399.8	2559.1	2792.1	3146.8	3579.0	3953.8
25°	2159.0	2157.1	2181.4	2231.8	2308.4	2420.7	2586.5	2830.8	3207.8	3652.6	4029.5
26°	2174.5	2173.6	2197.9	2248.2	2326.8	2441.6	2613.7	2871.2	3269.6	3721.0	4102.7
27°	2190.2	2191.2	2215.2	2265.5	2345.9	2462.1	2641.4	2912.2	3331.5	3787.0	4170.5
28°	2206.9	2211.2	2233.1	2284.0	2365.8	2484.6	2669.3	2955.2	3392.8	3850.6	4236.3
29°	2225.0	2231.9	2252.2	2302.8	2386.4	2506.9	2697.8	2996.9	3452.0	3910.7	4299.0
30°	2244.4	2254.4	2272.7	2322.1	2406.3	2530.0	2725.9	3039.5	3511.1	3967.5	4357.6
31°	2264.9	2277.1	2294.1	2342.0	2427.7	2553.2	2753.9	3082.2	3567.4	4021.0	4412.5
32°	2286.1	2301.6	2315.7	2363.7	2450.0	2577.4	2782.7	3125.4	3621.4	4071.9	4464.2
33°	2308.4	2326.3	2337.8	2385.1	2472.2	2601.5	2811.0	3169.0	3674.3	4122.5	4513.7
34°	2330.4	2351.2	2359.9	2407.5	2495.6	2626.0	2839.7	3212.4	3723.2	4169.6	4559.6
35°	2352.5	2376.8	2382.1	2430.8	2518.8	2651.5	2868.5	3256.2	3772.2	4216.4	4600.6
36°	2375.4	2402.9	2404.3	2454.7	2542.3	2676.9	2899.2	3301.0	3819.5	4258.6	4638.7
37°	2396.5	2428.3	2427.0	2478.4	2566.5	2703.4	2930.0	3343.8	3864.3	4300.3	4672.9
38°	2419.8	2455.1	2450.9	2503.9	2591.3	2729.1	2961.8	3387.6	3908.9	4339.7	4704.8
39°	2443.1	2481.0	2474.7	2529.0	2616.6	2756.9	2993.6	3429.6	3950.3	4377.1	4731.8
40°	2467.1	2506.1	2499.6	2554.7	2642.9	2783.7	3026.0	3470.5	3990.2	4412.7	4755.3
41°	2492.1	2530.0	2524.5	2580.9	2669.8	2811.3	3058.8	3511.2	4028.5	4446.1	4773.0
42°	2516.9	2554.1	2550.4	2606.5	2698.1	2840.5	3092.2	3549.7	4067.4	4479.5	4786.8
43°	2542.0	2577.3	2577.1	2634.9	2725.7	2870.5	3127.6	3587.6	4105.4	4509.0	4798.5
44°	2568.6	2601.7	2604.6	2662.7	2754.5	2902.3	3163.2	3624.9	4142.7	4536.1	4804.4



REPORT NUMBER: P1436703

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2595.9	2625.9	2632.1	2691.6	2784.6	2932.6	3199.2	3661.4	4178.1	4562.2	4807.3
46°	2623.7	2648.6	2660.4	2720.0	2814.4	2965.3	3235.0	3695.0	4212.3	4585.6	4804.9
47°	2652.9	2670.8	2690.3	2748.9	2845.7	2996.9	3271.4	3725.9	4245.1	4607.4	4798.6
48°	2682.6	2694.6	2720.9	2778.7	2877.2	3030.2	3307.6	3756.7	4275.3	4625.4	4788.7
49°	2713.6	2719.2	2751.4	2808.1	2909.1	3064.1	3342.6	3785.6	4303.8	4641.3	4774.3
50°	2745.0	2742.9	2783.4	2838.9	2942.6	3099.7	3377.8	3813.1	4328.5	4655.7	4756.4
51°	2778.7	2767.7	2815.7	2870.3	2975.4	3134.5	3412.2	3837.8	4351.7	4665.1	4733.0
52°	2811.3	2791.5	2847.9	2903.0	3011.4	3169.5	3445.7	3860.7	4370.5	4671.1	4703.6
53°	2841.6	2810.5	2877.3	2935.7	3047.1	3205.4	3476.3	3881.3	4384.7	4672.1	4670.0
54°	2867.7	2823.9	2904.5	2970.0	3085.0	3240.7	3505.4	3897.1	4395.7	4671.0	4632.3
55°	2891.4	2838.3	2928.2	3004.9	3122.6	3276.6	3532.1	3910.3	4401.5	4662.4	4591.1
56°	2915.9	2855.7	2951.5	3040.9	3163.3	3313.0	3554.8	3920.4	4400.9	4648.9	4543.4
57°	2939.2	2874.2	2975.2	3076.2	3203.1	3349.7	3576.2	3925.8	4393.4	4627.6	4490.4
58°	2962.1	2887.5	2997.8	3114.5	3245.0	3384.9	3593.4	3928.1	4379.3	4600.5	4431.3
59°	2980.7	2897.5	3016.3	3150.0	3289.0	3418.6	3607.1	3926.3	4358.4	4566.3	4367.5
60°	2996.7	2909.4	3032.4	3186.0	3333.8	3451.9	3618.8	3918.6	4330.9	4525.0	4297.9
61°	3013.2	2920.6	3049.0	3219.8	3379.6	3485.5	3626.3	3902.3	4297.1	4475.5	4223.9
62°	3029.3	2928.0	3064.9	3255.4	3423.1	3519.7	3628.8	3877.9	4254.4	4418.3	4146.2
63°	3041.8	2933.7	3079.0	3289.2	3465.1	3551.0	3626.8	3846.7	4200.9	4353.3	4065.4
64°	3052.6	2936.2	3091.5	3321.2	3507.2	3580.1	3620.5	3806.4	4139.6	4283.2	3983.8
65°	3053.5	2913.9	3092.4	3351.0	3549.5	3606.0	3604.7	3753.9	4066.5	4203.3	3898.4
66°	3024.6	2894.9	3061.0	3375.8	3591.1	3626.2	3581.3	3688.1	3982.5	4114.5	3811.8
67°	3008.2	2885.3	3044.1	3394.9	3628.2	3642.3	3543.8	3591.5	3887.9	4017.5	3727.4
68°	3001.5	2849.1	3032.2	3387.3	3663.3	3651.0	3473.6	3427.5	3765.7	3912.4	3641.7
69°	2958.4	2746.5	2985.2	3368.2	3692.4	3644.8	3347.1	3186.8	3590.8	3792.8	3556.6
70°	2873.6	2559.9	2901.4	3366.0	3714.6	3618.9	3148.3	2876.4	3357.9	3655.5	3471.2
71°	2738.6	2284.9	2767.2	3342.1	3718.5	3553.7	2898.2	2557.1	3067.1	3489.3	3379.7
72°	2522.4	2028.7	2552.6	3302.5	3692.5	3437.2	2634.7	2275.4	2757.8	3287.5	3284.4
73°	2255.4	1785.7	2277.3	3241.2	3624.4	3269.0	2384.7	1998.0	2459.0	3054.0	3175.0
74°	1993.5	1514.3	2024.5	3131.2	3513.3	3079.3	2128.6	1646.4	2155.5	2788.6	3046.8
75°	1718.0	1153.2	1755.9	2962.0	3346.0	2870.0	1783.7	1144.7	1789.7	2496.9	2865.5
76°	1386.7	833.0	1422.3	2738.7	3087.7	2646.7	1282.7	648.2	1289.8	2191.7	2616.1
77°	1067.3	758.8	1127.3	2481.9	2737.3	2377.4	785.2	474.9	754.4	1856.2	2272.3
78°	1004.1	989.6	1094.5	2164.1	2307.4	1955.6	387.5	310.9	558.1	1441.1	1816.8
79°	1237.4	941.3	1317.7	1796.1	1885.1	1359.7	206.3	146.9	370.7	954.3	1312.1
80°	1446.1	892.9	1126.2	1433.5	1530.1	768.1	171.4	125.2	183.2	539.0	807.4
81°	1128.6	840.1	934.7	1301.0	1175.1	368.9	136.6	107.3	152.0	350.2	583.1
82°	811.2	482.2	740.2	1075.6	820.2	218.2	101.8	90.8	129.2	162.6	365.0
83°	462.2	342.8	419.3	850.1	567.5	168.7	84.6	75.8	105.6	123.8	146.9
84°	260.7	203.5	253.2	623.7	343.9	138.4	69.0	61.4	82.3	99.1	116.3
85°	173.0	65.9	203.5	349.8	250.8	108.1	54.9	48.7	62.9	75.0	95.9
86°	85.9	44.6	153.7	280.0	157.7	78.1	42.1	36.1	48.8	54.5	76.6
87°	59.6	23.4	103.9	210.3	65.7	55.1	30.9	23.5	34.8	39.1	53.7
88°	33.4	2.1	54.2	140.5	44.6	37.5	21.3	13.3	20.9	23.8	31.4
89°	7.4	1.4	4.9	70.8	23.5	19.9	11.7	5.0	9.0	9.5	9.1



REPORT NUMBER: P1436703

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436703

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436703

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436703

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2232.7	2232.7	2232.7
1°	2264.2	2268.7	2270.6
2°	2303.8	2312.8	2314.5
3°	2346.9	2359.9	2363.9
4°	2395.2	2414.4	2418.9
5°	2449.2	2474.2	2480.8
6°	2509.1	2540.1	2549.1
7°	2573.1	2612.8	2623.4
8°	2642.3	2690.6	2704.7
9°	2718.9	2774.1	2792.5
10°	2800.1	2866.5	2887.4
11°	2888.5	2968.3	2990.5
12°	2984.5	3074.5	3101.8
13°	3087.4	3189.9	3219.7
14°	3196.3	3314.4	3350.1
15°	3310.1	3443.3	3488.9
16°	3427.0	3577.8	3632.1
17°	3547.9	3715.0	3774.8
18°	3666.5	3851.2	3915.6
19°	3781.8	3980.1	4047.8
20°	3893.3	4102.7	4169.6
21°	3997.4	4213.6	4279.3
22°	4095.1	4312.8	4373.9
23°	4188.3	4401.1	4459.7
24°	4274.6	4480.4	4535.0
25°	4355.9	4548.8	4599.8
26°	4428.6	4609.6	4655.6
27°	4496.4	4661.2	4705.8
28°	4556.3	4706.1	4748.2
29°	4610.6	4744.0	4783.3
30°	4656.8	4776.4	4811.0
31°	4699.2	4800.9	4833.7
32°	4735.0	4821.8	4850.2
33°	4765.6	4836.3	4862.7
34°	4790.5	4845.9	4868.4
35°	4811.5	4849.7	4871.0
36°	4827.5	4849.5	4869.6
37°	4837.7	4846.2	4862.8
38°	4844.3	4838.8	4852.8
39°	4846.4	4828.9	4840.4
40°	4845.0	4815.4	4824.0
41°	4838.9	4799.1	4801.5
42°	4829.2	4779.6	4776.8
43°	4815.7	4757.9	4746.5
44°	4797.6	4730.9	4711.1

REPORT NUMBER: P1436703

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	4777.2	4700.8	4670.0
46°	4752.2	4665.2	4621.8
47°	4724.2	4624.6	4569.9
48°	4692.2	4579.9	4514.5
49°	4656.1	4528.0	4451.3
50°	4615.1	4472.7	4383.2
51°	4568.0	4410.5	4306.4
52°	4515.1	4339.5	4224.9
53°	4456.0	4263.7	4138.1
54°	4394.1	4182.4	4048.2
55°	4326.7	4093.4	3953.4
56°	4252.5	4001.4	3852.5
57°	4173.9	3905.9	3754.5
58°	4090.2	3805.5	3650.8
59°	4005.7	3705.2	3548.3
60°	3920.2	3602.3	3438.1
61°	3831.5	3496.2	3323.9
62°	3745.2	3388.9	3204.4
63°	3659.8	3280.5	3086.7
64°	3577.2	3180.3	2975.9
65°	3497.9	3085.0	2886.5
66°	3422.9	3007.2	2820.7
67°	3351.5	2949.9	2783.5
68°	3287.3	2910.5	2744.8
69°	3231.5	2869.8	2656.2
70°	3188.9	2801.6	2481.6
71°	3145.1	2670.7	2217.0
72°	3089.2	2440.1	1931.2
73°	3003.3	2138.2	1636.1
74°	2846.9	1803.4	1295.8
75°	2600.4	1451.4	869.1
76°	2278.3	1050.2	473.0
77°	1918.1	603.4	309.3
78°	1467.4	445.5	147.1
79°	941.0	287.7	117.2
80°	502.0	129.9	101.0
81°	329.1	107.6	86.9
82°	158.5	91.3	74.2
83°	122.4	76.7	62.5
84°	98.2	63.3	51.8
85°	74.6	51.8	41.2
86°	55.5	40.3	30.6
87°	39.7	28.8	20.9
88°	23.9	18.3	12.1
89°	9.3	7.7	5.1



REPORT NUMBER: P1436703

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436703

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436703

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)