

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: P1444968

Luminaire Tested: XAS180-SFPM (3000K-108W-T4)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1444968
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/5/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: XAS180-SFPM (3000K-108W-T4)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 4
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 28628 (1 lamp)
Luminaire Lumens: 17054.3 lumens
Efficiency: 59.6%
Efficacy: 158.5 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

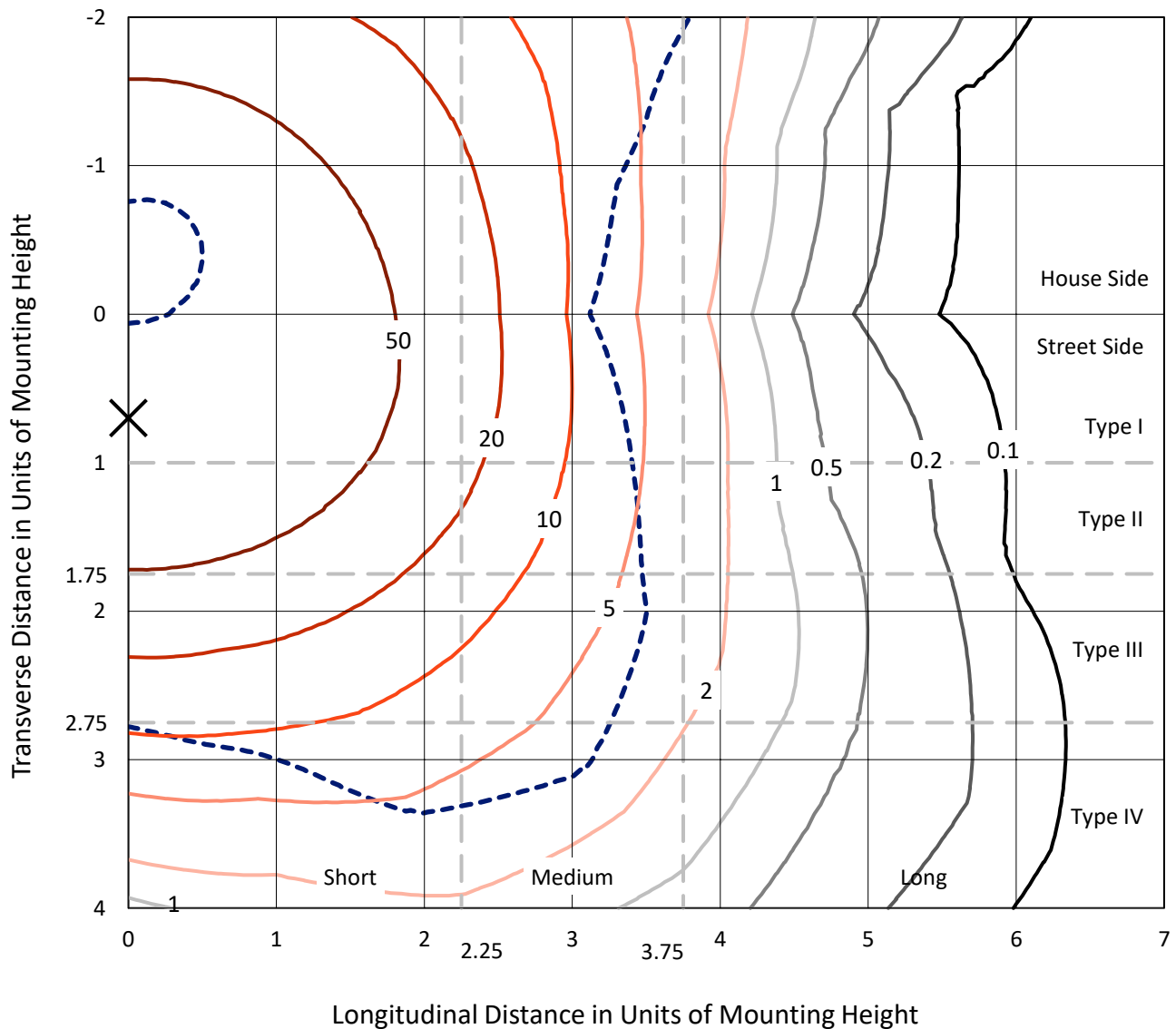
Input Watts (W): 107.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

REPORT NUMBER: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
--- 1/2 Max cd

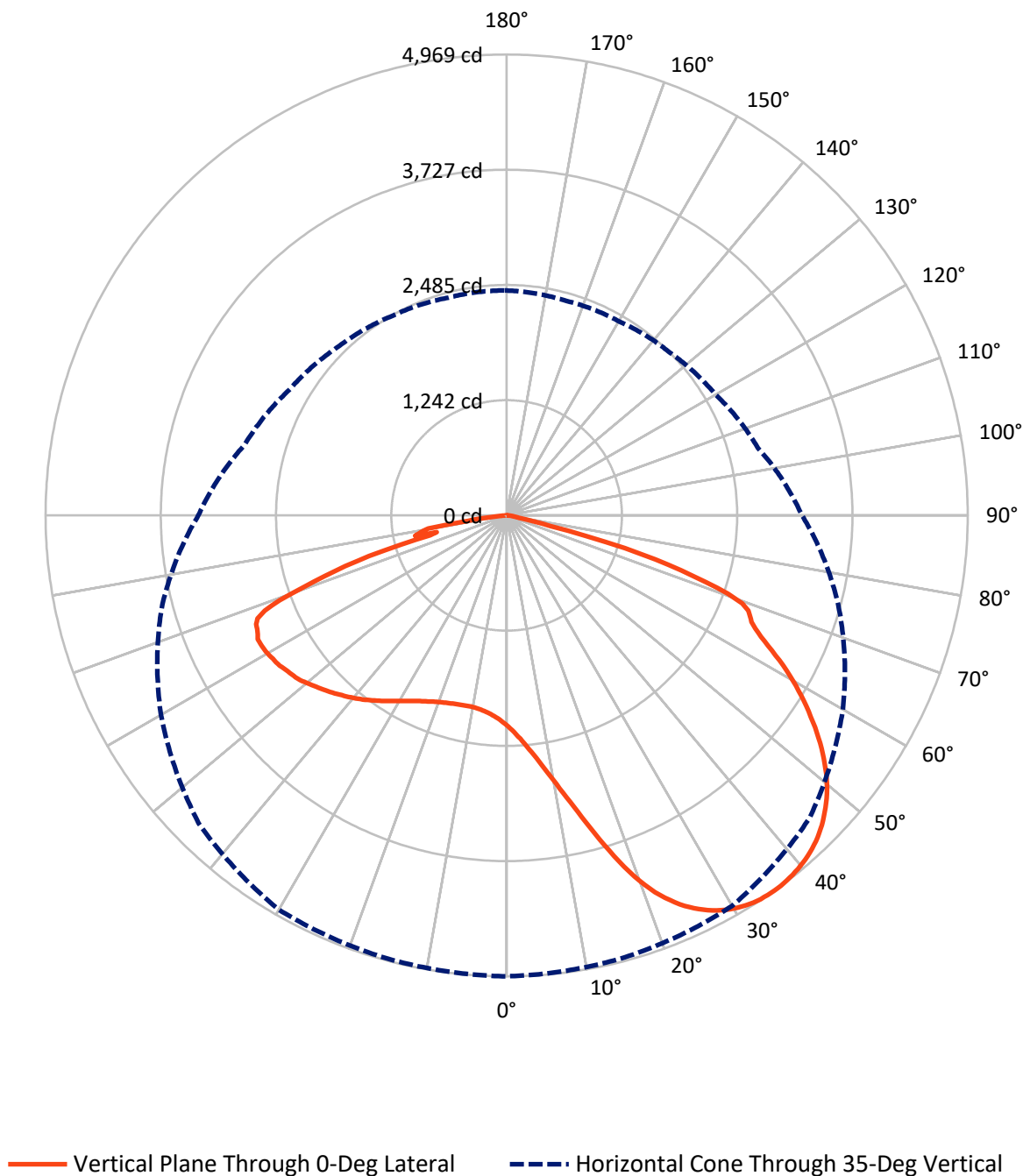


Based on 3 foot mounting height. Maximum calculated value = 393.7 fc
Type IV - Short - Full Cutoff

REPORT NUMBER: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

Luminous Intensity Polar Plot



REPORT NUMBER: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

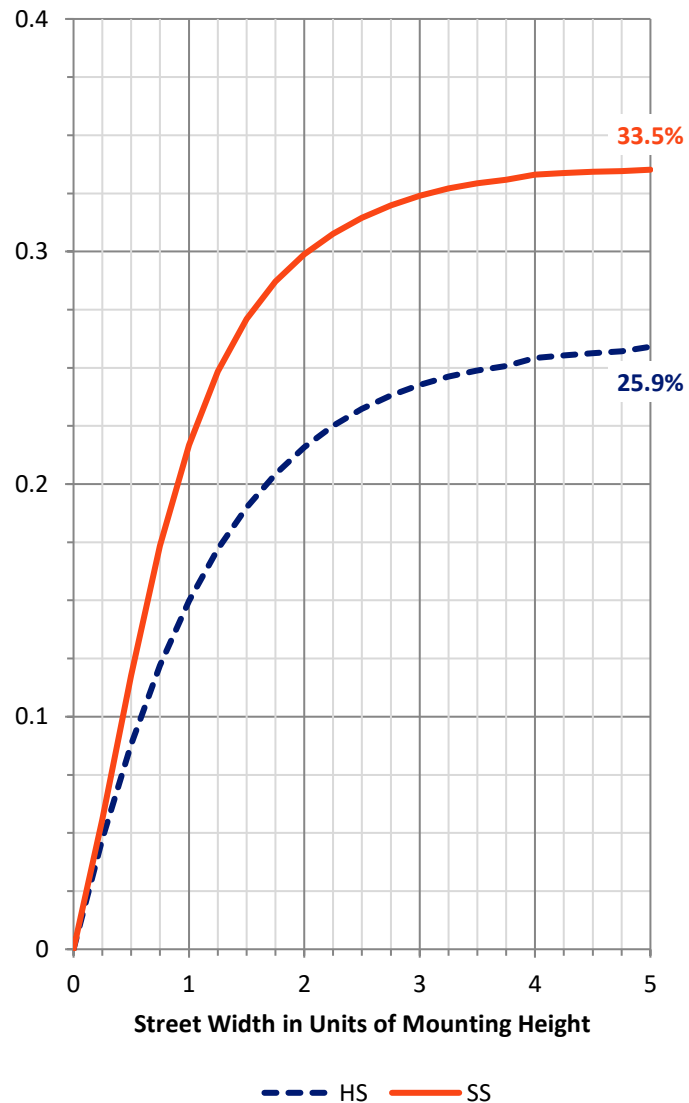
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7466.1	0.0	7466.1
	% Lamp	26.1	0.0	26.1
Street Side	Lumens	9588.2	0.0	9588.2
	% Lamp	33.5	0.0	33.5
Total	Lumens	17054.3	0.0	17054.3
	% Lamp	59.6	0.0	59.6

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	225.9	1.3	0.8
10°-20°	766.8	4.5	2.7
20°-30°	1471.9	8.6	5.1
30°-40°	2217.2	13.0	7.7
40°-50°	2899.6	17.0	10.1
50°-60°	3410.0	20.0	11.9
60°-70°	3557.8	20.9	12.4
70°-80°	2277.8	13.4	8.0
80°-90°	227.3	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°	17054.3	100.0	59.6
0°-180°	17054.3	100.0	59.6

Coefficient of Utilization



REPORT NUMBER: P1444968

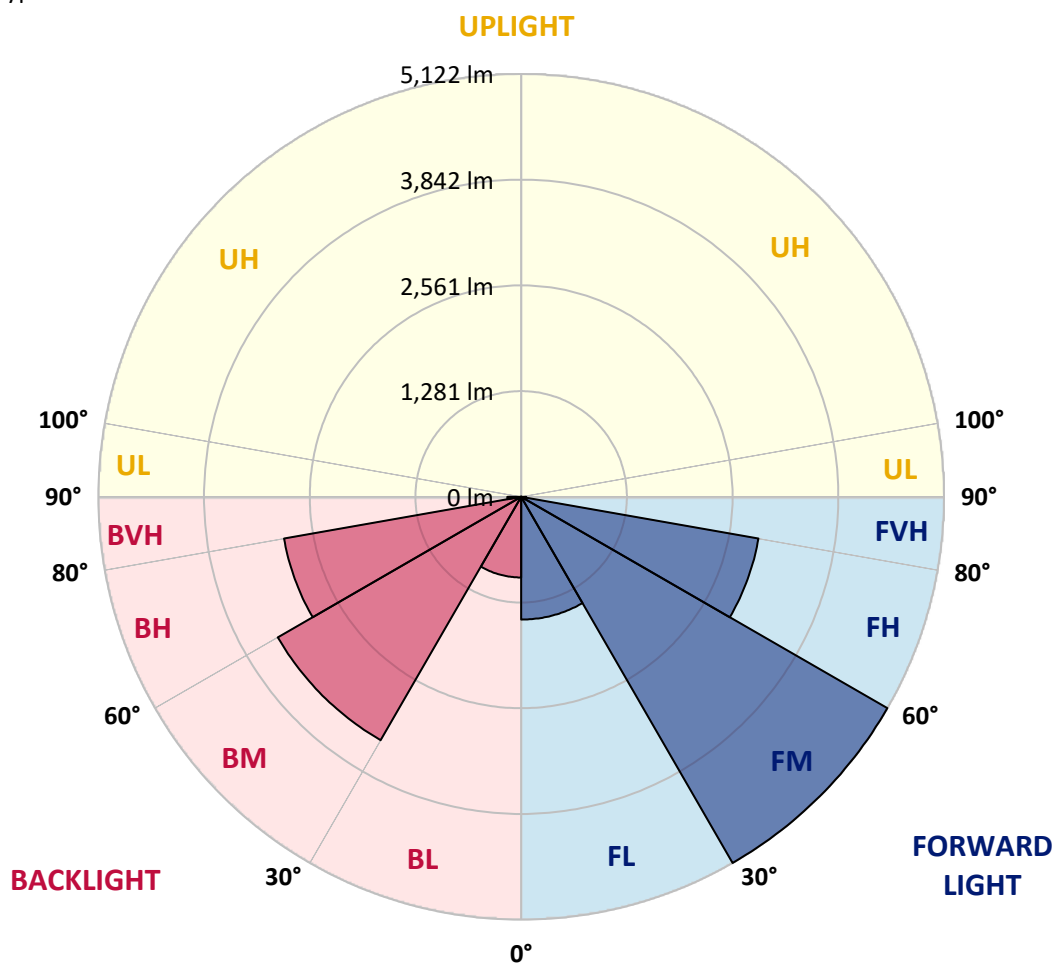
CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1487.3	5.2			
FM	(30°-60°)	5122.4	17.9			
FH	(60°-80°)	2918.6	10.2			G2/5000
FVH	(80°-90°)	59.9	0.2			G1/100
BL	(0°-30°)	977.3	3.4	B2/1000		
BM	(30°-60°)	3404.5	11.9	B3/5000		
BH	(60°-80°)	2916.9	10.2	B4/5000		G4/5000
BVH	(80°-90°)	167.4	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		11573.7	40.4			

BUG Rating: B4-U0-G4

Type IV Short



REPORT NUMBER: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2277.7	2277.7	2277.7	2277.7	2277.7	2277.7	2277.7	2277.7	2277.7	2277.7	2277.7
1°	2316.4	2315.7	2312.6	2307.1	2299.4	2291.2	2273.7	2264.4	2257.0	2250.6	2246.6
2°	2361.1	2359.0	2351.2	2337.8	2320.1	2301.6	2274.3	2256.8	2241.4	2228.8	2220.7
3°	2411.6	2407.5	2393.4	2371.9	2345.3	2315.9	2278.3	2251.8	2228.8	2210.6	2197.7
4°	2467.7	2460.8	2440.6	2410.3	2372.9	2332.1	2283.7	2248.8	2218.8	2195.6	2179.1
5°	2530.8	2521.3	2493.8	2452.3	2403.8	2351.2	2291.1	2247.2	2210.9	2182.9	2163.1
6°	2600.5	2587.1	2552.8	2499.6	2437.4	2371.7	2299.9	2247.9	2205.3	2173.0	2149.8
7°	2676.3	2659.8	2617.0	2552.3	2474.1	2395.0	2311.9	2250.9	2201.7	2165.3	2139.8
8°	2759.2	2738.4	2686.9	2607.7	2513.7	2421.5	2326.0	2256.3	2200.5	2158.9	2131.4
9°	2848.8	2825.9	2762.0	2667.7	2558.5	2449.1	2341.8	2262.7	2201.5	2155.3	2125.1
10°	2945.6	2916.0	2842.9	2733.3	2606.6	2479.5	2359.8	2271.8	2204.1	2154.5	2120.8
11°	3050.8	3017.5	2930.2	2803.9	2656.9	2512.3	2379.1	2282.8	2208.4	2155.5	2119.1
12°	3164.3	3123.2	3022.7	2876.7	2708.7	2548.2	2400.3	2294.5	2214.4	2157.7	2120.3
13°	3284.6	3238.9	3123.3	2955.0	2764.8	2586.2	2422.5	2307.6	2221.5	2162.0	2123.0
14°	3417.6	3364.1	3230.6	3038.6	2824.4	2624.2	2445.1	2320.6	2229.3	2167.4	2126.1
15°	3559.3	3498.5	3343.9	3126.6	2885.5	2663.8	2469.2	2334.7	2238.6	2173.9	2130.8
16°	3705.3	3635.2	3462.1	3221.0	2951.4	2705.9	2495.3	2350.8	2248.4	2181.2	2136.9
17°	3851.0	3773.6	3579.8	3317.9	3020.1	2749.7	2522.3	2366.8	2259.7	2189.0	2143.8
18°	3994.5	3908.9	3698.1	3415.4	3091.9	2794.3	2550.6	2385.2	2271.9	2198.6	2150.4
19°	4129.5	4038.8	3814.7	3510.0	3166.1	2840.9	2579.9	2404.3	2284.3	2208.7	2158.6
20°	4253.7	4161.4	3925.2	3604.4	3241.7	2889.6	2611.0	2424.6	2297.7	2219.5	2167.9
21°	4365.6	4275.2	4032.4	3696.0	3316.3	2940.2	2642.4	2445.7	2311.8	2229.8	2178.1
22°	4462.1	4372.4	4132.9	3785.2	3391.5	2992.1	2675.4	2467.7	2327.9	2241.9	2189.4
23°	4549.6	4466.1	4226.2	3870.6	3465.9	3046.4	2709.6	2490.2	2345.5	2254.8	2201.9
24°	4626.5	4546.9	4312.8	3950.9	3538.9	3102.2	2744.4	2514.0	2363.5	2269.4	2215.4
25°	4692.5	4619.0	4393.1	4029.4	3610.3	3158.7	2781.2	2538.5	2382.0	2285.2	2229.1
26°	4749.5	4682.8	4468.2	4102.9	3679.0	3214.7	2818.5	2564.0	2401.4	2301.4	2244.2
27°	4800.7	4737.1	4534.6	4173.4	3745.9	3271.9	2856.0	2589.7	2421.0	2318.5	2259.9
28°	4843.9	4783.3	4594.5	4241.1	3809.1	3328.5	2894.9	2614.7	2441.7	2337.2	2276.5
29°	4879.8	4823.7	4649.3	4305.3	3869.1	3385.0	2934.6	2641.0	2461.9	2357.4	2294.0
30°	4908.0	4856.0	4698.4	4367.3	3928.6	3439.6	2975.6	2667.7	2483.9	2377.4	2312.0
31°	4931.2	4881.9	4741.3	4424.4	3983.7	3493.9	3016.6	2693.9	2506.6	2397.8	2330.9
32°	4948.0	4903.1	4779.1	4477.7	4036.5	3547.2	3058.1	2721.4	2529.2	2419.0	2351.2
33°	4960.8	4918.4	4812.3	4528.3	4087.5	3599.0	3099.3	2749.8	2552.9	2440.1	2372.3
34°	4966.6	4927.5	4838.7	4573.6	4135.9	3649.6	3141.0	2776.9	2577.0	2461.9	2393.8
35°	4969.2	4931.8	4860.9	4615.6	4183.8	3698.5	3182.5	2804.5	2601.5	2484.4	2416.7
36°	4967.7	4933.1	4878.6	4654.2	4227.8	3745.8	3223.8	2832.2	2626.5	2507.3	2440.5
37°	4960.9	4929.2	4891.1	4689.3	4270.6	3791.4	3264.3	2860.8	2651.9	2531.3	2465.0
38°	4950.7	4922.2	4899.4	4720.8	4311.7	3836.2	3306.1	2890.0	2677.2	2556.3	2489.9
39°	4938.0	4913.5	4902.4	4747.4	4351.2	3880.1	3347.8	2919.1	2703.1	2581.3	2514.5
40°	4921.3	4901.0	4902.3	4771.6	4388.5	3922.7	3390.3	2950.2	2729.7	2607.0	2539.5
41°	4898.3	4884.0	4896.9	4792.0	4423.2	3963.5	3430.6	2982.7	2757.2	2633.1	2565.0
42°	4873.1	4862.9	4888.0	4809.6	4457.6	4003.8	3469.6	3015.4	2784.8	2660.2	2591.0
43°	4842.2	4839.8	4875.8	4822.5	4488.7	4043.7	3508.2	3047.2	2812.4	2688.7	2617.2
44°	4806.1	4813.1	4859.1	4830.0	4518.3	4081.8	3543.4	3080.4	2841.0	2716.9	2644.4

REPORT NUMBER: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	4764.2	4780.0	4836.5	4835.6	4547.1	4119.9	3579.6	3115.4	2871.4	2745.7	2671.9
46°	4715.0	4745.0	4813.3	4836.6	4574.4	4157.6	3614.8	3151.6	2902.7	2775.3	2700.2
47°	4662.1	4702.1	4784.8	4833.3	4600.8	4195.8	3648.9	3188.1	2934.5	2805.1	2729.6
48°	4605.5	4655.2	4751.9	4824.4	4624.4	4230.5	3680.9	3225.1	2967.6	2835.4	2759.4
49°	4541.1	4602.1	4715.8	4813.9	4645.0	4264.3	3711.6	3262.4	3001.8	2867.6	2789.9
50°	4471.6	4542.3	4672.3	4796.7	4663.3	4297.5	3741.2	3299.4	3036.1	2900.0	2821.9
51°	4393.2	4476.9	4624.6	4776.0	4679.0	4327.9	3771.1	3336.9	3072.1	2934.9	2854.0
52°	4310.1	4402.8	4570.0	4748.8	4691.6	4355.8	3799.0	3375.9	3109.0	2971.0	2888.8
53°	4221.5	4323.8	4511.9	4716.2	4700.8	4381.3	3825.3	3412.9	3146.5	3006.8	2921.9
54°	4129.8	4236.6	4447.2	4680.3	4704.3	4403.7	3850.4	3448.9	3186.3	3044.1	2957.6
55°	4033.1	4143.8	4375.4	4637.8	4702.4	4421.8	3872.3	3481.4	3226.3	3083.4	2994.1
56°	3930.2	4049.2	4297.4	4589.7	4696.2	4435.6	3892.2	3512.8	3266.5	3123.6	3031.5
57°	3830.2	3950.1	4218.0	4537.6	4681.9	4444.4	3909.9	3541.5	3306.9	3166.1	3070.0
58°	3724.4	3849.4	4132.9	4479.8	4660.3	4445.8	3921.8	3567.5	3347.6	3210.3	3106.2
59°	3619.8	3746.9	4047.6	4415.5	4631.6	4439.6	3928.9	3590.9	3388.3	3256.8	3141.9
60°	3507.5	3643.6	3957.7	4346.3	4595.1	4425.8	3932.3	3610.8	3429.0	3304.0	3177.3
61°	3390.9	3535.0	3867.9	4274.6	4550.1	4405.5	3928.4	3626.8	3469.9	3351.7	3212.9
62°	3269.1	3424.3	3778.9	4197.4	4499.3	4374.4	3917.3	3638.1	3509.2	3399.1	3247.8
63°	3149.0	3312.8	3690.8	4116.6	4442.7	4331.6	3896.9	3644.5	3547.9	3445.6	3281.6
64°	3036.0	3204.7	3603.4	4034.7	4376.1	4277.5	3866.7	3645.9	3585.7	3492.2	3313.9
65°	2944.7	3105.9	3518.4	3950.9	4304.1	4213.4	3828.9	3639.8	3622.0	3539.4	3344.5
66°	2877.6	3024.5	3436.6	3867.4	4222.7	4136.2	3777.2	3624.8	3653.5	3591.4	3372.2
67°	2839.6	2965.1	3362.6	3785.2	4130.3	4049.6	3710.8	3599.7	3680.0	3640.4	3398.0
68°	2800.1	2924.4	3298.0	3703.9	4027.9	3947.8	3594.5	3556.2	3699.8	3686.7	3397.0
69°	2709.8	2884.9	3245.6	3623.0	3913.7	3813.8	3408.0	3469.8	3707.1	3728.2	3383.1
70°	2531.7	2812.2	3204.1	3541.4	3794.1	3626.7	3149.6	3326.1	3702.3	3762.0	3385.4
71°	2261.7	2668.5	3166.7	3463.9	3651.3	3383.6	2834.8	3118.5	3667.3	3783.4	3365.9
72°	1970.2	2434.3	3122.1	3383.6	3476.5	3095.2	2537.0	2877.9	3582.0	3774.8	3326.1
73°	1669.1	2131.2	3051.3	3297.7	3273.5	2800.8	2286.7	2639.3	3447.5	3728.8	3271.7
74°	1322.0	1804.8	2913.4	3194.2	3045.5	2514.0	1988.3	2413.0	3274.4	3643.5	3164.7
75°	886.6	1452.7	2670.5	3044.4	2786.8	2198.4	1512.1	2147.7	3080.0	3510.4	3004.3
76°	482.6	1030.8	2343.1	2826.0	2516.8	1767.4	1035.8	1662.7	2888.0	3294.7	2786.8
77°	315.6	575.4	1991.8	2513.7	2222.3	1197.9	563.5	1177.6	2670.9	2978.5	2529.5
78°	150.0	423.8	1569.5	2082.7	1849.0	656.6	273.5	695.3	2348.7	2548.3	2213.4
79°	119.5	274.9	1035.0	1578.1	1368.7	487.3	170.4	338.9	1780.2	2078.6	1857.9
80°	103.1	126.0	547.3	1041.0	838.4	328.5	147.4	188.6	1211.8	1659.2	1527.4
81°	88.6	106.4	349.6	545.0	598.6	169.8	124.4	157.9	645.4	1311.8	1385.6
82°	75.7	90.5	155.9	350.9	368.6	143.3	101.4	127.2	309.9	966.8	1171.6
83°	63.7	75.8	125.1	159.3	138.6	117.9	85.4	96.5	203.9	724.1	957.6
84°	52.9	62.4	101.3	124.7	111.2	91.3	70.3	78.0	163.6	509.6	741.3
85°	42.1	51.1	77.5	102.9	85.6	70.1	55.7	62.1	134.0	328.7	458.4
86°	31.2	39.9	58.1	82.5	62.9	55.2	42.1	48.3	104.4	236.1	323.8
87°	21.3	28.7	42.1	60.1	46.5	40.3	29.3	35.8	76.3	143.6	189.3
88°	12.3	18.7	26.1	48.3	30.0	25.5	20.4	27.3	50.4	53.1	56.4
89°	5.2	8.1	10.9	36.7	13.6	12.8	11.4	18.8	34.3	36.0	38.1

REPORT NUMBER: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

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: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

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: P1444968
CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

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: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2277.7	2277.7	2277.7	2277.7	2277.7	2277.7	2277.7	2277.7	2277.7	2277.7	2277.7
1°	2244.7	2244.4	2246.2	2252.2	2258.1	2266.5	2275.4	2277.4	2286.2	2295.7	2303.3
2°	2216.1	2215.1	2219.3	2227.7	2239.4	2253.5	2271.2	2282.0	2301.4	2320.2	2336.4
3°	2191.3	2189.8	2195.2	2206.5	2223.1	2244.4	2269.5	2289.6	2318.2	2347.7	2373.9
4°	2170.6	2168.8	2175.3	2189.2	2210.4	2237.3	2269.9	2298.9	2337.8	2378.0	2415.0
5°	2153.1	2150.4	2158.2	2175.0	2199.6	2232.8	2272.2	2310.3	2360.7	2412.1	2458.9
6°	2138.4	2135.3	2144.3	2163.0	2192.2	2230.3	2276.5	2324.1	2385.0	2448.9	2509.5
7°	2125.7	2122.9	2132.2	2153.5	2186.2	2230.1	2283.8	2340.6	2412.7	2490.2	2564.2
8°	2116.5	2113.1	2123.6	2146.8	2182.7	2231.7	2292.7	2358.1	2442.1	2535.0	2623.3
9°	2108.7	2105.3	2116.6	2142.5	2181.3	2235.2	2302.9	2377.6	2474.4	2582.8	2686.4
10°	2103.7	2100.0	2112.5	2140.2	2181.9	2239.8	2314.4	2399.1	2508.7	2633.5	2754.7
11°	2101.4	2097.2	2110.7	2140.7	2185.4	2246.6	2328.5	2423.1	2547.3	2688.1	2828.9
12°	2100.6	2096.6	2110.9	2143.2	2190.5	2255.6	2344.3	2448.3	2586.7	2746.3	2905.9
13°	2102.4	2097.4	2112.4	2147.0	2197.0	2265.8	2361.4	2475.3	2628.3	2807.7	2990.0
14°	2104.4	2100.2	2116.3	2152.6	2205.8	2277.3	2379.0	2503.0	2671.7	2872.2	3078.4
15°	2108.4	2103.6	2121.2	2159.4	2215.9	2290.8	2397.6	2531.8	2716.7	2940.5	3173.7
16°	2113.0	2108.2	2126.4	2166.3	2226.0	2305.1	2417.5	2562.7	2764.0	3013.1	3273.3
17°	2118.3	2113.5	2132.9	2174.8	2237.8	2320.7	2438.7	2594.6	2813.8	3088.4	3374.9
18°	2124.7	2119.8	2140.8	2183.5	2250.2	2336.0	2460.2	2627.3	2863.8	3167.3	3478.6
19°	2131.9	2127.5	2148.8	2193.6	2262.6	2353.3	2483.1	2660.9	2916.0	3247.7	3581.0
20°	2141.2	2136.4	2158.6	2204.9	2275.9	2370.5	2507.0	2695.9	2971.9	3328.6	3678.9
21°	2151.3	2147.1	2169.4	2217.1	2289.2	2388.7	2532.4	2732.3	3027.2	3413.0	3774.2
22°	2162.5	2158.0	2181.6	2230.5	2304.1	2408.0	2558.2	2769.9	3087.1	3494.2	3865.6
23°	2174.8	2171.1	2195.0	2244.8	2320.1	2428.2	2584.1	2808.7	3149.1	3574.7	3952.5
24°	2188.0	2185.7	2209.6	2260.5	2336.7	2448.2	2610.7	2848.4	3210.3	3651.2	4033.5
25°	2202.5	2200.6	2225.4	2276.8	2355.0	2469.5	2638.7	2887.9	3272.5	3726.3	4110.7
26°	2218.4	2217.4	2242.2	2293.6	2373.8	2490.8	2666.4	2929.1	3335.5	3796.0	4185.5
27°	2234.4	2235.4	2259.9	2311.1	2393.2	2511.8	2694.7	2971.0	3398.7	3863.4	4254.6
28°	2251.4	2255.8	2278.1	2330.1	2413.5	2534.7	2723.1	3014.8	3461.2	3928.2	4321.7
29°	2269.9	2276.9	2297.6	2349.3	2434.5	2557.4	2752.2	3057.3	3521.6	3989.5	4385.7
30°	2289.7	2299.8	2318.5	2368.9	2454.8	2581.0	2780.9	3100.8	3581.9	4047.5	4445.4
31°	2310.6	2323.0	2340.4	2389.2	2476.7	2604.7	2809.4	3144.3	3639.3	4102.1	4501.5
32°	2332.2	2348.0	2362.4	2411.3	2499.5	2629.4	2838.8	3188.5	3694.4	4154.0	4554.3
33°	2354.9	2373.2	2385.0	2433.1	2522.1	2653.9	2867.7	3232.9	3748.4	4205.6	4604.7
34°	2377.4	2398.7	2407.5	2456.0	2545.9	2678.9	2897.0	3277.2	3798.3	4253.7	4651.5
35°	2400.0	2424.7	2430.1	2479.8	2569.6	2705.0	2926.3	3321.9	3848.2	4301.4	4693.4
36°	2423.3	2451.3	2452.7	2504.2	2593.6	2730.9	2957.7	3367.5	3896.5	4344.5	4732.2
37°	2444.8	2477.3	2476.0	2528.3	2618.3	2757.9	2989.1	3411.3	3942.2	4387.0	4767.1
38°	2468.6	2504.6	2500.3	2554.4	2643.6	2784.1	3021.5	3455.9	3987.7	4427.2	4799.7
39°	2492.4	2531.0	2524.6	2580.0	2669.4	2812.5	3054.0	3498.7	4029.9	4465.4	4827.2
40°	2516.8	2556.6	2550.0	2606.2	2696.2	2839.8	3087.1	3540.5	4070.7	4501.7	4851.2
41°	2542.3	2581.1	2575.4	2633.0	2723.7	2868.0	3120.4	3582.0	4109.7	4535.8	4869.2
42°	2567.7	2605.6	2601.8	2659.1	2752.5	2897.8	3154.5	3621.3	4149.4	4569.8	4883.3
43°	2593.3	2629.3	2629.1	2688.0	2780.7	2928.4	3190.7	3659.9	4188.1	4600.0	4895.2
44°	2620.4	2654.2	2657.1	2716.4	2810.1	2960.8	3226.9	3698.0	4226.3	4627.5	4901.3

REPORT NUMBER: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2648.2	2678.9	2685.2	2745.9	2840.7	2991.8	3263.8	3735.3	4262.4	4654.2	4904.2
46°	2676.6	2702.0	2714.0	2774.9	2871.2	3025.1	3300.2	3769.5	4297.2	4678.1	4901.7
47°	2706.4	2724.7	2744.5	2804.3	2903.1	3057.3	3337.3	3801.0	4330.7	4700.3	4895.4
48°	2736.7	2748.9	2775.8	2834.8	2935.2	3091.3	3374.3	3832.4	4361.5	4718.6	4885.3
49°	2768.3	2774.1	2806.9	2864.7	2967.8	3125.9	3410.0	3862.0	4390.6	4734.9	4870.5
50°	2800.3	2798.2	2839.5	2896.1	3001.9	3162.2	3445.9	3890.0	4415.8	4749.5	4852.3
51°	2834.7	2823.5	2872.4	2928.1	3035.4	3197.8	3481.0	3915.2	4439.4	4759.1	4828.4
52°	2868.0	2847.8	2905.4	2961.6	3072.1	3233.4	3515.2	3938.6	4458.6	4765.3	4798.4
53°	2898.9	2867.2	2935.3	2994.9	3108.6	3270.0	3546.4	3959.6	4473.1	4766.3	4764.1
54°	2925.6	2880.9	2963.1	3029.9	3147.2	3306.1	3576.1	3975.6	4484.4	4765.2	4725.7
55°	2949.7	2895.5	2987.3	3065.5	3185.6	3342.6	3603.3	3989.1	4490.2	4756.4	4683.7
56°	2974.7	2913.3	3011.0	3102.2	3227.1	3379.8	3626.5	3999.5	4489.7	4742.7	4635.0
57°	2998.5	2932.2	3035.2	3138.2	3267.7	3417.3	3648.4	4004.9	4482.0	4720.9	4580.9
58°	3021.8	2945.8	3058.3	3177.3	3310.5	3453.2	3665.9	4007.3	4467.6	4693.3	4520.7
59°	3040.8	2955.9	3077.1	3213.5	3355.3	3487.5	3679.8	4005.4	4446.3	4658.4	4455.6
60°	3057.2	2968.0	3093.5	3250.2	3401.1	3521.5	3691.8	3997.6	4418.3	4616.2	4384.5
61°	3074.0	2979.5	3110.5	3284.7	3447.7	3555.8	3699.5	3980.9	4383.8	4565.7	4309.1
62°	3090.4	2987.0	3126.7	3321.0	3492.2	3590.7	3702.0	3956.1	4340.2	4507.4	4229.8
63°	3103.2	2992.9	3141.1	3355.5	3534.9	3622.6	3699.9	3924.2	4285.7	4441.1	4147.4
64°	3114.1	2995.4	3153.8	3388.1	3577.9	3652.3	3693.5	3883.2	4223.0	4369.5	4064.2
65°	3115.1	2972.7	3154.8	3418.6	3621.1	3678.7	3677.4	3829.6	4148.5	4288.1	3977.0
66°	3085.6	2953.3	3122.8	3443.8	3663.5	3699.3	3653.5	3762.4	4062.9	4197.4	3888.7
67°	3068.9	2943.4	3105.5	3463.3	3701.4	3715.8	3615.2	3664.0	3966.3	4098.5	3802.6
68°	3062.0	2906.6	3093.4	3455.6	3737.2	3724.6	3543.7	3496.6	3841.7	3991.3	3715.1
69°	3018.1	2801.8	3045.4	3436.1	3766.8	3718.3	3414.6	3251.0	3663.2	3869.3	3628.3
70°	2931.5	2611.6	2959.9	3433.8	3789.5	3691.9	3211.8	2934.4	3425.6	3729.2	3541.2
71°	2793.9	2330.9	2823.0	3409.5	3793.5	3625.4	2956.6	2608.6	3128.9	3559.7	3447.9
72°	2573.3	2069.6	2604.1	3369.1	3767.0	3506.5	2687.9	2321.3	2813.4	3353.8	3350.7
73°	2300.8	1821.7	2323.2	3306.6	3697.5	3334.9	2432.8	2038.3	2508.6	3115.6	3239.0
74°	2033.7	1544.8	2065.4	3194.4	3584.2	3141.4	2171.6	1679.6	2199.0	2844.8	3108.2
75°	1752.7	1176.4	1791.3	3021.7	3413.5	2927.8	1819.7	1167.8	1825.8	2547.2	2923.2
76°	1414.7	849.8	1450.9	2793.9	3150.0	2700.1	1308.6	661.2	1315.8	2235.9	2668.9
77°	1088.8	774.1	1150.0	2532.0	2792.5	2425.3	801.1	484.4	769.6	1893.7	2318.1
78°	1024.4	1009.6	1116.6	2207.7	2354.0	1995.1	395.3	317.1	569.4	1470.1	1853.5
79°	1262.3	960.2	1344.3	1832.4	1923.1	1387.1	210.4	149.9	378.1	973.6	1338.6
80°	1475.2	910.9	1148.9	1462.4	1561.0	783.6	174.9	127.7	186.9	549.9	823.7
81°	1151.4	857.0	953.6	1327.2	1198.8	376.3	139.3	109.4	155.0	357.3	594.9
82°	827.5	491.9	755.1	1097.3	836.7	222.6	103.8	92.6	131.8	165.9	372.4
83°	471.5	349.8	427.7	867.2	578.9	172.1	86.3	77.3	107.7	126.3	149.9
84°	266.0	207.6	258.4	636.3	350.8	141.2	70.4	62.6	84.0	101.1	118.7
85°	176.5	67.2	207.6	356.8	255.9	110.3	56.0	49.7	64.2	76.5	97.9
86°	87.6	45.5	156.8	285.7	160.9	79.7	43.0	36.8	49.8	55.6	78.1
87°	60.8	23.8	106.0	214.5	67.1	56.2	31.5	24.0	35.5	39.9	54.8
88°	34.1	2.2	55.2	143.4	45.5	38.3	21.7	13.6	21.3	24.3	32.0
89°	7.5	1.4	5.0	72.2	24.0	20.3	11.9	5.1	9.2	9.7	9.3

REPORT NUMBER: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

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: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

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: P1444968
CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

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: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2277.7	2277.7	2277.7
1°	2309.9	2314.4	2316.4
2°	2350.3	2359.4	2361.1
3°	2394.2	2407.5	2411.6
4°	2443.5	2463.1	2467.7
5°	2498.6	2524.1	2530.8
6°	2559.7	2591.3	2600.5
7°	2625.0	2665.5	2676.3
8°	2695.6	2744.9	2759.2
9°	2773.7	2830.1	2848.8
10°	2856.5	2924.3	2945.6
11°	2946.8	3028.2	3050.8
12°	3044.7	3136.5	3164.3
13°	3149.6	3254.2	3284.6
14°	3260.8	3381.2	3417.6
15°	3376.9	3512.8	3559.3
16°	3496.1	3650.0	3705.3
17°	3619.4	3790.0	3851.0
18°	3740.5	3928.9	3994.5
19°	3858.1	4060.4	4129.5
20°	3971.8	4185.4	4253.7
21°	4078.0	4298.6	4365.6
22°	4177.7	4399.8	4462.1
23°	4272.8	4489.9	4549.6
24°	4360.8	4570.8	4626.5
25°	4443.7	4640.5	4692.5
26°	4517.9	4702.6	4749.5
27°	4587.1	4755.2	4800.7
28°	4648.2	4801.0	4843.9
29°	4703.6	4839.6	4879.8
30°	4750.7	4872.7	4908.0
31°	4793.9	4897.7	4931.2
32°	4830.4	4919.1	4948.0
33°	4861.7	4933.9	4960.8
34°	4887.1	4943.6	4966.6
35°	4908.5	4947.5	4969.2
36°	4924.9	4947.3	4967.7
37°	4935.2	4943.9	4960.9
38°	4942.0	4936.4	4950.7
39°	4944.2	4926.2	4938.0
40°	4942.7	4912.5	4921.3
41°	4936.5	4895.9	4898.3
42°	4926.6	4876.0	4873.1
43°	4912.8	4853.8	4842.2
44°	4894.3	4826.3	4806.1

REPORT NUMBER: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	4873.5	4795.6	4764.2
46°	4848.1	4759.3	4715.0
47°	4819.4	4717.8	4662.1
48°	4786.8	4672.3	4605.5
49°	4750.0	4619.3	4541.1
50°	4708.1	4562.8	4471.6
51°	4660.1	4499.5	4393.2
52°	4606.1	4427.0	4310.1
53°	4545.9	4349.7	4221.5
54°	4482.7	4266.8	4129.8
55°	4414.0	4176.0	4033.1
56°	4338.3	4082.0	3930.2
57°	4258.1	3984.6	3830.2
58°	4172.6	3882.2	3724.4
59°	4086.4	3779.9	3619.8
60°	3999.2	3674.9	3507.5
61°	3908.8	3566.7	3390.9
62°	3820.8	3457.2	3269.1
63°	3733.6	3346.7	3149.0
64°	3649.3	3244.5	3036.0
65°	3568.4	3147.2	2944.7
66°	3491.9	3067.9	2877.6
67°	3419.1	3009.4	2839.6
68°	3353.6	2969.2	2800.1
69°	3296.6	2927.7	2709.8
70°	3253.2	2858.1	2531.7
71°	3208.5	2724.6	2261.7
72°	3151.5	2489.3	1970.2
73°	3063.8	2181.3	1669.1
74°	2904.3	1839.8	1322.0
75°	2652.8	1480.7	886.6
76°	2324.3	1071.3	482.6
77°	1956.8	615.6	315.6
78°	1497.0	454.5	150.0
79°	960.0	293.5	119.5
80°	512.1	132.5	103.1
81°	335.8	109.8	88.6
82°	161.7	93.2	75.7
83°	124.8	78.3	63.7
84°	100.2	64.6	52.9
85°	76.1	52.9	42.1
86°	56.6	41.1	31.2
87°	40.5	29.4	21.3
88°	24.4	18.7	12.3
89°	9.5	7.9	5.2

REPORT NUMBER: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

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: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

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: P1444968

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)