

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: P1444993

Luminaire Tested: XAS180-SFPM (4000K-108W-T4-HSS)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1444993
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 (4000K-108W-T4-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 24748 (1 lamp)
Luminaire Lumens: 15622.2 lumens
Efficiency: 63.1%
Efficacy: 148.9 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

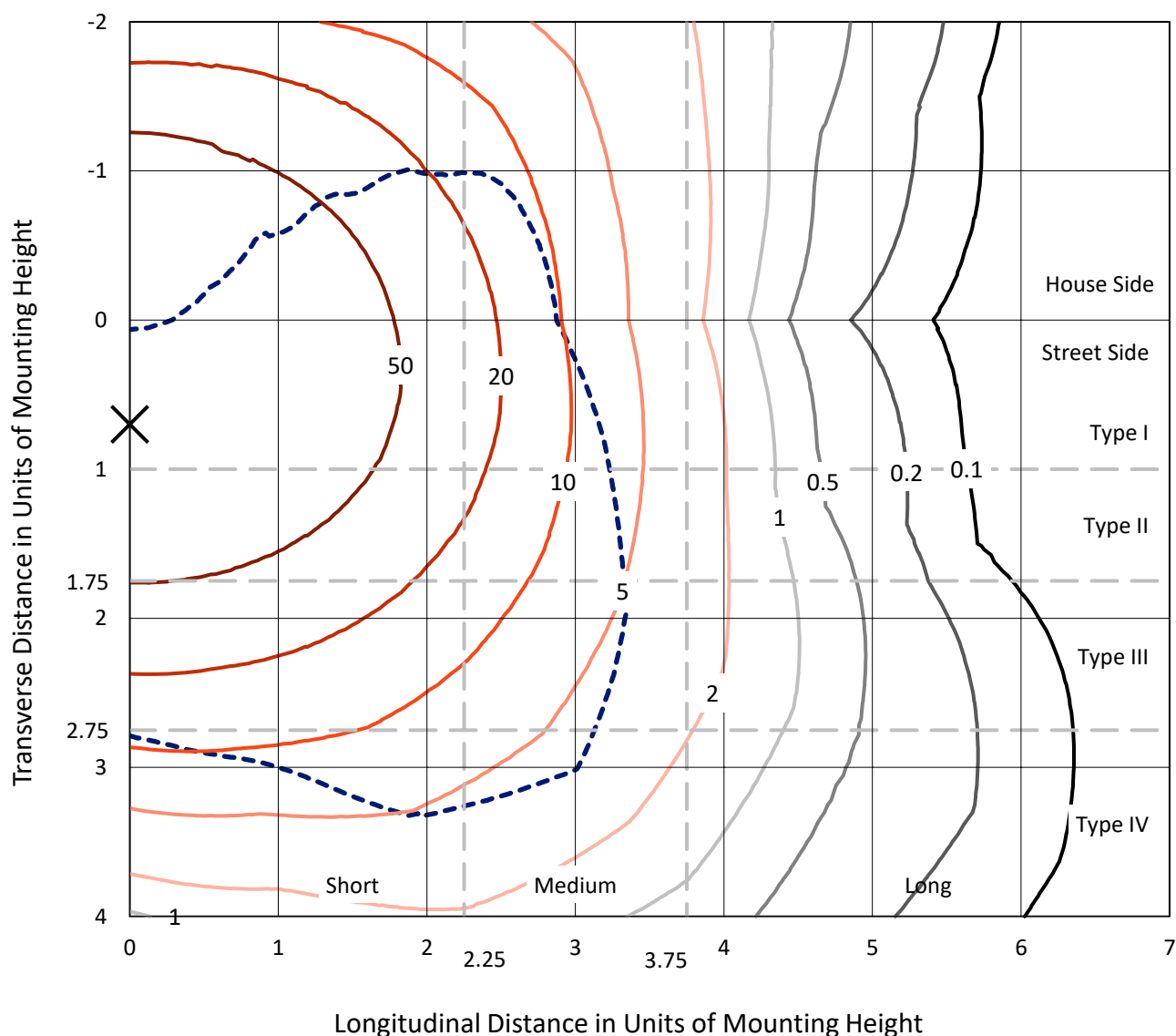
Input Watts (W): 104.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

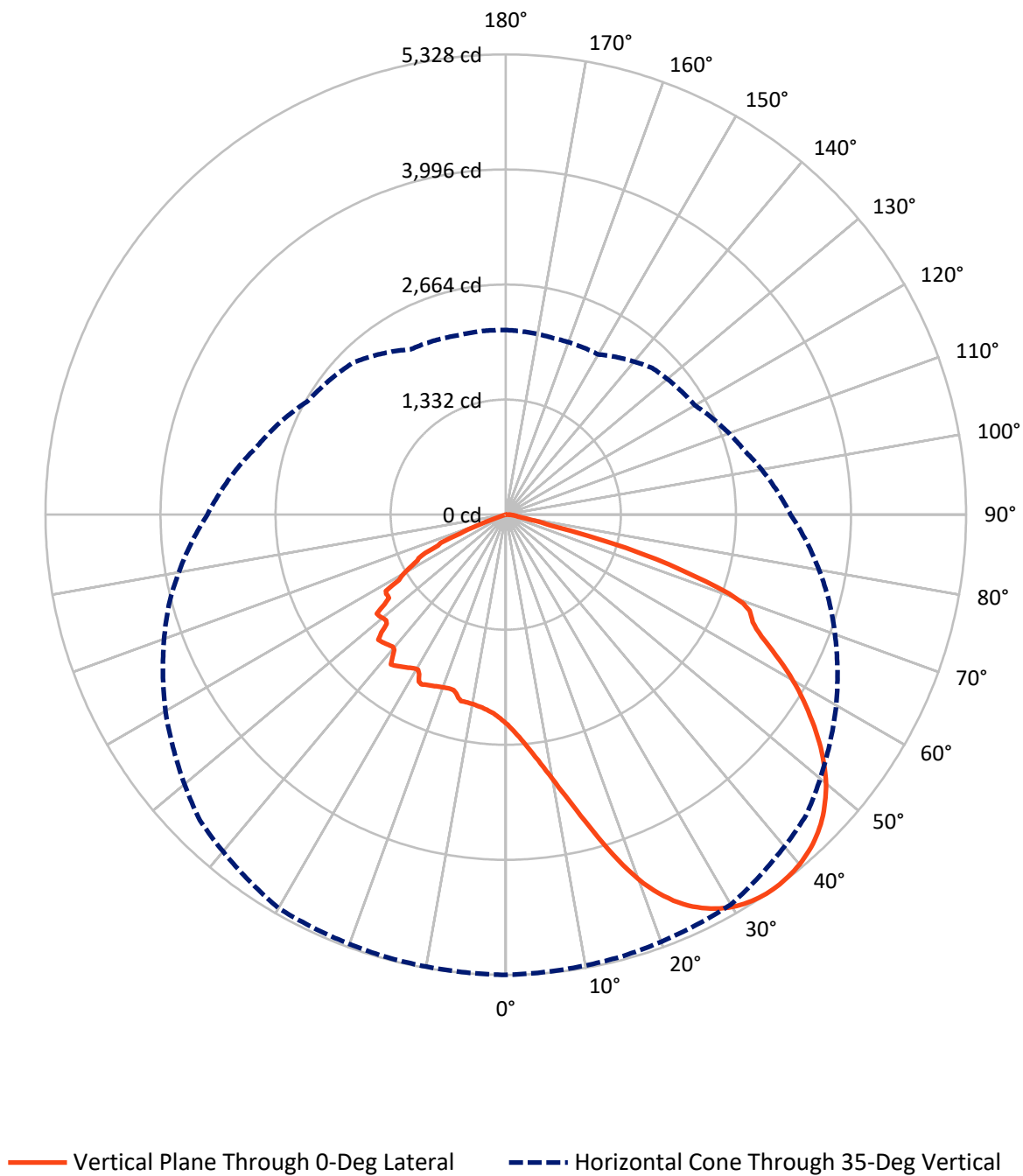


Based on 3 foot mounting height. Maximum calculated value = 421.6 fc
 Type IV - Short - Full Cutoff

REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

Luminous Intensity Polar Plot



REPORT NUMBER: P1444993

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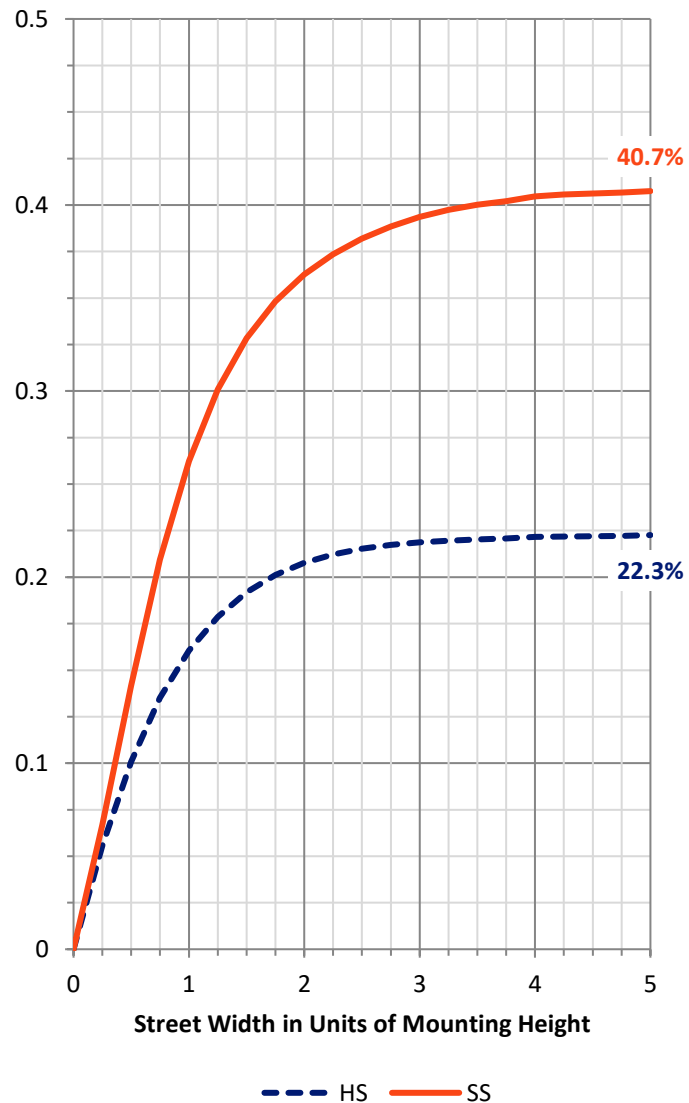
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5534.4	0.0	5534.4
	% Lamp	22.4	0.0	22.4
Street Side	Lumens	10087.8	0.0	10087.8
	% Lamp	40.8	0.0	40.8
Total	Lumens	15622.2	0.0	15622.2
	% Lamp	63.1	0.0	63.1

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	241.2	1.5	1.0
10°-20°	814.9	5.2	3.3
20°-30°	1540.9	9.9	6.2
30°-40°	2265.3	14.5	9.2
40°-50°	2861.5	18.3	11.6
50°-60°	3168.5	20.3	12.8
60°-70°	2981.1	19.1	12.0
70°-80°	1624.7	10.4	6.6
80°-90°	124.0	0.8	0.5
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°	15622.2	100.0	63.1
0°-180°	15622.2	100.0	63.1

Coefficient of Utilization



REPORT NUMBER: P1444993

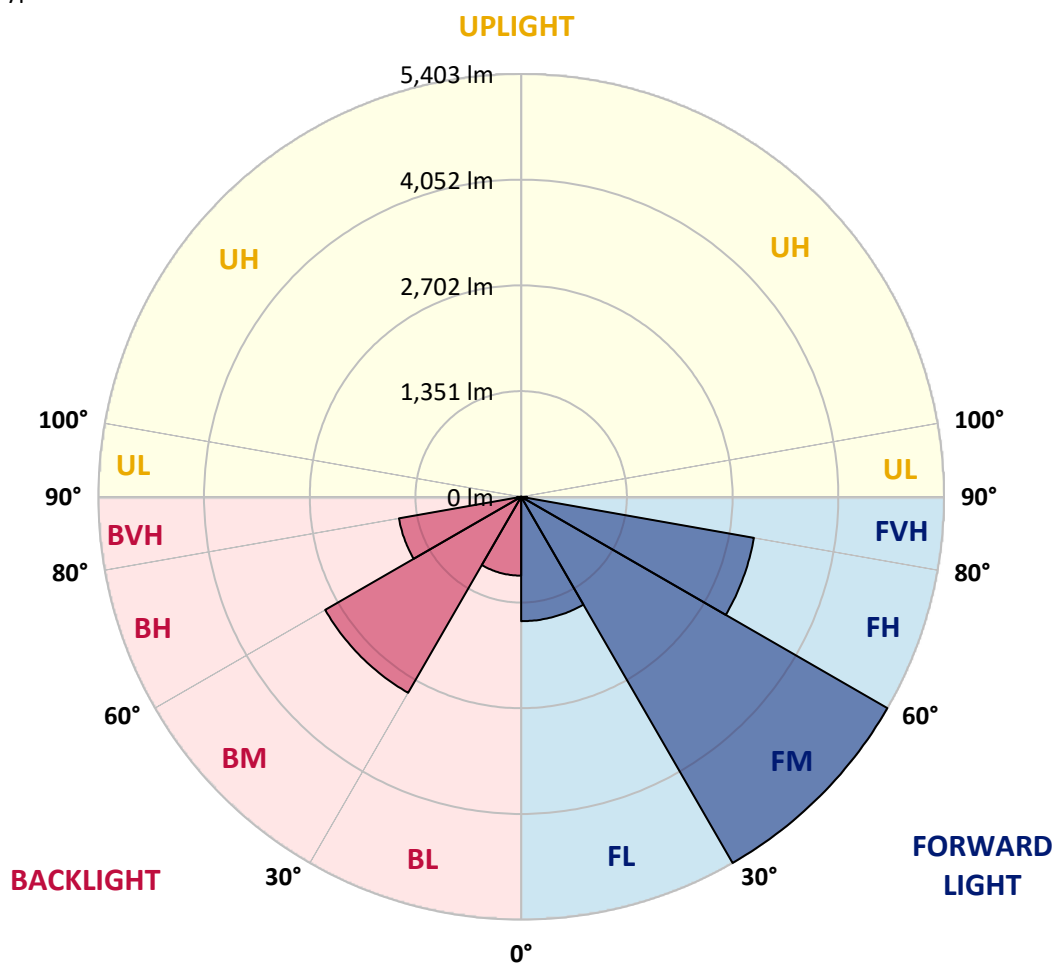
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1589.5	6.4			
FM	(30°-60°)	5403.3	21.8			
FH	(60°-80°)	3020.0	12.2			G2/5000
FVH	(80°-90°)	74.9	0.3			G1/100
BL	(0°-30°)	1007.4	4.1	B3/2500		
BM	(30°-60°)	2892.1	11.7	B3/5000		
BH	(60°-80°)	1585.9	6.4	B3/2500		G3/2500
BVH	(80°-90°)	49.0	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		9125.8	36.9			

BUG Rating: B3-U0-G3

Type IV Short



REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2431.4	2431.4	2431.4	2431.4	2431.4	2431.4	2431.4	2431.4	2431.4	2431.4	2431.4
1°	2475.1	2474.1	2471.3	2465.0	2455.5	2445.6	2425.4	2416.0	2408.5	2401.3	2396.5
2°	2525.3	2522.5	2514.1	2499.2	2479.3	2457.8	2426.5	2407.1	2390.0	2376.4	2366.5
3°	2580.2	2576.1	2560.7	2536.5	2506.6	2473.7	2431.2	2401.2	2375.5	2355.3	2340.2
4°	2641.6	2634.3	2611.7	2578.6	2537.4	2492.8	2437.4	2398.1	2364.0	2337.3	2318.1
5°	2711.4	2700.5	2670.5	2624.8	2571.1	2513.2	2445.5	2396.2	2355.2	2322.7	2301.0
6°	2786.6	2772.6	2734.6	2677.1	2608.2	2535.9	2455.4	2396.3	2348.0	2311.9	2286.7
7°	2868.1	2850.5	2805.0	2734.7	2648.8	2562.1	2467.9	2399.3	2343.2	2303.6	2275.6
8°	2957.1	2935.7	2879.4	2795.3	2692.8	2590.3	2483.9	2404.9	2342.0	2297.0	2266.7
9°	3053.4	3027.0	2960.5	2860.5	2741.8	2621.1	2501.4	2411.7	2342.7	2292.9	2259.4
10°	3157.9	3126.6	3048.3	2931.0	2793.3	2654.1	2520.0	2420.5	2345.9	2291.8	2253.9
11°	3270.8	3234.1	3141.8	3006.0	2847.7	2690.9	2541.2	2431.4	2350.2	2292.5	2251.1
12°	3391.9	3348.9	3241.4	3085.1	2904.7	2728.8	2563.9	2443.4	2356.6	2294.6	2250.5
13°	3522.3	3472.3	3347.9	3171.3	2965.4	2769.7	2587.6	2456.6	2363.9	2298.0	2251.8
14°	3662.6	3607.3	3463.7	3260.5	3028.7	2811.5	2611.8	2470.0	2371.3	2302.7	2252.9
15°	3813.1	3747.1	3586.4	3356.8	3095.3	2853.0	2637.2	2485.2	2380.7	2308.2	2255.9
16°	3968.1	3896.7	3711.9	3456.6	3166.0	2898.2	2664.9	2500.7	2391.1	2313.6	2259.1
17°	4125.9	4044.6	3838.4	3559.6	3239.5	2944.8	2693.1	2517.9	2402.1	2320.3	2247.0
18°	4277.5	4187.5	3963.6	3662.9	3317.2	2993.2	2721.1	2531.7	2413.9	2328.5	2207.7
19°	4422.6	4326.2	4088.5	3765.0	3396.3	3041.8	2740.5	2541.8	2420.1	2337.0	2180.0
20°	4556.2	4457.7	4207.6	3865.8	3475.2	3088.1	2765.0	2554.5	2424.0	2343.4	2164.4
21°	4674.1	4575.6	4322.1	3964.2	3556.4	3130.7	2792.3	2576.1	2430.5	2313.3	2170.8
22°	4777.0	4685.4	4428.8	4059.0	3636.2	3179.6	2826.7	2597.1	2445.4	2288.6	2178.6
23°	4872.1	4782.5	4528.9	4149.0	3715.5	3230.3	2861.4	2615.8	2459.5	2274.1	2187.7
24°	4954.6	4869.6	4622.9	4236.1	3784.1	3286.8	2893.4	2631.1	2469.1	2264.3	2198.5
25°	5026.7	4947.3	4708.6	4319.1	3849.6	3346.9	2922.2	2649.7	2479.4	2274.6	2209.5
26°	5088.0	5014.7	4787.1	4398.5	3916.8	3405.7	2953.2	2670.2	2491.5	2280.0	2222.3
27°	5142.1	5074.1	4858.8	4475.9	3981.0	3462.5	2986.6	2695.0	2509.2	2286.6	2234.6
28°	5188.0	5124.5	4925.4	4548.1	4043.4	3512.0	3023.1	2720.9	2519.6	2296.2	2246.5
29°	5226.8	5167.5	4983.6	4615.4	4104.7	3562.8	3063.4	2746.4	2505.9	2312.8	2259.8
30°	5258.9	5203.2	5037.3	4681.5	4166.5	3614.4	3104.5	2772.7	2506.7	2329.4	2270.5
31°	5284.3	5232.9	5083.6	4741.5	4224.8	3665.4	3146.6	2798.6	2499.5	2346.9	2273.9
32°	5302.5	5254.6	5122.6	4791.5	4280.1	3717.7	3189.0	2818.2	2505.4	2363.6	2206.8
33°	5316.2	5271.0	5158.5	4838.5	4330.3	3771.0	3230.8	2828.7	2500.3	2377.3	2151.1
34°	5325.1	5281.6	5186.9	4880.2	4375.1	3823.4	3269.7	2841.2	2514.1	2388.9	2129.4
35°	5328.4	5286.9	5212.1	4919.2	4417.2	3875.1	3297.6	2861.7	2528.8	2399.4	2141.4
36°	5327.0	5289.3	5230.2	4956.6	4458.7	3923.9	3322.6	2883.4	2546.2	2411.6	2153.7
37°	5320.1	5285.7	5244.3	4990.3	4498.3	3971.3	3352.9	2906.0	2563.4	2408.8	2163.3
38°	5309.8	5279.6	5253.4	5019.5	4536.6	4017.9	3389.8	2930.9	2575.4	2342.8	2171.5
39°	5296.2	5269.2	5258.5	5045.3	4573.5	4061.8	3424.6	2952.5	2586.5	2290.7	2183.9
40°	5278.3	5256.5	5256.8	5067.3	4609.1	4096.5	3459.9	2972.1	2605.9	2276.9	2200.0
41°	5254.6	5238.9	5252.8	5087.9	4643.6	4125.4	3495.3	2990.3	2629.8	2294.1	2215.7
42°	5228.1	5218.1	5242.8	5106.0	4677.2	4151.9	3530.6	3004.2	2653.3	2312.5	2229.3
43°	5194.9	5193.6	5229.4	5119.8	4710.9	4182.7	3560.4	3018.6	2677.1	2331.8	2182.2
44°	5155.9	5164.4	5212.2	5127.6	4742.7	4215.0	3587.8	3045.4	2701.9	2349.8	2106.4

REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	5112.1	5131.3	5189.3	5129.9	4771.7	4249.0	3611.4	3077.7	2721.1	2361.5	2075.0
46°	5061.1	5092.7	5163.4	5126.7	4800.7	4282.2	3629.3	3110.5	2727.2	2369.3	2086.5
47°	5003.7	5047.4	5134.6	5118.0	4828.3	4314.6	3645.1	3140.8	2727.6	2382.3	2096.1
48°	4943.6	4996.7	5099.8	5104.8	4851.7	4344.6	3659.7	3157.5	2683.7	2397.7	2103.9
49°	4876.2	4939.6	5058.8	5088.9	4869.9	4376.4	3683.6	3168.4	2647.2	2349.8	2114.9
50°	4800.8	4875.9	5012.3	5067.8	4881.4	4403.7	3712.3	3175.2	2634.3	2275.3	2126.6
51°	4719.1	4805.0	4956.9	5041.7	4887.9	4426.4	3740.8	3171.0	2624.6	2243.4	2085.5
52°	4628.9	4727.6	4896.6	5009.1	4890.8	4445.7	3768.0	3192.7	2643.1	2260.5	1972.5
53°	4535.4	4642.1	4830.1	4971.6	4887.6	4463.0	3793.9	3205.3	2654.5	2278.4	1936.7
54°	4436.3	4549.1	4756.4	4930.6	4883.0	4471.4	3817.1	3212.6	2666.9	2291.3	1953.3
55°	4332.7	4451.9	4675.9	4882.4	4871.5	4471.9	3832.9	3227.8	2687.4	2303.1	1971.8
56°	4226.8	4350.2	4593.6	4828.5	4857.8	4469.2	3840.4	3236.8	2709.9	2306.6	1989.9
57°	4120.0	4246.8	4505.1	4772.0	4839.2	4458.3	3839.2	3241.2	2721.4	2227.1	2005.1
58°	4010.0	4138.0	4413.8	4709.6	4813.9	4451.0	3832.1	3249.6	2730.5	2154.9	1903.4
59°	3897.3	4032.1	4320.2	4642.0	4781.8	4442.4	3828.5	3249.5	2685.4	2152.6	1824.1
60°	3778.1	3921.7	4223.4	4570.6	4739.6	4427.3	3821.4	3235.5	2629.1	2178.2	1829.0
61°	3655.5	3807.4	4124.4	4494.3	4689.3	4405.0	3806.3	3217.5	2612.7	2206.1	1835.3
62°	3527.5	3691.0	4028.4	4413.0	4630.9	4373.2	3787.7	3208.2	2620.3	2233.1	1761.4
63°	3402.9	3573.1	3933.9	4329.7	4566.6	4329.5	3755.7	3183.1	2627.2	2178.8	1657.0
64°	3283.4	3459.5	3843.3	4243.3	4491.1	4272.2	3712.3	3153.6	2625.8	2110.8	1635.7
65°	3188.3	3355.1	3753.8	4153.3	4408.7	4203.8	3659.2	3109.8	2597.4	2110.0	1615.7
66°	3117.2	3271.7	3668.2	4063.6	4316.9	4118.8	3595.8	3051.6	2506.6	2123.1	1476.2
67°	3077.2	3209.3	3591.5	3972.6	4213.1	4022.3	3522.8	2976.6	2469.1	2036.2	1453.6
68°	3032.6	3167.0	3523.2	3881.1	4093.6	3911.8	3398.8	2896.2	2483.4	1988.2	1361.9
69°	2932.6	3121.1	3466.9	3791.5	3965.0	3761.8	3196.3	2802.5	2490.4	1981.7	1270.1
70°	2739.7	3038.6	3421.5	3701.5	3835.3	3561.0	2913.0	2665.9	2484.7	1885.4	1177.8
71°	2442.6	2879.6	3378.8	3611.8	3679.5	3307.7	2599.7	2479.3	2404.4	1855.0	1030.1
72°	2138.3	2622.8	3326.7	3517.1	3499.6	3019.0	2316.6	2259.7	2305.6	1784.4	923.1
73°	1813.8	2297.4	3243.6	3423.3	3292.2	2722.6	2058.1	2044.6	2195.5	1728.3	823.1
74°	1445.5	1948.1	3086.5	3310.6	3058.2	2437.7	1755.5	1854.1	2067.6	1629.2	695.6
75°	983.3	1569.0	2817.2	3152.6	2795.2	2111.7	1336.4	1645.9	1903.9	1529.6	620.8
76°	545.1	1113.3	2469.2	2921.7	2519.7	1670.4	917.3	1321.1	1757.2	1355.9	555.5
77°	421.3	636.2	2097.1	2590.8	2213.9	1102.7	498.6	994.0	1612.4	1182.1	489.5
78°	300.3	484.8	1647.0	2137.2	1834.4	613.5	240.1	573.6	1333.6	1007.6	421.1
79°	179.3	334.5	1080.6	1606.3	1337.6	406.6	180.6	416.0	1054.8	795.2	349.3
80°	158.7	184.1	588.7	1057.1	824.4	207.6	121.4	258.5	774.9	605.6	295.3
81°	141.9	159.7	446.5	552.2	600.1	172.0	102.9	101.4	417.1	445.4	265.6
82°	126.7	141.2	309.0	366.1	379.6	146.9	87.3	80.8	306.5	355.6	262.2
83°	112.4	124.3	171.5	191.7	159.2	120.4	72.8	64.0	195.8	281.9	215.5
84°	99.0	108.5	143.1	156.8	129.1	93.8	59.4	50.8	88.3	216.8	165.8
85°	86.1	94.1	116.3	133.0	102.4	73.4	46.4	40.0	75.7	151.6	116.0
86°	73.7	80.8	94.8	110.8	78.8	59.1	34.6	30.8	59.7	87.0	66.6
87°	61.5	68.1	76.3	86.3	60.8	44.9	24.0	22.6	44.0	49.2	41.5
88°	53.1	57.3	59.3	59.8	44.2	30.7	16.9	16.0	30.6	33.8	28.5
89°	44.8	46.4	45.6	42.5	27.6	18.7	9.7	9.5	17.1	18.3	15.5



REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1444993
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2431.4	2431.4	2431.4	2431.4	2431.4	2431.4	2431.4	2431.4	2431.4	2431.4	2431.4
1°	2393.9	2394.2	2396.9	2402.1	2409.6	2417.1	2427.8	2429.5	2440.3	2451.0	2460.5
2°	2361.1	2360.8	2365.0	2374.6	2387.1	2403.7	2422.7	2434.8	2456.7	2477.6	2497.0
3°	2332.3	2331.3	2336.7	2348.9	2367.9	2391.3	2419.8	2442.6	2474.8	2508.1	2537.4
4°	2307.8	2306.6	2313.5	2328.6	2352.1	2383.0	2419.7	2452.3	2496.8	2541.7	2582.3
5°	2289.5	2287.4	2294.6	2312.4	2339.3	2376.3	2421.5	2464.8	2521.0	2578.5	2631.4
6°	2273.4	2270.5	2279.3	2299.9	2330.0	2371.7	2425.5	2479.5	2548.0	2619.0	2684.3
7°	2259.8	2256.5	2266.2	2289.2	2324.3	2371.0	2432.3	2497.1	2577.6	2663.4	2744.6
8°	2249.4	2245.5	2255.6	2281.7	2320.5	2372.5	2441.2	2515.8	2609.9	2712.3	2808.4
9°	2240.0	2236.4	2247.6	2276.3	2318.8	2375.7	2451.0	2535.9	2644.7	2764.0	2877.3
10°	2233.3	2228.6	2241.5	2273.4	2319.1	2380.2	2462.5	2559.0	2681.9	2819.0	2950.6
11°	2228.1	2223.2	2237.8	2272.2	2321.7	2387.7	2476.4	2585.0	2723.6	2877.3	3028.7
12°	2225.0	2220.1	2235.3	2273.1	2326.4	2396.4	2492.7	2611.2	2765.4	2939.8	3112.0
13°	2224.6	2218.8	2235.1	2275.0	2333.0	2407.1	2509.6	2639.4	2810.2	3005.7	3202.0
14°	2224.7	2218.1	2236.6	2279.2	2341.1	2418.7	2527.8	2668.7	2855.9	3074.5	3296.6
15°	2222.2	2190.9	2234.5	2284.1	2349.6	2432.2	2546.8	2700.5	2904.1	3148.8	3397.7
16°	2175.1	2146.2	2191.2	2289.2	2358.6	2447.0	2567.1	2731.7	2954.7	3224.2	3504.2
17°	2140.2	2119.9	2157.5	2280.6	2368.6	2462.0	2589.3	2765.1	3006.5	3305.1	3613.4
18°	2121.9	2115.1	2139.6	2242.2	2380.5	2477.8	2608.9	2798.4	3061.0	3389.5	3723.4
19°	2124.6	2118.3	2142.1	2217.4	2391.2	2489.5	2622.5	2826.4	3116.7	3474.9	3833.1
20°	2129.4	2122.9	2147.5	2204.7	2400.8	2497.5	2638.9	2854.2	3174.0	3562.1	3939.0
21°	2135.6	2130.1	2154.6	2210.3	2381.0	2507.5	2662.3	2886.1	3226.0	3651.2	4041.7
22°	2144.6	2138.2	2163.8	2220.0	2352.3	2525.9	2688.3	2922.9	3279.1	3737.4	4138.6
23°	2153.9	2148.9	2175.4	2230.9	2339.0	2545.2	2714.9	2963.1	3337.7	3823.1	4231.3
24°	2164.1	2159.2	2187.3	2243.3	2335.0	2561.2	2736.3	3003.3	3399.5	3904.8	4319.2
25°	2174.8	2169.0	2198.8	2256.6	2345.7	2573.6	2756.7	3039.8	3464.7	3977.0	4401.1
26°	2186.0	2180.7	2211.1	2272.0	2355.7	2586.5	2778.7	3074.2	3531.1	4043.1	4479.7
27°	2197.1	2192.8	2223.0	2286.2	2363.6	2602.4	2803.0	3111.1	3596.7	4108.8	4555.5
28°	2208.7	2180.6	2235.3	2300.8	2373.5	2615.9	2831.4	3150.9	3658.1	4171.9	4627.9
29°	2173.7	2103.1	2208.2	2315.2	2390.0	2611.7	2860.4	3193.0	3712.3	4233.1	4696.4
30°	2100.8	2061.4	2134.0	2327.2	2408.2	2608.4	2889.3	3237.3	3769.3	4294.4	4760.4
31°	2065.2	2066.6	2097.9	2332.0	2426.9	2608.2	2918.0	3283.2	3825.0	4352.3	4821.6
32°	2072.3	2082.8	2103.6	2278.0	2446.3	2609.0	2941.0	3328.9	3877.9	4407.5	4877.0
33°	2086.9	2099.8	2118.1	2223.1	2463.8	2608.5	2955.7	3373.7	3932.8	4460.8	4925.6
34°	2101.2	2117.3	2133.1	2198.9	2477.9	2622.4	2970.5	3418.3	3985.2	4507.2	4967.3
35°	2116.0	2136.6	2148.1	2208.3	2491.7	2637.9	2993.3	3454.1	4038.3	4548.1	5007.0
36°	2132.2	2154.3	2164.2	2223.3	2502.7	2655.3	3017.8	3483.7	4088.1	4588.5	5044.7
37°	2146.4	2171.0	2180.1	2234.5	2509.1	2674.7	3042.7	3517.1	4136.1	4627.2	5080.0
38°	2160.4	2184.3	2195.2	2244.0	2445.0	2689.7	3071.0	3554.7	4182.4	4666.4	5109.5
39°	2170.5	2104.4	2207.2	2254.3	2394.9	2702.9	3098.9	3592.1	4226.4	4703.2	5135.0
40°	2088.2	2027.9	2134.2	2270.5	2379.9	2721.9	3122.3	3629.0	4263.9	4737.8	5157.0
41°	2013.8	2011.7	2056.1	2287.9	2394.8	2747.2	3143.0	3666.3	4292.8	4772.3	5176.1
42°	1996.6	2023.1	2034.5	2303.7	2413.6	2773.8	3157.7	3703.1	4318.9	4806.7	5190.8
43°	2010.2	2035.7	2048.3	2272.8	2433.6	2800.0	3173.8	3737.5	4346.8	4839.2	5202.6
44°	2025.0	2047.6	2064.0	2191.6	2453.0	2827.0	3204.5	3768.9	4375.7	4868.7	5209.7

REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2040.3	2059.5	2079.3	2153.4	2466.8	2848.6	3238.9	3796.8	4406.5	4896.3	5209.7
46°	2055.8	2066.6	2095.0	2161.8	2476.0	2856.9	3273.4	3815.1	4438.9	4920.8	5203.4
47°	2070.6	1983.3	2107.7	2171.0	2488.0	2862.4	3307.3	3830.0	4468.9	4944.0	5190.8
48°	1991.5	1869.3	2041.4	2179.0	2504.1	2839.3	3333.5	3843.0	4497.1	4964.1	5175.8
49°	1880.2	1847.3	1927.9	2189.7	2473.8	2801.0	3340.9	3865.2	4522.4	4977.7	5156.3
50°	1860.7	1856.4	1900.7	2200.2	2396.4	2773.9	3346.2	3891.8	4545.0	4983.7	5132.5
51°	1876.0	1866.7	1916.0	2171.6	2353.0	2761.9	3341.6	3915.6	4561.2	4982.3	5104.8
52°	1892.2	1876.8	1930.3	2057.2	2366.3	2775.7	3342.6	3938.1	4573.5	4977.1	5070.2
53°	1906.6	1881.4	1944.0	2013.0	2384.8	2787.0	3356.0	3956.9	4580.3	4966.1	5032.2
54°	1913.8	1746.0	1952.0	2028.5	2397.0	2797.4	3359.5	3972.2	4577.4	4954.3	4987.4
55°	1791.1	1662.5	1829.9	2046.6	2408.3	2810.9	3361.8	3979.8	4567.2	4936.8	4939.9
56°	1700.2	1656.6	1737.8	2065.3	2412.1	2831.7	3362.1	3975.7	4550.0	4917.1	4887.6
57°	1694.1	1659.5	1728.1	2078.8	2353.2	2839.8	3357.8	3962.1	4527.2	4891.8	4829.0
58°	1696.8	1645.7	1730.1	1982.4	2269.0	2843.8	3356.0	3944.6	4503.3	4856.6	4766.5
59°	1665.0	1450.4	1703.9	1896.1	2260.4	2812.4	3351.0	3927.2	4478.9	4816.9	4698.7
60°	1493.1	1397.0	1530.6	1896.6	2285.0	2742.9	3327.6	3906.6	4448.5	4770.6	4624.3
61°	1459.9	1314.9	1493.0	1902.1	2311.4	2709.2	3299.7	3880.4	4411.4	4715.5	4545.0
62°	1455.5	1232.9	1483.7	1838.9	2334.8	2708.4	3283.5	3847.6	4366.3	4651.1	4462.5
63°	1370.8	1151.7	1396.6	1723.5	2286.9	2707.5	3254.7	3804.1	4310.8	4575.7	4376.2
64°	1286.1	1128.4	1309.6	1700.6	2205.1	2700.0	3216.8	3747.2	4243.9	4494.4	4288.9
65°	1201.2	1031.0	1222.0	1686.4	2193.1	2669.0	3163.5	3676.8	4161.2	4405.2	4194.6
66°	1068.5	862.2	1092.4	1536.6	2193.8	2578.8	3096.8	3592.7	4063.0	4308.6	4095.4
67°	933.6	822.0	952.8	1504.3	2103.3	2519.7	3017.2	3491.1	3955.8	4197.6	3996.7
68°	839.9	574.0	861.8	1445.2	2052.6	2522.1	2908.7	3315.7	3819.0	4074.8	3898.8
69°	684.3	474.0	703.1	1319.0	2033.3	2517.0	2777.7	3056.8	3629.4	3939.5	3804.3
70°	548.0	326.6	563.8	1192.7	1930.2	2496.9	2596.5	2717.8	3391.1	3790.4	3703.6
71°	376.9	179.2	376.5	1066.7	1884.2	2395.6	2369.2	2404.4	3092.3	3613.9	3598.0
72°	208.2	32.8	194.7	958.9	1805.0	2264.9	2126.9	2117.1	2775.1	3413.8	3492.2
73°	175.3	0.4	157.9	846.0	1724.4	2130.1	1892.1	1830.9	2464.8	3172.2	3373.9
74°	142.4	0.3	121.4	695.8	1604.9	1982.0	1674.1	1490.5	2157.2	2897.7	3235.5
75°	109.7	0.3	105.4	610.5	1471.5	1808.3	1345.0	1044.2	1790.6	2593.5	3042.5
76°	83.4	0.3	84.0	542.7	1283.0	1635.4	1015.9	604.9	1295.9	2272.4	2783.6
77°	58.7	0.4	66.5	478.5	1094.5	1385.9	686.7	388.7	771.9	1930.9	2422.2
78°	43.9	0.4	53.8	414.6	906.1	1136.5	353.5	177.6	577.6	1512.7	1953.6
79°	43.2	0.5	53.5	344.7	724.8	885.3	230.8	135.5	386.2	1022.9	1416.3
80°	58.0	0.5	64.5	298.5	563.0	506.2	109.6	114.9	194.8	597.7	881.2
81°	70.9	0.6	66.7	277.3	423.0	367.1	87.8	97.8	165.6	396.8	645.8
82°	62.6	0.7	41.6	258.5	328.2	228.1	72.3	82.2	141.4	198.8	416.3
83°	39.1	0.8	29.6	196.0	246.4	89.8	59.0	68.4	116.7	151.8	186.7
84°	28.6	0.9	17.5	133.5	164.5	74.8	47.4	56.0	92.4	125.0	155.2
85°	18.2	1.0	5.8	71.6	83.6	59.0	37.7	43.6	72.1	98.2	131.9
86°	8.0	1.1	5.2	36.4	46.6	43.9	29.1	31.3	57.9	76.1	109.8
87°	5.9	1.2	5.2	25.6	26.5	31.6	21.4	21.0	43.8	58.8	85.3
88°	4.3	1.3	4.6	14.9	18.5	22.0	15.1	12.3	29.7	42.7	59.3
89°	3.3	1.4	2.9	4.3	10.5	12.5	8.8	5.2	18.2	26.7	42.3

REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1444993
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2431.4	2431.4	2431.4
1°	2467.6	2472.7	2475.1
2°	2511.7	2521.6	2525.3
3°	2560.1	2575.0	2580.2
4°	2614.4	2635.4	2641.6
5°	2673.5	2702.4	2711.4
6°	2738.8	2775.8	2786.6
7°	2810.6	2854.0	2868.1
8°	2888.0	2939.8	2957.1
9°	2971.7	3033.5	3053.4
10°	3059.2	3134.9	3157.9
11°	3157.1	3243.0	3270.8
12°	3260.9	3361.5	3391.9
13°	3372.7	3486.2	3522.3
14°	3492.3	3621.0	3662.6
15°	3617.6	3763.4	3813.1
16°	3745.1	3908.9	3968.1
17°	3874.7	4058.5	4125.9
18°	4005.1	4206.8	4277.5
19°	4131.1	4349.7	4422.6
20°	4253.0	4482.1	4556.2
21°	4367.2	4602.8	4674.1
22°	4473.6	4712.9	4777.0
23°	4575.8	4809.1	4872.1
24°	4670.7	4894.9	4954.6
25°	4758.4	4970.3	5026.7
26°	4838.4	5036.7	5088.0
27°	4913.8	5094.1	5142.1
28°	4978.8	5144.0	5188.0
29°	5038.4	5185.4	5226.8
30°	5090.0	5219.6	5258.9
31°	5136.6	5248.6	5284.3
32°	5176.7	5271.9	5302.5
33°	5211.1	5288.3	5316.2
34°	5238.4	5299.6	5325.1
35°	5260.8	5305.4	5328.4
36°	5278.3	5304.8	5327.0
37°	5291.5	5301.5	5320.1
38°	5299.4	5295.0	5309.8
39°	5302.2	5283.5	5296.2
40°	5300.6	5269.6	5278.3
41°	5295.2	5253.2	5254.6
42°	5285.0	5232.4	5228.1
43°	5270.1	5208.4	5194.9
44°	5252.0	5180.1	5155.9

REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	5229.2	5147.3	5112.1
46°	5203.6	5109.9	5061.1
47°	5173.1	5065.3	5003.7
48°	5140.2	5016.4	4943.6
49°	5100.9	4961.2	4876.2
50°	5054.5	4900.7	4800.8
51°	5001.5	4832.6	4719.1
52°	4939.9	4755.4	4628.9
53°	4873.2	4674.4	4535.4
54°	4800.3	4584.4	4436.3
55°	4724.8	4491.3	4332.7
56°	4642.4	4389.7	4226.8
57°	4556.1	4286.4	4120.0
58°	4464.6	4179.6	4010.0
59°	4369.7	4071.5	3897.3
60°	4273.9	3959.7	3778.1
61°	4178.1	3846.2	3655.5
62°	4082.1	3729.0	3527.5
63°	3989.5	3615.7	3402.9
64°	3902.6	3506.1	3283.4
65°	3818.1	3405.1	3188.3
66°	3736.2	3320.2	3117.2
67°	3658.4	3258.6	3077.2
68°	3586.7	3215.8	3032.6
69°	3523.0	3169.8	2932.6
70°	3472.8	3094.7	2739.7
71°	3421.5	2948.0	2442.6
72°	3358.4	2695.1	2138.3
73°	3265.1	2367.2	1813.8
74°	3094.6	2005.3	1445.5
75°	2822.9	1623.4	983.3
76°	2476.9	1187.9	545.1
77°	2084.6	708.6	421.3
78°	1615.0	531.9	300.3
79°	1061.5	360.4	179.3
80°	596.0	188.9	158.7
81°	448.7	164.6	141.9
82°	312.1	145.5	126.7
83°	175.5	128.1	112.4
84°	145.3	111.7	99.0
85°	117.8	96.6	86.1
86°	96.3	82.8	73.7
87°	77.2	69.7	61.5
88°	59.1	58.4	53.1
89°	45.6	47.1	44.8

REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
90°	0.0	0.0	0.0
91°	0.0	0.0	0.0
92°	0.0	0.0	0.0
93°	0.0	0.0	0.0
94°	0.0	0.0	0.0
95°	0.0	0.0	0.0
96°	0.0	0.0	0.0
97°	0.0	0.0	0.0
98°	0.0	0.0	0.0
99°	0.0	0.0	0.0
100°	0.0	0.0	0.0
101°	0.0	0.0	0.0
102°	0.0	0.0	0.0
103°	0.0	0.0	0.0
104°	0.0	0.0	0.0
105°	0.0	0.0	0.0
106°	0.0	0.0	0.0
107°	0.0	0.0	0.0
108°	0.0	0.0	0.0
109°	0.0	0.0	0.0
110°	0.0	0.0	0.0
111°	0.0	0.0	0.0
112°	0.0	0.0	0.0
113°	0.0	0.0	0.0
114°	0.0	0.0	0.0
115°	0.0	0.0	0.0
116°	0.0	0.0	0.0
117°	0.0	0.0	0.0
118°	0.0	0.0	0.0
119°	0.0	0.0	0.0
120°	0.0	0.0	0.0
121°	0.0	0.0	0.0
122°	0.0	0.0	0.0
123°	0.0	0.0	0.0
124°	0.0	0.0	0.0
125°	0.0	0.0	0.0
126°	0.0	0.0	0.0
127°	0.0	0.0	0.0
128°	0.0	0.0	0.0
129°	0.0	0.0	0.0
130°	0.0	0.0	0.0
131°	0.0	0.0	0.0
132°	0.0	0.0	0.0
133°	0.0	0.0	0.0
134°	0.0	0.0	0.0

REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
135°	0.0	0.0	0.0
136°	0.0	0.0	0.0
137°	0.0	0.0	0.0
138°	0.0	0.0	0.0
139°	0.0	0.0	0.0
140°	0.0	0.0	0.0
141°	0.0	0.0	0.0
142°	0.0	0.0	0.0
143°	0.0	0.0	0.0
144°	0.0	0.0	0.0
145°	0.0	0.0	0.0
146°	0.0	0.0	0.0
147°	0.0	0.0	0.0
148°	0.0	0.0	0.0
149°	0.0	0.0	0.0
150°	0.0	0.0	0.0
151°	0.0	0.0	0.0
152°	0.0	0.0	0.0
153°	0.0	0.0	0.0
154°	0.0	0.0	0.0
155°	0.0	0.0	0.0
156°	0.0	0.0	0.0
157°	0.0	0.0	0.0
158°	0.0	0.0	0.0
159°	0.0	0.0	0.0
160°	0.0	0.0	0.0
161°	0.0	0.0	0.0
162°	0.0	0.0	0.0
163°	0.0	0.0	0.0
164°	0.0	0.0	0.0
165°	0.0	0.0	0.0
166°	0.0	0.0	0.0
167°	0.0	0.0	0.0
168°	0.0	0.0	0.0
169°	0.0	0.0	0.0
170°	0.0	0.0	0.0
171°	0.0	0.0	0.0
172°	0.0	0.0	0.0
173°	0.0	0.0	0.0
174°	0.0	0.0	0.0
175°	0.0	0.0	0.0
176°	0.0	0.0	0.0
177°	0.0	0.0	0.0
178°	0.0	0.0	0.0
179°	0.0	0.0	0.0

REPORT NUMBER: P1444993

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)