

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: P1436702

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

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436702
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-T4-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 28062 (1 lamp)
Luminaire Lumens: 14742.9 lumens
Efficiency: 52.5%
Efficacy: 137.0 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

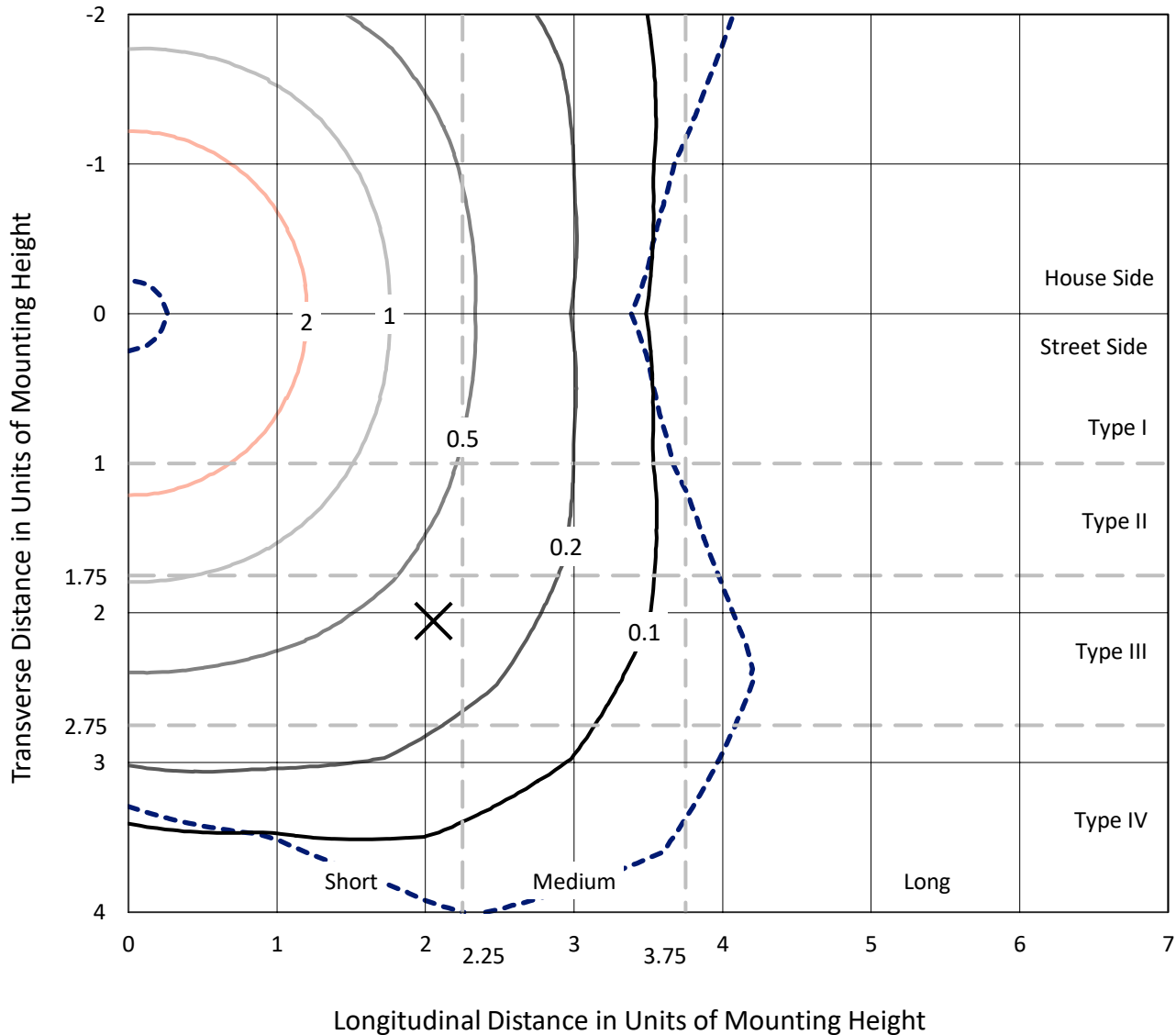
Input Watts (W): 107.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

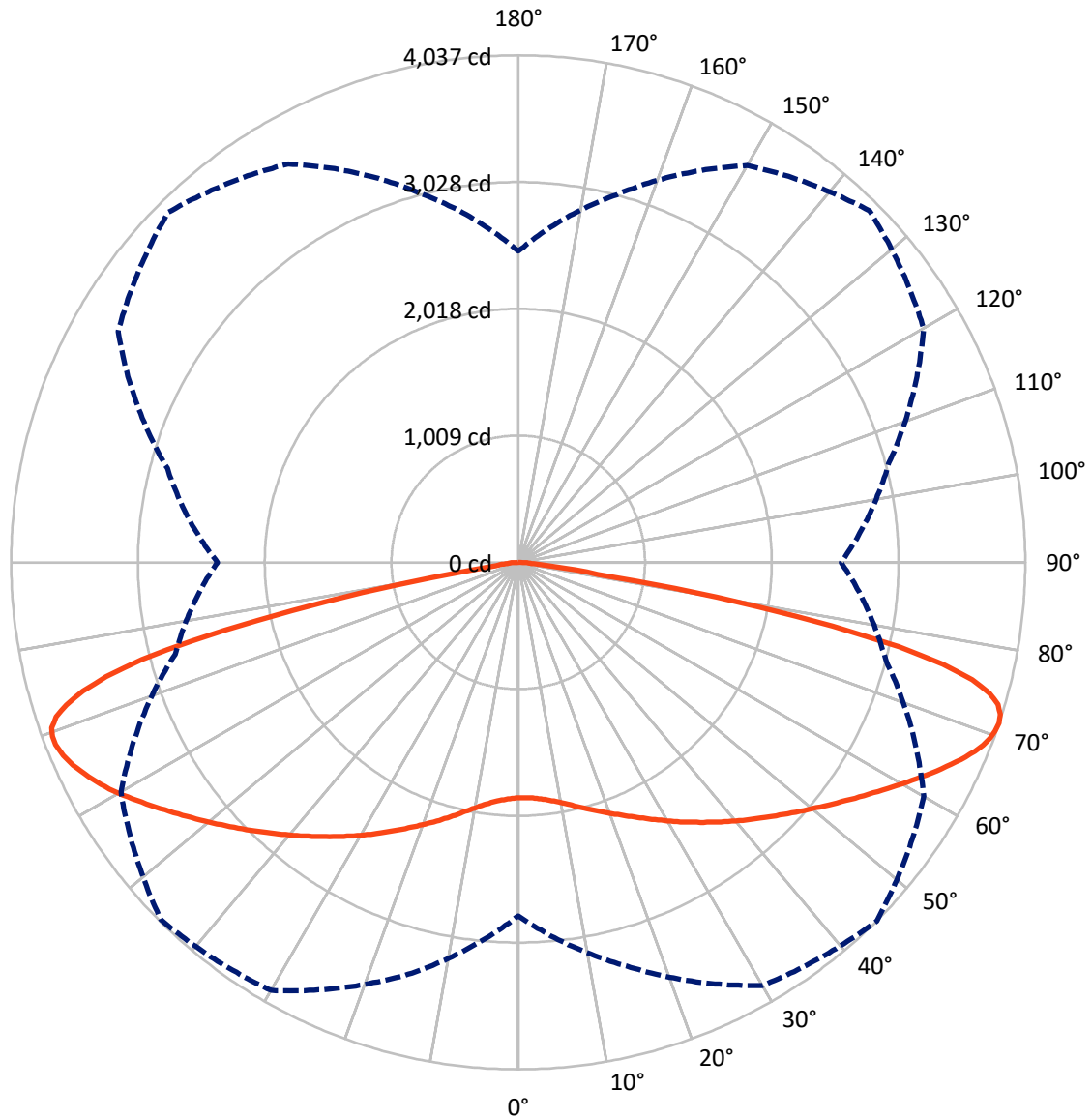


Based on 20 foot mounting height. Maximum calculated value = 4.7 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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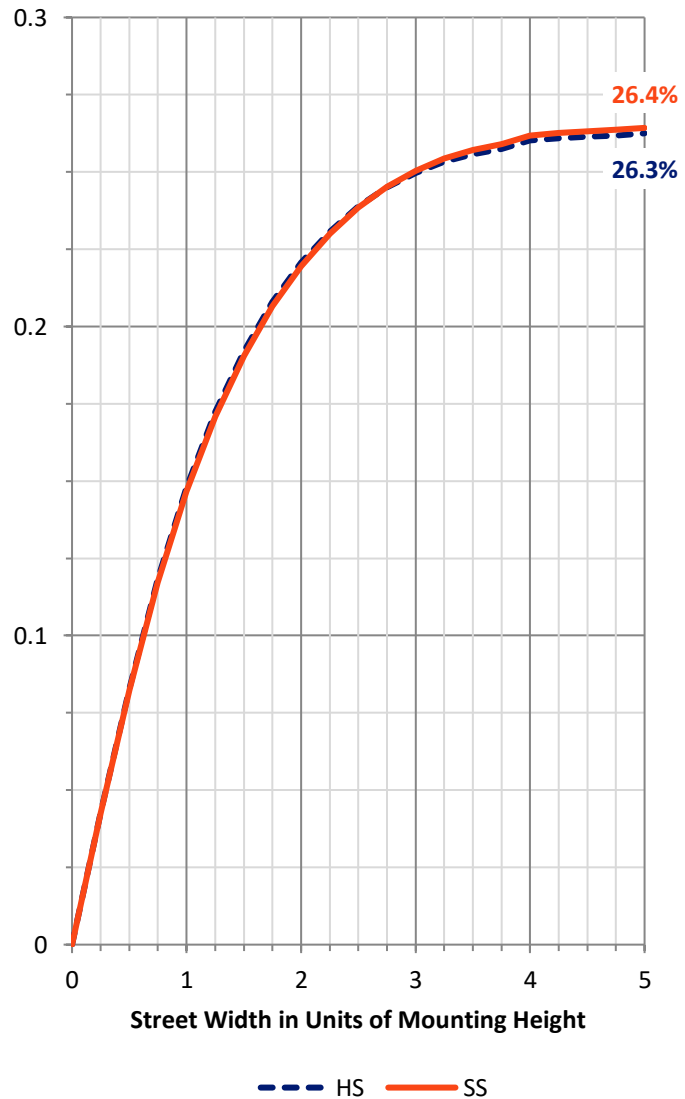
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7336.3	0.0	7336.3
	% Lamp	26.1	0.0	26.1
Street Side	Lumens	7406.6	0.0	7406.6
	% Lamp	26.4	0.0	26.4
Total	Lumens	14742.9	0.0	14742.9
	% Lamp	52.5	0.0	52.5

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	183.0	1.2	0.7
10°-20°	585.7	4.0	2.1
20°-30°	1065.0	7.2	3.8
30°-40°	1631.3	11.1	5.8
40°-50°	2273.6	15.4	8.1
50°-60°	2975.8	20.2	10.6
60°-70°	3556.4	24.1	12.7
70°-80°	2356.2	16.0	8.4
80°-90°	115.8	0.8	0.4
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°	14742.9	100.0	52.5
0°-180°	14742.9	100.0	52.5

Coefficient of Utilization



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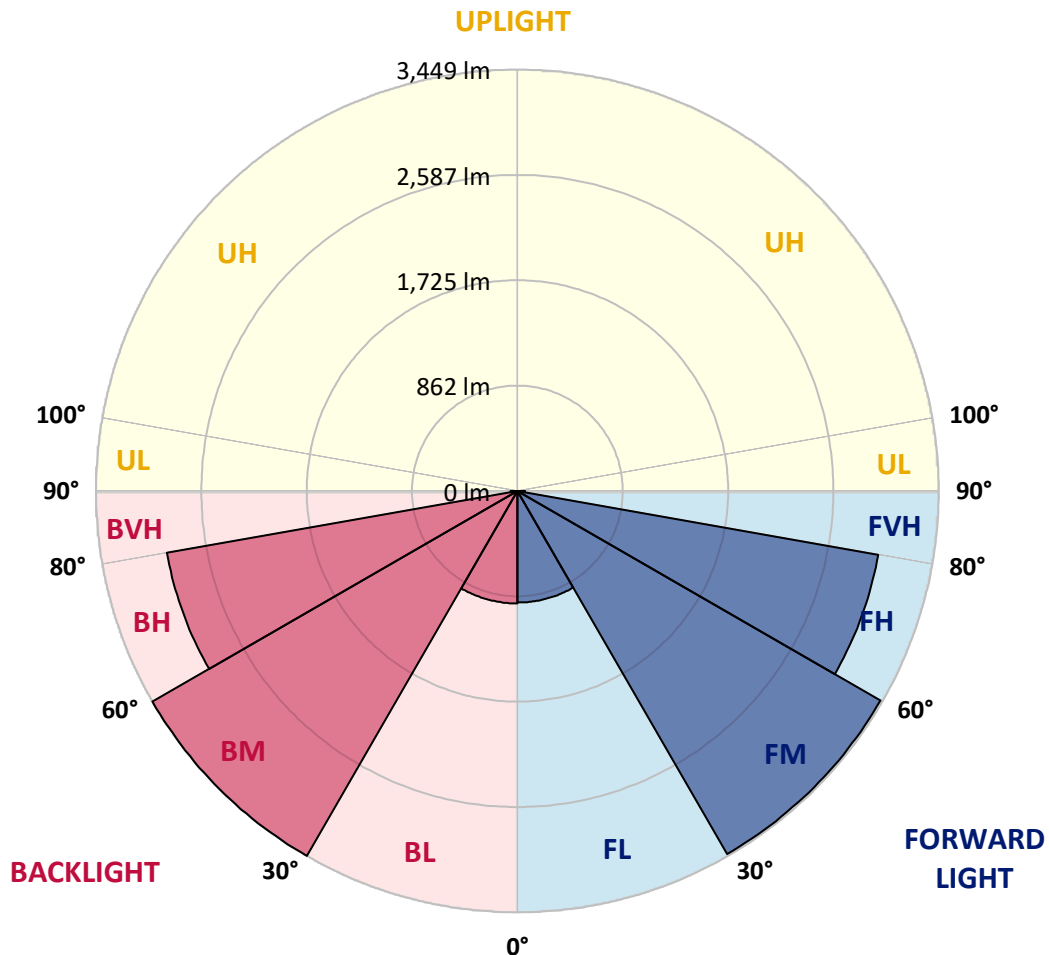
CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	913.3	3.3			
FM (30°-60°)	3431.6	12.2			
FH (60°-80°)	2999.6	10.7			G2/5000
FVH (80°-90°)	62.1	0.2			G1/100
BL (0°-30°)	920.5	3.3	B2/1000		
BM (30°-60°)	3449.1	12.3	B3/5000		
BH (60°-80°)	2913.0	10.4	B4/5000		G2/5000
BVH (80°-90°)	53.7	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	13319.1	47.5			

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1874.0	1874.0	1874.0	1874.0	1874.0	1874.0	1874.0	1874.0	1874.0	1874.0	1874.0
1°	1874.9	1874.5	1874.9	1874.5	1874.6	1874.4	1873.0	1873.2	1873.2	1873.9	1874.2
2°	1877.9	1877.1	1877.0	1876.5	1875.8	1875.1	1873.9	1873.9	1874.2	1875.2	1876.2
3°	1882.8	1881.6	1880.8	1879.6	1879.2	1878.2	1877.0	1876.9	1877.2	1878.3	1879.9
4°	1889.8	1888.3	1886.8	1885.6	1884.4	1883.2	1881.8	1881.7	1882.2	1883.7	1885.6
5°	1897.8	1895.9	1894.3	1892.2	1890.5	1889.4	1887.6	1888.3	1889.5	1891.3	1893.3
6°	1906.8	1904.5	1903.4	1901.1	1898.2	1896.5	1894.8	1895.3	1897.2	1900.4	1903.0
7°	1916.7	1914.4	1913.7	1911.2	1908.3	1905.7	1903.6	1904.5	1906.2	1911.0	1914.5
8°	1928.3	1925.8	1924.6	1922.5	1919.4	1916.5	1915.0	1916.0	1918.1	1922.4	1927.4
9°	1940.9	1938.6	1936.9	1934.8	1932.1	1928.6	1926.4	1928.0	1931.8	1936.2	1941.3
10°	1954.7	1952.4	1950.9	1948.7	1946.3	1942.2	1940.3	1941.9	1946.5	1951.9	1956.3
11°	1969.8	1967.2	1966.5	1964.4	1961.3	1957.3	1954.9	1957.5	1962.5	1969.3	1973.2
12°	1985.2	1981.8	1982.2	1981.0	1977.6	1973.4	1970.4	1973.8	1979.7	1987.3	1991.8
13°	2000.2	1996.9	1998.9	1999.1	1994.7	1990.8	1986.5	1990.7	1998.4	2006.2	2011.6
14°	2016.7	2013.0	2015.7	2017.3	2013.1	2008.2	2003.4	2008.7	2016.8	2026.5	2031.6
15°	2032.9	2029.5	2032.9	2036.5	2032.0	2026.2	2021.4	2026.5	2036.6	2047.3	2051.6
16°	2050.6	2048.0	2050.8	2055.4	2051.9	2045.5	2040.8	2045.7	2057.0	2068.7	2073.0
17°	2069.7	2067.1	2070.5	2075.3	2072.7	2065.2	2060.2	2065.4	2078.8	2089.4	2094.2
18°	2089.4	2086.0	2090.2	2095.1	2093.3	2085.6	2080.7	2086.4	2100.3	2110.9	2114.7
19°	2109.7	2106.0	2110.9	2115.7	2114.8	2107.0	2102.0	2108.5	2122.6	2132.8	2135.3
20°	2131.8	2127.4	2131.9	2136.7	2136.8	2129.6	2124.6	2131.7	2145.5	2154.7	2155.9
21°	2154.3	2149.8	2153.0	2158.3	2159.5	2152.5	2147.4	2155.7	2168.7	2175.8	2177.4
22°	2178.1	2173.3	2175.5	2180.3	2183.8	2176.4	2172.0	2180.6	2193.4	2199.1	2200.1
23°	2203.3	2198.2	2198.6	2203.7	2208.3	2201.6	2197.0	2206.8	2218.3	2222.5	2224.1
24°	2229.7	2224.0	2222.6	2227.6	2233.3	2227.1	2223.5	2233.6	2244.5	2246.9	2248.8
25°	2257.4	2250.7	2247.7	2253.1	2259.7	2253.8	2251.3	2261.5	2270.2	2272.1	2273.2
26°	2286.2	2278.1	2273.9	2278.9	2286.1	2280.1	2279.6	2289.6	2296.7	2297.9	2298.3
27°	2315.8	2306.2	2300.1	2305.8	2312.3	2307.0	2308.3	2318.2	2323.6	2324.8	2324.3
28°	2346.8	2334.7	2327.2	2333.1	2339.1	2334.6	2338.1	2346.4	2351.6	2352.6	2350.4
29°	2378.4	2363.4	2355.4	2361.8	2366.0	2362.4	2369.4	2375.2	2379.5	2381.4	2377.8
30°	2410.6	2392.1	2384.1	2390.8	2393.5	2391.1	2401.4	2404.6	2408.0	2410.5	2405.4
31°	2443.5	2421.7	2414.0	2420.8	2421.2	2419.1	2433.8	2433.7	2436.8	2440.5	2434.4
32°	2476.0	2451.2	2443.8	2451.1	2449.2	2449.1	2465.6	2463.8	2466.3	2470.9	2463.5
33°	2508.6	2481.6	2475.1	2480.9	2478.8	2478.2	2498.3	2493.0	2496.4	2501.4	2493.5
34°	2541.3	2511.8	2505.8	2511.5	2508.2	2506.6	2530.2	2522.1	2526.6	2531.3	2523.6
35°	2575.9	2541.8	2537.3	2542.5	2538.2	2535.2	2563.2	2550.9	2557.2	2562.6	2555.3
36°	2610.1	2572.7	2569.7	2574.1	2569.3	2564.9	2595.9	2580.6	2589.3	2594.2	2587.7
37°	2644.3	2604.1	2602.5	2606.5	2600.6	2593.6	2628.4	2610.7	2621.1	2626.4	2620.8
38°	2679.0	2636.5	2635.5	2638.7	2631.8	2623.6	2662.0	2640.2	2652.1	2658.6	2653.7
39°	2713.1	2669.0	2668.3	2671.4	2663.1	2654.7	2696.1	2670.7	2684.3	2690.6	2685.9
40°	2746.8	2703.0	2700.9	2704.6	2694.9	2686.1	2729.9	2702.1	2716.8	2723.9	2719.5
41°	2780.0	2737.5	2734.7	2737.7	2727.8	2718.6	2763.7	2735.0	2748.8	2757.3	2751.7
42°	2814.6	2772.9	2769.3	2772.3	2760.9	2751.7	2796.1	2768.1	2781.9	2792.0	2786.9
43°	2848.2	2809.7	2804.4	2807.4	2795.3	2786.2	2827.7	2802.7	2815.4	2827.1	2821.8
44°	2881.1	2847.5	2839.9	2842.9	2829.6	2821.7	2858.0	2838.2	2848.8	2861.8	2857.4



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	2914.1	2885.2	2876.3	2878.0	2864.5	2858.7	2887.6	2874.1	2883.0	2897.5	2894.2
46°	2947.2	2925.1	2914.0	2914.7	2901.1	2896.8	2917.7	2911.7	2917.7	2933.9	2931.4
47°	2981.4	2967.3	2953.2	2953.1	2938.9	2936.2	2948.7	2949.3	2954.4	2971.9	2970.8
48°	3016.2	3009.0	2992.7	2992.1	2976.5	2976.3	2977.9	2988.5	2992.4	3009.2	3010.7
49°	3052.2	3052.8	3034.4	3032.5	3015.5	3016.7	3006.8	3027.1	3030.8	3048.0	3050.0
50°	3088.9	3095.4	3076.2	3073.1	3054.1	3057.6	3035.9	3065.7	3068.9	3088.9	3091.1
51°	3126.5	3139.6	3119.2	3114.6	3095.2	3097.7	3066.3	3103.5	3108.5	3130.3	3134.5
52°	3165.2	3184.7	3164.5	3158.9	3137.0	3137.4	3097.5	3142.6	3149.2	3173.9	3177.4
53°	3203.9	3229.0	3210.6	3202.8	3178.5	3175.7	3127.3	3180.9	3189.9	3216.5	3221.3
54°	3242.7	3273.2	3257.4	3249.7	3220.8	3213.0	3156.8	3217.5	3232.0	3260.2	3265.2
55°	3279.8	3313.6	3305.3	3295.9	3262.7	3248.1	3185.8	3250.7	3274.5	3307.4	3311.4
56°	3314.8	3353.7	3354.2	3344.6	3305.8	3281.1	3213.6	3284.0	3316.9	3354.8	3358.8
57°	3347.9	3391.3	3403.2	3395.6	3348.3	3311.7	3238.5	3314.0	3359.0	3403.2	3404.9
58°	3378.9	3426.9	3453.2	3447.4	3390.4	3338.9	3259.7	3340.8	3401.0	3453.3	3449.0
59°	3406.8	3459.9	3504.3	3499.9	3432.8	3361.5	3279.5	3365.5	3442.2	3504.4	3491.6
60°	3431.9	3489.8	3554.5	3554.5	3473.4	3380.7	3295.1	3386.5	3481.4	3556.0	3532.6
61°	3452.5	3516.9	3603.1	3608.8	3513.6	3397.8	3307.2	3404.8	3522.1	3606.9	3573.8
62°	3468.5	3539.5	3650.7	3664.7	3552.4	3410.1	3314.0	3418.1	3559.7	3657.1	3613.4
63°	3482.6	3559.9	3697.2	3721.0	3592.3	3416.5	3314.4	3428.5	3597.6	3703.4	3650.4
64°	3495.2	3576.5	3739.7	3776.7	3629.6	3417.8	3309.1	3434.7	3635.3	3748.3	3685.2
65°	3507.5	3590.5	3780.8	3831.5	3665.3	3417.2	3299.9	3435.9	3670.2	3794.2	3715.7
66°	3514.6	3603.9	3817.3	3884.1	3696.3	3410.4	3286.0	3430.9	3701.5	3840.1	3744.1
67°	3514.6	3613.3	3848.5	3932.8	3721.9	3398.1	3263.4	3420.1	3727.3	3882.6	3767.0
68°	3482.2	3611.4	3875.2	3975.7	3739.6	3377.9	3193.8	3397.9	3747.7	3916.3	3752.3
69°	3378.4	3584.1	3892.5	4007.9	3749.9	3322.6	3047.7	3342.6	3757.7	3942.9	3718.0
70°	3159.6	3505.2	3899.0	4028.3	3753.9	3208.1	2834.4	3230.4	3756.1	3958.2	3699.5
71°	2813.7	3327.3	3889.9	4036.8	3728.5	3030.2	2570.4	3054.1	3726.0	3955.8	3648.4
72°	2453.1	3036.5	3858.9	4024.8	3663.5	2803.1	2329.5	2823.0	3647.2	3914.9	3562.6
73°	2071.1	2657.4	3783.5	3982.8	3552.1	2559.2	2143.7	2573.5	3515.4	3826.6	3454.8
74°	1629.4	2243.9	3617.9	3893.1	3396.3	2337.4	1910.4	2344.1	3343.4	3692.1	3276.7
75°	1078.8	1793.4	3314.6	3733.8	3191.7	2090.6	1459.8	2101.8	3124.6	3512.8	3011.4
76°	557.8	1258.6	2905.4	3477.7	2949.7	1720.0	1009.1	1748.1	2883.4	3248.1	2649.3
77°	403.7	677.1	2462.2	3103.2	2652.4	1157.5	559.0	1265.9	2596.1	2874.3	2200.6
78°	258.0	486.7	1924.4	2553.5	2239.0	600.0	240.7	783.8	2198.1	2376.9	1662.7
79°	112.3	303.1	1248.4	1945.8	1661.3	433.8	189.6	305.0	1639.7	1798.7	1124.8
80°	93.3	119.4	636.9	1267.1	1005.9	272.0	138.5	235.6	1081.3	1216.8	588.8
81°	79.8	98.4	460.7	641.3	494.1	110.2	88.4	166.2	528.2	640.9	270.5
82°	68.0	83.1	291.5	461.1	364.3	93.8	75.5	96.7	235.2	259.2	206.4
83°	57.0	69.4	122.3	293.2	238.4	79.4	63.9	81.6	184.8	202.3	142.2
84°	47.1	56.9	95.9	125.3	112.6	66.1	53.0	67.7	134.4	145.4	78.6
85°	37.2	46.5	73.2	103.3	85.5	54.1	42.7	55.1	84.5	88.8	56.9
86°	27.3	36.2	54.9	83.1	62.8	43.4	33.0	43.7	60.6	69.6	38.1
87°	18.5	25.9	39.9	61.1	46.1	32.8	23.5	33.1	43.8	49.4	23.7
88°	10.6	16.8	25.0	48.9	29.7	22.2	16.4	23.5	30.3	30.8	16.8
89°	4.3	7.2	10.1	37.1	13.2	11.9	9.3	16.3	20.9	21.3	9.9



REPORT NUMBER: P1436702

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436702

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436702

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436702

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1874.0	1874.0	1874.0	1874.0	1874.0	1874.0	1874.0	1874.0	1874.0	1874.0	1874.0
1°	1874.6	1875.0	1875.3	1875.9	1876.2	1876.5	1876.8	1875.5	1875.3	1875.1	1875.4
2°	1876.9	1877.9	1878.2	1879.3	1879.9	1880.1	1880.4	1879.3	1879.4	1878.9	1879.0
3°	1880.8	1882.5	1883.6	1884.6	1885.6	1885.9	1886.6	1885.1	1885.2	1884.7	1885.0
4°	1887.4	1889.3	1890.6	1891.8	1892.9	1893.5	1894.1	1892.9	1892.6	1892.2	1891.9
5°	1895.3	1897.9	1899.3	1901.2	1902.1	1902.7	1902.9	1901.5	1901.4	1900.9	1900.6
6°	1905.6	1908.1	1910.4	1912.3	1913.2	1913.2	1913.3	1911.7	1911.8	1911.5	1911.2
7°	1917.6	1919.9	1922.8	1925.0	1925.8	1926.4	1927.0	1924.9	1924.6	1923.8	1923.5
8°	1930.7	1933.4	1936.5	1939.3	1940.6	1941.7	1941.2	1938.7	1938.2	1937.5	1936.5
9°	1944.8	1948.0	1951.7	1955.4	1957.4	1957.9	1956.7	1953.1	1953.2	1952.9	1951.9
10°	1960.5	1964.3	1968.6	1973.0	1975.5	1975.5	1973.4	1969.9	1969.6	1970.1	1968.0
11°	1977.9	1982.0	1987.0	1992.4	1995.2	1994.8	1992.2	1988.4	1988.3	1988.8	1986.0
12°	1995.9	2000.2	2006.3	2012.8	2016.2	2015.3	2012.2	2007.6	2008.2	2008.1	2005.0
13°	2014.4	2018.6	2025.5	2034.8	2038.8	2037.6	2032.8	2028.3	2029.1	2029.1	2025.2
14°	2033.9	2037.8	2045.8	2056.5	2062.0	2060.4	2055.2	2049.7	2050.8	2051.4	2046.3
15°	2053.5	2057.0	2066.4	2079.0	2086.3	2084.3	2077.9	2071.9	2073.5	2074.8	2067.9
16°	2073.6	2077.1	2087.1	2101.4	2110.9	2110.0	2101.6	2094.8	2096.7	2098.1	2089.9
17°	2093.8	2097.3	2108.3	2124.1	2135.8	2134.9	2126.6	2119.1	2120.6	2122.0	2112.8
18°	2114.7	2118.1	2130.1	2146.4	2160.3	2160.9	2151.9	2143.3	2145.8	2146.7	2135.9
19°	2135.8	2140.3	2151.6	2169.1	2185.5	2186.6	2177.3	2168.5	2171.2	2171.5	2158.4
20°	2157.3	2162.6	2174.4	2193.5	2210.1	2213.3	2203.8	2194.8	2197.6	2197.2	2182.0
21°	2180.0	2185.6	2198.0	2217.4	2235.4	2240.7	2231.9	2222.0	2224.2	2223.4	2205.5
22°	2203.7	2209.6	2222.5	2242.8	2262.2	2268.5	2260.5	2249.5	2252.3	2249.9	2230.8
23°	2227.2	2234.3	2248.5	2269.3	2288.9	2297.5	2288.5	2278.5	2281.4	2276.8	2256.7
24°	2252.7	2260.5	2274.9	2296.1	2316.9	2326.0	2317.6	2308.0	2310.4	2303.8	2282.1
25°	2277.8	2287.0	2301.9	2323.2	2345.2	2354.8	2347.9	2338.2	2339.6	2331.8	2308.4
26°	2304.3	2315.6	2329.8	2351.6	2374.1	2383.8	2378.0	2369.8	2368.6	2359.6	2336.3
27°	2330.9	2344.0	2357.7	2379.8	2402.7	2412.5	2407.9	2401.2	2398.1	2387.5	2363.9
28°	2357.9	2375.3	2386.2	2408.9	2433.5	2442.7	2438.7	2434.5	2428.1	2416.5	2393.2
29°	2385.9	2406.4	2415.7	2438.9	2463.6	2472.4	2469.8	2467.6	2458.2	2446.3	2423.8
30°	2414.7	2439.2	2445.6	2468.6	2494.4	2502.5	2500.6	2500.7	2488.0	2475.5	2454.9
31°	2444.4	2472.2	2475.9	2498.5	2523.8	2532.7	2530.7	2534.7	2518.2	2504.9	2486.0
32°	2474.0	2505.7	2506.4	2528.6	2555.0	2564.1	2562.0	2568.4	2547.4	2534.2	2517.3
33°	2504.5	2539.6	2537.0	2560.1	2586.2	2595.8	2593.0	2602.3	2577.7	2565.4	2549.9
34°	2534.9	2573.4	2567.1	2592.1	2618.4	2627.2	2624.3	2636.7	2607.8	2596.5	2582.5
35°	2564.7	2608.8	2598.6	2624.8	2650.6	2659.1	2655.2	2671.2	2638.9	2628.9	2616.8
36°	2595.5	2644.3	2630.4	2657.7	2682.5	2690.3	2686.4	2706.1	2669.8	2661.2	2650.4
37°	2625.7	2679.7	2662.6	2690.9	2714.9	2721.9	2718.9	2741.2	2701.8	2694.2	2684.1
38°	2657.5	2714.7	2695.7	2724.5	2748.1	2754.5	2751.1	2776.1	2733.9	2727.5	2718.6
39°	2690.0	2750.1	2729.0	2758.9	2782.2	2786.9	2784.6	2810.4	2766.3	2761.5	2752.5
40°	2723.9	2783.2	2763.9	2793.9	2816.2	2820.6	2818.1	2843.5	2799.5	2796.1	2787.2
41°	2759.3	2816.6	2799.2	2829.2	2851.5	2853.9	2851.7	2875.4	2833.7	2831.0	2821.9
42°	2794.1	2849.0	2836.1	2864.0	2886.3	2888.4	2886.2	2907.1	2869.6	2866.7	2858.1
43°	2830.3	2881.1	2873.1	2899.5	2922.7	2924.8	2922.6	2939.2	2906.5	2902.0	2893.2
44°	2867.6	2913.2	2911.1	2936.1	2959.5	2961.1	2959.3	2972.5	2944.4	2937.7	2929.9



REPORT NUMBER: P1436702

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2905.7	2945.9	2949.7	2974.3	2997.6	2998.0	2998.2	3004.7	2983.1	2974.7	2966.8
46°	2945.2	2977.8	2990.0	3011.8	3035.9	3034.9	3037.0	3033.9	3023.7	3012.3	3004.8
47°	2986.7	3009.0	3030.9	3049.7	3074.7	3071.8	3075.6	3063.0	3062.4	3050.2	3044.3
48°	3028.8	3041.8	3073.2	3088.9	3114.0	3109.8	3113.6	3092.7	3101.7	3088.3	3084.6
49°	3071.1	3077.0	3116.6	3128.3	3154.7	3148.1	3151.3	3123.1	3140.2	3127.1	3125.2
50°	3115.4	3111.6	3160.7	3169.8	3195.3	3187.0	3188.2	3154.0	3178.3	3167.2	3166.6
51°	3162.1	3147.2	3204.8	3211.5	3237.2	3225.2	3224.9	3181.8	3215.2	3207.3	3209.0
52°	3206.6	3181.0	3247.7	3253.2	3279.8	3263.6	3259.9	3210.1	3251.0	3247.2	3252.5
53°	3246.6	3209.0	3287.5	3296.6	3323.6	3302.0	3292.4	3236.5	3283.2	3286.1	3296.2
54°	3281.3	3229.8	3323.6	3340.6	3368.0	3341.6	3322.6	3260.0	3313.8	3327.4	3342.2
55°	3312.8	3251.1	3354.9	3385.0	3413.4	3379.8	3350.8	3282.4	3341.7	3366.8	3390.0
56°	3344.9	3275.3	3385.4	3431.4	3459.5	3417.0	3376.0	3302.7	3366.9	3405.8	3439.1
57°	3375.3	3300.6	3415.4	3476.6	3505.7	3454.6	3398.3	3319.6	3388.3	3443.3	3486.6
58°	3404.0	3318.3	3444.4	3523.1	3552.7	3491.6	3417.1	3335.9	3406.1	3480.9	3536.4
59°	3426.0	3330.7	3465.9	3566.9	3601.8	3526.6	3433.0	3349.7	3420.8	3516.9	3585.9
60°	3444.1	3346.0	3483.8	3608.0	3650.1	3560.7	3447.5	3360.1	3433.3	3552.9	3636.4
61°	3461.6	3361.2	3501.2	3650.0	3698.9	3594.9	3459.0	3364.3	3445.2	3587.6	3687.3
62°	3478.2	3373.6	3517.3	3689.8	3743.4	3630.0	3466.7	3365.4	3452.2	3620.8	3738.9
63°	3493.2	3383.7	3532.4	3726.3	3783.8	3661.7	3469.9	3364.4	3453.8	3651.6	3789.9
64°	3506.6	3385.7	3545.1	3759.9	3822.0	3692.1	3471.5	3356.0	3451.8	3679.8	3841.1
65°	3504.7	3353.9	3540.3	3789.4	3859.2	3718.7	3466.4	3341.2	3444.1	3703.6	3889.4
66°	3461.5	3325.8	3492.8	3812.6	3894.6	3739.8	3457.4	3320.0	3432.1	3723.9	3935.2
67°	3433.8	3308.5	3463.1	3825.6	3922.2	3757.5	3439.6	3268.7	3411.0	3738.6	3974.3
68°	3417.2	3252.2	3437.7	3799.5	3943.8	3768.9	3395.9	3146.8	3361.3	3747.0	4006.9
69°	3350.0	3104.8	3363.6	3755.5	3958.1	3765.4	3301.0	2940.3	3254.4	3741.6	4029.6
70°	3223.9	2847.1	3241.1	3726.5	3960.1	3740.5	3128.4	2667.7	3074.2	3717.9	4036.8
71°	3031.4	2476.8	3047.6	3663.1	3941.1	3678.2	2892.3	2395.4	2827.9	3653.3	4023.1
72°	2737.1	2141.2	2748.4	3571.7	3880.7	3562.1	2624.5	2167.9	2559.1	3545.9	3985.3
73°	2377.3	1798.1	2383.8	3446.6	3771.0	3387.0	2365.4	1946.8	2303.6	3382.1	3907.9
74°	2004.6	1347.7	2012.2	3254.1	3613.8	3173.4	2119.5	1645.1	2054.7	3170.9	3780.5
75°	1525.8	897.3	1535.3	2963.2	3404.0	2914.1	1811.8	1173.3	1732.7	2910.7	3574.4
76°	1046.9	453.9	1058.3	2575.6	3094.8	2631.4	1331.2	665.1	1254.5	2611.5	3278.2
77°	572.3	332.9	585.5	2126.1	2673.7	2290.2	850.6	477.5	701.4	2251.1	2852.5
78°	241.5	211.9	253.2	1591.8	2125.4	1814.2	376.8	296.3	508.2	1767.5	2282.8
79°	188.2	93.7	196.4	1057.6	1551.6	1317.6	174.8	115.2	315.3	1171.8	1639.2
80°	135.0	77.3	139.6	527.4	977.8	821.0	146.0	96.3	122.3	643.2	992.4
81°	81.9	64.3	83.6	237.0	413.4	325.6	117.2	82.4	100.6	464.8	467.5
82°	66.8	52.8	68.2	183.7	178.1	172.1	88.6	70.0	85.4	297.3	302.0
83°	53.3	41.9	54.6	130.3	147.1	139.8	74.7	58.7	71.8	129.7	146.4
84°	41.1	32.4	42.0	77.3	116.1	107.4	62.1	48.7	59.3	100.2	118.2
85°	30.0	23.1	30.6	55.1	85.2	75.1	50.2	38.7	48.7	75.1	98.0
86°	21.2	15.9	21.5	36.4	66.3	53.9	39.3	28.8	38.2	54.8	78.5
87°	12.5	8.8	12.4	26.2	46.6	39.0	29.4	19.6	27.6	39.7	55.3
88°	3.8	1.7	3.4	16.1	31.8	26.8	20.3	11.5	18.4	24.6	44.4
89°	2.7	1.6	2.5	5.9	17.0	14.7	11.1	4.6	8.3	9.5	33.8



REPORT NUMBER: P1436702

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436702

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436702

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436702

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1874.0	1874.0	1874.0
1°	1875.4	1874.9	1874.9
2°	1878.9	1878.5	1877.9
3°	1884.4	1883.8	1882.8
4°	1891.7	1890.8	1889.8
5°	1900.1	1899.0	1897.8
6°	1910.0	1908.9	1906.8
7°	1920.9	1919.4	1916.7
8°	1933.5	1930.8	1928.3
9°	1947.8	1944.2	1940.9
10°	1963.4	1958.9	1954.7
11°	1980.2	1974.8	1969.8
12°	1998.2	1991.1	1985.2
13°	2017.3	2007.7	2000.2
14°	2036.1	2024.8	2016.7
15°	2055.1	2042.3	2032.9
16°	2075.4	2060.8	2050.6
17°	2095.6	2080.6	2069.7
18°	2116.9	2100.8	2089.4
19°	2138.7	2121.5	2109.7
20°	2160.0	2142.3	2131.8
21°	2182.8	2165.0	2154.3
22°	2206.6	2188.5	2178.1
23°	2231.4	2213.0	2203.3
24°	2256.9	2238.3	2229.7
25°	2282.4	2265.0	2257.4
26°	2310.1	2292.3	2286.2
27°	2338.5	2320.4	2315.8
28°	2367.1	2348.7	2346.8
29°	2397.4	2377.8	2378.4
30°	2428.4	2407.2	2410.6
31°	2459.4	2438.2	2443.5
32°	2490.5	2468.9	2476.0
33°	2522.1	2500.3	2508.6
34°	2553.8	2530.5	2541.3
35°	2586.7	2561.6	2575.9
36°	2620.9	2592.5	2610.1
37°	2654.0	2624.9	2644.3
38°	2688.5	2658.0	2679.0
39°	2722.2	2691.1	2713.1
40°	2757.7	2725.8	2746.8
41°	2792.8	2761.1	2780.0
42°	2829.0	2798.2	2814.6
43°	2865.5	2835.9	2848.2
44°	2902.3	2873.3	2881.1



REPORT NUMBER: P1436702

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	2939.9	2913.7	2914.1
46°	2978.4	2953.7	2947.2
47°	3017.6	2996.1	2981.4
48°	3058.3	3039.3	3016.2
49°	3100.1	3084.3	3052.2
50°	3143.0	3129.3	3088.9
51°	3186.8	3175.7	3126.5
52°	3232.0	3221.2	3165.2
53°	3279.0	3266.9	3203.9
54°	3324.8	3311.8	3242.7
55°	3372.9	3356.2	3279.8
56°	3422.2	3397.6	3314.8
57°	3470.6	3435.7	3347.9
58°	3520.9	3470.6	3378.9
59°	3569.5	3503.1	3406.8
60°	3618.2	3532.5	3431.9
61°	3666.9	3557.6	3452.5
62°	3714.3	3580.1	3468.5
63°	3760.0	3599.1	3482.6
64°	3805.5	3617.2	3495.2
65°	3847.4	3633.5	3507.5
66°	3886.5	3649.0	3514.6
67°	3918.2	3658.9	3514.6
68°	3942.4	3657.7	3482.2
69°	3954.2	3632.4	3378.4
70°	3953.9	3558.4	3159.6
71°	3935.5	3396.2	2813.7
72°	3889.7	3106.2	2453.1
73°	3793.3	2722.2	2071.1
74°	3602.7	2290.1	1629.4
75°	3287.9	1837.5	1078.8
76°	2883.3	1316.6	557.8
77°	2417.0	729.8	403.7
78°	1839.4	526.3	258.0
79°	1162.5	324.1	112.3
80°	597.8	121.8	93.3
81°	428.9	102.4	79.8
82°	274.4	86.6	68.0
83°	120.0	72.0	57.0
84°	94.8	59.1	47.1
85°	71.8	48.2	37.2
86°	53.9	37.4	27.3
87°	38.8	26.5	18.5
88°	23.8	16.9	10.6
89°	8.8	6.9	4.3



REPORT NUMBER: P1436702

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436702

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436702

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)