

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: P1436750

Luminaire Tested: XAS180-SFPM (5000K-108W-T4-HSS)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436750
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 (5000K-108W-T4-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 28062 (1 lamp)
Luminaire Lumens: 15647.2 lumens
Efficiency: 55.8%
Efficacy: 145.3 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

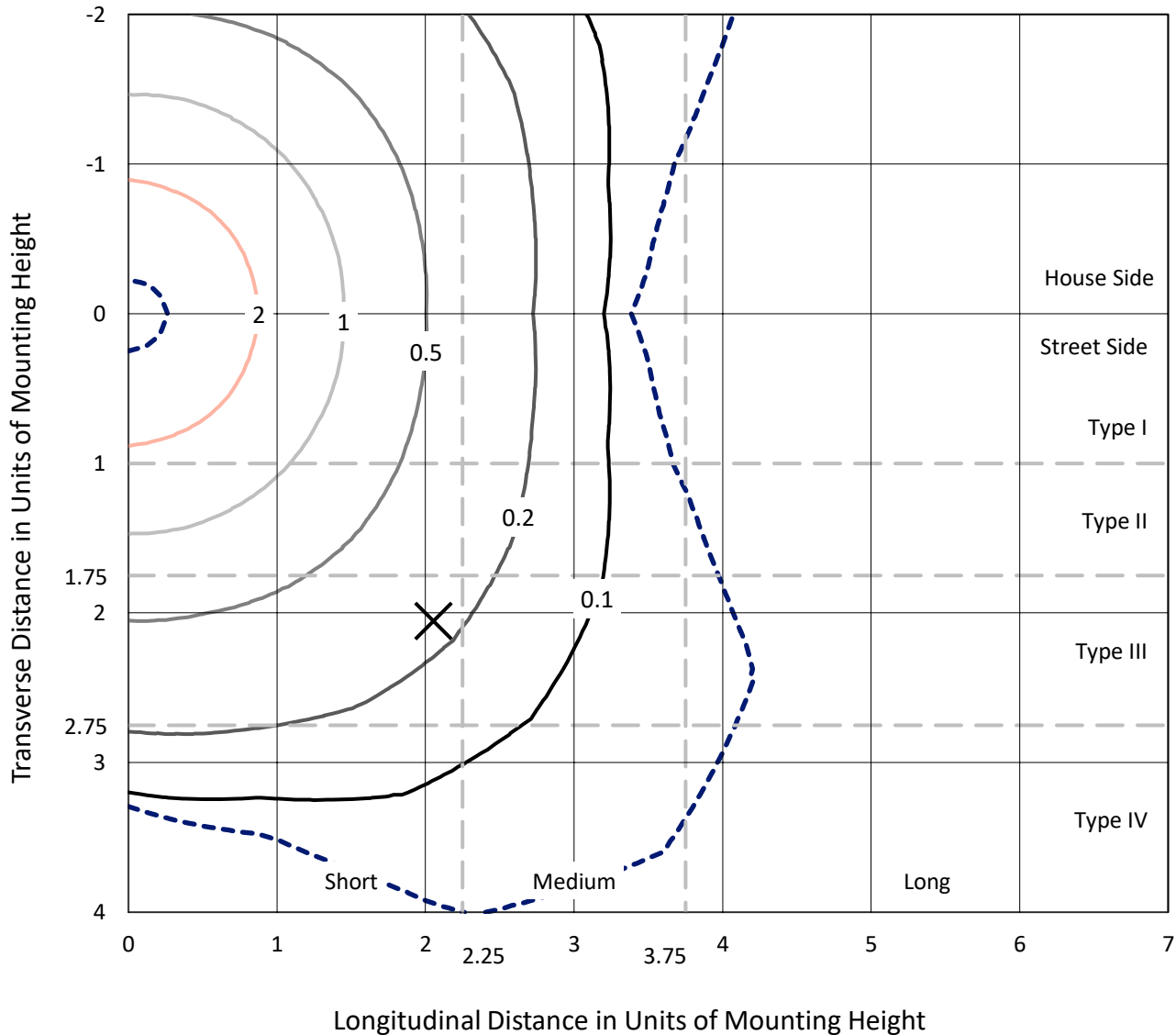
Input Watts (W): 107.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

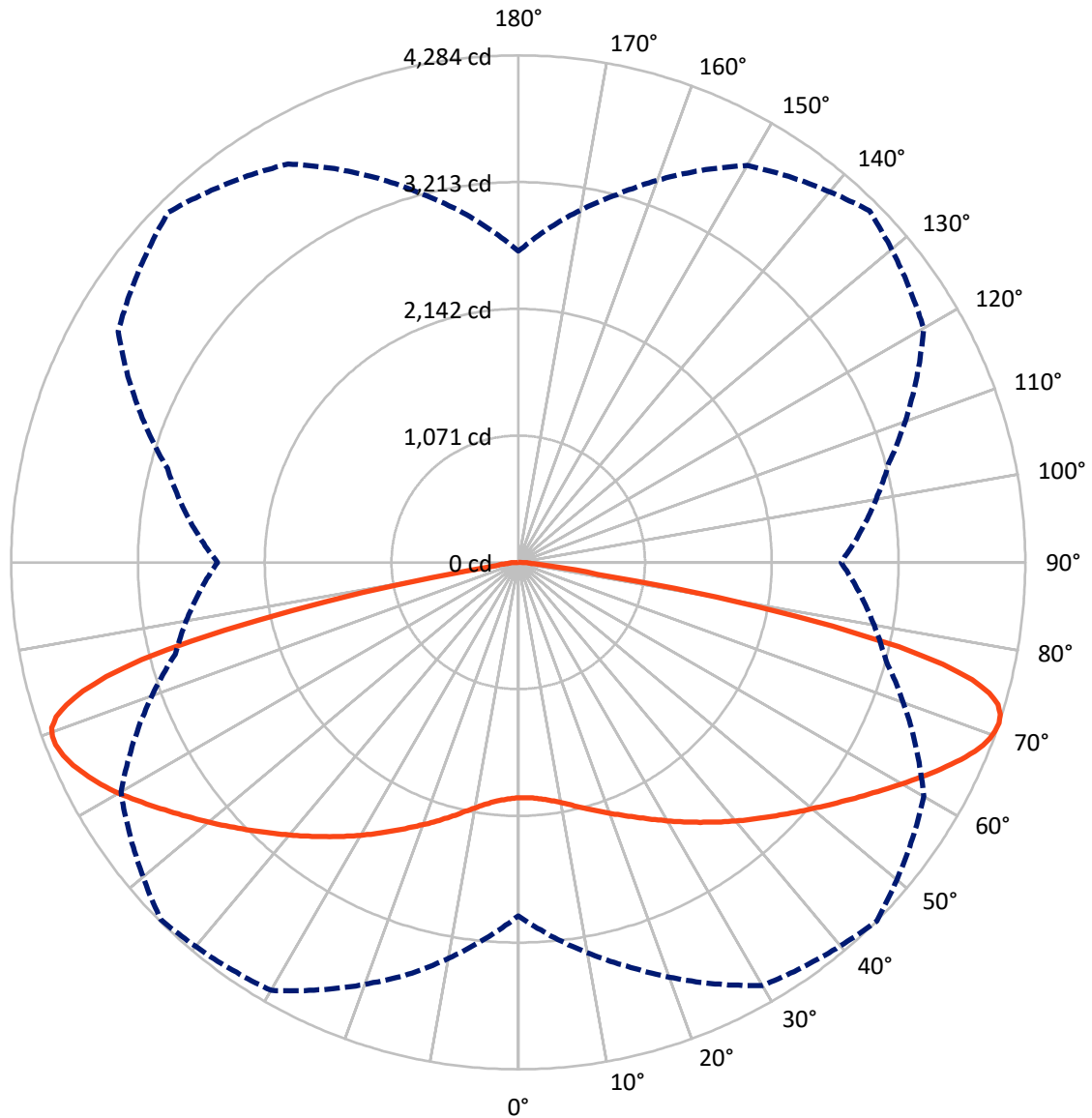
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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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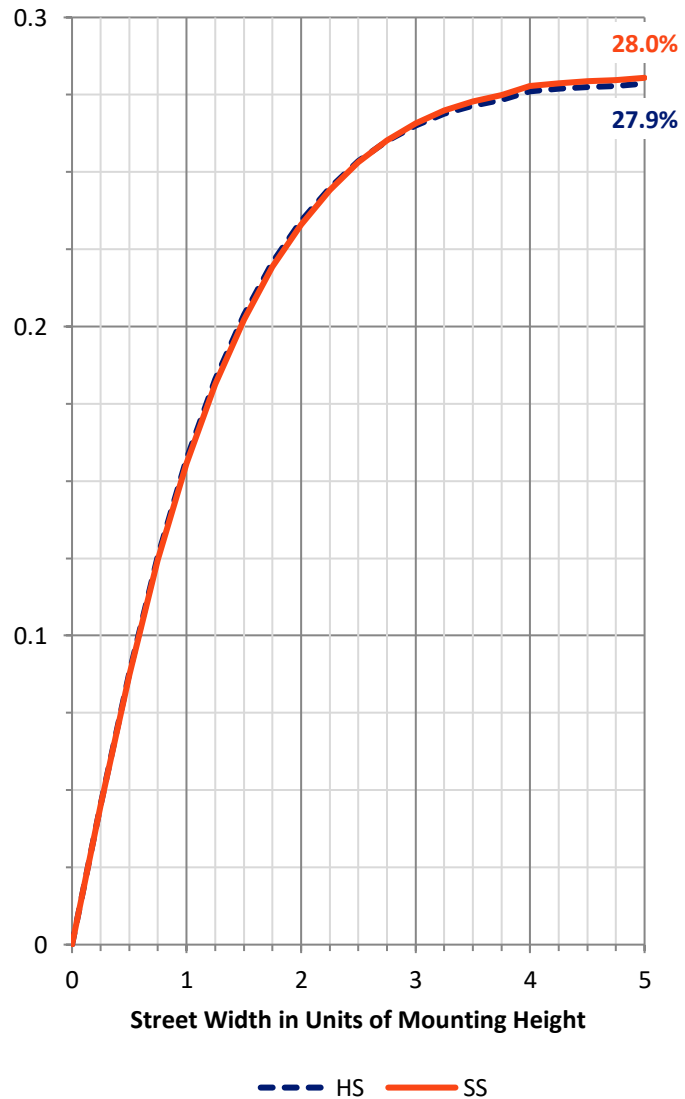
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7786.3	0.0	7786.3
	% Lamp	27.7	0.0	27.7
Street Side	Lumens	7860.9	0.0	7860.9
	% Lamp	28.0	0.0	28.0
Total	Lumens	15647.2	0.0	15647.2
	% Lamp	55.8	0.0	55.8

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	194.3	1.2	0.7
10°-20°	621.7	4.0	2.2
20°-30°	1130.3	7.2	4.0
30°-40°	1731.3	11.1	6.2
40°-50°	2413.1	15.4	8.6
50°-60°	3158.3	20.2	11.3
60°-70°	3774.5	24.1	13.5
70°-80°	2500.8	16.0	8.9
80°-90°	122.9	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°	15647.2	100.0	55.8
0°-180°	15647.2	100.0	55.8

Coefficient of Utilization



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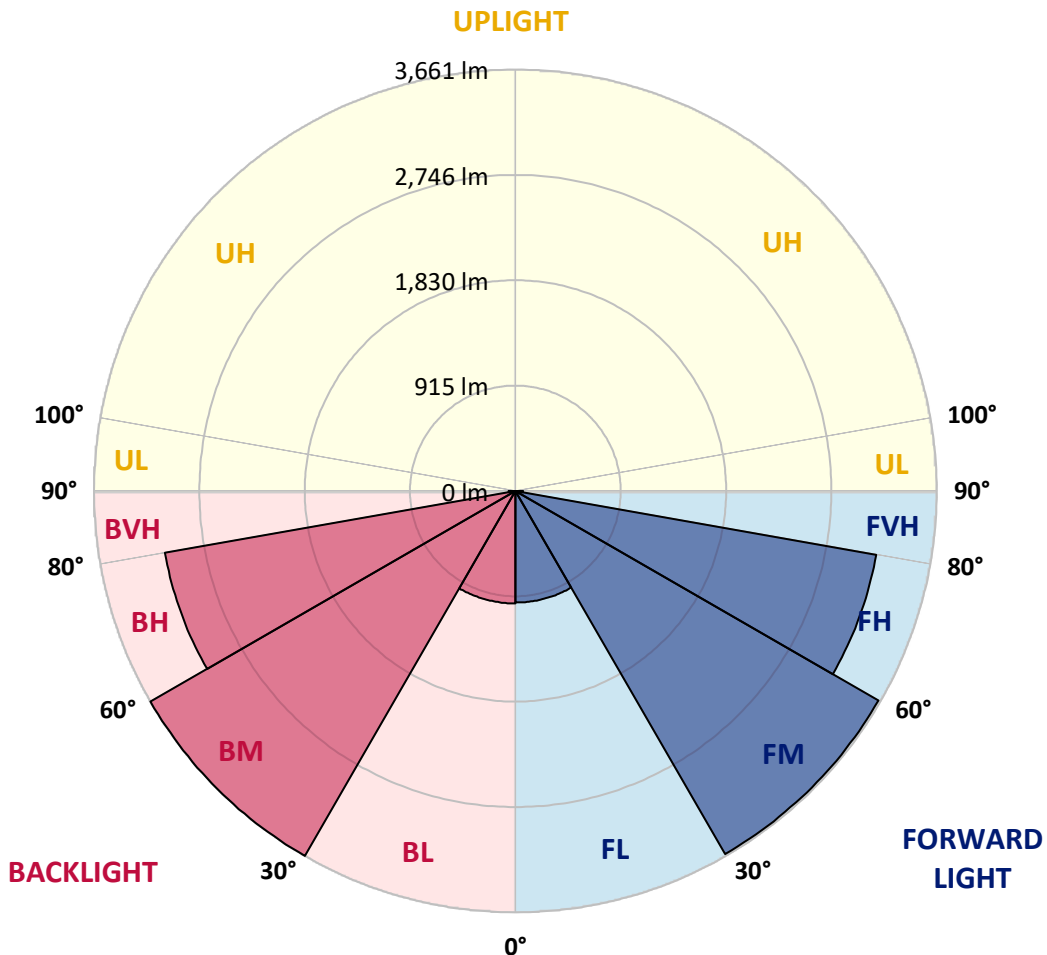
CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	969.4	3.5			
FM (30°-60°)	3642.1	13.0			
FH (60°-80°)	3183.5	11.3			G2/5000
FVH (80°-90°)	65.9	0.2			G1/100
BL (0°-30°)	976.9	3.5	B2/1000		
BM (30°-60°)	3660.7	13.0	B3/5000		
BH (60°-80°)	3091.7	11.0	B4/5000		G2/5000
BVH (80°-90°)	57.0	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	12414.8	44.2			

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°	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0
1°	1989.9	1989.5	1989.9	1989.5	1989.6	1989.4	1987.9	1988.1	1988.1	1988.8	1989.2
2°	1993.0	1992.3	1992.1	1991.6	1990.8	1990.1	1988.9	1988.9	1989.2	1990.2	1991.3
3°	1998.3	1997.0	1996.2	1994.9	1994.5	1993.4	1992.1	1992.0	1992.3	1993.5	1995.2
4°	2005.7	2004.1	2002.6	2001.3	2000.0	1998.7	1997.2	1997.1	1997.6	1999.3	2001.3
5°	2014.2	2012.2	2010.5	2008.3	2006.4	2005.2	2003.4	2004.1	2005.4	2007.3	2009.4
6°	2023.8	2021.3	2020.2	2017.7	2014.7	2012.8	2011.0	2011.6	2013.6	2017.0	2019.7
7°	2034.3	2031.8	2031.1	2028.4	2025.4	2022.6	2020.4	2021.3	2023.1	2028.2	2031.9
8°	2046.6	2043.9	2042.7	2040.4	2037.1	2034.0	2032.5	2033.6	2035.7	2040.3	2045.7
9°	2059.9	2057.5	2055.7	2053.5	2050.6	2046.8	2044.6	2046.3	2050.2	2055.0	2060.4
10°	2074.6	2072.2	2070.6	2068.2	2065.7	2061.3	2059.3	2061.1	2065.9	2071.7	2076.3
11°	2090.6	2087.8	2087.2	2084.9	2081.6	2077.4	2074.8	2077.6	2082.9	2090.1	2094.2
12°	2107.0	2103.3	2103.8	2102.5	2098.9	2094.5	2091.3	2094.9	2101.1	2109.2	2113.9
13°	2122.8	2119.4	2121.6	2121.7	2117.1	2112.9	2108.3	2112.8	2120.9	2129.3	2135.0
14°	2140.4	2136.4	2139.3	2141.0	2136.6	2131.4	2126.2	2131.9	2140.5	2150.8	2156.2
15°	2157.6	2154.0	2157.6	2161.4	2156.6	2150.5	2145.4	2150.8	2161.5	2172.9	2177.5
16°	2176.4	2173.6	2176.6	2181.5	2177.7	2171.0	2166.0	2171.2	2183.2	2195.6	2200.1
17°	2196.6	2193.9	2197.4	2202.6	2199.8	2191.9	2186.6	2192.1	2206.3	2217.5	2222.7
18°	2217.6	2214.0	2218.4	2223.6	2221.7	2213.6	2208.3	2214.3	2229.1	2240.3	2244.4
19°	2239.2	2235.2	2240.4	2245.5	2244.6	2236.3	2230.9	2237.8	2252.8	2263.6	2266.3
20°	2262.6	2257.9	2262.6	2267.8	2267.9	2260.2	2254.9	2262.5	2277.1	2286.8	2288.1
21°	2286.4	2281.7	2285.0	2290.7	2292.0	2284.5	2279.1	2287.9	2301.7	2309.3	2311.0
22°	2311.7	2306.6	2308.9	2314.0	2317.7	2309.9	2305.2	2314.3	2328.0	2334.0	2335.1
23°	2338.4	2333.0	2333.4	2338.9	2343.8	2336.6	2331.8	2342.2	2354.4	2358.8	2360.5
24°	2366.5	2360.4	2358.9	2364.3	2370.2	2363.7	2359.9	2370.6	2382.1	2384.7	2386.8
25°	2395.8	2388.7	2385.6	2391.3	2398.3	2392.0	2389.4	2400.2	2409.4	2411.5	2412.7
26°	2426.4	2417.9	2413.3	2418.7	2426.3	2419.9	2419.4	2430.1	2437.6	2438.8	2439.3
27°	2457.8	2447.6	2441.2	2447.2	2454.1	2448.5	2449.9	2460.4	2466.2	2467.4	2466.8
28°	2490.7	2477.9	2469.9	2476.2	2482.6	2477.7	2481.5	2490.4	2495.9	2496.9	2494.6
29°	2524.3	2508.4	2499.8	2506.7	2511.1	2507.3	2514.7	2520.9	2525.5	2527.5	2523.7
30°	2558.5	2538.9	2530.4	2537.5	2540.4	2537.8	2548.7	2552.1	2555.8	2558.4	2553.0
31°	2593.3	2570.2	2562.1	2569.2	2569.8	2567.5	2583.1	2583.0	2586.3	2590.2	2583.7
32°	2627.9	2601.6	2593.7	2601.4	2599.4	2599.4	2616.8	2615.0	2617.6	2622.5	2614.6
33°	2662.4	2633.8	2626.9	2633.1	2630.9	2630.2	2651.5	2645.9	2649.5	2654.8	2646.4
34°	2697.2	2665.9	2659.5	2665.5	2662.0	2660.4	2685.4	2676.8	2681.6	2686.6	2678.4
35°	2733.9	2697.7	2693.0	2698.4	2693.9	2690.7	2720.5	2707.4	2714.1	2719.7	2712.0
36°	2770.1	2730.6	2727.3	2732.0	2726.9	2722.3	2755.1	2738.9	2748.1	2753.4	2746.4
37°	2806.5	2763.8	2762.2	2766.4	2760.2	2752.6	2789.6	2770.8	2781.9	2787.5	2781.6
38°	2843.4	2798.2	2797.2	2800.5	2793.2	2784.5	2825.3	2802.2	2814.8	2821.7	2816.5
39°	2879.5	2832.8	2831.9	2835.2	2826.5	2817.5	2861.4	2834.5	2849.0	2855.6	2850.7
40°	2915.3	2868.8	2866.6	2870.5	2860.3	2850.9	2897.3	2867.8	2883.4	2891.0	2886.3
41°	2950.5	2905.4	2902.5	2905.6	2895.2	2885.4	2933.2	2902.7	2917.4	2926.4	2920.5
42°	2987.3	2942.9	2939.2	2942.3	2930.3	2920.5	2967.6	2937.9	2952.6	2963.2	2957.8
43°	3023.0	2982.0	2976.5	2979.6	2966.8	2957.1	3001.1	2974.6	2988.1	3000.5	2994.9
44°	3057.9	3022.2	3014.1	3017.3	3003.2	2994.7	3033.3	3012.3	3023.6	3037.3	3032.7



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3092.9	3062.2	3052.7	3054.6	3040.2	3034.0	3064.7	3050.4	3059.8	3075.2	3071.7
46°	3128.0	3104.5	3092.8	3093.5	3079.1	3074.5	3096.6	3090.3	3096.6	3113.8	3111.2
47°	3164.3	3149.4	3134.3	3134.2	3119.2	3116.4	3129.6	3130.2	3135.6	3154.2	3153.0
48°	3201.2	3193.5	3176.3	3175.7	3159.1	3158.9	3160.5	3171.8	3176.0	3193.8	3195.4
49°	3239.4	3240.0	3220.6	3218.5	3200.4	3201.8	3191.2	3212.8	3216.7	3235.0	3237.1
50°	3278.4	3285.3	3264.9	3261.5	3241.5	3245.2	3222.1	3253.7	3257.1	3278.4	3280.7
51°	3318.3	3332.2	3310.5	3305.6	3285.1	3287.8	3254.4	3293.9	3299.2	3322.3	3326.7
52°	3359.3	3380.1	3358.6	3352.7	3329.4	3329.9	3287.5	3335.3	3342.4	3368.5	3372.3
53°	3400.4	3427.1	3407.5	3399.2	3373.5	3370.5	3319.1	3376.0	3385.6	3413.8	3418.8
54°	3441.6	3473.9	3457.2	3449.0	3418.3	3410.1	3350.4	3414.8	3430.3	3460.2	3465.5
55°	3481.0	3516.8	3508.0	3498.0	3462.8	3447.3	3381.2	3450.1	3475.4	3510.2	3514.5
56°	3518.1	3559.4	3560.0	3549.7	3508.6	3482.4	3410.7	3485.5	3520.4	3560.5	3564.8
57°	3553.2	3599.3	3611.9	3603.9	3553.7	3514.8	3437.1	3517.3	3565.0	3611.9	3613.7
58°	3586.1	3637.1	3665.0	3658.9	3598.4	3543.7	3459.7	3545.7	3609.7	3665.1	3660.6
59°	3615.8	3672.2	3719.3	3714.5	3643.3	3567.7	3480.7	3572.0	3653.3	3719.3	3705.7
60°	3642.4	3703.9	3772.5	3772.5	3686.4	3588.0	3497.2	3594.3	3695.0	3774.1	3749.3
61°	3664.2	3732.6	3824.1	3830.1	3729.1	3606.2	3510.1	3613.6	3738.1	3828.1	3793.0
62°	3681.2	3756.6	3874.7	3889.4	3770.3	3619.2	3517.3	3627.8	3778.1	3881.4	3835.0
63°	3696.2	3778.3	3924.0	3949.2	3812.7	3626.0	3517.7	3638.8	3818.3	3930.6	3874.3
64°	3709.6	3795.8	3969.1	4008.3	3852.3	3627.5	3512.1	3645.4	3858.3	3978.2	3911.2
65°	3722.6	3810.8	4012.7	4066.5	3890.2	3626.8	3502.3	3646.6	3895.4	4026.9	3943.6
66°	3730.1	3825.0	4051.5	4122.3	3923.0	3619.6	3487.6	3641.3	3928.6	4075.7	3973.8
67°	3730.1	3834.9	4084.6	4174.0	3950.2	3606.5	3463.6	3629.9	3955.9	4120.7	3998.1
68°	3695.8	3832.9	4112.9	4219.6	3969.0	3585.1	3389.7	3606.4	3977.5	4156.5	3982.5
69°	3585.6	3803.9	4131.2	4253.7	3979.9	3526.4	3234.7	3547.6	3988.2	4184.8	3946.0
70°	3353.4	3720.2	4138.1	4275.4	3984.2	3404.8	3008.3	3428.5	3986.5	4201.0	3926.5
71°	2986.3	3531.4	4128.5	4284.4	3957.2	3216.1	2728.0	3241.5	3954.5	4198.4	3872.2
72°	2603.6	3222.7	4095.6	4271.7	3888.2	2975.1	2472.4	2996.1	3870.9	4155.1	3781.2
73°	2198.1	2820.4	4015.6	4227.1	3770.0	2716.2	2275.2	2731.4	3731.0	4061.3	3666.7
74°	1729.3	2381.6	3839.8	4131.9	3604.6	2480.8	2027.6	2487.9	3548.4	3918.6	3477.7
75°	1145.0	1903.4	3517.9	3962.8	3387.5	2218.9	1549.3	2230.7	3316.2	3728.2	3196.1
76°	592.0	1335.8	3083.6	3691.1	3130.6	1825.5	1071.0	1855.3	3060.3	3447.3	2811.9
77°	428.4	718.6	2613.2	3293.5	2815.1	1228.5	593.3	1343.6	2755.4	3050.6	2335.6
78°	273.8	516.6	2042.4	2710.1	2376.4	636.8	255.5	831.9	2332.9	2522.7	1764.7
79°	119.2	321.7	1324.9	2065.2	1763.2	460.4	201.2	323.8	1740.3	1909.1	1193.8
80°	99.1	126.8	676.0	1344.8	1067.6	288.7	147.0	250.0	1147.6	1291.5	624.9
81°	84.7	104.4	488.9	680.6	524.4	117.0	93.9	176.3	560.6	680.3	287.1
82°	72.2	88.2	309.4	489.4	386.6	99.6	80.2	102.7	249.6	275.1	219.0
83°	60.5	73.6	129.8	311.2	253.1	84.3	67.8	86.6	196.1	214.7	151.0
84°	50.0	60.4	101.7	133.0	119.5	70.2	56.2	71.9	142.7	154.3	83.4
85°	39.5	49.4	77.6	109.7	90.8	57.4	45.3	58.5	89.7	94.2	60.4
86°	29.0	38.5	58.2	88.2	66.7	46.1	35.1	46.4	64.4	73.8	40.4
87°	19.6	27.5	42.4	64.8	49.0	34.8	25.0	35.1	46.5	52.4	25.1
88°	11.2	17.8	26.6	51.9	31.5	23.5	17.4	25.0	32.1	32.6	17.8
89°	4.5	7.7	10.7	39.4	14.1	12.6	9.9	17.3	22.1	22.6	10.5



REPORT NUMBER: P1436750

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436750

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436750

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436750

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0
1°	1989.6	1990.0	1990.4	1991.0	1991.3	1991.6	1991.9	1990.6	1990.3	1990.1	1990.4
2°	1992.0	1993.1	1993.4	1994.6	1995.2	1995.4	1995.7	1994.5	1994.7	1994.2	1994.3
3°	1996.2	1997.9	1999.1	2000.2	2001.2	2001.6	2002.3	2000.7	2000.8	2000.3	2000.6
4°	2003.1	2005.1	2006.5	2007.8	2009.0	2009.6	2010.3	2009.0	2008.7	2008.3	2008.0
5°	2011.6	2014.3	2015.8	2017.8	2018.7	2019.4	2019.6	2018.2	2018.0	2017.5	2017.2
6°	2022.5	2025.2	2027.6	2029.6	2030.6	2030.6	2030.7	2029.0	2029.1	2028.7	2028.4
7°	2035.2	2037.7	2040.7	2043.1	2043.9	2044.6	2045.2	2042.9	2042.6	2041.8	2041.5
8°	2049.1	2052.0	2055.3	2058.3	2059.7	2060.8	2060.3	2057.7	2057.1	2056.3	2055.3
9°	2064.1	2067.5	2071.4	2075.3	2077.5	2078.0	2076.7	2072.9	2073.0	2072.7	2071.6
10°	2080.8	2084.8	2089.3	2094.1	2096.7	2096.7	2094.5	2090.7	2090.4	2090.9	2088.7
11°	2099.2	2103.6	2108.8	2114.6	2117.6	2117.2	2114.4	2110.4	2110.3	2110.7	2107.8
12°	2118.3	2122.8	2129.4	2136.3	2139.9	2138.9	2135.6	2130.8	2131.4	2131.3	2128.0
13°	2138.0	2142.4	2149.7	2159.6	2163.8	2162.5	2157.5	2152.7	2153.5	2153.5	2149.4
14°	2158.6	2162.8	2171.3	2182.6	2188.5	2186.7	2181.2	2175.4	2176.6	2177.3	2171.9
15°	2179.4	2183.2	2193.2	2206.5	2214.2	2212.2	2205.3	2199.0	2200.7	2202.0	2194.8
16°	2200.8	2204.5	2215.1	2230.3	2240.4	2239.4	2230.5	2223.3	2225.3	2226.8	2218.1
17°	2222.3	2225.9	2237.7	2254.4	2266.8	2265.8	2257.1	2249.1	2250.6	2252.2	2242.4
18°	2244.4	2248.0	2260.7	2278.0	2292.8	2293.4	2283.9	2274.8	2277.4	2278.4	2266.9
19°	2266.8	2271.6	2283.6	2302.2	2319.6	2320.7	2310.9	2301.5	2304.3	2304.7	2290.8
20°	2289.6	2295.3	2307.8	2328.0	2345.7	2349.1	2339.0	2329.4	2332.4	2331.9	2315.9
21°	2313.8	2319.6	2332.8	2353.5	2372.5	2378.2	2368.9	2358.3	2360.6	2359.8	2340.7
22°	2338.9	2345.1	2358.8	2380.3	2401.0	2407.7	2399.2	2387.5	2390.5	2387.9	2367.6
23°	2363.8	2371.3	2386.4	2408.5	2429.4	2438.4	2428.8	2418.3	2421.4	2416.4	2395.2
24°	2390.9	2399.2	2414.5	2437.0	2459.0	2468.7	2459.7	2449.5	2452.2	2445.1	2422.1
25°	2417.5	2427.2	2443.1	2465.6	2489.1	2499.3	2492.0	2481.6	2483.1	2474.8	2450.0
26°	2445.7	2457.6	2472.7	2495.8	2519.7	2530.0	2523.9	2515.2	2513.9	2504.3	2479.6
27°	2473.9	2487.8	2502.3	2525.8	2550.1	2560.4	2555.6	2548.5	2545.2	2534.0	2508.9
28°	2502.6	2521.0	2532.6	2556.6	2582.8	2592.5	2588.3	2583.8	2577.1	2564.7	2540.0
29°	2532.2	2554.0	2563.8	2588.5	2614.7	2624.0	2621.3	2618.9	2609.0	2596.3	2572.5
30°	2562.8	2588.8	2595.6	2620.0	2647.4	2656.0	2654.0	2654.1	2640.6	2627.3	2605.4
31°	2594.3	2623.9	2627.8	2651.7	2678.6	2688.0	2686.0	2690.2	2672.6	2658.5	2638.5
32°	2625.7	2659.4	2660.2	2683.7	2711.8	2721.4	2719.1	2725.9	2703.6	2689.6	2671.7
33°	2658.1	2695.4	2692.6	2717.1	2744.8	2755.0	2752.0	2761.9	2735.9	2722.8	2706.3
34°	2690.4	2731.3	2724.5	2751.1	2779.0	2788.3	2785.3	2798.5	2767.8	2755.8	2740.9
35°	2722.0	2768.9	2758.0	2785.8	2813.2	2822.2	2818.0	2835.0	2800.8	2790.1	2777.3
36°	2754.7	2806.5	2791.7	2820.7	2847.0	2855.3	2851.2	2872.1	2833.6	2824.5	2813.0
37°	2786.8	2844.0	2825.9	2855.9	2881.4	2888.9	2885.7	2909.3	2867.5	2859.5	2848.8
38°	2820.5	2881.2	2861.0	2891.6	2916.7	2923.5	2919.9	2946.3	2901.6	2894.8	2885.3
39°	2855.0	2918.8	2896.4	2928.1	2952.9	2957.9	2955.4	2982.8	2936.0	2930.8	2921.3
40°	2891.0	2953.9	2933.5	2965.3	2988.9	2993.6	2991.0	3017.9	2971.3	2967.6	2958.2
41°	2928.5	2989.3	2970.9	3002.7	3026.4	3028.9	3026.6	3051.7	3007.6	3004.7	2995.0
42°	2965.5	3023.8	3010.0	3039.7	3063.3	3065.6	3063.2	3085.4	3045.6	3042.5	3033.4
43°	3003.9	3057.8	3049.3	3077.3	3102.0	3104.3	3101.9	3119.5	3084.8	3080.1	3070.6
44°	3043.5	3091.9	3089.7	3116.2	3141.1	3142.7	3140.8	3154.8	3125.1	3117.9	3109.6



REPORT NUMBER: P1436750

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	3083.9	3126.6	3130.7	3156.8	3181.4	3181.9	3182.1	3189.0	3166.1	3157.1	3148.8
46°	3125.9	3160.5	3173.4	3196.5	3222.1	3221.0	3223.2	3220.0	3209.1	3197.0	3189.1
47°	3169.9	3193.6	3216.8	3236.7	3263.3	3260.3	3264.3	3250.8	3250.3	3237.3	3231.0
48°	3214.5	3228.4	3261.7	3278.4	3305.0	3300.6	3304.6	3282.4	3291.9	3277.8	3273.8
49°	3259.4	3265.7	3307.8	3320.2	3348.3	3341.2	3344.6	3314.7	3332.8	3318.9	3316.9
50°	3306.5	3302.4	3354.6	3364.3	3391.3	3382.4	3383.8	3347.4	3373.2	3361.5	3360.8
51°	3356.1	3340.3	3401.3	3408.5	3435.7	3423.0	3422.7	3377.0	3412.4	3404.0	3405.9
52°	3403.3	3376.1	3446.9	3452.7	3481.0	3463.8	3459.9	3407.0	3450.5	3446.4	3452.0
53°	3445.7	3405.9	3489.2	3498.8	3527.5	3504.5	3494.4	3435.0	3484.6	3487.7	3498.4
54°	3482.5	3427.9	3527.5	3545.5	3574.6	3546.6	3526.4	3459.9	3517.1	3531.5	3547.2
55°	3516.0	3450.6	3560.6	3592.6	3622.8	3587.1	3556.3	3483.7	3546.7	3573.4	3597.9
56°	3550.1	3476.2	3593.1	3641.9	3671.7	3626.6	3583.1	3505.3	3573.5	3614.7	3650.1
57°	3582.4	3503.0	3624.9	3689.9	3720.8	3666.5	3606.7	3523.2	3596.1	3654.5	3700.4
58°	3612.8	3521.8	3655.7	3739.2	3770.6	3705.7	3626.7	3540.6	3615.0	3694.4	3753.3
59°	3636.1	3535.0	3678.5	3785.7	3822.8	3743.0	3643.6	3555.1	3630.6	3732.7	3805.9
60°	3655.3	3551.3	3697.5	3829.3	3874.0	3779.2	3658.9	3566.2	3643.9	3770.8	3859.4
61°	3673.9	3567.4	3716.0	3873.9	3925.7	3815.5	3671.2	3570.6	3656.5	3807.6	3913.4
62°	3691.5	3580.5	3733.0	3916.1	3973.0	3852.7	3679.3	3571.8	3663.9	3842.9	3968.2
63°	3707.5	3591.2	3749.0	3954.9	4015.9	3886.3	3682.7	3570.7	3665.7	3875.6	4022.4
64°	3721.7	3593.4	3762.5	3990.5	4056.4	3918.6	3684.5	3561.8	3663.5	3905.6	4076.7
65°	3719.7	3559.6	3757.5	4021.9	4095.9	3946.8	3679.0	3546.1	3655.3	3930.8	4127.9
66°	3673.8	3529.8	3707.0	4046.4	4133.4	3969.2	3669.5	3523.7	3642.6	3952.3	4176.5
67°	3644.4	3511.4	3675.6	4060.2	4162.8	3988.0	3650.6	3469.2	3620.2	3967.9	4218.1
68°	3626.8	3451.7	3648.6	4032.5	4185.7	4000.1	3604.2	3339.8	3567.4	3976.8	4252.7
69°	3555.5	3295.2	3569.9	3985.9	4200.9	3996.4	3503.4	3120.6	3454.0	3971.1	4276.7
70°	3421.6	3021.8	3439.9	3955.1	4203.0	3970.0	3320.3	2831.4	3262.8	3946.0	4284.4
71°	3217.3	2628.7	3234.5	3887.8	4182.8	3903.8	3069.7	2542.3	3001.3	3877.4	4269.9
72°	2905.0	2272.5	2917.0	3790.8	4118.8	3780.6	2785.5	2300.8	2716.1	3763.4	4229.8
73°	2523.1	1908.4	2530.1	3658.0	4002.4	3594.8	2510.5	2066.2	2444.9	3589.5	4147.6
74°	2127.6	1430.4	2135.7	3453.7	3835.5	3368.0	2249.5	1746.0	2180.7	3365.4	4012.4
75°	1619.3	952.4	1629.4	3145.0	3612.8	3092.8	1922.9	1245.3	1839.0	3089.2	3793.7
76°	1111.2	481.8	1123.2	2733.6	3284.6	2792.8	1412.9	705.9	1331.4	2771.7	3479.3
77°	607.4	353.3	621.4	2256.6	2837.7	2430.7	902.8	506.8	744.4	2389.2	3027.4
78°	256.3	224.9	268.7	1689.5	2255.8	1925.5	399.9	314.5	539.4	1875.9	2422.8
79°	199.8	99.5	208.4	1122.4	1646.8	1398.4	185.5	122.3	334.6	1243.6	1739.7
80°	143.3	82.0	148.1	559.7	1037.8	871.4	154.9	102.2	129.8	682.7	1053.3
81°	86.9	68.3	88.7	251.5	438.8	345.6	124.4	87.4	106.8	493.4	496.2
82°	70.9	56.0	72.4	194.9	189.0	182.7	94.0	74.3	90.6	315.5	320.5
83°	56.6	44.5	58.0	138.3	156.1	148.3	79.2	62.2	76.2	137.6	155.4
84°	43.7	34.4	44.6	82.1	123.3	114.0	65.9	51.7	63.0	106.4	125.4
85°	31.8	24.5	32.4	58.5	90.4	79.7	53.3	41.1	51.7	79.7	104.0
86°	22.5	16.9	22.8	38.6	70.4	57.2	41.8	30.6	40.5	58.2	83.4
87°	13.3	9.3	13.2	27.8	49.4	41.4	31.2	20.8	29.3	42.1	58.7
88°	4.0	1.9	3.6	17.1	33.7	28.5	21.5	12.2	19.6	26.1	47.2
89°	2.9	1.7	2.7	6.3	18.0	15.6	11.8	4.9	8.9	10.1	35.8



REPORT NUMBER: P1436750

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436750

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436750

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436750

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1989.0	1989.0	1989.0
1°	1990.5	1989.9	1989.9
2°	1994.1	1993.7	1993.0
3°	2000.0	1999.4	1998.3
4°	2007.8	2006.8	2005.7
5°	2016.7	2015.5	2014.2
6°	2027.2	2025.9	2023.8
7°	2038.8	2037.1	2034.3
8°	2052.1	2049.2	2046.6
9°	2067.3	2063.5	2059.9
10°	2083.9	2079.1	2074.6
11°	2101.7	2095.9	2090.6
12°	2120.7	2113.3	2107.0
13°	2141.0	2130.9	2122.8
14°	2161.0	2149.0	2140.4
15°	2181.2	2167.6	2157.6
16°	2202.7	2187.2	2176.4
17°	2224.2	2208.3	2196.6
18°	2246.7	2229.7	2217.6
19°	2269.9	2251.6	2239.2
20°	2292.5	2273.7	2262.6
21°	2316.7	2297.8	2286.4
22°	2341.9	2322.7	2311.7
23°	2368.3	2348.7	2338.4
24°	2395.3	2375.5	2366.5
25°	2422.4	2403.9	2395.8
26°	2451.8	2432.9	2426.4
27°	2482.0	2462.7	2457.8
28°	2512.3	2492.8	2490.7
29°	2544.4	2523.7	2524.3
30°	2577.3	2554.9	2558.5
31°	2610.2	2587.7	2593.3
32°	2643.3	2620.4	2627.9
33°	2676.8	2653.6	2662.4
34°	2710.4	2685.7	2697.2
35°	2745.3	2718.7	2733.9
36°	2781.7	2751.5	2770.1
37°	2816.8	2785.9	2806.5
38°	2853.5	2821.1	2843.4
39°	2889.2	2856.1	2879.5
40°	2926.9	2893.0	2915.3
41°	2964.1	2930.5	2950.5
42°	3002.5	2969.8	2987.3
43°	3041.3	3009.8	3023.0
44°	3080.3	3049.5	3057.9

REPORT NUMBER: P1436750

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	3120.2	3092.4	3092.9
46°	3161.1	3134.9	3128.0
47°	3202.7	3179.9	3164.3
48°	3245.9	3225.8	3201.2
49°	3290.2	3273.5	3239.4
50°	3335.8	3321.3	3278.4
51°	3382.3	3370.5	3318.3
52°	3430.3	3418.8	3359.3
53°	3480.1	3467.3	3400.4
54°	3528.7	3514.9	3441.6
55°	3579.8	3562.1	3481.0
56°	3632.1	3606.0	3518.1
57°	3683.5	3646.4	3553.2
58°	3736.8	3683.5	3586.1
59°	3788.5	3717.9	3615.8
60°	3840.2	3749.2	3642.4
61°	3891.8	3775.8	3664.2
62°	3942.1	3799.7	3681.2
63°	3990.6	3819.9	3696.2
64°	4038.9	3839.1	3709.6
65°	4083.4	3856.4	3722.6
66°	4124.9	3872.8	3730.1
67°	4158.5	3883.4	3730.1
68°	4184.2	3882.1	3695.8
69°	4196.7	3855.2	3585.6
70°	4196.4	3776.7	3353.4
71°	4176.9	3604.5	2986.3
72°	4128.3	3296.7	2603.6
73°	4026.0	2889.2	2198.1
74°	3823.7	2430.5	1729.3
75°	3489.6	1950.2	1145.0
76°	3060.2	1397.3	592.0
77°	2565.3	774.6	428.4
78°	1952.3	558.6	273.8
79°	1233.8	343.9	119.2
80°	634.5	129.3	99.1
81°	455.2	108.7	84.7
82°	291.3	91.9	72.2
83°	127.3	76.4	60.5
84°	100.6	62.7	50.0
85°	76.2	51.2	39.5
86°	57.2	39.7	29.0
87°	41.2	28.2	19.6
88°	25.3	17.9	11.2
89°	9.3	7.3	4.5



REPORT NUMBER: P1436750

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436750

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436750

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)