

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: P1436752

Luminaire Tested: XAS180-SFPM (5000K-108W-T5-HSS)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436752
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-T5-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 5 WITH HOUSE SIDE SHIELD
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 23809 (1 lamp)
Luminaire Lumens: 15055.1 lumens
Efficiency: 63.2%
Efficacy: 137.1 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

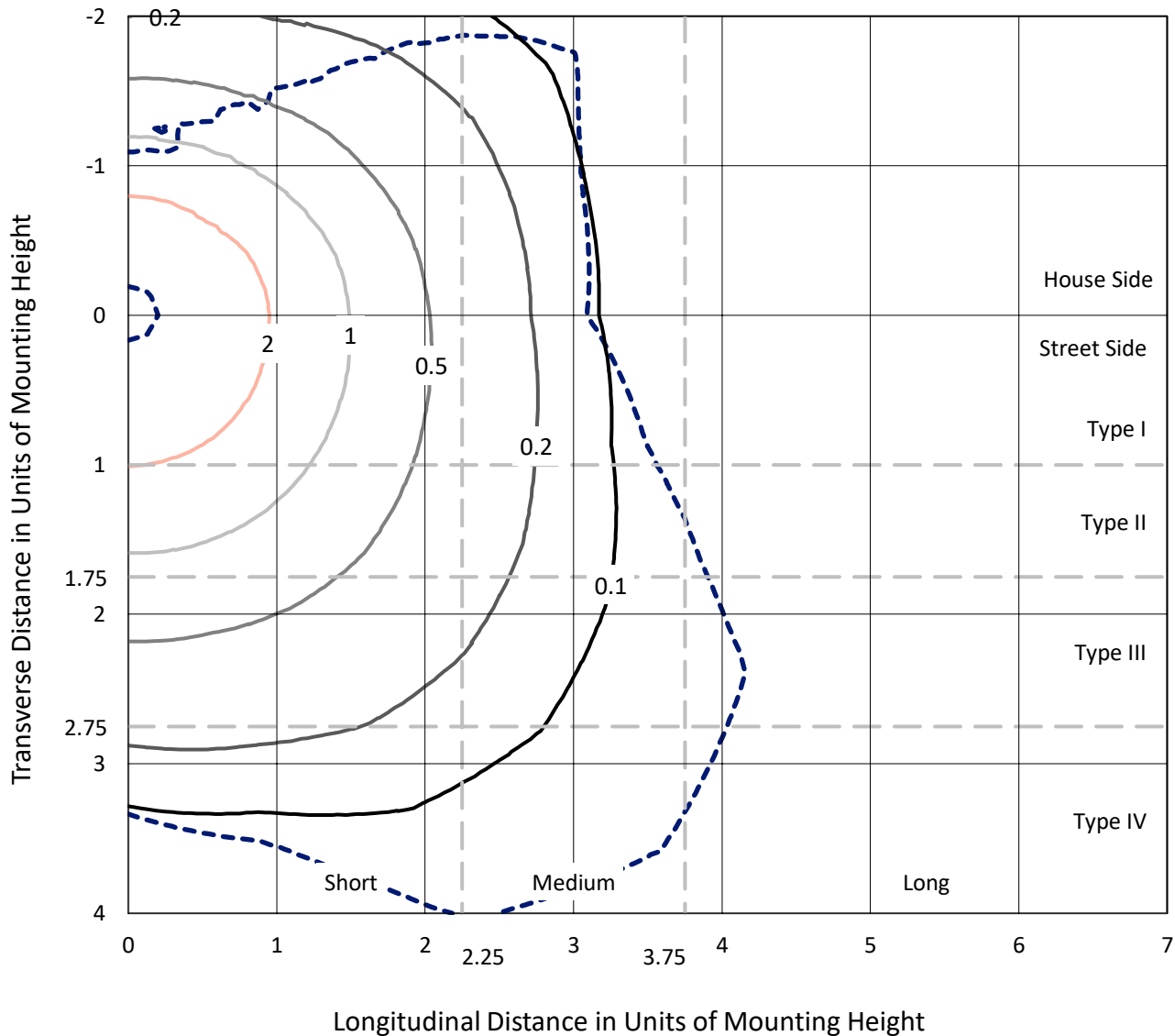
Input Watts (W): 109.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

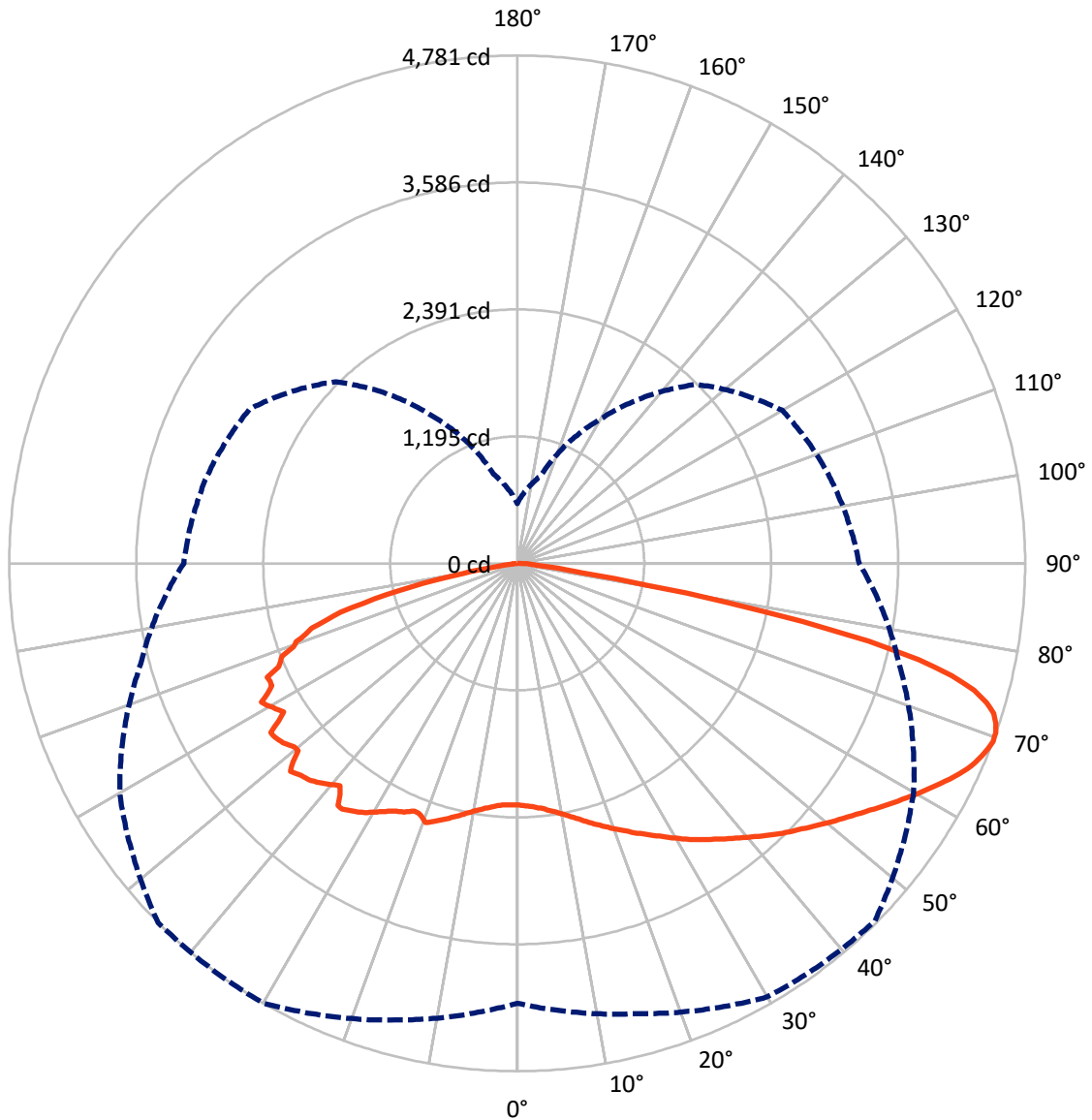
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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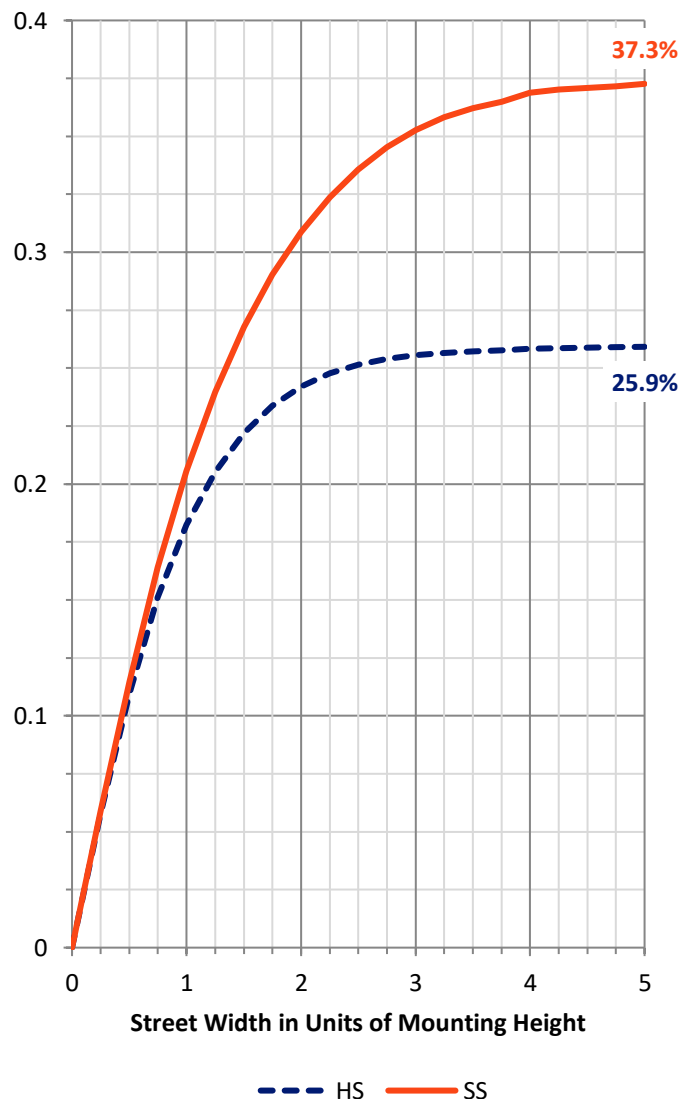
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6183.0	0.0	6183.0
	% Lamp	26.0	0.0	26.0
Street Side	Lumens	8872.1	0.0	8872.1
	% Lamp	37.3	0.0	37.3
Total	Lumens	15055.1	0.0	15055.1
	% Lamp	63.2	0.0	63.2

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	222.3	1.5	0.9
10°-20°	707.5	4.7	3.0
20°-30°	1261.2	8.4	5.3
30°-40°	1867.2	12.4	7.8
40°-50°	2491.3	16.5	10.5
50°-60°	3055.4	20.3	12.8
60°-70°	3328.2	22.1	14.0
70°-80°	2007.7	13.3	8.4
80°-90°	114.1	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°	15055.1	100.0	63.2
0°-180°	15055.1	100.0	63.2

Coefficient of Utilization



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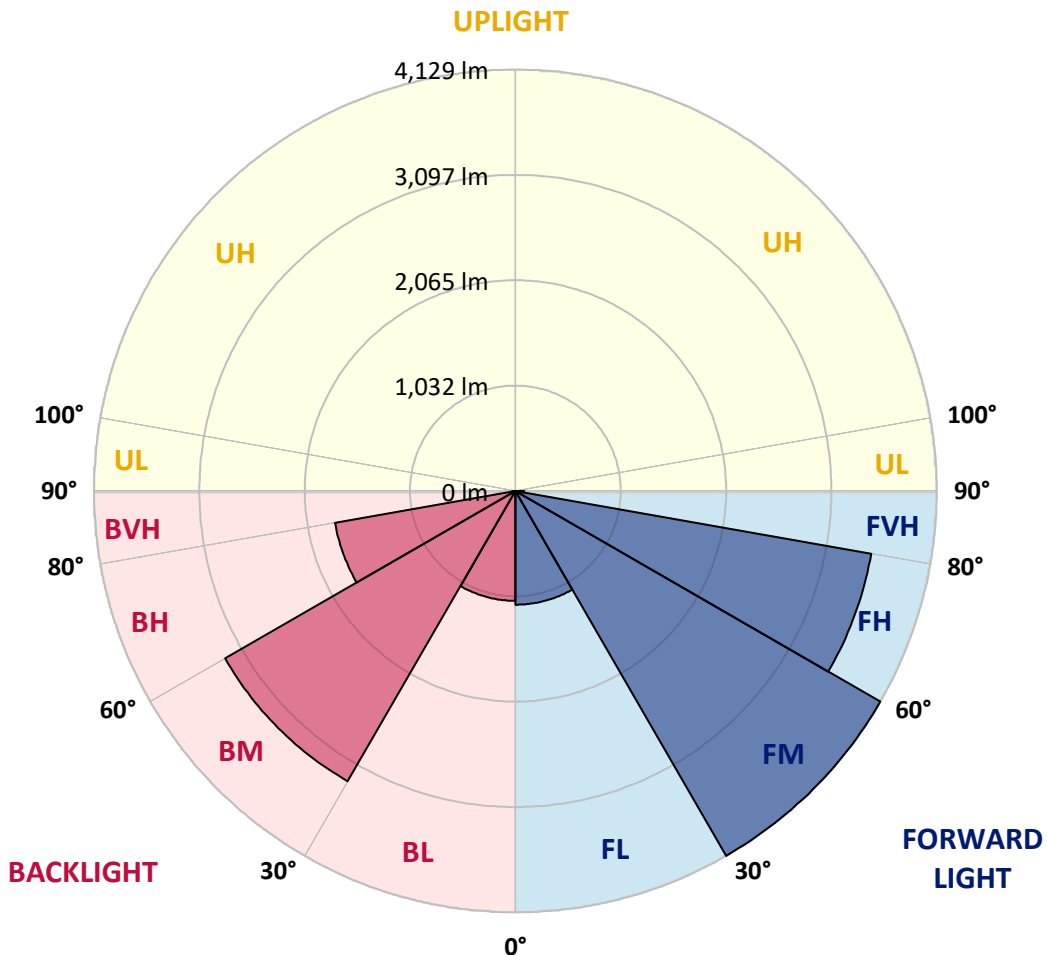
CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1114.9	4.7			
FM (30°-60°)	4129.3	17.3			
FH (60°-80°)	3541.1	14.9			G2/5000
FVH (80°-90°)	86.8	0.4			G1/100
BL (0°-30°)	1076.1	4.5	B3/2500		
BM (30°-60°)	3284.7	13.8	B3/5000		
BH (60°-80°)	1794.8	7.5	B3/2500		G3/2500
BVH (80°-90°)	27.3	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	8753.9	36.8			

BUG Rating: B3-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2276.4	2276.4	2276.4	2276.4	2276.4	2276.4	2276.4	2276.4	2276.4	2276.4	2276.4
1°	2279.7	2279.7	2279.5	2278.8	2278.3	2277.0	2275.6	2274.9	2274.3	2274.1	2274.1
2°	2285.7	2285.0	2284.5	2282.9	2281.4	2278.9	2276.7	2275.4	2274.3	2273.7	2274.1
3°	2293.6	2292.4	2290.9	2288.5	2286.7	2283.7	2280.7	2278.8	2276.7	2275.6	2275.8
4°	2303.8	2302.0	2299.8	2296.7	2294.2	2290.5	2286.8	2284.3	2281.5	2280.2	2280.1
5°	2315.5	2313.0	2310.7	2306.8	2303.1	2298.8	2294.4	2291.3	2288.8	2287.2	2288.6
6°	2328.4	2325.3	2323.2	2319.2	2314.3	2308.3	2303.6	2299.6	2296.9	2298.3	2300.2
7°	2341.7	2339.3	2337.2	2333.0	2327.6	2320.6	2314.8	2310.1	2306.9	2310.9	2313.8
8°	2356.7	2354.2	2352.1	2348.2	2342.1	2334.6	2328.5	2323.5	2320.9	2325.2	2329.2
9°	2373.7	2371.0	2368.2	2364.6	2358.6	2350.0	2343.0	2338.0	2337.9	2341.2	2345.7
10°	2392.0	2389.2	2387.1	2383.0	2377.4	2367.0	2359.5	2353.6	2355.8	2360.2	2363.5
11°	2411.6	2408.1	2407.1	2403.4	2397.1	2386.3	2377.5	2371.7	2375.3	2381.1	2383.5
12°	2431.1	2427.3	2427.5	2424.7	2417.3	2406.5	2396.2	2390.9	2395.7	2402.3	2404.2
13°	2451.0	2447.0	2448.9	2447.9	2439.3	2427.7	2415.9	2410.8	2418.1	2424.5	2426.2
14°	2471.6	2467.1	2470.0	2470.7	2462.8	2449.4	2436.3	2431.0	2440.2	2448.5	2448.4
15°	2493.3	2489.1	2492.9	2494.8	2486.2	2471.7	2458.2	2452.5	2463.3	2471.9	2470.4
16°	2514.9	2512.2	2516.0	2519.0	2510.5	2495.5	2481.0	2475.0	2487.7	2495.5	2492.9
17°	2538.5	2535.7	2540.0	2543.8	2536.1	2519.6	2504.1	2498.4	2512.9	2518.8	2486.5
18°	2563.3	2559.6	2565.0	2568.5	2561.8	2544.1	2525.4	2517.0	2538.0	2542.9	2445.8
19°	2588.7	2584.8	2590.7	2594.3	2588.3	2570.4	2540.3	2534.9	2555.9	2567.0	2425.3
20°	2615.6	2611.4	2616.8	2620.3	2615.1	2592.7	2560.8	2554.4	2574.2	2587.9	2445.8
21°	2644.5	2639.3	2643.7	2647.0	2643.3	2612.0	2585.2	2583.0	2594.1	2551.7	2467.8
22°	2674.3	2668.7	2672.2	2675.5	2672.6	2636.5	2613.4	2611.1	2621.2	2528.0	2490.9
23°	2705.9	2699.7	2700.9	2704.0	2703.3	2662.0	2643.0	2634.8	2646.3	2523.8	2515.2
24°	2738.8	2731.9	2730.9	2733.4	2727.6	2692.5	2668.8	2658.0	2665.1	2547.9	2540.5
25°	2772.3	2764.6	2761.6	2764.9	2752.2	2724.1	2693.0	2684.1	2687.8	2571.3	2565.5
26°	2807.7	2798.4	2793.2	2797.0	2781.9	2756.0	2722.1	2713.3	2712.5	2588.0	2592.1
27°	2844.3	2832.6	2826.2	2829.1	2807.8	2783.6	2749.8	2745.6	2740.9	2607.3	2618.2
28°	2882.0	2868.3	2859.8	2863.1	2837.6	2809.4	2783.7	2777.6	2755.9	2630.1	2644.1
29°	2921.0	2903.6	2894.4	2898.4	2869.9	2838.3	2818.9	2810.6	2738.6	2659.5	2670.4
30°	2961.1	2940.1	2930.6	2934.4	2903.3	2867.7	2856.0	2843.9	2740.1	2689.8	2692.4
31°	3001.3	2976.1	2966.9	2969.8	2937.5	2895.8	2893.9	2876.0	2732.2	2720.6	2704.3
32°	3041.1	3012.4	3003.9	3001.0	2971.6	2930.3	2931.1	2897.9	2754.8	2750.2	2607.7
33°	3081.6	3049.7	3041.4	3032.5	3002.1	2964.7	2968.8	2914.5	2777.2	2774.7	2536.0
34°	3122.4	3086.8	3079.9	3064.9	3031.2	2998.5	3000.4	2932.7	2801.0	2795.8	2546.6
35°	3164.6	3125.0	3119.2	3101.0	3062.2	3032.3	3022.6	2959.8	2827.1	2816.9	2573.2
36°	3207.0	3163.7	3158.6	3135.5	3096.4	3067.0	3047.5	2987.6	2856.1	2840.3	2595.7
37°	3249.2	3201.8	3199.2	3171.0	3129.9	3100.8	3074.6	3016.0	2882.7	2835.9	2614.3
38°	3291.7	3241.3	3239.9	3208.8	3163.2	3136.8	3107.2	3045.5	2900.5	2743.8	2630.4
39°	3333.4	3281.8	3279.3	3248.4	3197.8	3171.3	3142.5	3069.9	2922.0	2677.4	2653.9
40°	3375.8	3323.3	3319.9	3288.5	3235.5	3196.8	3178.1	3092.8	2953.8	2703.4	2680.9
41°	3416.4	3367.0	3361.9	3328.5	3275.0	3225.5	3211.7	3116.7	2986.3	2732.0	2707.6
42°	3459.1	3409.6	3403.9	3370.9	3314.4	3253.3	3244.4	3134.5	3019.4	2761.8	2731.4
43°	3499.5	3454.3	3447.1	3412.9	3356.1	3284.5	3271.1	3157.9	3052.2	2792.6	2653.0
44°	3539.6	3500.9	3490.0	3454.7	3396.3	3320.5	3293.0	3195.4	3085.4	2818.7	2552.4

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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3581.2	3547.7	3535.8	3493.9	3438.9	3360.7	3318.9	3233.7	3109.2	2835.9	2550.7
46°	3622.7	3597.0	3582.4	3534.4	3482.7	3403.1	3336.4	3273.6	3114.6	2851.5	2573.7
47°	3664.1	3647.8	3630.4	3575.9	3527.9	3446.1	3355.1	3307.1	3119.5	2874.8	2591.8
48°	3707.6	3699.6	3679.0	3618.3	3571.9	3488.0	3377.2	3320.0	3051.7	2895.9	2606.7
49°	3751.4	3751.8	3728.6	3663.9	3612.7	3532.1	3407.0	3327.5	2999.1	2820.2	2626.6
50°	3796.9	3805.5	3778.4	3711.4	3648.3	3575.8	3439.5	3330.7	2992.7	2713.6	2651.9
51°	3842.5	3859.7	3829.8	3759.8	3687.8	3613.9	3471.9	3324.6	3022.1	2716.9	2580.4
52°	3888.9	3914.5	3880.0	3808.9	3729.7	3649.5	3506.0	3349.0	3045.6	2746.1	2424.5
53°	3936.4	3967.9	3930.9	3857.5	3766.9	3686.6	3538.8	3380.1	3057.6	2774.2	2424.1
54°	3982.4	4020.3	3984.5	3910.1	3808.6	3717.4	3569.7	3410.5	3073.0	2792.9	2452.1
55°	4028.2	4069.8	4038.5	3964.5	3852.7	3737.8	3592.6	3429.9	3105.0	2810.2	2481.4
56°	4070.0	4118.1	4096.2	4021.4	3899.2	3764.0	3605.6	3437.0	3131.7	2813.3	2510.6
57°	4110.0	4163.9	4154.4	4082.7	3946.4	3790.3	3616.0	3449.4	3143.1	2695.6	2535.4
58°	4148.2	4206.5	4212.7	4143.6	3992.8	3817.8	3623.2	3461.1	3160.5	2605.8	2382.9
59°	4182.1	4246.6	4269.4	4204.3	4039.4	3841.7	3634.9	3456.6	3082.2	2637.4	2300.6
60°	4211.8	4282.3	4325.0	4268.6	4083.2	3862.3	3643.8	3434.2	3005.3	2672.0	2311.6
61°	4236.2	4314.3	4380.5	4332.4	4124.9	3880.8	3647.6	3430.8	3017.5	2708.6	2323.2
62°	4255.2	4341.1	4434.4	4397.9	4164.4	3892.4	3646.6	3427.0	3025.4	2740.8	2209.3
63°	4271.7	4365.0	4489.3	4463.7	4202.4	3896.8	3634.3	3398.0	3031.2	2648.6	2081.3
64°	4286.3	4384.4	4540.2	4529.3	4235.3	3895.5	3607.7	3374.7	3024.3	2580.6	2066.1
65°	4300.0	4400.9	4587.0	4590.4	4267.1	3887.9	3579.0	3330.9	2981.8	2577.0	2027.1
66°	4308.0	4416.2	4628.9	4644.4	4294.8	3867.0	3550.0	3282.6	2861.9	2585.6	1836.6
67°	4306.8	4425.6	4664.7	4692.3	4312.3	3838.7	3512.0	3201.8	2855.4	2448.9	1829.4
68°	4266.6	4421.4	4695.2	4731.8	4312.1	3803.2	3409.6	3132.2	2872.1	2409.6	1720.7
69°	4139.6	4387.3	4711.9	4760.6	4308.2	3725.3	3218.8	3056.4	2880.4	2380.9	1569.8
70°	3876.1	4286.6	4715.6	4776.8	4303.7	3583.8	2943.4	2931.3	2870.2	2245.7	1417.1
71°	3462.2	4070.2	4698.1	4773.7	4264.8	3372.9	2661.2	2741.5	2766.3	2207.3	1264.5
72°	3023.8	3717.2	4654.5	4744.9	4188.8	3103.4	2400.4	2504.1	2660.6	2097.5	1112.5
73°	2561.1	3256.9	4557.0	4685.5	4061.5	2829.5	2170.1	2259.2	2542.8	2030.1	992.1
74°	2024.1	2755.2	4347.8	4573.7	3878.0	2576.6	1904.0	2037.3	2396.3	1862.7	825.9
75°	1351.1	2210.2	3973.4	4382.2	3640.0	2293.6	1448.3	1808.3	2192.4	1725.7	711.5
76°	736.6	1560.9	3482.9	4080.3	3359.9	1866.7	992.5	1420.4	1999.6	1496.4	610.8
77°	549.0	868.0	2958.8	3642.0	3016.0	1230.2	543.4	1032.7	1777.5	1267.0	499.0
78°	367.6	636.7	2315.5	3007.7	2542.6	641.4	395.3	651.4	1417.7	1037.3	364.6
79°	186.3	414.8	1505.7	2268.3	1879.5	463.0	247.2	462.1	1058.0	770.8	258.1
80°	165.3	192.9	778.9	1473.7	1146.1	297.5	102.0	272.9	702.8	515.0	151.6
81°	147.1	168.3	578.9	749.0	574.9	131.9	87.2	86.6	493.5	358.9	46.8
82°	130.7	148.1	383.1	554.1	377.2	112.2	74.0	72.7	284.1	202.9	24.0
83°	115.8	129.7	187.3	367.8	183.3	94.8	62.1	60.3	77.6	51.7	19.5
84°	101.6	112.8	154.0	181.5	148.0	79.6	50.9	49.3	60.1	39.4	16.2
85°	87.9	97.2	124.7	150.6	117.0	66.2	40.8	40.0	46.8	32.8	12.9
86°	74.9	83.3	101.9	125.8	89.3	54.7	31.5	31.4	34.6	26.8	9.6
87°	62.6	70.3	81.6	98.2	69.2	43.2	23.3	23.5	25.5	20.9	7.5
88°	54.0	58.9	63.0	67.5	52.2	31.8	15.1	16.7	18.2	15.0	5.7
89°	45.5	47.5	51.8	52.9	35.3	20.6	6.9	9.8	10.9	9.1	4.2



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CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-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: P1436752

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-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: P1436752

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-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: P1436752

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2276.4	2276.4	2276.4	2276.4	2276.4	2276.4	2276.4	2276.4	2276.4	2276.4	2276.4
1°	2274.5	2274.3	2275.4	2275.8	2276.8	2277.7	2278.3	2278.1	2278.9	2279.3	2279.7
2°	2274.7	2274.1	2276.0	2277.3	2279.0	2280.5	2282.0	2282.6	2284.3	2285.2	2286.1
3°	2276.7	2276.4	2278.7	2280.7	2283.1	2285.2	2287.8	2289.0	2291.4	2292.9	2294.1
4°	2281.4	2282.6	2284.8	2286.6	2289.6	2292.7	2296.4	2298.3	2301.1	2302.6	2303.8
5°	2291.3	2292.5	2294.9	2296.6	2298.8	2302.5	2306.3	2308.9	2312.2	2314.5	2316.0
6°	2303.1	2304.5	2308.0	2309.8	2312.0	2313.8	2318.6	2321.6	2325.7	2328.5	2330.1
7°	2317.5	2318.7	2322.5	2324.8	2327.1	2328.3	2333.5	2337.2	2341.3	2344.6	2346.3
8°	2332.6	2334.0	2338.5	2342.4	2344.7	2345.7	2350.4	2353.8	2358.8	2362.6	2363.6
9°	2349.2	2350.9	2355.5	2360.8	2364.3	2365.6	2367.7	2371.3	2377.4	2382.3	2383.4
10°	2366.4	2369.1	2375.0	2381.6	2386.1	2386.6	2387.7	2391.1	2397.6	2403.4	2404.1
11°	2385.9	2388.1	2395.4	2404.6	2409.0	2409.7	2409.2	2413.6	2421.1	2427.1	2426.4
12°	2404.9	2407.7	2415.7	2428.1	2434.0	2434.2	2432.5	2437.1	2445.1	2451.5	2450.5
13°	2425.7	2427.8	2437.0	2451.9	2460.6	2460.5	2456.7	2461.9	2471.0	2477.0	2476.0
14°	2445.7	2446.7	2459.1	2475.7	2488.7	2487.4	2481.8	2487.4	2497.9	2505.0	2503.2
15°	2458.9	2421.3	2473.0	2501.0	2515.9	2516.1	2509.4	2513.4	2525.5	2534.3	2529.5
16°	2409.2	2375.8	2425.5	2525.1	2542.6	2545.7	2537.2	2541.1	2553.3	2563.3	2557.6
17°	2378.1	2378.8	2396.8	2523.4	2570.6	2575.8	2566.3	2569.9	2582.1	2592.6	2585.5
18°	2398.0	2399.7	2416.0	2483.4	2598.9	2605.0	2592.6	2598.8	2612.2	2621.7	2613.9
19°	2418.3	2421.1	2437.7	2466.6	2626.5	2627.5	2612.6	2620.5	2643.2	2652.7	2642.4
20°	2440.3	2444.1	2460.4	2488.7	2650.6	2650.2	2635.9	2643.9	2674.8	2684.1	2672.0
21°	2463.2	2467.1	2484.3	2513.7	2629.1	2674.5	2667.9	2670.3	2699.3	2716.7	2701.6
22°	2487.8	2491.9	2509.9	2539.3	2600.5	2706.0	2700.9	2702.3	2727.8	2748.6	2732.1
23°	2512.2	2517.5	2537.0	2565.9	2598.0	2738.6	2733.2	2737.0	2756.2	2781.4	2764.0
24°	2538.2	2544.1	2564.4	2593.5	2625.6	2765.1	2759.5	2770.9	2789.6	2814.0	2795.3
25°	2563.3	2568.9	2591.3	2621.5	2654.6	2788.8	2787.8	2800.4	2824.9	2841.9	2827.8
26°	2588.6	2595.4	2617.8	2651.6	2676.9	2813.7	2816.0	2829.8	2860.3	2869.5	2861.2
27°	2613.9	2621.0	2644.7	2680.8	2698.4	2842.8	2849.0	2862.3	2895.2	2900.8	2895.2
28°	2636.6	2602.1	2669.1	2710.4	2721.7	2862.9	2884.0	2896.1	2925.8	2931.2	2931.4
29°	2581.1	2499.3	2624.9	2739.3	2753.1	2858.5	2919.2	2934.2	2954.9	2965.9	2968.7
30°	2486.7	2468.0	2528.0	2762.5	2785.0	2853.8	2955.4	2973.1	2987.9	3001.2	3007.1
31°	2471.7	2495.2	2509.5	2778.5	2817.0	2856.0	2989.6	3012.0	3017.5	3036.6	3045.0
32°	2496.8	2524.1	2534.9	2698.3	2848.7	2870.8	3016.6	3051.8	3049.9	3072.6	3082.8
33°	2522.1	2553.9	2561.2	2628.4	2878.4	2895.7	3035.2	3090.8	3085.9	3107.5	3118.5
34°	2547.8	2582.8	2586.9	2627.5	2901.9	2922.4	3055.8	3129.9	3121.1	3140.7	3153.1
35°	2573.0	2614.4	2613.1	2655.5	2925.8	2948.8	3085.1	3157.1	3157.7	3174.0	3189.8
36°	2599.8	2644.0	2641.5	2682.8	2948.0	2976.4	3114.9	3185.1	3195.5	3209.2	3229.2
37°	2623.9	2673.4	2668.6	2702.7	2956.5	3006.0	3146.2	3212.6	3232.9	3246.5	3266.4
38°	2649.9	2698.4	2695.4	2720.5	2867.8	3025.9	3179.5	3248.1	3271.3	3281.6	3304.2
39°	2671.5	2574.7	2719.6	2742.0	2801.2	3047.2	3212.3	3282.2	3309.7	3319.7	3344.8
40°	2544.0	2474.2	2605.5	2770.4	2820.0	3078.6	3237.3	3316.1	3340.5	3361.0	3387.1
41°	2449.6	2490.4	2506.5	2798.9	2850.0	3112.5	3261.8	3349.6	3368.9	3403.7	3429.9
42°	2466.2	2512.5	2516.2	2824.8	2881.1	3148.8	3278.7	3383.5	3400.2	3445.4	3473.5
43°	2492.3	2535.2	2543.0	2766.6	2912.6	3185.3	3305.0	3416.0	3432.8	3487.9	3516.4
44°	2520.1	2557.0	2571.6	2658.5	2941.5	3221.4	3343.4	3442.7	3472.0	3530.3	3560.7



REPORT NUMBER: P1436752

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2547.8	2577.8	2598.7	2642.4	2961.7	3249.2	3385.1	3469.4	3513.9	3574.1	3601.8
46°	2575.7	2593.3	2627.1	2666.8	2977.4	3257.3	3426.3	3490.3	3558.5	3619.9	3643.9
47°	2599.3	2459.1	2651.9	2684.2	3000.7	3271.2	3468.1	3505.6	3602.1	3665.2	3686.4
48°	2480.3	2314.1	2550.2	2699.0	3024.1	3230.2	3496.1	3528.1	3644.9	3710.3	3731.2
49°	2330.5	2324.7	2395.4	2719.2	2972.2	3176.1	3495.6	3559.4	3688.2	3752.3	3777.4
50°	2348.2	2344.7	2401.1	2743.7	2861.4	3139.3	3495.2	3593.1	3729.3	3789.8	3826.2
51°	2376.5	2365.3	2427.7	2691.8	2844.2	3165.1	3488.2	3624.4	3765.0	3825.9	3874.2
52°	2404.9	2385.5	2453.4	2533.2	2875.0	3185.3	3489.2	3656.2	3796.6	3865.2	3921.7
53°	2430.1	2399.7	2477.4	2517.2	2903.1	3196.9	3510.6	3685.1	3829.2	3900.5	3971.5
54°	2447.7	2200.9	2497.0	2543.8	2920.5	3209.8	3534.3	3712.0	3855.0	3940.7	4024.9
55°	2265.0	2104.4	2311.5	2572.2	2935.6	3234.8	3551.4	3729.1	3869.1	3984.6	4080.8
56°	2160.3	2118.6	2203.6	2600.1	2938.8	3259.3	3551.2	3732.5	3888.3	4028.6	4138.2
57°	2165.7	2127.1	2207.1	2624.0	2845.7	3264.9	3551.8	3731.0	3903.9	4070.3	4195.1
58°	2174.3	2097.6	2215.9	2477.4	2737.3	3273.1	3553.1	3730.2	3921.1	4109.3	4253.4
59°	2107.8	1819.8	2161.1	2381.3	2762.0	3214.1	3544.7	3733.7	3936.8	4147.7	4311.3
60°	1876.3	1791.0	1917.8	2390.4	2792.7	3117.0	3518.3	3735.3	3949.2	4185.3	4370.0
61°	1870.4	1789.9	1908.5	2403.5	2825.2	3110.3	3504.4	3729.6	3960.4	4223.2	4429.5
62°	1861.2	1593.5	1897.7	2299.5	2854.4	3112.7	3497.6	3723.6	3967.7	4257.1	4489.1
63°	1667.9	1444.3	1692.6	2153.9	2766.1	3111.3	3465.8	3708.8	3966.8	4284.8	4549.4
64°	1536.8	1320.9	1560.2	2138.4	2672.8	3100.2	3438.3	3677.4	3960.9	4307.6	4606.9
65°	1524.0	1197.3	1547.9	2110.6	2657.1	3058.7	3385.2	3641.3	3939.3	4327.0	4657.8
66°	1357.6	1075.0	1374.8	1898.5	2652.4	2936.9	3330.4	3601.7	3906.9	4343.4	4700.0
67°	1191.4	1036.6	1203.0	1881.5	2508.8	2903.3	3250.1	3535.9	3868.4	4345.4	4734.5
68°	1046.7	688.0	1066.9	1775.9	2459.4	2911.2	3153.1	3388.2	3799.4	4336.5	4761.1
69°	851.9	561.7	870.1	1604.7	2417.5	2906.9	3039.0	3139.4	3670.7	4321.8	4781.2
70°	653.1	382.8	664.7	1461.1	2273.0	2880.4	2863.7	2808.5	3468.3	4285.2	4778.5
71°	460.6	204.0	455.6	1305.1	2220.0	2747.1	2621.7	2516.3	3183.2	4211.2	4750.3
72°	225.7	27.4	194.2	1149.1	2102.5	2601.4	2347.1	2255.5	2880.2	4091.0	4701.6
73°	187.7	0.4	162.9	991.7	2001.2	2445.6	2085.9	1996.2	2585.9	3907.7	4608.7
74°	152.3	0.3	131.6	790.3	1815.6	2267.0	1845.0	1668.8	2297.7	3665.6	4462.0
75°	117.0	0.3	100.3	659.3	1643.7	2034.8	1490.5	1204.7	1937.9	3367.0	4228.0
76°	82.7	0.4	71.2	556.2	1394.4	1801.1	1136.0	705.0	1415.8	3019.2	3888.0
77°	46.5	0.4	41.6	446.3	1145.1	1487.8	784.1	331.6	819.5	2617.0	3390.7
78°	33.1	0.5	29.8	325.1	895.7	1174.5	554.9	254.1	598.5	2087.3	2738.7
79°	19.7	0.6	17.9	231.3	642.6	860.8	325.7	178.2	378.7	1417.8	2003.9
80°	6.4	0.7	6.2	137.5	389.3	469.9	100.0	102.4	158.9	808.3	1240.4
81°	5.4	0.8	5.2	45.8	229.4	336.2	82.0	85.8	127.2	590.7	620.5
82°	4.7	0.9	4.5	25.9	73.7	202.5	69.0	72.3	107.8	381.7	467.2
83°	4.1	1.0	4.0	20.1	49.0	71.2	57.3	60.4	91.2	172.7	322.7
84°	3.6	1.1	3.6	16.6	40.1	57.3	47.0	49.8	76.7	141.4	178.2
85°	3.3	1.3	3.2	13.1	33.5	44.1	38.0	39.3	63.5	111.0	149.6
86°	2.9	1.4	2.9	9.6	27.5	32.4	29.8	29.7	52.5	85.2	124.9
87°	2.7	1.6	2.7	7.3	20.7	24.4	22.2	20.6	41.5	66.2	96.5
88°	2.5	1.7	2.5	5.4	13.8	17.3	15.7	12.5	30.5	50.3	67.3
89°	2.3	1.8	2.3	3.8	6.9	10.3	9.1	5.6	19.8	34.5	52.6



REPORT NUMBER: P1436752

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-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: P1436752

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-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: P1436752

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-HSS)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1436752

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2276.4	2276.4	2276.4
1°	2280.4	2280.6	2279.7
2°	2286.6	2287.1	2285.7
3°	2295.0	2295.5	2293.6
4°	2305.5	2305.7	2303.8
5°	2317.0	2317.3	2315.5
6°	2330.4	2330.6	2328.4
7°	2345.7	2344.6	2341.7
8°	2362.2	2360.3	2356.7
9°	2380.9	2377.7	2373.7
10°	2401.3	2397.0	2392.0
11°	2422.6	2417.4	2411.6
12°	2445.3	2438.4	2431.1
13°	2469.2	2459.2	2451.0
14°	2494.1	2481.0	2471.6
15°	2518.2	2504.0	2493.3
16°	2542.8	2527.6	2514.9
17°	2568.5	2551.6	2538.5
18°	2594.6	2577.0	2563.3
19°	2621.8	2602.7	2588.7
20°	2649.3	2629.4	2615.6
21°	2677.7	2657.6	2644.5
22°	2707.8	2687.0	2674.3
23°	2738.6	2717.7	2705.9
24°	2768.9	2748.6	2738.8
25°	2801.3	2781.6	2772.3
26°	2835.0	2815.6	2807.7
27°	2869.9	2850.4	2844.3
28°	2905.6	2885.1	2882.0
29°	2943.0	2921.0	2921.0
30°	2980.1	2958.0	2961.1
31°	3018.7	2995.6	3001.3
32°	3056.8	3033.1	3041.1
33°	3095.9	3071.8	3081.6
34°	3135.7	3109.8	3122.4
35°	3176.0	3147.9	3164.6
36°	3217.2	3186.2	3207.0
37°	3258.4	3225.9	3249.2
38°	3300.3	3266.4	3291.7
39°	3342.4	3307.6	3333.4
40°	3386.2	3350.4	3375.8
41°	3429.1	3394.6	3416.4
42°	3472.4	3439.7	3459.1
43°	3517.0	3484.7	3499.5
44°	3562.4	3531.7	3539.6



REPORT NUMBER: P1436752

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	3608.7	3581.6	3581.2
46°	3655.3	3630.9	3622.7
47°	3703.4	3682.3	3664.1
48°	3753.0	3734.7	3707.6
49°	3804.1	3790.3	3751.4
50°	3855.7	3844.7	3796.9
51°	3907.0	3900.7	3842.5
52°	3958.4	3956.3	3888.9
53°	4010.9	4012.4	3936.4
54°	4063.2	4066.8	3982.4
55°	4118.3	4120.0	4028.2
56°	4175.7	4170.4	4070.0
57°	4234.4	4217.1	4110.0
58°	4290.2	4259.7	4148.2
59°	4344.2	4299.2	4182.1
60°	4400.1	4333.6	4211.8
61°	4455.4	4363.6	4236.2
62°	4509.5	4390.1	4255.2
63°	4564.6	4413.7	4271.7
64°	4619.0	4435.7	4286.3
65°	4668.8	4454.9	4300.0
66°	4712.7	4472.9	4308.0
67°	4747.6	4484.2	4306.8
68°	4771.7	4481.2	4266.6
69°	4780.1	4450.3	4139.6
70°	4775.1	4362.3	3876.1
71°	4748.8	4165.9	3462.2
72°	4691.6	3820.8	3023.8
73°	4578.0	3359.4	2561.1
74°	4352.3	2838.0	2024.1
75°	3981.1	2285.5	1351.1
76°	3490.0	1667.0	736.6
77°	2944.2	964.8	549.0
78°	2268.5	710.0	367.6
79°	1473.4	459.0	186.3
80°	795.6	208.1	165.3
81°	581.6	175.2	147.1
82°	384.6	153.9	130.7
83°	187.5	134.4	115.8
84°	156.4	116.6	101.6
85°	127.2	100.5	87.9
86°	103.7	85.8	74.9
87°	83.3	72.2	62.6
88°	64.1	60.3	54.0
89°	52.7	48.3	45.5



REPORT NUMBER: P1436752

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-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: P1436752

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-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: P1436752

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)