

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: P1444970

Luminaire Tested: XAS180-SFPM (3000K-108W-T5)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1444970
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/5/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: XAS180-SFPM (3000K-108W-T5)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 5
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 28062 (1 lamp)
Luminaire Lumens: 16717.3 lumens
Efficiency: 59.6%
Efficacy: 152.3 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): 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

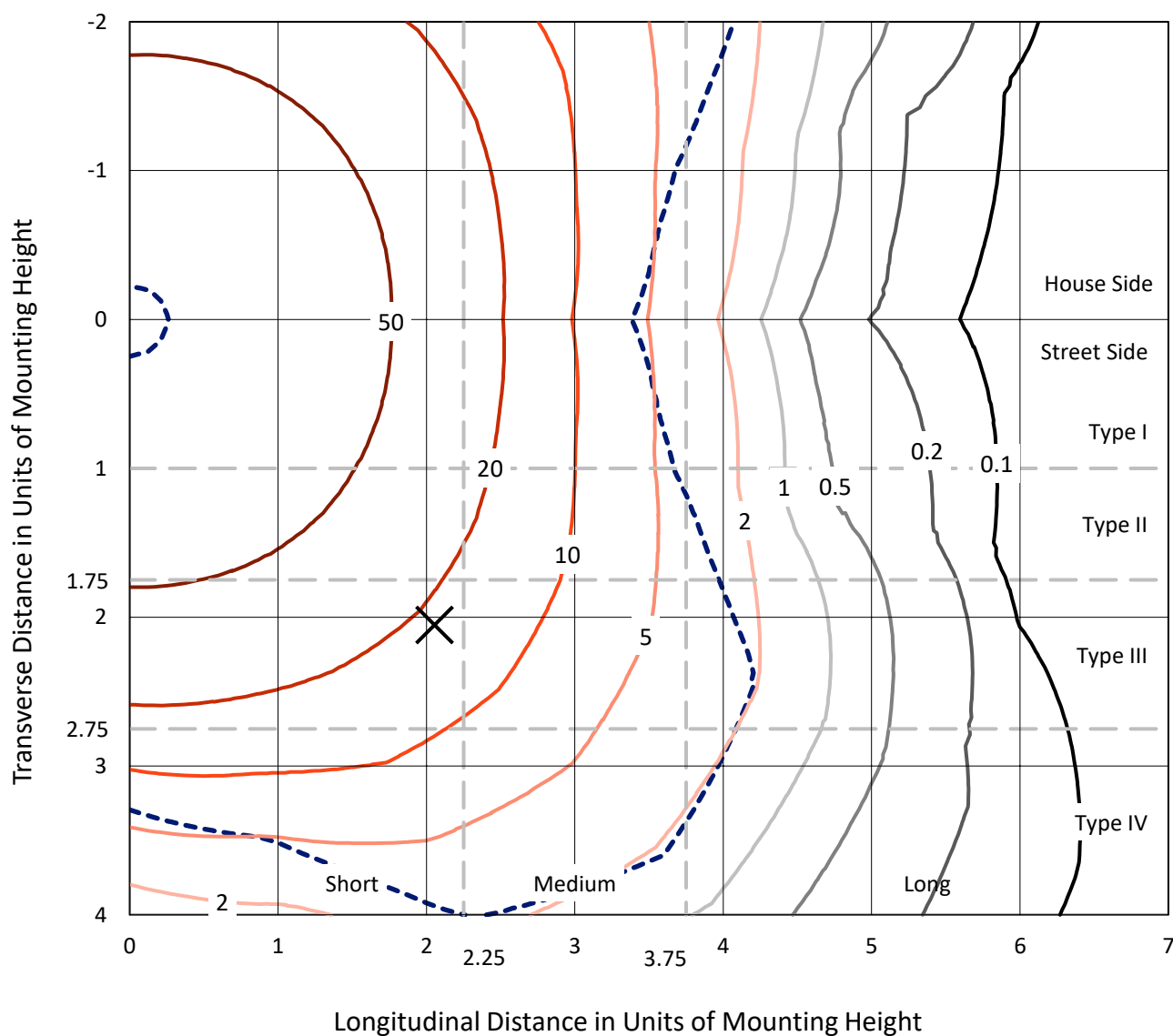
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

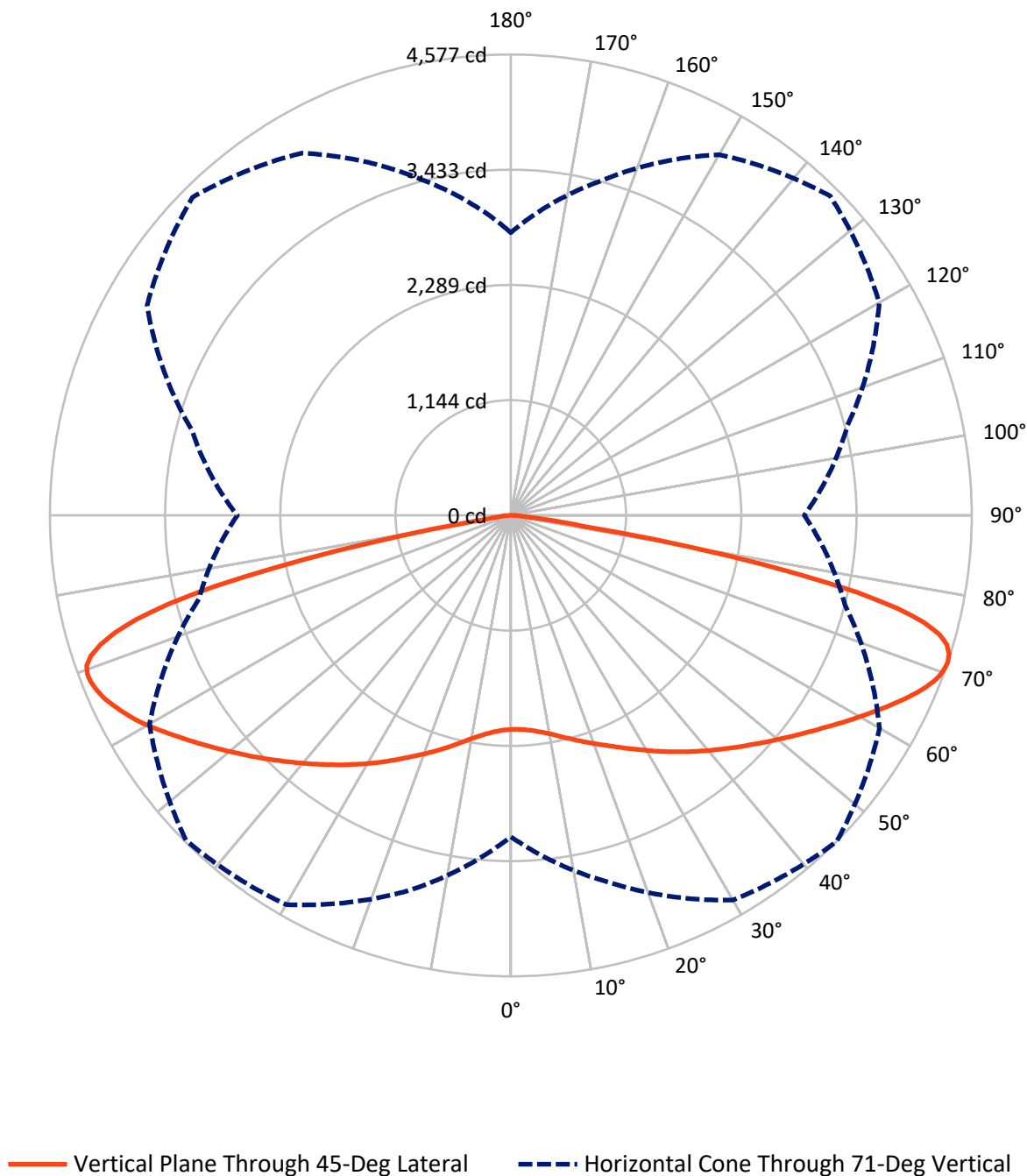


Based on 3 foot mounting height. Maximum calculated value = 236.5 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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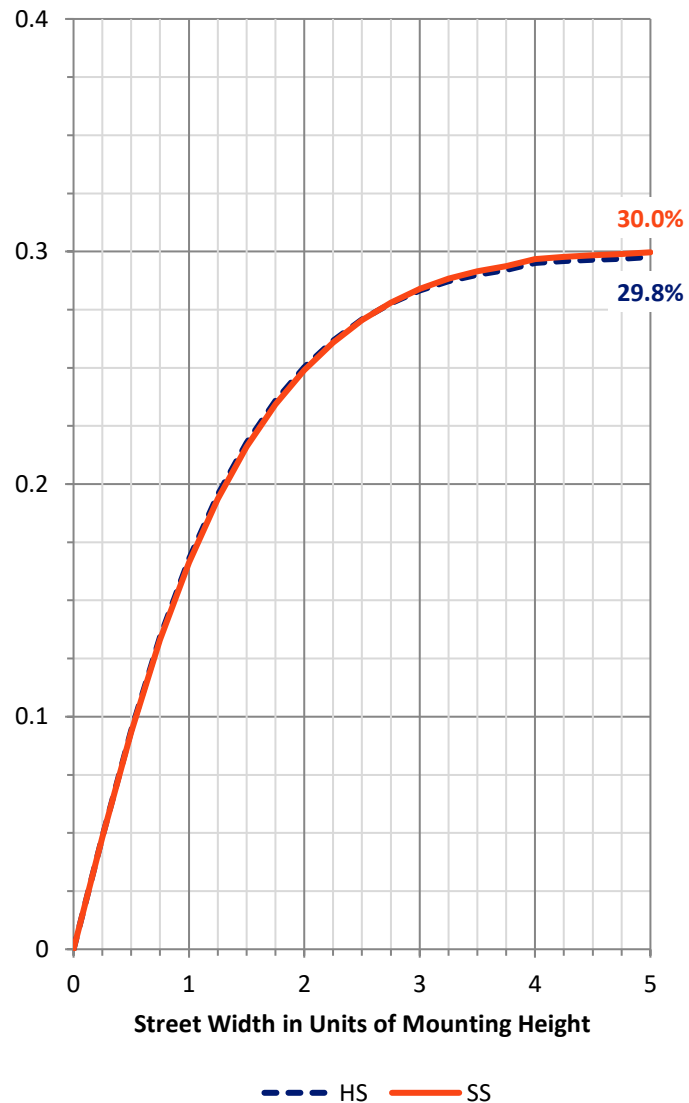
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8318.8	0.0	8318.8
	% Lamp	29.6	0.0	29.6
Street Side	Lumens	8398.5	0.0	8398.5
	% Lamp	29.9	0.0	29.9
Total	Lumens	16717.3	0.0	16717.3
	% Lamp	59.6	0.0	59.6

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	207.5	1.2	0.7
10°-20°	664.2	4.0	2.4
20°-30°	1207.6	7.2	4.3
30°-40°	1849.7	11.1	6.6
40°-50°	2578.1	15.4	9.2
50°-60°	3374.3	20.2	12.0
60°-70°	4032.6	24.1	14.4
70°-80°	2671.8	16.0	9.5
80°-90°	131.3	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°	16717.3	100.0	59.6
0°-180°	16717.3	100.0	59.6

Coefficient of Utilization



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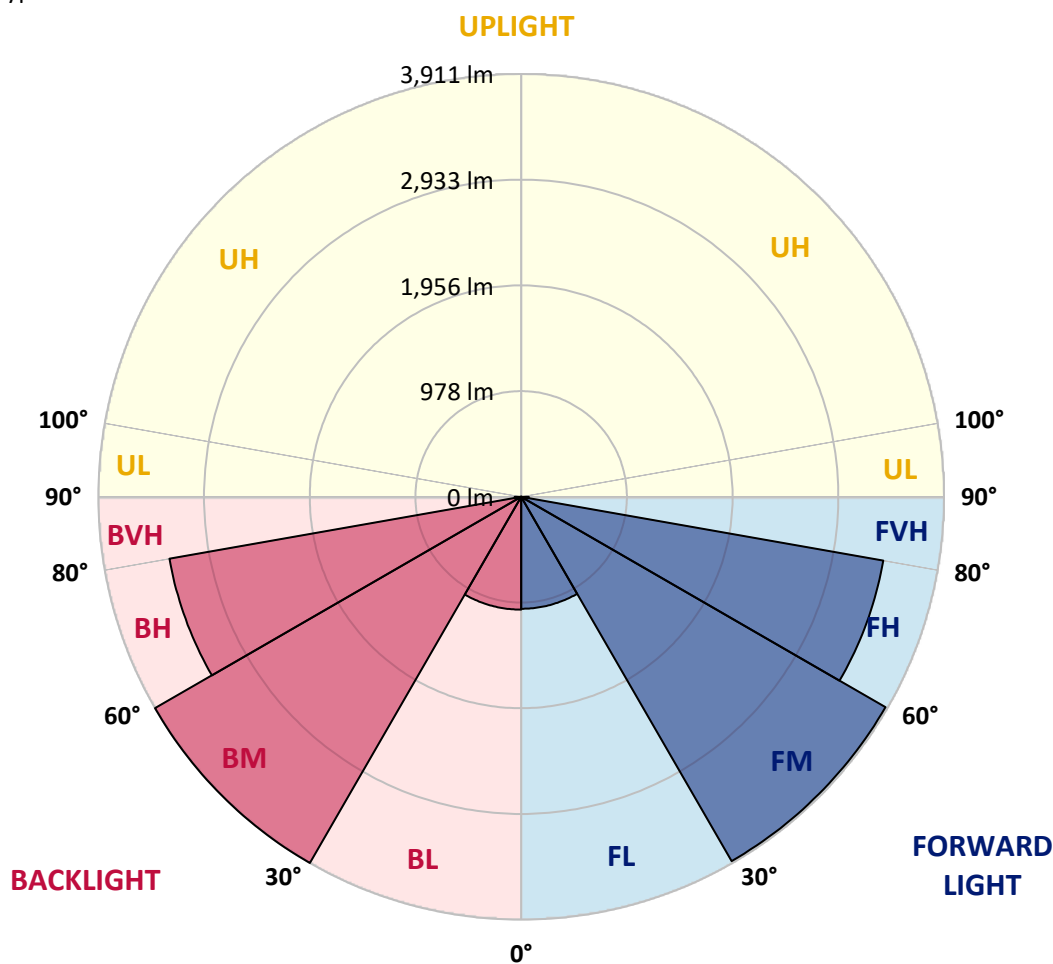
CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1035.7	3.7			
FM	(30°-60°)	3891.1	13.9			
FH	(60°-80°)	3401.2	12.1			G2/5000
FVH	(80°-90°)	70.4	0.3			G1/100
BL	(0°-30°)	1043.7	3.7	B3/2500		
BM	(30°-60°)	3911.0	13.9	B3/5000		
BH	(60°-80°)	3303.1	11.8	B4/5000		G2/5000
BVH	(80°-90°)	60.9	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		11344.7	40.4			

BUG Rating: B4-U0-G2

Type V Short



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CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2125.0	2125.0	2125.0	2125.0	2125.0	2125.0	2125.0	2125.0	2125.0	2125.0	2125.0
1°	2126.0	2125.6	2126.0	2125.6	2125.6	2125.4	2123.9	2124.0	2124.0	2124.8	2125.2
2°	2129.3	2128.5	2128.3	2127.8	2126.9	2126.2	2124.9	2124.9	2125.2	2126.3	2127.4
3°	2134.9	2133.6	2132.7	2131.4	2130.9	2129.7	2128.4	2128.2	2128.6	2129.9	2131.6
4°	2142.9	2141.1	2139.5	2138.1	2136.8	2135.3	2133.8	2133.7	2134.2	2136.0	2138.1
5°	2151.9	2149.8	2148.0	2145.7	2143.6	2142.4	2140.4	2141.2	2142.6	2144.6	2146.8
6°	2162.2	2159.5	2158.3	2155.7	2152.4	2150.5	2148.5	2149.2	2151.3	2154.9	2157.8
7°	2173.4	2170.8	2170.0	2167.1	2163.9	2160.9	2158.5	2159.5	2161.5	2166.9	2170.9
8°	2186.5	2183.7	2182.4	2179.9	2176.4	2173.1	2171.5	2172.6	2175.0	2179.8	2185.6
9°	2200.8	2198.2	2196.3	2193.9	2190.9	2186.8	2184.4	2186.2	2190.5	2195.5	2201.3
10°	2216.4	2213.9	2212.2	2209.6	2207.0	2202.3	2200.2	2202.0	2207.2	2213.3	2218.3
11°	2233.6	2230.6	2229.9	2227.5	2224.0	2219.5	2216.7	2219.6	2225.3	2233.0	2237.5
12°	2251.1	2247.2	2247.7	2246.3	2242.5	2237.7	2234.3	2238.2	2244.8	2253.4	2258.5
13°	2268.0	2264.3	2266.6	2266.8	2261.9	2257.4	2252.5	2257.3	2266.0	2274.9	2281.0
14°	2286.8	2282.6	2285.6	2287.4	2282.7	2277.2	2271.6	2277.7	2286.8	2297.9	2303.7
15°	2305.2	2301.3	2305.1	2309.2	2304.1	2297.6	2292.1	2297.9	2309.3	2321.5	2326.4
16°	2325.3	2322.2	2325.4	2330.7	2326.6	2319.4	2314.1	2319.7	2332.5	2345.7	2350.6
17°	2346.8	2344.0	2347.7	2353.2	2350.3	2341.8	2336.1	2342.0	2357.2	2369.2	2374.6
18°	2369.2	2365.4	2370.1	2375.7	2373.6	2364.9	2359.3	2365.8	2381.6	2393.5	2397.9
19°	2392.3	2388.1	2393.6	2399.1	2398.1	2389.2	2383.5	2390.9	2406.8	2418.4	2421.2
20°	2417.3	2412.3	2417.4	2422.8	2423.0	2414.8	2409.1	2417.2	2432.8	2443.2	2444.6
21°	2442.8	2437.7	2441.3	2447.4	2448.7	2440.7	2434.9	2444.3	2459.1	2467.2	2469.0
22°	2469.8	2464.3	2466.8	2472.2	2476.2	2467.9	2462.8	2472.6	2487.2	2493.6	2494.7
23°	2498.3	2492.5	2493.0	2498.8	2504.0	2496.4	2491.2	2502.4	2515.4	2520.1	2522.0
24°	2528.3	2521.8	2520.2	2526.0	2532.3	2525.4	2521.3	2532.7	2545.0	2547.8	2550.0
25°	2559.7	2552.1	2548.7	2554.9	2562.3	2555.6	2552.8	2564.3	2574.2	2576.4	2577.7
26°	2592.3	2583.2	2578.4	2584.1	2592.2	2585.4	2584.9	2596.3	2604.3	2605.6	2606.1
27°	2625.9	2615.0	2608.2	2614.6	2621.9	2615.9	2617.4	2628.7	2634.8	2636.1	2635.5
28°	2661.1	2647.3	2638.9	2645.6	2652.4	2647.2	2651.2	2660.7	2666.6	2667.6	2665.2
29°	2696.9	2679.9	2670.8	2678.1	2682.9	2678.8	2686.7	2693.2	2698.2	2700.3	2696.3
30°	2733.5	2712.5	2703.4	2711.0	2714.1	2711.3	2723.0	2726.6	2730.5	2733.3	2727.6
31°	2770.7	2746.0	2737.3	2744.9	2745.5	2743.0	2759.7	2759.6	2763.2	2767.3	2760.4
32°	2807.6	2779.5	2771.0	2779.3	2777.2	2777.1	2795.8	2793.8	2796.6	2801.8	2793.4
33°	2844.5	2813.9	2806.5	2813.2	2810.8	2810.1	2832.9	2826.9	2830.7	2836.3	2827.4
34°	2881.6	2848.2	2841.3	2847.8	2844.1	2842.3	2869.1	2859.9	2865.0	2870.3	2861.5
35°	2920.9	2882.2	2877.1	2883.0	2878.1	2874.7	2906.5	2892.6	2899.7	2905.7	2897.5
36°	2959.6	2917.3	2913.8	2918.8	2913.4	2908.4	2943.6	2926.2	2936.1	2941.7	2934.3
37°	2998.4	2952.8	2951.1	2955.5	2948.9	2940.9	2980.4	2960.3	2972.1	2978.2	2971.8
38°	3037.8	2989.6	2988.5	2992.1	2984.2	2975.0	3018.5	2993.8	3007.3	3014.7	3009.1
39°	3076.4	3026.5	3025.6	3029.1	3019.8	3010.2	3057.1	3028.4	3043.8	3050.9	3045.6
40°	3114.6	3065.0	3062.6	3066.8	3055.9	3045.8	3095.5	3064.0	3080.6	3088.7	3083.7
41°	3152.2	3104.1	3100.9	3104.3	3093.1	3082.7	3133.8	3101.2	3116.9	3126.6	3120.2
42°	3191.6	3144.2	3140.2	3143.5	3130.7	3120.2	3170.6	3138.8	3154.5	3165.9	3160.1
43°	3229.7	3186.0	3180.0	3183.3	3169.6	3159.3	3206.3	3178.0	3192.5	3205.7	3199.7
44°	3267.0	3228.8	3220.2	3223.6	3208.5	3199.5	3240.8	3218.2	3230.3	3245.0	3240.0

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CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3304.4	3271.6	3261.5	3263.5	3248.2	3241.5	3274.3	3259.0	3269.1	3285.5	3281.7
46°	3341.9	3316.8	3304.3	3305.0	3289.6	3284.7	3308.4	3301.6	3308.4	3326.8	3324.0
47°	3380.7	3364.7	3348.6	3348.5	3332.5	3329.5	3343.6	3344.3	3350.0	3369.9	3368.7
48°	3420.1	3411.9	3393.5	3392.8	3375.2	3374.9	3376.6	3388.7	3393.1	3412.2	3413.9
49°	3460.9	3461.6	3440.8	3438.6	3419.3	3420.7	3409.5	3432.5	3436.7	3456.2	3458.5
50°	3502.6	3510.0	3488.2	3484.6	3463.1	3467.1	3442.5	3476.3	3479.9	3502.6	3505.1
51°	3545.2	3560.1	3536.9	3531.7	3509.7	3512.6	3477.0	3519.1	3524.8	3549.5	3554.2
52°	3589.1	3611.2	3588.2	3582.0	3557.1	3557.6	3512.4	3563.4	3571.0	3598.9	3602.9
53°	3633.0	3661.5	3640.5	3631.7	3604.2	3601.0	3546.1	3606.8	3617.1	3647.3	3652.6
54°	3676.9	3711.5	3693.6	3684.9	3652.1	3643.3	3579.5	3648.4	3664.9	3696.8	3702.5
55°	3719.1	3757.3	3747.9	3737.2	3699.6	3683.0	3612.4	3686.0	3713.0	3750.3	3754.9
56°	3758.7	3802.8	3803.4	3792.5	3748.5	3720.5	3643.9	3723.8	3761.1	3804.0	3808.6
57°	3796.2	3845.5	3858.9	3850.4	3796.7	3755.2	3672.2	3757.8	3808.8	3858.9	3860.8
58°	3831.4	3885.8	3915.6	3909.1	3844.5	3786.0	3696.2	3788.2	3856.5	3915.8	3910.9
59°	3863.0	3923.3	3973.6	3968.6	3892.5	3811.6	3718.7	3816.2	3903.1	3973.7	3959.1
60°	3891.5	3957.2	4030.5	4030.5	3938.5	3833.4	3736.3	3840.1	3947.6	4032.2	4005.7
61°	3914.8	3987.9	4085.6	4092.0	3984.2	3852.8	3750.1	3860.7	3993.8	4089.9	4052.4
62°	3933.0	4013.5	4139.6	4155.4	4028.2	3866.7	3757.8	3875.9	4036.5	4146.8	4097.3
63°	3949.0	4036.6	4192.4	4219.3	4073.4	3874.0	3758.3	3887.6	4079.4	4199.4	4139.2
64°	3963.2	4055.4	4240.5	4282.4	4115.7	3875.6	3752.2	3894.7	4122.2	4250.3	4178.7
65°	3977.2	4071.4	4287.1	4344.6	4156.2	3874.8	3741.8	3896.0	4161.7	4302.3	4213.3
66°	3985.2	4086.6	4328.5	4404.2	4191.3	3867.1	3726.1	3890.3	4197.2	4354.4	4245.5
67°	3985.2	4097.2	4363.9	4459.5	4220.3	3853.2	3700.4	3878.1	4226.4	4402.5	4271.5
68°	3948.5	4095.0	4394.1	4508.2	4240.4	3830.3	3621.5	3853.0	4249.6	4440.7	4254.9
69°	3830.8	4064.0	4413.7	4544.6	4252.1	3767.6	3455.9	3790.3	4260.9	4471.0	4215.9
70°	3582.8	3974.6	4421.1	4567.8	4256.6	3637.7	3214.0	3663.0	4259.1	4488.3	4195.0
71°	3190.5	3772.9	4410.8	4577.4	4227.9	3436.0	2914.6	3463.1	4224.9	4485.5	4137.0
72°	2781.6	3443.1	4375.7	4563.8	4154.1	3178.5	2641.5	3201.0	4135.6	4439.2	4039.7
73°	2348.4	3013.3	4290.2	4516.1	4027.8	2901.9	2430.8	2918.2	3986.1	4339.0	3917.4
74°	1847.6	2544.4	4102.3	4414.5	3851.1	2650.4	2166.3	2658.0	3791.1	4186.5	3715.6
75°	1223.3	2033.6	3758.5	4233.8	3619.2	2370.6	1655.3	2383.2	3543.0	3983.2	3414.7
76°	632.5	1427.2	3294.5	3943.5	3344.7	1950.3	1144.2	1982.2	3269.5	3683.0	3004.1
77°	457.7	767.8	2791.9	3518.7	3007.6	1312.5	633.9	1435.4	2943.8	3259.2	2495.3
78°	292.5	551.9	2182.1	2895.4	2538.9	680.3	272.9	888.8	2492.4	2695.3	1885.4
79°	127.4	343.7	1415.5	2206.4	1883.8	491.9	215.0	345.9	1859.3	2039.6	1275.4
80°	105.8	135.4	722.2	1436.8	1140.6	308.4	157.0	267.1	1226.1	1379.8	667.7
81°	90.5	111.5	522.3	727.1	560.3	125.0	100.3	188.4	598.9	726.8	306.8
82°	77.1	94.3	330.5	522.8	413.1	106.4	85.6	109.7	266.7	293.9	234.0
83°	64.7	78.7	138.7	332.4	270.4	90.0	72.5	92.5	209.5	229.4	161.3
84°	53.4	64.5	108.7	142.1	127.7	75.0	60.1	76.8	152.4	164.9	89.1
85°	42.2	52.8	83.0	117.2	97.0	61.3	48.4	62.5	95.8	100.7	64.5
86°	31.0	41.1	62.2	94.2	71.2	49.2	37.5	49.6	68.8	78.9	43.2
87°	20.9	29.4	45.3	69.3	52.3	37.2	26.7	37.5	49.6	56.0	26.9
88°	12.0	19.1	28.4	55.5	33.7	25.1	18.6	26.7	34.3	34.9	19.1
89°	4.8	8.2	11.5	42.1	15.0	13.5	10.6	18.4	23.7	24.1	11.2

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CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

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: P1444970

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

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: P1444970
CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

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: P1444970

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2125.0	2125.0	2125.0	2125.0	2125.0	2125.0	2125.0	2125.0	2125.0	2125.0	2125.0
1°	2125.6	2126.1	2126.5	2127.1	2127.5	2127.8	2128.1	2126.7	2126.4	2126.2	2126.5
2°	2128.3	2129.4	2129.7	2131.0	2131.7	2131.9	2132.2	2130.9	2131.1	2130.5	2130.6
3°	2132.7	2134.6	2135.8	2137.0	2138.1	2138.5	2139.2	2137.5	2137.6	2137.1	2137.4
4°	2140.1	2142.3	2143.7	2145.1	2146.4	2147.0	2147.7	2146.4	2146.0	2145.6	2145.3
5°	2149.2	2152.0	2153.7	2155.8	2156.8	2157.5	2157.7	2156.2	2156.0	2155.5	2155.1
6°	2160.8	2163.6	2166.2	2168.4	2169.4	2169.4	2169.5	2167.8	2167.8	2167.5	2167.1
7°	2174.4	2177.0	2180.3	2182.8	2183.7	2184.4	2185.0	2182.6	2182.3	2181.5	2181.1
8°	2189.2	2192.4	2195.9	2199.0	2200.5	2201.8	2201.2	2198.4	2197.8	2196.9	2195.8
9°	2205.3	2208.9	2213.1	2217.3	2219.6	2220.1	2218.7	2214.6	2214.8	2214.5	2213.3
10°	2223.1	2227.4	2232.2	2237.3	2240.1	2240.1	2237.7	2233.7	2233.4	2233.9	2231.5
11°	2242.8	2247.5	2253.1	2259.3	2262.4	2261.9	2259.0	2254.7	2254.6	2255.1	2252.0
12°	2263.2	2268.0	2275.0	2282.4	2286.2	2285.2	2281.7	2276.5	2277.1	2277.1	2273.5
13°	2284.2	2288.9	2296.7	2307.3	2311.8	2310.4	2305.1	2299.9	2300.8	2300.8	2296.4
14°	2306.3	2310.7	2319.8	2331.9	2338.2	2336.3	2330.4	2324.2	2325.4	2326.2	2320.4
15°	2328.5	2332.5	2343.1	2357.4	2365.7	2363.4	2356.1	2349.4	2351.2	2352.6	2344.9
16°	2351.3	2355.3	2366.6	2382.9	2393.6	2392.6	2383.0	2375.4	2377.5	2379.1	2369.8
17°	2374.2	2378.2	2390.7	2408.5	2421.8	2420.8	2411.4	2402.9	2404.6	2406.2	2395.7
18°	2397.9	2401.8	2415.3	2433.8	2449.6	2450.2	2440.1	2430.3	2433.1	2434.2	2421.9
19°	2421.8	2427.0	2439.8	2459.6	2478.2	2479.4	2468.9	2458.9	2461.9	2462.3	2447.4
20°	2446.2	2452.2	2465.6	2487.2	2506.1	2509.7	2499.0	2488.7	2491.9	2491.4	2474.3
21°	2472.0	2478.2	2492.3	2514.4	2534.8	2540.8	2530.8	2519.5	2522.0	2521.1	2500.8
22°	2498.9	2505.5	2520.1	2543.1	2565.2	2572.3	2563.3	2550.8	2554.0	2551.2	2529.5
23°	2525.5	2533.5	2549.6	2573.2	2595.5	2605.2	2594.9	2583.6	2587.0	2581.7	2559.0
24°	2554.4	2563.3	2579.6	2603.6	2627.2	2637.5	2627.9	2617.0	2619.8	2612.3	2587.7
25°	2582.8	2593.2	2610.1	2634.3	2659.3	2670.2	2662.4	2651.3	2652.9	2644.1	2617.5
26°	2612.9	2625.7	2641.8	2666.5	2692.0	2703.0	2696.5	2687.2	2685.9	2675.5	2649.2
27°	2643.1	2657.9	2673.4	2698.5	2724.5	2735.5	2730.4	2722.8	2719.2	2707.2	2680.4
28°	2673.7	2693.4	2705.8	2731.5	2759.4	2769.8	2765.3	2760.5	2753.3	2740.1	2713.7
29°	2705.4	2728.6	2739.2	2765.6	2793.5	2803.4	2800.6	2798.0	2787.4	2773.9	2748.4
30°	2738.1	2765.9	2773.1	2799.2	2828.5	2837.6	2835.5	2835.6	2821.2	2807.0	2783.6
31°	2771.7	2803.3	2807.5	2833.1	2861.8	2871.8	2869.6	2874.2	2855.4	2840.3	2818.9
32°	2805.3	2841.2	2842.1	2867.2	2897.2	2907.5	2905.1	2912.3	2888.5	2873.6	2854.4
33°	2839.9	2879.7	2876.7	2902.9	2932.5	2943.4	2940.2	2950.8	2922.9	2909.0	2891.4
34°	2874.4	2918.1	2910.9	2939.3	2969.1	2979.0	2975.8	2989.8	2957.1	2944.2	2928.4
35°	2908.2	2958.2	2946.6	2976.3	3005.6	3015.2	3010.8	3028.9	2992.3	2980.9	2967.2
36°	2943.1	2998.4	2982.6	3013.6	3041.7	3050.6	3046.2	3068.5	3027.4	3017.6	3005.3
37°	2977.3	3038.5	3019.2	3051.2	3078.4	3086.4	3083.0	3108.3	3063.6	3055.0	3043.6
38°	3013.4	3078.3	3056.7	3089.4	3116.1	3123.4	3119.5	3147.8	3100.0	3092.8	3082.7
39°	3050.2	3118.4	3094.5	3128.4	3154.8	3160.2	3157.5	3186.8	3136.8	3131.3	3121.1
40°	3088.7	3155.9	3134.1	3168.1	3193.3	3198.3	3195.5	3224.3	3174.5	3170.5	3160.5
41°	3128.8	3193.8	3174.0	3208.1	3233.3	3236.1	3233.6	3260.4	3213.2	3210.1	3199.8
42°	3168.3	3230.6	3215.9	3247.6	3272.8	3275.3	3272.7	3296.4	3253.9	3250.6	3240.8
43°	3209.3	3266.9	3257.9	3287.8	3314.1	3316.5	3314.0	3332.8	3295.7	3290.7	3280.6
44°	3251.7	3303.3	3301.0	3329.3	3355.9	3357.6	3355.6	3370.6	3338.8	3331.1	3322.3

REPORT NUMBER: P1444970

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	3294.8	3340.4	3344.8	3372.7	3399.0	3399.5	3399.8	3407.0	3382.6	3373.0	3364.1
46°	3339.7	3376.6	3390.5	3415.1	3442.5	3441.3	3443.7	3440.1	3428.6	3415.7	3407.1
47°	3386.7	3412.0	3436.8	3458.1	3486.5	3483.2	3487.5	3473.2	3472.6	3458.7	3452.0
48°	3434.4	3449.1	3484.7	3502.6	3531.1	3526.3	3530.6	3506.9	3517.1	3501.9	3497.6
49°	3482.3	3489.1	3534.0	3547.3	3577.2	3569.7	3573.4	3541.4	3560.7	3545.8	3543.7
50°	3532.7	3528.3	3584.0	3594.3	3623.2	3613.7	3615.2	3576.3	3603.9	3591.3	3590.6
51°	3585.6	3568.7	3633.9	3641.6	3670.7	3657.1	3656.8	3607.9	3645.7	3636.8	3638.8
52°	3636.0	3607.0	3682.6	3688.9	3719.1	3700.7	3696.5	3640.0	3686.4	3682.1	3688.0
53°	3681.4	3638.8	3727.8	3738.1	3768.7	3744.2	3733.4	3669.9	3722.9	3726.2	3737.7
54°	3720.7	3662.3	3768.7	3788.0	3819.0	3789.1	3767.6	3696.5	3757.6	3773.0	3789.8
55°	3756.4	3686.5	3804.1	3838.3	3870.5	3832.4	3799.5	3722.0	3789.2	3817.7	3843.9
56°	3792.9	3713.9	3838.8	3890.9	3922.8	3874.6	3828.1	3745.0	3817.8	3861.9	3899.7
57°	3827.4	3742.6	3872.8	3942.2	3975.2	3917.2	3853.3	3764.1	3842.0	3904.5	3953.5
58°	3859.8	3762.7	3905.7	3994.9	4028.5	3959.1	3874.7	3782.7	3862.2	3947.0	4010.0
59°	3884.8	3776.7	3930.0	4044.6	4084.2	3998.9	3892.8	3798.2	3878.9	3987.9	4066.1
60°	3905.3	3794.1	3950.4	4091.2	4138.9	4037.6	3909.2	3810.0	3893.1	4028.7	4123.4
61°	3925.1	3811.3	3970.1	4138.8	4194.2	4076.4	3922.2	3814.8	3906.6	4068.0	4181.0
62°	3943.9	3825.3	3988.3	4183.9	4244.7	4116.2	3930.9	3816.1	3914.5	4105.7	4239.6
63°	3961.0	3836.8	4005.4	4225.4	4290.5	4152.0	3934.5	3814.9	3916.4	4140.7	4297.4
64°	3976.2	3839.1	4019.8	4263.4	4333.8	4186.6	3936.4	3805.4	3914.0	4172.6	4355.5
65°	3974.0	3803.0	4014.4	4296.9	4376.0	4216.7	3930.6	3788.6	3905.3	4199.6	4410.2
66°	3925.0	3771.2	3960.5	4323.1	4416.1	4240.6	3920.4	3764.6	3891.7	4222.6	4462.2
67°	3893.7	3751.5	3926.9	4337.9	4447.4	4260.7	3900.2	3706.4	3867.8	4239.2	4506.5
68°	3874.8	3687.7	3898.1	4308.3	4472.0	4273.7	3850.7	3568.2	3811.4	4248.8	4543.5
69°	3798.6	3520.6	3814.0	4258.4	4488.2	4269.7	3743.0	3334.1	3690.2	4242.6	4569.2
70°	3655.6	3228.4	3675.1	4225.5	4490.5	4241.4	3547.3	3025.0	3485.9	4215.8	4577.4
71°	3437.3	2808.5	3455.7	4153.7	4468.8	4170.7	3279.6	2716.2	3206.6	4142.6	4561.9
72°	3103.6	2427.9	3116.4	4050.0	4400.4	4039.1	2976.0	2458.2	2901.9	4020.8	4519.1
73°	2695.7	2038.9	2703.1	3908.1	4276.1	3840.6	2682.2	2207.5	2612.0	3835.0	4431.2
74°	2273.1	1528.2	2281.7	3689.9	4097.8	3598.4	2403.4	1865.4	2329.9	3595.5	4286.8
75°	1730.1	1017.5	1740.9	3360.0	3859.8	3304.3	2054.5	1330.4	1964.8	3300.5	4053.1
76°	1187.1	514.7	1200.0	2920.6	3509.3	2983.8	1509.5	754.2	1422.5	2961.3	3717.2
77°	648.9	377.5	663.9	2410.9	3031.8	2596.9	964.5	541.4	795.3	2552.6	3234.4
78°	273.8	240.2	287.1	1805.0	2410.0	2057.1	427.2	336.0	576.3	2004.2	2588.5
79°	213.4	106.3	222.7	1199.2	1759.4	1494.1	198.2	130.7	357.5	1328.7	1858.7
80°	153.1	87.6	158.3	598.0	1108.7	931.0	165.5	109.2	138.7	729.3	1125.3
81°	92.8	72.9	94.8	268.7	468.8	369.2	132.9	93.4	114.1	527.1	530.1
82°	75.8	59.9	77.4	208.3	202.0	195.2	100.4	79.3	96.8	337.1	342.4
83°	60.4	47.5	61.9	147.7	166.8	158.5	84.7	66.5	81.5	147.0	166.0
84°	46.6	36.8	47.6	87.7	131.7	121.8	70.4	55.2	67.3	113.6	134.0
85°	34.0	26.2	34.7	62.5	96.6	85.1	56.9	43.9	55.3	85.1	111.1
86°	24.1	18.1	24.4	41.3	75.2	61.2	44.6	32.6	43.3	62.2	89.1
87°	14.2	10.0	14.1	29.7	52.8	44.2	33.3	22.3	31.3	45.0	62.7
88°	4.3	2.0	3.8	18.2	36.0	30.4	23.0	13.0	20.9	27.9	50.4
89°	3.1	1.8	2.9	6.7	19.3	16.6	12.6	5.2	9.5	10.8	38.3

REPORT NUMBER: P1444970

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

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: P1444970

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

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: P1444970
CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

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: P1444970

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2125.0	2125.0	2125.0
1°	2126.6	2126.0	2126.0
2°	2130.5	2130.0	2129.3
3°	2136.7	2136.1	2134.9
4°	2145.1	2144.0	2142.9
5°	2154.6	2153.3	2151.9
6°	2165.8	2164.5	2162.2
7°	2178.2	2176.4	2173.4
8°	2192.4	2189.4	2186.5
9°	2208.7	2204.6	2200.8
10°	2226.4	2221.3	2216.4
11°	2245.4	2239.2	2233.6
12°	2265.8	2257.8	2251.1
13°	2287.4	2276.6	2268.0
14°	2308.8	2296.0	2286.8
15°	2330.3	2315.8	2305.2
16°	2353.3	2336.8	2325.3
17°	2376.3	2359.3	2346.8
18°	2400.4	2382.2	2369.2
19°	2425.2	2405.6	2392.3
20°	2449.3	2429.2	2417.3
21°	2475.1	2454.9	2442.8
22°	2502.1	2481.6	2469.8
23°	2530.3	2509.3	2498.3
24°	2559.1	2538.0	2528.3
25°	2588.1	2568.3	2559.7
26°	2619.4	2599.3	2592.3
27°	2651.7	2631.2	2625.9
28°	2684.1	2663.3	2661.1
29°	2718.4	2696.3	2696.9
30°	2753.6	2729.6	2733.5
31°	2788.7	2764.7	2770.7
32°	2824.1	2799.6	2807.6
33°	2859.9	2835.1	2844.5
34°	2895.8	2869.4	2881.6
35°	2933.1	2904.6	2920.9
36°	2971.9	2939.6	2959.6
37°	3009.4	2976.4	2998.4
38°	3048.6	3014.0	3037.8
39°	3086.8	3051.4	3076.4
40°	3127.0	3090.9	3114.6
41°	3166.8	3130.9	3152.2
42°	3207.9	3172.9	3191.6
43°	3249.3	3215.6	3229.7
44°	3290.9	3258.0	3267.0

REPORT NUMBER: P1444970

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	3333.6	3303.9	3304.4
46°	3377.2	3349.3	3341.9
47°	3421.7	3397.4	3380.7
48°	3467.9	3446.3	3420.1
49°	3515.2	3497.4	3460.9
50°	3563.9	3548.4	3502.6
51°	3613.6	3601.0	3545.2
52°	3664.9	3652.6	3589.1
53°	3718.1	3704.4	3633.0
54°	3770.1	3755.3	3676.9
55°	3824.6	3805.7	3719.1
56°	3880.5	3852.6	3758.7
57°	3935.4	3895.8	3796.2
58°	3992.4	3935.4	3831.4
59°	4047.5	3972.2	3863.0
60°	4102.8	4005.6	3891.5
61°	4157.9	4034.0	3914.8
62°	4211.7	4059.6	3933.0
63°	4263.5	4081.1	3949.0
64°	4315.1	4101.6	3963.2
65°	4362.7	4120.1	3977.2
66°	4407.0	4137.6	3985.2
67°	4442.9	4148.9	3985.2
68°	4470.4	4147.6	3948.5
69°	4483.7	4118.9	3830.8
70°	4483.4	4035.0	3582.8
71°	4462.6	3851.0	3190.5
72°	4410.6	3522.2	2781.6
73°	4301.3	3086.8	2348.4
74°	4085.2	2596.7	1847.6
75°	3728.2	2083.5	1223.3
76°	3269.5	1492.9	632.5
77°	2740.7	827.6	457.7
78°	2085.8	596.8	292.5
79°	1318.2	367.5	127.4
80°	677.9	138.1	105.8
81°	486.4	116.2	90.5
82°	311.2	98.2	77.1
83°	136.0	81.6	64.7
84°	107.5	67.0	53.4
85°	81.4	54.7	42.2
86°	61.1	42.4	31.0
87°	44.0	30.1	20.9
88°	27.0	19.1	12.0
89°	10.0	7.8	4.8

REPORT NUMBER: P1444970

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

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: P1444970

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

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: P1444970

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)