Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P1436726

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

Issue Date: 3/25/2026

Test Information

Test Method:	LM-79-2024
Report Number:	P1436726
	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 (4000K-108W-T4-HSS)
Description:	XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
	LUMEN OUTPUT - 60% (108W)
	OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source:	4000K CCT, 80 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	28062 (1 lamp)
Luminaire Lumens:	15622.2 lumens
Efficiency:	55.7%
Efficacy:	148.9 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):	104.9
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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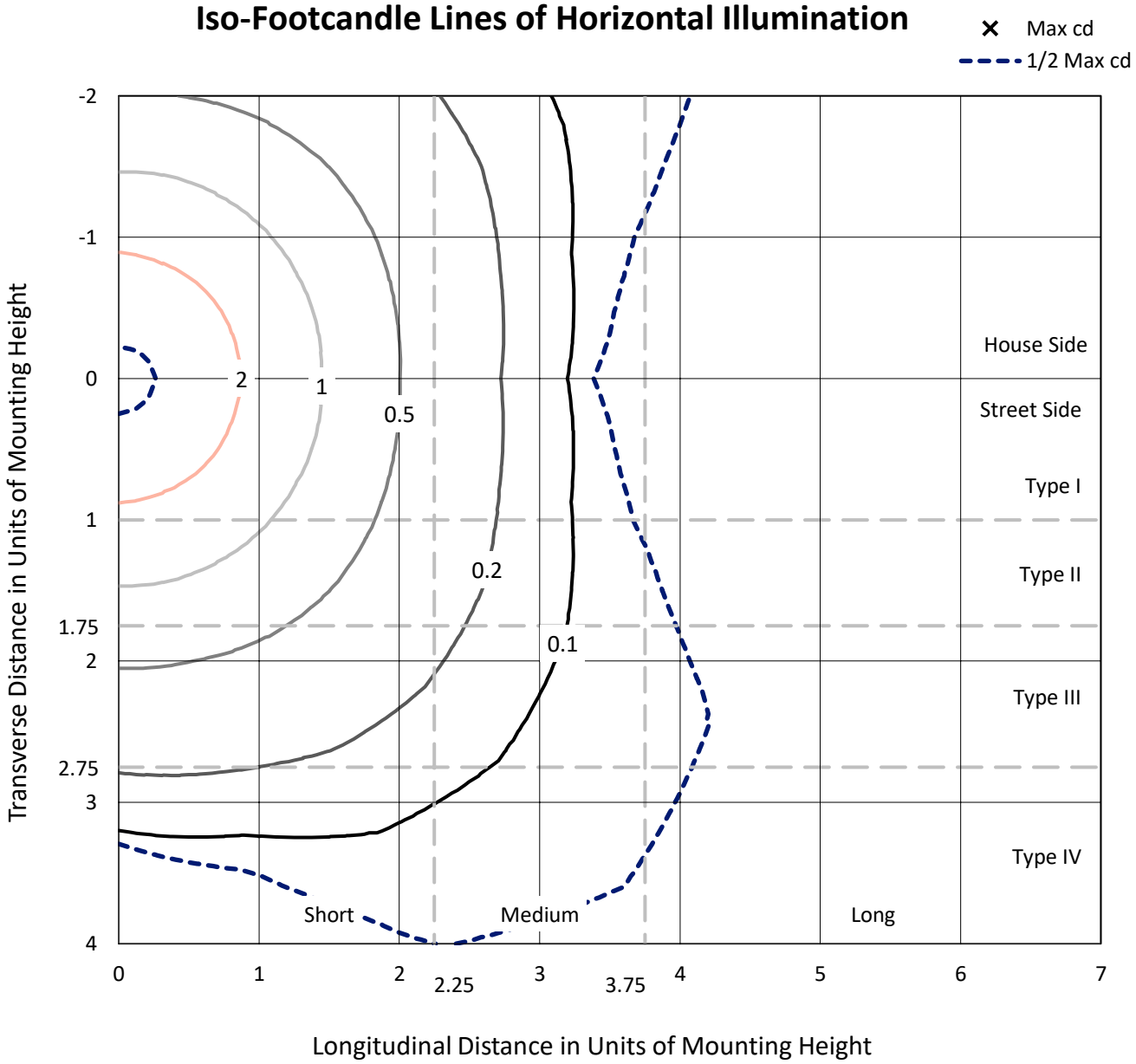
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
Type V - Short - Full Cutoff

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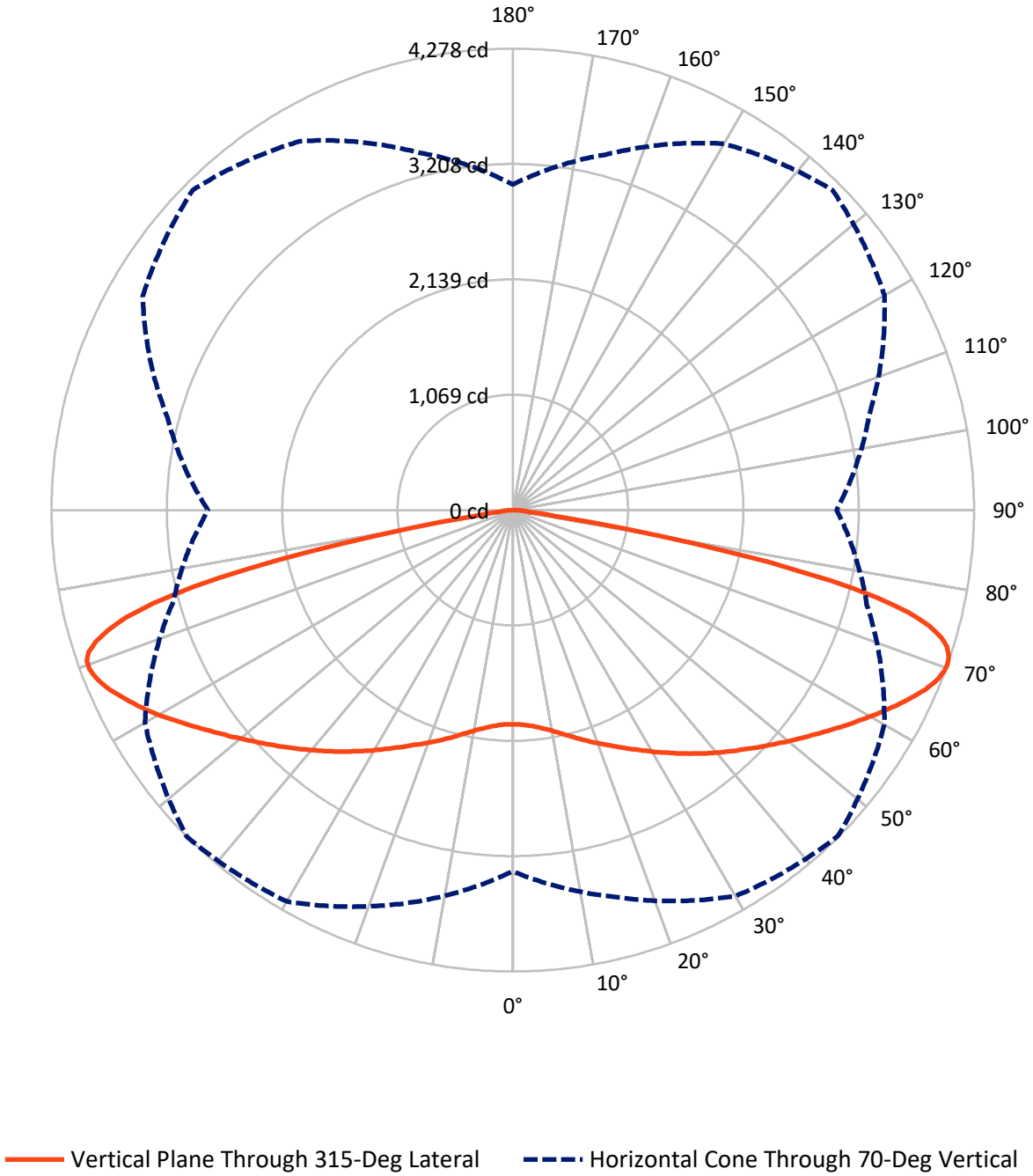
Luminous Intensity Polar Plot



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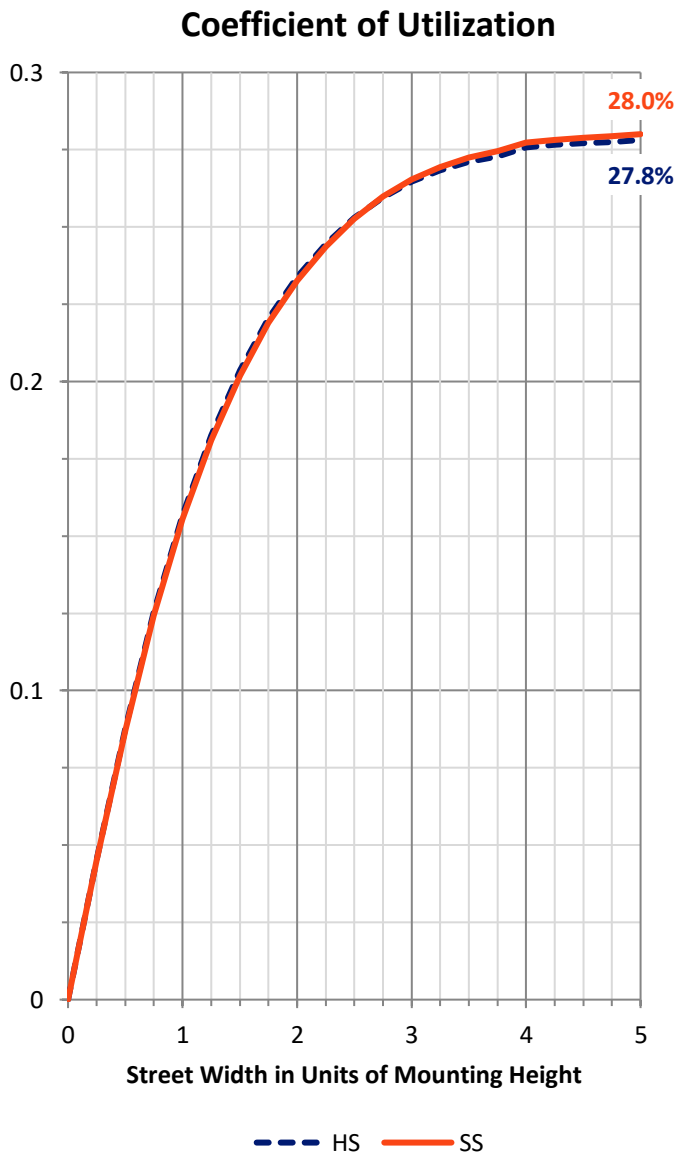
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7773.8	0.0	7773.8
	% Lamp	27.7	0.0	27.7
Street Side	Lumens	7848.3	0.0	7848.3
	% Lamp	28.0	0.0	28.0
Total	Lumens	15622.2	0.0	15622.2
	% Lamp	55.7	0.0	55.7

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	193.9	1.2	0.7
10°-20°	620.7	4.0	2.2
20°-30°	1128.5	7.2	4.0
30°-40°	1728.5	11.1	6.2
40°-50°	2409.2	15.4	8.6
50°-60°	3153.3	20.2	11.2
60°-70°	3768.5	24.1	13.4
70°-80°	2496.8	16.0	8.9
80°-90°	122.7	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°	15622.2	100.0	55.7
0°-180°	15622.2	100.0	55.7



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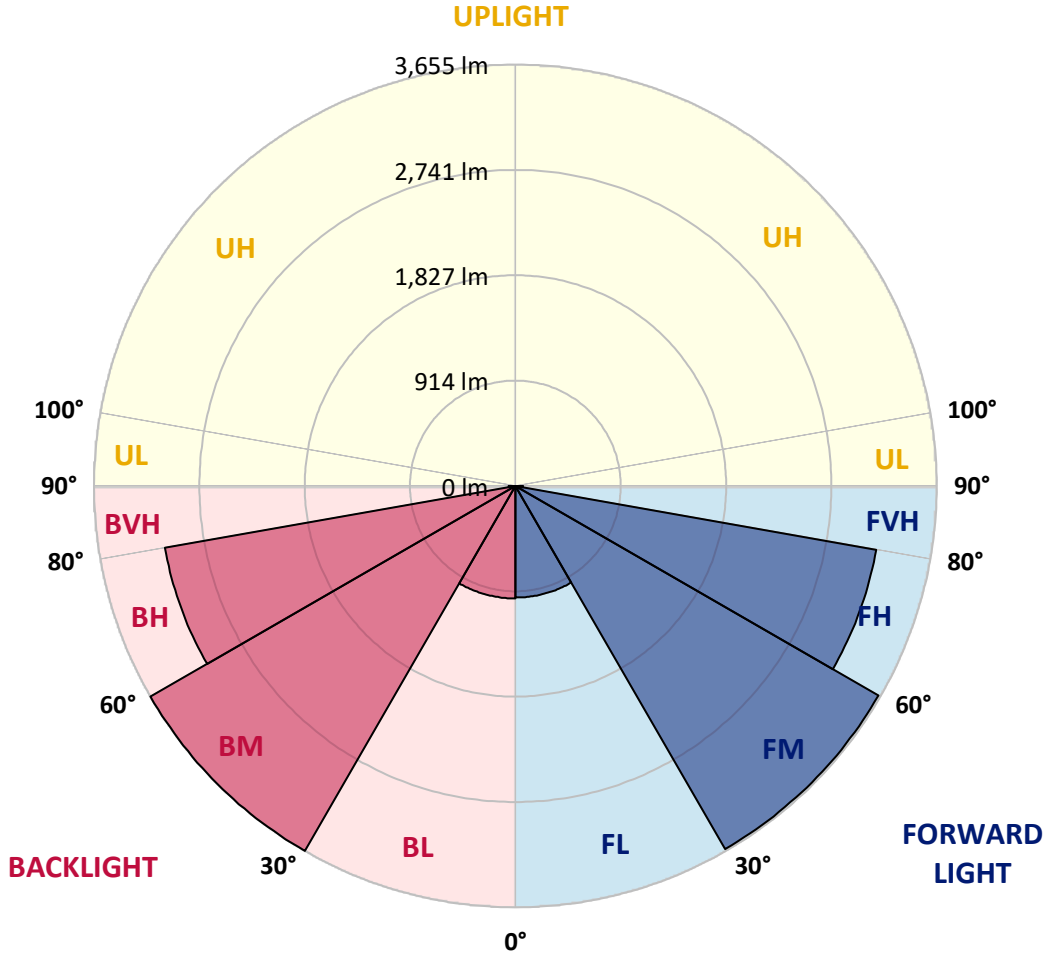
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	967.8	3.4			
FM	(30°-60°)	3636.2	13.0			
FH	(60°-80°)	3178.4	11.3			G2/5000
FVH	(80°-90°)	65.8	0.2			G1/100
BL	(0°-30°)	975.3	3.5	B2/1000		
BM	(30°-60°)	3654.8	13.0	B3/5000		
BH	(60°-80°)	3086.8	11.0	B4/5000		G2/5000
BVH	(80°-90°)	56.9	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		12439.8	44.3			

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°	1985.8	1985.8	1985.8	1985.8	1985.8	1985.8	1985.8	1985.8	1985.8	1985.8	1985.8
1°	1986.7	1986.3	1986.7	1986.3	1986.4	1986.2	1984.7	1984.9	1984.9	1985.6	1986.0
2°	1989.8	1989.1	1988.9	1988.4	1987.6	1986.9	1985.7	1985.7	1986.0	1987.0	1988.1
3°	1995.1	1993.8	1993.0	1991.7	1991.3	1990.2	1989.0	1988.8	1989.1	1990.4	1992.0
4°	2002.5	2000.9	1999.4	1998.1	1996.8	1995.5	1994.0	1993.9	1994.4	1996.1	1998.1
5°	2010.9	2008.9	2007.3	2005.1	2003.2	2002.0	2000.2	2000.9	2002.2	2004.1	2006.2
6°	2020.5	2018.1	2017.0	2014.5	2011.4	2009.6	2007.8	2008.4	2010.4	2013.7	2016.5
7°	2031.0	2028.6	2027.9	2025.1	2022.1	2019.4	2017.1	2018.1	2019.9	2024.9	2028.7
8°	2043.3	2040.6	2039.4	2037.1	2033.8	2030.8	2029.2	2030.3	2032.5	2037.1	2042.4
9°	2056.7	2054.2	2052.4	2050.2	2047.4	2043.6	2041.3	2043.0	2047.0	2051.7	2057.1
10°	2071.2	2068.8	2067.3	2064.9	2062.4	2058.0	2056.0	2057.8	2062.6	2068.3	2073.0
11°	2087.3	2084.5	2083.8	2081.6	2078.3	2074.1	2071.5	2074.2	2079.5	2086.8	2090.9
12°	2103.6	2100.0	2100.5	2099.2	2095.6	2091.1	2087.9	2091.6	2097.7	2105.8	2110.5
13°	2119.4	2116.0	2118.2	2118.3	2113.7	2109.5	2105.0	2109.4	2117.6	2125.8	2131.6
14°	2137.0	2133.0	2135.9	2137.6	2133.1	2128.0	2122.8	2128.5	2137.0	2147.4	2152.8
15°	2154.2	2150.5	2154.1	2157.9	2153.2	2147.1	2142.0	2147.3	2158.0	2169.4	2174.0
16°	2172.9	2170.1	2173.1	2178.0	2174.2	2167.5	2162.5	2167.7	2179.7	2192.0	2196.6
17°	2193.1	2190.4	2193.9	2199.1	2196.3	2188.4	2183.1	2188.6	2202.8	2214.0	2219.1
18°	2214.0	2210.4	2214.9	2220.0	2218.1	2210.0	2204.8	2210.8	2225.6	2236.7	2240.8
19°	2235.6	2231.6	2236.8	2241.9	2241.0	2232.7	2227.3	2234.2	2249.2	2260.0	2262.6
20°	2259.0	2254.3	2259.0	2264.1	2264.2	2256.6	2251.3	2258.8	2273.4	2283.2	2284.5
21°	2282.8	2278.1	2281.4	2287.1	2288.3	2280.8	2275.4	2284.2	2298.0	2305.6	2307.3
22°	2308.0	2302.9	2305.2	2310.3	2314.0	2306.2	2301.5	2310.6	2324.3	2330.3	2331.3
23°	2334.7	2329.3	2329.7	2335.1	2340.0	2332.9	2328.0	2338.5	2350.6	2355.0	2356.8
24°	2362.7	2356.6	2355.2	2360.5	2366.5	2359.9	2356.1	2366.8	2378.3	2380.9	2382.9
25°	2392.0	2384.9	2381.8	2387.5	2394.5	2388.2	2385.6	2396.3	2405.6	2407.6	2408.8
26°	2422.5	2414.0	2409.5	2414.8	2422.4	2416.1	2415.6	2426.2	2433.7	2434.9	2435.4
27°	2453.9	2443.7	2437.3	2443.3	2450.2	2444.6	2445.9	2456.5	2462.2	2463.4	2462.9
28°	2486.8	2473.9	2466.0	2472.3	2478.6	2473.8	2477.6	2486.4	2491.9	2492.9	2490.6
29°	2520.3	2504.3	2495.8	2502.7	2507.1	2503.3	2510.7	2516.8	2521.4	2523.4	2519.7
30°	2554.4	2534.8	2526.3	2533.4	2536.3	2533.7	2544.7	2548.0	2551.7	2554.3	2548.9
31°	2589.2	2566.1	2558.0	2565.1	2565.6	2563.4	2578.9	2578.8	2582.2	2586.1	2579.6
32°	2623.7	2597.4	2589.5	2597.3	2595.3	2595.2	2612.6	2610.8	2613.4	2618.3	2610.4
33°	2658.2	2629.6	2622.7	2628.9	2626.7	2626.0	2647.3	2641.7	2645.3	2650.5	2642.2
34°	2692.8	2661.6	2655.2	2661.3	2657.8	2656.1	2681.2	2672.5	2677.3	2682.3	2674.1
35°	2729.5	2693.4	2688.7	2694.1	2689.6	2686.4	2716.1	2703.1	2709.7	2715.4	2707.7
36°	2765.7	2726.2	2722.9	2727.6	2722.6	2717.9	2750.7	2734.5	2743.7	2749.0	2742.1
37°	2802.0	2759.4	2757.8	2761.9	2755.7	2748.2	2785.1	2766.4	2777.4	2783.1	2777.1
38°	2838.8	2793.8	2792.7	2796.1	2788.8	2780.1	2820.8	2797.7	2810.3	2817.2	2812.0
39°	2874.9	2828.2	2827.4	2830.7	2821.9	2813.0	2856.8	2830.0	2844.4	2851.1	2846.1
40°	2910.6	2864.2	2862.0	2865.9	2855.7	2846.3	2892.7	2863.2	2878.8	2886.4	2881.7
41°	2945.7	2900.8	2897.8	2900.9	2890.5	2880.8	2928.5	2898.1	2912.7	2921.8	2915.8
42°	2982.5	2938.2	2934.5	2937.6	2925.6	2915.9	2962.9	2933.2	2947.9	2958.5	2953.1
43°	3018.1	2977.3	2971.7	2974.8	2962.0	2952.4	2996.3	2969.9	2983.3	2995.7	2990.1
44°	3053.0	3017.3	3009.3	3012.4	2998.4	2990.0	3028.5	3007.4	3018.7	3032.4	3027.8

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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3087.9	3057.3	3047.8	3049.7	3035.4	3029.1	3059.8	3045.5	3054.9	3070.3	3066.8
46°	3123.0	3099.6	3087.8	3088.5	3074.1	3069.6	3091.7	3085.3	3091.7	3108.9	3106.2
47°	3159.2	3144.3	3129.3	3129.2	3114.2	3111.4	3124.6	3125.2	3130.6	3149.1	3148.0
48°	3196.1	3188.4	3171.2	3170.6	3154.1	3153.8	3155.5	3166.8	3170.9	3188.7	3190.3
49°	3234.2	3234.8	3215.4	3213.4	3195.3	3196.7	3186.1	3207.7	3211.6	3229.8	3231.9
50°	3273.1	3280.0	3259.7	3256.3	3236.3	3240.0	3217.0	3248.5	3251.9	3273.1	3275.5
51°	3313.0	3326.9	3305.2	3300.3	3279.8	3282.5	3249.2	3288.6	3293.9	3317.0	3321.4
52°	3354.0	3374.7	3353.2	3347.3	3324.1	3324.5	3282.3	3330.0	3337.1	3363.2	3366.9
53°	3395.0	3421.6	3402.1	3393.8	3368.1	3365.1	3313.8	3370.6	3380.1	3408.4	3413.4
54°	3436.1	3468.4	3451.7	3443.5	3412.9	3404.6	3345.1	3409.4	3424.8	3454.7	3460.0
55°	3475.4	3511.2	3502.4	3492.4	3457.2	3441.8	3375.8	3444.5	3469.8	3504.6	3508.9
56°	3512.5	3553.7	3554.3	3544.0	3502.9	3476.8	3405.2	3479.9	3514.7	3554.8	3559.1
57°	3547.5	3593.6	3606.2	3598.1	3548.0	3509.2	3431.6	3511.7	3559.3	3606.2	3607.9
58°	3580.4	3631.3	3659.1	3653.0	3592.6	3538.0	3454.1	3540.0	3603.9	3659.3	3654.7
59°	3610.0	3666.3	3713.3	3708.6	3637.5	3562.0	3475.1	3566.2	3647.5	3713.4	3699.8
60°	3636.6	3698.0	3766.5	3766.5	3680.5	3582.3	3491.6	3588.5	3689.0	3768.1	3743.3
61°	3658.4	3726.6	3818.0	3824.0	3723.2	3600.4	3504.4	3607.8	3732.1	3822.0	3787.0
62°	3675.4	3750.6	3868.5	3883.2	3764.3	3613.4	3511.7	3622.0	3772.1	3875.2	3828.9
63°	3690.3	3772.2	3917.7	3942.9	3806.6	3620.2	3512.1	3632.9	3812.2	3924.3	3868.1
64°	3703.6	3789.8	3962.7	4001.9	3846.1	3621.7	3506.5	3639.6	3852.2	3971.8	3905.0
65°	3716.7	3804.7	4006.3	4060.0	3883.9	3621.0	3496.7	3640.8	3889.1	4020.4	3937.3
66°	3724.2	3818.9	4045.0	4115.7	3916.7	3613.8	3482.0	3635.5	3922.3	4069.2	3967.4
67°	3724.2	3828.8	4078.1	4167.4	3943.8	3600.8	3458.0	3624.1	3949.6	4114.1	3991.7
68°	3689.9	3826.8	4106.3	4212.8	3962.6	3579.4	3384.3	3600.6	3971.2	4149.8	3976.1
69°	3579.9	3797.8	4124.6	4246.9	3973.6	3520.8	3229.5	3542.0	3981.8	4178.1	3939.7
70°	*3348.1*	*3714.3*	*4131.5*	*4268.6*	*3977.8*	*3399.4*	*3003.5*	*3423.1*	*3980.1*	*4194.3*	*3920.2*
71°	2981.5	3525.8	4121.9	4277.5	3950.9	3211.0	2723.7	3236.3	3948.2	4191.7	3866.0
72°	2599.4	3217.6	4089.1	4264.8	3881.9	2970.3	2468.4	2991.3	3864.7	4148.4	3775.1
73°	2194.6	2815.9	4009.1	4220.3	3764.0	2711.8	2271.6	2727.0	3725.0	4054.8	3660.8
74°	1726.5	2377.8	3833.6	4125.3	3598.9	2476.8	2024.4	2483.9	3542.7	3912.3	3472.2
75°	1143.2	1900.4	3512.3	3956.5	3382.1	2215.3	1546.8	2227.1	3310.9	3722.3	3191.0
76°	591.1	1333.7	3078.7	3685.2	3125.6	1822.6	1069.2	1852.3	3055.4	3441.8	2807.4
77°	427.7	717.5	2609.0	3288.2	2810.6	1226.6	592.4	1341.4	2751.0	3045.7	2331.8
78°	273.4	515.7	2039.2	2705.8	2372.6	635.7	255.1	830.5	2329.2	2518.7	1761.9
79°	119.0	321.2	1322.8	2061.9	1760.4	459.6	200.9	323.2	1737.5	1906.0	1191.9
80°	98.9	126.6	674.9	1342.6	1065.9	288.2	146.7	249.6	1145.8	1289.4	623.9
81°	84.6	104.2	488.1	679.5	523.6	116.8	93.7	176.1	559.7	679.2	286.7
82°	72.0	88.1	308.9	488.6	386.0	99.4	80.0	102.5	249.2	274.7	218.7
83°	60.4	73.5	129.6	310.7	252.7	84.1	67.7	86.5	195.8	214.4	150.7
84°	49.9	60.3	101.6	132.8	119.3	70.0	56.1	71.7	142.4	154.1	83.3
85°	39.4	49.3	77.5	109.5	90.6	57.3	45.2	58.4	89.6	94.1	60.3
86°	29.0	38.4	58.2	88.0	66.6	46.0	35.0	46.3	64.3	73.7	40.4
87°	19.6	27.5	42.3	64.7	48.9	34.7	24.9	35.1	46.4	52.3	25.1
88°	11.2	17.8	26.5	51.9	31.5	23.5	17.4	24.9	32.1	32.6	17.8
89°	4.5	7.7	10.7	39.3	14.0	12.6	9.9	17.2	22.1	22.5	10.5

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

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1436726
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1436726
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1436726
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1985.8	1985.8	1985.8	1985.8	1985.8	1985.8	1985.8	1985.8	1985.8	1985.8	*1985.8*
1°	1986.4	1986.8	1987.2	1987.8	1988.1	1988.5	1988.7	1987.4	1987.1	1986.9	*1987.2*
2°	1988.8	1989.9	1990.2	1991.4	1992.0	1992.2	1992.5	1991.4	1991.5	1991.0	*1991.1*
3°	1993.0	1994.7	1995.9	1997.0	1998.0	1998.4	1999.1	1997.5	1997.6	1997.1	*1997.4*
4°	1999.9	2001.9	2003.3	2004.6	2005.8	2006.4	2007.1	2005.8	2005.4	2005.0	*2004.8*
5°	2008.4	2011.1	2012.6	2014.6	2015.5	2016.1	2016.3	2015.0	2014.8	2014.3	*2014.0*
6°	2019.2	2021.9	2024.3	2026.4	2027.3	2027.3	2027.4	2025.8	2025.8	2025.5	*2025.1*
7°	2032.0	2034.4	2037.4	2039.8	2040.7	2041.3	2041.9	2039.7	2039.3	2038.6	*2038.2*
8°	2045.8	2048.7	2052.0	2055.0	2056.4	2057.5	2057.0	2054.4	2053.8	2053.0	*2052.0*
9°	2060.8	2064.2	2068.1	2072.0	2074.2	2074.6	2073.4	2069.6	2069.7	2069.4	*2068.3*
10°	2077.5	2081.5	2086.0	2090.7	2093.3	2093.3	2091.1	2087.4	2087.1	2087.5	*2085.3*
11°	2095.8	2100.2	2105.5	2111.3	2114.2	2113.8	2111.0	2107.0	2106.9	2107.4	*2104.5*
12°	2114.9	2119.4	2126.0	2132.9	2136.4	2135.5	2132.2	2127.4	2128.0	2127.9	*2124.6*
13°	2134.5	2139.0	2146.3	2156.1	2160.4	2159.1	2154.1	2149.3	2150.1	2150.1	*2146.0*
14°	2155.2	2159.3	2167.8	2179.1	2185.0	2183.2	2177.7	2171.9	2173.1	2173.8	*2168.4*
15°	2176.0	2179.7	2189.6	2203.0	2210.7	2208.6	2201.8	2195.5	2197.2	2198.5	*2191.3*
16°	2197.3	2201.0	2211.6	2226.8	2236.8	2235.9	2226.9	2219.8	2221.8	2223.2	*2214.5*
17°	2218.7	2222.4	2234.1	2250.8	2263.1	2262.2	2253.4	2245.5	2247.0	2248.6	*2238.8*
18°	2240.8	2244.4	2257.1	2274.4	2289.1	2289.7	2280.2	2271.1	2273.8	2274.7	*2263.3*
19°	2263.1	2268.0	2279.9	2298.5	2315.8	2317.0	2307.2	2297.8	2300.7	2301.0	*2287.1*
20°	2286.0	2291.6	2304.1	2324.3	2342.0	2345.3	2335.3	2325.6	2328.7	2328.2	*2312.2*
21°	2310.1	2315.9	2329.0	2349.7	2368.7	2374.4	2365.1	2354.5	2356.8	2356.0	*2337.0*
22°	2335.2	2341.3	2355.0	2376.5	2397.1	2403.8	2395.3	2383.7	2386.7	2384.1	*2363.8*
23°	2360.1	2367.5	2382.6	2404.6	2425.5	2434.5	2425.0	2414.4	2417.5	2412.5	*2391.3*
24°	2387.1	2395.3	2410.6	2433.1	2455.1	2464.8	2455.8	2445.6	2448.2	2441.2	*2418.2*
25°	2413.6	2423.3	2439.2	2461.7	2485.1	2495.3	2488.0	2477.6	2479.1	2470.9	*2446.1*
26°	2441.8	2453.7	2468.7	2491.8	2515.7	2525.9	2519.8	2511.1	2509.9	2500.3	*2475.6*
27°	2469.9	2483.8	2498.3	2521.7	2546.0	2556.3	2551.5	2544.4	2541.1	2529.9	*2504.8*
28°	2498.6	2516.9	2528.6	2552.6	2578.7	2588.4	2584.1	2579.7	2572.9	2560.6	*2535.9*
29°	2528.2	2549.9	2559.7	2584.4	2610.5	2619.8	2617.1	2614.7	2604.8	2592.2	*2568.4*
30°	2558.7	2584.7	2591.5	2615.9	2643.2	2651.7	2649.8	2649.9	2636.4	2623.1	*2601.3*
31°	2590.1	2619.7	2623.6	2647.5	2674.3	2683.7	2681.7	2685.9	2668.3	2654.3	*2634.3*
32°	2621.5	2655.1	2655.9	2679.4	2707.4	2717.0	2714.8	2721.6	2699.3	2685.3	*2667.4*
33°	2653.9	2691.1	2688.3	2712.8	2740.4	2750.6	2747.6	2757.5	2731.5	2718.5	*2702.0*
34°	2686.1	2726.9	2720.2	2746.7	2774.6	2783.9	2780.9	2794.0	2763.4	2751.4	*2736.5*
35°	2717.7	2764.4	2753.6	2781.4	2808.7	2817.7	2813.5	2830.5	2796.3	2785.6	*2772.8*
36°	2750.3	2802.0	2787.3	2816.2	2842.5	2850.7	2846.7	2867.5	2829.1	2819.9	*2808.5*
37°	2782.3	2839.5	2821.4	2851.3	2876.8	2884.2	2881.1	2904.7	2862.9	2854.9	*2844.2*
38°	2816.0	2876.6	2856.5	2887.0	2912.0	2918.8	2915.2	2941.6	2896.9	2890.2	*2880.7*
39°	2850.4	2914.1	2891.8	2923.4	2948.1	2953.2	2950.7	2978.0	2931.3	2926.2	*2916.6*
40°	2886.4	2949.2	2928.8	2960.6	2984.1	2988.8	2986.2	3013.1	2966.5	2962.8	*2953.4*
41°	2923.8	2984.6	2966.1	2997.9	3021.5	3024.1	3021.7	3046.8	3002.8	2999.9	*2990.2*
42°	2960.7	3019.0	3005.2	3034.8	3058.4	3060.7	3058.3	3080.5	3040.7	3037.7	*3028.5*
43°	2999.1	3052.9	3044.5	3072.4	3097.0	3099.3	3096.9	3114.5	3079.9	3075.1	*3065.7*
44°	3038.7	3086.9	3084.8	3111.3	3136.0	3137.7	3135.8	3149.8	3120.1	3112.9	*3104.6*

REPORT NUMBER: P1436726
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	3079.0	3121.6	3125.7	3151.7	3176.3	3176.8	3177.1	3183.8	3161.0	3152.1	3143.8
46°	3120.9	3155.4	3168.4	3191.4	3217.0	3215.9	3218.1	3214.8	3204.0	3191.9	3184.0
47°	3164.9	3188.5	3211.7	3231.6	3258.1	3255.0	3259.1	3245.6	3245.1	3232.1	3225.9
48°	3209.4	3223.2	3256.4	3273.1	3299.8	3295.3	3299.3	3277.2	3286.7	3272.5	3268.5
49°	3254.2	3260.5	3302.5	3314.9	3342.9	3335.8	3339.3	3309.4	3327.5	3313.6	3311.6
50°	3301.3	3297.1	3349.2	3358.9	3385.9	3377.0	3378.4	3342.1	3367.8	3356.1	3355.4
51°	3350.7	3334.9	3395.9	3403.0	3430.2	3417.5	3417.3	3371.6	3406.9	3398.6	3400.4
52°	3397.8	3370.7	3441.4	3447.2	3475.4	3458.2	3454.3	3401.6	3444.9	3440.9	3446.4
53°	3440.2	3400.4	3483.6	3493.2	3521.8	3498.9	3488.8	3429.5	3479.0	3482.1	3492.8
54°	3476.9	3422.4	3521.9	3539.9	3568.9	3540.9	3520.8	3454.4	3511.5	3525.8	3541.5
55°	3510.3	3445.0	3554.9	3586.8	3617.0	3581.4	3550.7	3478.2	3541.0	3567.6	3592.1
56°	3544.4	3470.7	3587.3	3636.1	3665.8	3620.8	3577.4	3499.7	3567.7	3608.9	3644.2
57°	3576.7	3497.4	3619.1	3684.0	3714.8	3660.6	3600.9	3517.5	3590.3	3648.7	3694.5
58°	3607.0	3516.2	3649.9	3733.2	3764.6	3699.8	3620.9	3534.9	3609.2	3688.5	3747.3
59°	3630.3	3529.3	3672.6	3779.6	3816.6	3737.0	3637.8	3549.4	3624.8	3726.7	3799.8
60°	3649.5	3545.6	3691.6	3823.2	3867.8	3773.1	3653.1	3560.5	3638.1	3764.8	3853.3
61°	3668.0	3561.7	3710.0	3867.7	3919.5	3809.4	3665.3	3564.9	3650.7	3801.6	3907.2
62°	3685.6	3574.8	3727.1	3909.8	3966.7	3846.5	3673.4	3566.1	3658.0	3836.7	3961.9
63°	3701.5	3585.5	3743.0	3948.6	4009.5	3880.1	3676.8	3565.0	3659.8	3869.4	4015.9
64°	3715.8	3587.6	3756.5	3984.1	4049.9	3912.3	3678.6	3556.1	3657.7	3899.3	4070.2
65°	3713.7	3553.9	3751.5	4015.4	4089.3	3940.5	3673.1	3540.5	3649.5	3924.5	4121.3
66°	3667.9	3524.2	3701.1	4039.9	4126.8	3962.8	3663.6	3518.0	3636.8	3946.0	4169.9
67°	3638.6	3505.8	3669.7	4053.7	4156.1	3981.6	3644.7	3463.6	3614.5	3961.6	4211.3
68°	3621.0	3446.2	3642.7	4026.1	4179.1	3993.7	3598.5	3334.4	3561.7	3970.5	4245.9
69°	3549.8	3290.0	3564.2	3979.5	4194.2	3990.0	3497.8	3115.7	3448.5	3964.7	4269.9
70°	3416.2	3017.0	3434.4	3948.7	4196.3	3963.6	3314.9	2826.8	3257.6	3939.7	4277.6
71°	3212.2	2624.5	3229.3	3881.6	4176.1	3897.5	3064.8	2538.2	2996.5	3871.2	4263.1
72°	2900.3	2268.9	2912.3	3784.7	4112.2	3774.5	2781.0	2297.1	2711.8	3757.4	4223.0
73°	2519.1	1905.3	2526.0	3652.1	3996.0	3589.0	2506.5	2062.9	2440.9	3583.8	4141.0
74°	2124.2	1428.1	2132.3	3448.2	3829.3	3362.7	2245.9	1743.2	2177.2	3360.0	4006.0
75°	1616.8	950.8	1626.8	3139.9	3607.0	3087.9	1919.9	1243.3	1836.1	3084.3	3787.6
76°	1109.4	481.0	1121.4	2729.3	3279.4	2788.3	1410.6	704.8	1329.3	2767.3	3473.7
77°	606.4	352.7	620.4	2252.9	2833.2	2426.8	901.3	505.9	743.2	2385.4	3022.6
78°	255.9	224.5	268.3	1686.8	2252.2	1922.4	399.3	314.0	538.6	1872.9	2418.9
79°	199.5	99.3	208.1	1120.6	1644.1	1396.2	185.2	122.1	334.1	1241.7	1736.9
80°	143.0	81.9	147.9	558.8	1036.1	870.0	154.7	102.1	129.6	681.6	1051.6
81°	86.7	68.2	88.6	251.1	438.1	345.1	124.2	87.3	106.6	492.6	495.4
82°	70.8	55.9	72.3	194.6	188.7	182.4	93.9	74.1	90.5	315.0	320.0
83°	56.5	44.4	57.9	138.1	155.9	148.1	79.1	62.1	76.1	137.4	155.2
84°	43.6	34.4	44.5	81.9	123.1	113.8	65.8	51.6	62.9	106.2	125.2
85°	31.8	24.5	32.4	58.4	90.2	79.5	53.2	41.0	51.6	79.6	103.9
86°	22.5	16.9	22.8	38.6	70.3	57.2	41.7	30.5	40.4	58.1	83.2
87°	13.2	9.3	13.2	27.8	49.3	41.3	31.1	20.8	29.2	42.0	58.6
88°	4.0	1.8	3.6	17.0	33.7	28.4	21.5	12.2	19.5	26.1	47.1
89°	2.9	1.7	2.7	6.3	18.0	15.5	11.8	4.9	8.8	10.1	35.8

REPORT NUMBER: P1436726
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1436726
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1436726
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1436726
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1985.8	1985.8	1985.8
1°	1987.3	1986.7	1986.7
2°	1990.9	1990.5	1989.8
3°	1996.8	1996.2	1995.1
4°	2004.5	2003.6	2002.5
5°	2013.5	2012.3	2010.9
6°	2023.9	2022.7	2020.5
7°	2035.5	2033.8	2031.0
8°	2048.8	2046.0	2043.3
9°	2064.0	2060.2	2056.7
10°	2080.5	2075.7	2071.2
11°	2098.3	2092.6	2087.3
12°	2117.3	2109.9	2103.6
13°	2137.6	2127.5	2119.4
14°	2157.5	2145.6	2137.0
15°	2177.7	2164.1	2154.2
16°	2199.2	2183.7	2172.9
17°	2220.6	2204.7	2193.1
18°	2243.1	2226.1	2214.0
19°	2266.3	2248.0	2235.6
20°	2288.9	2270.0	2259.0
21°	2313.0	2294.1	2282.8
22°	2338.2	2319.0	2308.0
23°	2364.5	2345.0	2334.7
24°	2391.5	2371.7	2362.7
25°	2418.6	2400.1	2392.0
26°	2447.8	2429.0	2422.5
27°	2478.0	2458.8	2453.9
28°	2508.2	2488.8	2486.8
29°	2540.4	2519.7	2520.3
30°	2573.2	2550.8	2554.4
31°	2606.1	2583.6	2589.2
32°	2639.1	2616.2	2623.7
33°	2672.5	2649.4	2658.2
34°	2706.1	2681.4	2692.8
35°	2740.9	2714.3	2729.5
36°	2777.2	2747.1	2765.7
37°	2812.3	2781.5	2802.0
38°	2848.9	2816.5	2838.8
39°	2884.6	2851.6	2874.9
40°	2922.2	2888.4	2910.6
41°	2959.4	2925.8	2945.7
42°	2997.7	2965.1	2982.5
43°	3036.4	3005.0	3018.1
44°	3075.3	3044.6	3053.0

REPORT NUMBER: P1436726
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	3115.2	3087.5	3087.9
46°	3156.0	3129.9	3123.0
47°	3197.6	3174.8	3159.2
48°	3240.7	3220.6	3196.1
49°	3284.9	3268.3	3234.2
50°	3330.4	3316.0	3273.1
51°	3376.9	3365.1	3313.0
52°	3424.8	3413.3	3354.0
53°	3474.6	3461.7	3395.0
54°	3523.1	3509.3	3436.1
55°	3574.0	3556.4	3475.4
56°	3626.3	3600.2	3512.5
57°	3677.6	3640.6	3547.5
58°	3730.9	3677.6	3580.4
59°	3782.4	3712.0	3610.0
60°	3834.0	3743.2	3636.6
61°	3885.6	3769.8	3658.4
62°	3935.8	3793.7	3675.4
63°	3984.2	3813.7	3690.3
64°	4032.5	3833.0	3703.6
65°	4076.9	3850.2	3716.7
66°	4118.3	3866.6	3724.2
67°	4151.9	3877.2	3724.2
68°	4177.5	3875.9	3689.9
69°	4190.0	3849.0	3579.9
70°	*4189.7*	*3770.7*	*3348.1*
71°	4170.3	3598.8	2981.5
72°	4121.7	3291.5	2599.4
73°	4019.6	2884.6	2194.6
74°	3817.6	2426.6	1726.5
75°	3484.0	1947.0	1143.2
76°	3055.3	1395.1	591.1
77°	2561.2	773.4	427.7
78°	1949.2	557.7	273.4
79°	1231.9	343.4	119.0
80°	633.5	129.0	98.9
81°	454.5	108.5	84.6
82°	290.8	91.7	72.0
83°	127.1	76.3	60.4
84°	100.5	62.6	49.9
85°	76.1	51.1	39.4
86°	57.1	39.6	29.0
87°	41.1	28.1	19.6
88°	25.2	17.9	11.2
89°	9.3	7.3	4.5

REPORT NUMBER: P1436726
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1436726
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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: P1436726
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)