

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: P1436724

Luminaire Tested: XAS180-SFPM (4000K-108W-T3-HSS)

Issue Date: 3/25/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1436724  
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-T3-HSS)  
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.  
LUMEN OUTPUT - 60% (108W)  
OPTICS - TYPE 3 WITH HOUSE SIDE SHIELD  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: 24748 (1 lamp)  
Luminaire Lumens: 15407 lumens  
Efficiency: 62.3%  
Efficacy: 143.9 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

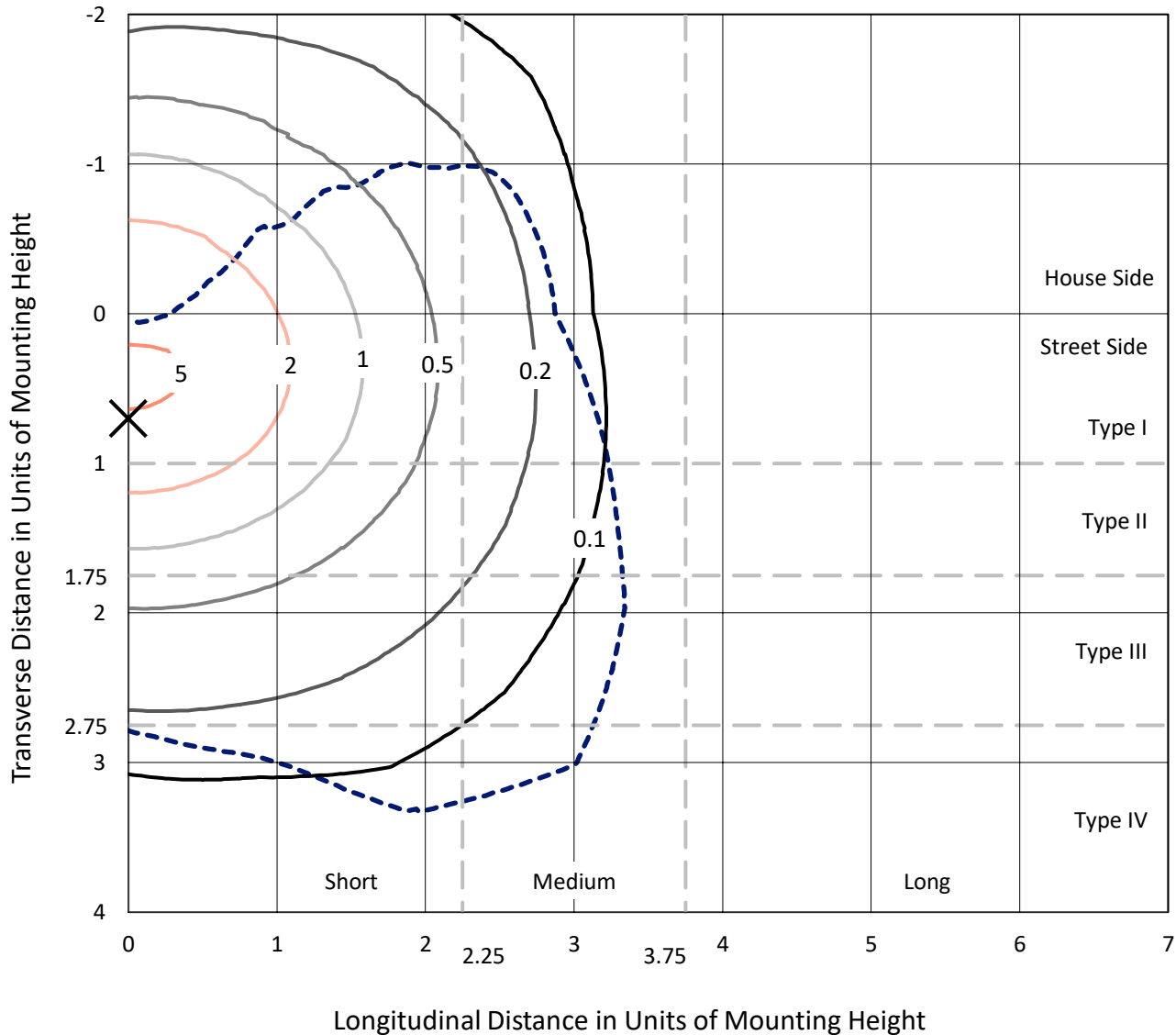
Input Watts (W): 107.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT

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### Iso-Footcandle Lines of Horizontal Illumination

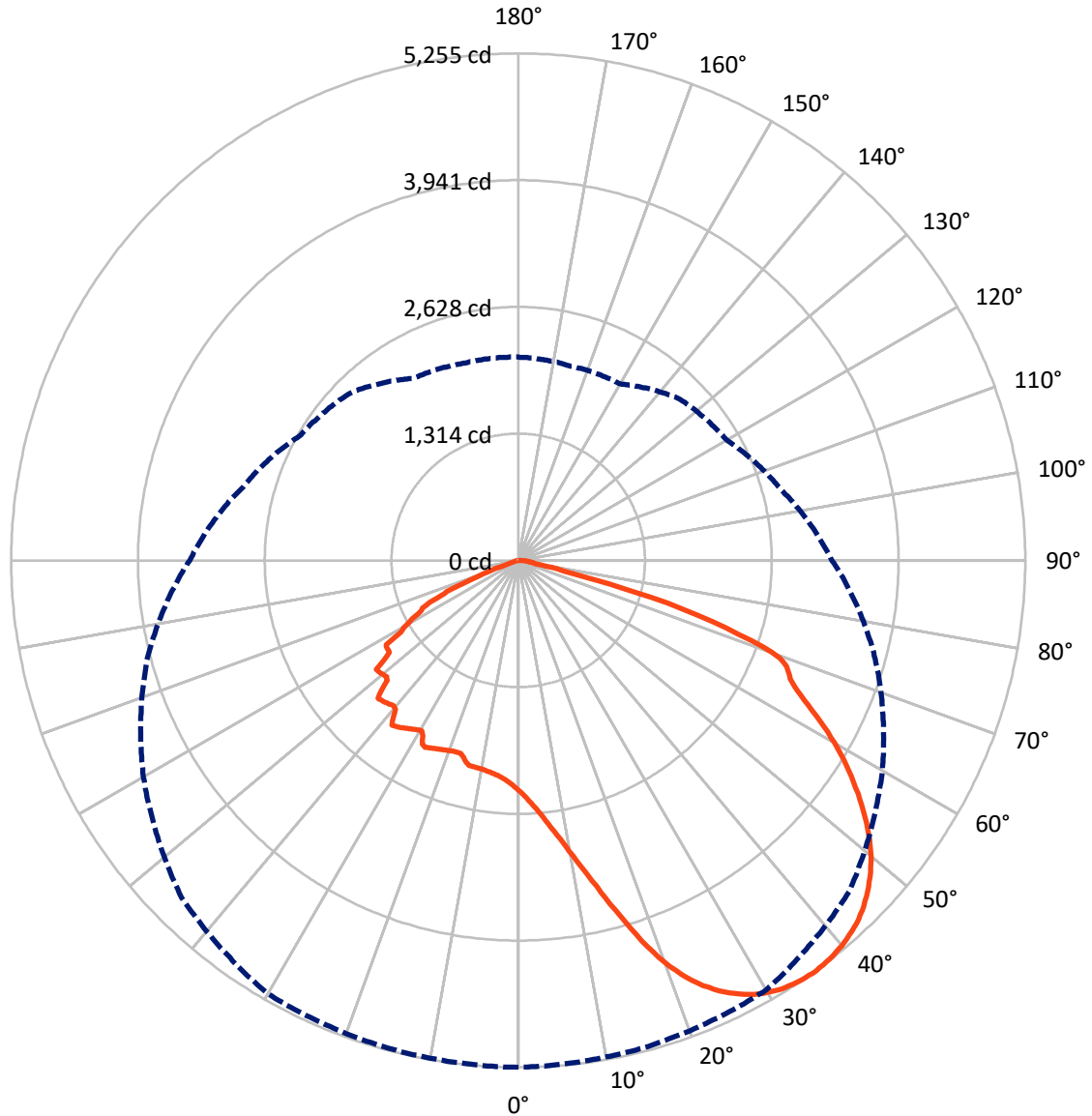
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc  
 Type IV - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 35-Deg Vertical

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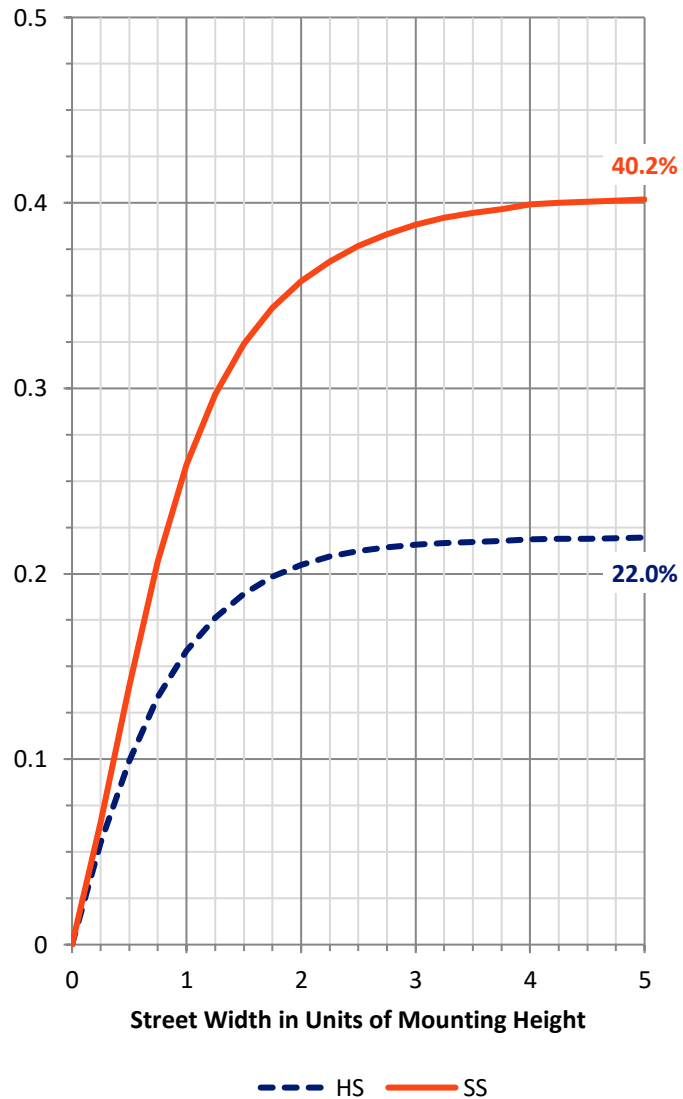
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5458.1	0.0	5458.1
	% Lamp	22.1	0.0	22.1
<b>Street Side</b>	Lumens	9948.8	0.0	9948.8
	% Lamp	40.2	0.0	40.2
<b>Total</b>	Lumens	15407.0	0.0	15407.0
	% Lamp	62.3	0.0	62.3

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	237.8	1.5	1.0
10°-20°	803.7	5.2	3.2
20°-30°	1519.6	9.9	6.1
30°-40°	2234.1	14.5	9.0
40°-50°	2822.1	18.3	11.4
50°-60°	3124.9	20.3	12.6
60°-70°	2940.1	19.1	11.9
70°-80°	1602.4	10.4	6.5
80°-90°	122.3	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°	15407.0	100.0	62.3
0°-180°	15407.0	100.0	62.3

**Coefficient of Utilization**



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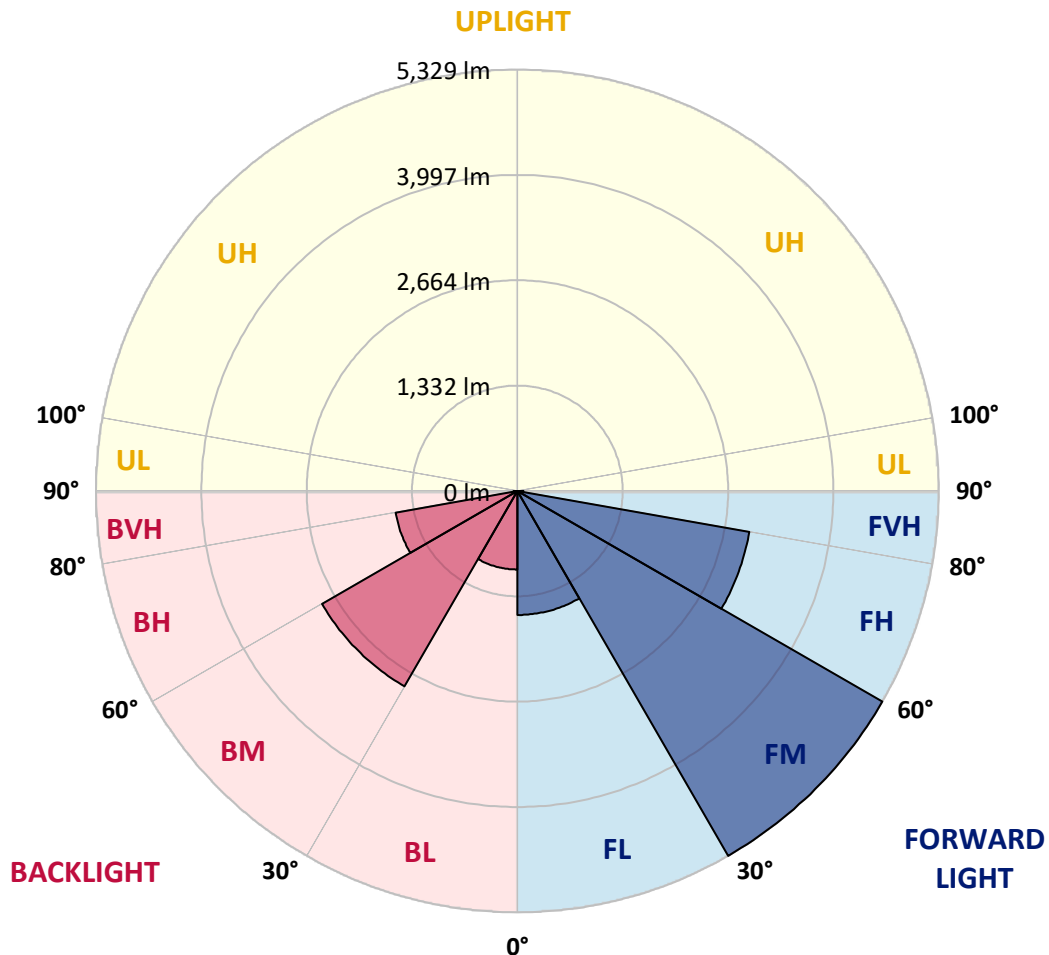
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1567.6	6.3			
FM (30°-60°)	5328.9	21.5			
FH (60°-80°)	2978.4	12.0			G2/5000
FVH (80°-90°)	73.9	0.3			G1/100
BL (0°-30°)	993.6	4.0	B2/1000		
BM (30°-60°)	2852.2	11.5	B3/5000		
BH (60°-80°)	1564.0	6.3	B3/2500		G3/2500
BVH (80°-90°)	48.4	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	9341.0	37.7			

**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°	2397.9	2397.9	2397.9	2397.9	2397.9	2397.9	2397.9	2397.9	2397.9	2397.9	2397.9
1°	2441.0	2440.0	2437.2	2431.1	2421.7	2411.9	2392.0	2382.8	2375.3	2368.2	2363.5
2°	2490.5	2487.7	2479.5	2464.8	2445.2	2423.9	2393.1	2374.0	2357.1	2343.7	2333.9
3°	2544.6	2540.6	2525.4	2501.6	2472.1	2439.7	2397.8	2368.1	2342.8	2322.9	2307.9
4°	2605.3	2598.0	2575.7	2543.1	2502.4	2458.5	2403.8	2365.1	2331.5	2305.1	2286.2
5°	2674.0	2663.3	2633.7	2588.7	2535.6	2478.6	2411.8	2363.2	2322.7	2290.7	2269.3
6°	2748.2	2734.4	2696.9	2640.2	2572.3	2501.0	2421.6	2363.3	2315.7	2280.1	2255.2
7°	2828.6	2811.2	2766.4	2697.0	2612.3	2526.8	2433.9	2366.3	2311.0	2271.9	2244.2
8°	2916.3	2895.2	2839.8	2756.8	2655.7	2554.6	2449.7	2371.8	2309.8	2265.4	2235.5
9°	3011.3	2985.3	2919.8	2821.1	2704.0	2585.0	2466.9	2378.5	2310.5	2261.3	2228.2
10°	3114.4	3083.6	3006.3	2890.6	2754.8	2617.5	2485.3	2387.1	2313.6	2260.2	2222.8
11°	3225.7	3189.6	3098.5	2964.6	2808.5	2653.9	2506.2	2397.9	2317.8	2260.9	2220.1
12°	3345.2	3302.8	3196.8	3042.6	2864.7	2691.2	2528.6	2409.8	2324.2	2263.0	2219.5
13°	3473.8	3424.5	3301.8	3127.6	2924.6	2731.5	2552.0	2422.8	2331.3	2266.3	2220.8
14°	3612.2	3557.6	3416.0	3215.6	2987.0	2772.8	2575.9	2436.0	2338.6	2270.9	2221.8
15°	3760.6	3695.5	3537.0	3310.6	3052.6	2813.7	2600.9	2450.9	2347.9	2276.4	2224.9
16°	3913.5	3843.0	3660.7	3409.0	3122.4	2858.3	2628.2	2466.3	2358.2	2281.8	2228.0
17°	4069.1	3988.9	3785.5	3510.6	3194.9	2904.2	2656.0	2483.2	2369.1	2288.4	2216.1
18°	4218.5	4129.8	3909.0	3612.4	3271.5	2951.9	2683.6	2496.9	2380.6	2296.4	2177.3
19°	4361.7	4266.7	4032.1	3713.1	3349.5	2999.9	2702.7	2506.8	2386.7	2304.8	2150.0
20°	4493.4	4396.3	4149.6	3812.5	3427.3	3045.5	2727.0	2519.3	2390.6	2311.1	2134.5
21°	4609.7	4512.6	4262.5	3909.6	3507.4	3087.5	2753.9	2540.6	2397.0	2281.4	2140.9
22°	4711.2	4620.9	4367.8	4003.1	3586.1	3135.8	2787.7	2561.3	2411.8	2257.1	2148.5
23°	4805.0	4716.6	4466.6	4091.8	3664.3	3185.8	2822.0	2579.7	2425.6	2242.7	2157.6
24°	4886.3	4802.5	4559.2	4177.8	3732.0	3241.6	2853.5	2594.9	2435.0	2233.1	2168.2
25°	4957.4	4879.2	4643.7	4259.6	3796.6	3300.8	2881.9	2613.2	2445.3	2243.2	2179.1
26°	5017.9	4945.6	4721.1	4337.9	3862.8	3358.8	2912.5	2633.5	2457.1	2248.6	2191.7
27°	5071.2	5004.2	4791.9	4414.3	3926.2	3414.8	2945.5	2657.9	2474.6	2255.1	2203.8
28°	5116.6	5053.9	4857.5	4485.5	3987.7	3463.6	2981.5	2683.4	2484.9	2264.5	2215.6
29°	5154.8	5096.3	4915.0	4551.8	4048.2	3513.7	3021.2	2708.5	2471.4	2281.0	2228.7
30°	5186.5	5131.6	4968.0	4617.0	4109.1	3564.6	3061.8	2734.6	2472.2	2297.3	2239.3
31°	5211.5	5160.8	5013.5	4676.2	4166.6	3614.9	3103.3	2760.1	2465.1	2314.6	2242.6
32°	5229.4	5182.2	5052.1	4725.5	4221.1	3666.5	3145.1	2779.4	2470.8	2331.1	2176.4
33°	5243.0	5198.4	5087.4	4771.9	4270.7	3719.1	3186.3	2789.7	2465.9	2344.5	2121.5
34°	5251.8	5208.9	5115.4	4813.0	4314.8	3770.7	3224.7	2802.0	2479.5	2356.0	2100.1
35°	5255.0	5214.1	5140.3	4851.5	4356.4	3821.7	3252.2	2822.3	2493.9	2366.4	2111.9
36°	5253.6	5216.5	5158.1	4888.3	4397.3	3869.8	3276.9	2843.7	2511.1	2378.4	2124.1
37°	5246.9	5212.9	5172.1	4921.5	4436.3	3916.6	3306.7	2866.0	2528.1	2375.7	2133.5
38°	5236.6	5206.8	5181.0	4950.3	4474.1	3962.6	3343.1	2890.6	2539.9	2310.5	2141.6
39°	5223.2	5196.6	5186.1	4975.8	4510.5	4005.8	3377.5	2911.9	2550.9	2259.1	2153.8
40°	5205.6	5184.1	5184.4	4997.5	4545.6	4040.1	3412.3	2931.2	2570.0	2245.5	2169.7
41°	5182.2	5166.7	5180.4	5017.8	4579.6	4068.6	3447.1	2949.1	2593.5	2262.5	2185.2
42°	5156.1	5146.3	5170.5	5035.6	4612.8	4094.7	3482.0	2962.8	2616.7	2280.7	2198.6
43°	5123.3	5122.1	5157.4	5049.3	4646.0	4125.1	3511.4	2977.0	2640.2	2299.7	2152.1
44°	5084.9	5093.2	5140.4	5057.0	4677.4	4156.9	3538.3	3003.5	2664.7	2317.4	2077.4



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CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-HSS)

**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	5041.7	5060.7	5117.8	5059.3	4706.0	4190.5	3561.7	3035.3	2683.6	2329.0	2046.4
46°	4991.4	5022.6	5092.3	5056.0	4734.6	4223.3	3579.3	3067.7	2689.6	2336.7	2057.7
47°	4934.8	4977.9	5063.8	5047.5	4761.8	4255.2	3594.9	3097.5	2690.0	2349.5	2067.2
48°	4875.5	4927.9	5029.5	5034.5	4784.9	4284.8	3609.2	3114.0	2646.7	2364.7	2075.0
49°	4809.0	4871.6	4989.1	5018.8	4802.8	4316.1	3632.8	3124.7	2610.7	2317.4	2085.7
50°	4734.7	4808.7	4943.3	4998.0	4814.2	4343.0	3661.2	3131.5	2598.0	2244.0	2097.3
51°	4654.1	4738.9	4888.6	4972.2	4820.6	4365.4	3689.3	3127.3	2588.4	2212.5	2056.8
52°	4565.1	4662.5	4829.1	4940.1	4823.4	4384.4	3716.1	3148.7	2606.7	2229.4	1945.3
53°	4473.0	4578.1	4763.6	4903.1	4820.3	4401.5	3741.6	3161.1	2617.9	2247.0	1910.0
54°	4375.2	4486.4	4690.9	4862.7	4815.7	4409.8	3764.6	3168.3	2630.2	2259.7	1926.4
55°	4273.1	4390.5	4611.5	4815.1	4804.3	4410.3	3780.1	3183.4	2650.4	2271.4	1944.6
56°	4168.6	4290.3	4530.4	4762.0	4790.9	4407.6	3787.5	3192.2	2672.5	2274.8	1962.5
57°	4063.2	4188.3	4443.1	4706.3	4772.5	4396.9	3786.3	3196.5	2683.9	2196.4	1977.5
58°	3954.8	4081.0	4353.0	4644.7	4747.6	4389.7	3779.3	3204.8	2692.9	2125.3	1877.2
59°	3843.6	3976.5	4260.7	4578.1	4715.9	4381.2	3775.8	3204.8	2648.4	2123.0	1799.0
60°	3726.0	3867.7	4165.2	4507.6	4674.3	4366.3	3768.7	3190.9	2592.9	2148.2	1803.8
61°	3605.2	3755.0	4067.6	4432.4	4624.7	4344.3	3753.9	3173.2	2576.7	2175.7	1810.1
62°	3478.9	3640.1	3972.9	4352.3	4567.1	4313.0	3735.6	3164.0	2584.2	2202.3	1737.1
63°	3356.0	3523.9	3879.7	4270.0	4503.7	4269.8	3704.0	3139.3	2591.0	2148.8	1634.1
64°	3238.1	3411.9	3790.4	4184.8	4429.2	4213.4	3661.2	3110.1	2589.6	2081.7	1613.2
65°	3144.4	3308.9	3702.1	4096.1	4348.0	4145.9	3608.8	3066.9	2561.6	2080.9	1593.5
66°	3074.3	3226.6	3617.6	4007.7	4257.4	4062.1	3546.2	3009.6	2472.0	2093.8	1455.9
67°	3034.8	3165.0	3542.0	3917.9	4155.0	3966.9	3474.3	2935.6	2435.0	2008.2	1433.6
68°	2990.9	3123.3	3474.6	3827.6	4037.2	3857.9	3351.9	2856.3	2449.2	1960.8	1343.1
69°	2892.2	3078.1	3419.1	3739.2	3910.4	3710.0	3152.2	2763.9	2456.1	1954.4	1252.6
70°	2702.0	2996.8	3374.3	3650.5	3782.4	3511.9	2872.9	2629.2	2450.5	1859.4	1161.6
71°	2409.0	2839.9	3332.3	3562.0	3628.8	3262.2	2563.9	2445.2	2371.2	1829.4	1015.9
72°	2108.9	2586.6	3280.9	3468.6	3451.4	2977.4	2284.7	2228.5	2273.8	1759.8	910.4
73°	1788.8	2265.7	3198.9	3376.2	3246.9	2685.1	2029.7	2016.4	2165.3	1704.5	811.8
74°	1425.6	1921.3	3044.0	3265.0	3016.1	2404.1	1731.3	1828.6	2039.2	1606.7	686.0
75°	969.7	1547.4	2778.4	3109.2	2756.7	2082.6	1318.0	1623.2	1877.7	1508.6	612.3
76°	537.6	1097.9	2435.2	2881.4	2485.0	1647.4	904.7	1302.9	1733.0	1337.2	547.9
77°	415.5	627.4	2068.2	2555.1	2183.4	1087.5	491.7	980.3	1590.2	1165.8	482.8
78°	296.2	478.1	1624.4	2107.8	1809.1	605.1	236.8	565.7	1315.2	993.7	415.3
79°	176.9	329.9	1065.7	1584.1	1319.2	401.0	178.1	410.3	1040.3	784.2	344.5
80°	156.5	181.6	580.6	1042.5	813.1	204.7	119.7	254.9	764.2	597.3	291.2
81°	140.0	157.5	440.3	544.6	591.8	169.6	101.5	100.0	411.3	439.3	261.9
82°	124.9	139.2	304.8	361.1	374.4	144.9	86.1	79.7	302.2	350.7	258.6
83°	110.9	122.6	169.2	189.0	157.0	118.7	71.8	63.1	193.1	278.0	212.6
84°	97.6	107.0	141.1	154.7	127.3	92.5	58.6	50.1	87.1	213.8	163.5
85°	84.9	92.8	114.7	131.2	101.0	72.4	45.8	39.5	74.6	149.5	114.4
86°	72.7	79.7	93.5	109.3	77.7	58.3	34.1	30.3	58.8	85.8	65.6
87°	60.6	67.2	75.2	85.2	59.9	44.3	23.7	22.3	43.4	48.6	40.9
88°	52.4	56.5	58.5	58.9	43.6	30.3	16.6	15.8	30.2	33.3	28.1
89°	44.2	45.8	45.0	41.9	27.3	18.4	9.6	9.3	16.9	18.0	15.2



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CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-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: P1436724

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-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: P1436724

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-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: P1436724

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-HSS)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2397.9	2397.9	2397.9	2397.9	2397.9	2397.9	2397.9	2397.9	2397.9	2397.9	2397.9
1°	2361.0	2361.2	2363.9	2369.1	2376.4	2383.8	2394.4	2396.1	2406.7	2417.2	2426.6
2°	2328.5	2328.3	2332.4	2341.9	2354.2	2370.5	2389.3	2401.2	2422.8	2443.5	2462.6
3°	2300.2	2299.1	2304.6	2316.6	2335.3	2358.3	2386.5	2409.0	2440.7	2473.5	2502.5
4°	2276.0	2274.8	2281.6	2296.5	2319.7	2350.1	2386.4	2418.5	2462.4	2506.7	2546.7
5°	2257.9	2255.9	2263.0	2280.6	2307.0	2343.6	2388.1	2430.8	2486.3	2543.0	2595.2
6°	2242.1	2239.2	2247.9	2268.3	2297.9	2339.0	2392.1	2445.4	2512.9	2582.9	2647.3
7°	2228.7	2225.4	2235.0	2257.6	2292.3	2338.3	2398.8	2462.7	2542.1	2626.7	2706.8
8°	2218.4	2214.6	2224.6	2250.3	2288.5	2339.8	2407.6	2481.2	2573.9	2675.0	2769.7
9°	2209.1	2205.6	2216.7	2245.0	2286.9	2343.0	2417.2	2501.0	2608.3	2725.9	2837.6
10°	2202.6	2197.9	2210.6	2242.1	2287.1	2347.5	2428.6	2523.8	2645.0	2780.1	2909.9
11°	2197.4	2192.6	2206.9	2240.9	2289.7	2354.8	2442.3	2549.4	2686.1	2837.7	2987.0
12°	2194.3	2189.5	2204.5	2241.7	2294.3	2363.4	2458.3	2575.2	2727.3	2899.3	3069.2
13°	2193.9	2188.3	2204.3	2243.7	2300.9	2373.9	2475.0	2603.1	2771.5	2964.3	3157.9
14°	2194.1	2187.5	2205.8	2247.8	2308.9	2385.4	2492.9	2632.0	2816.5	3032.2	3251.2
15°	2191.6	2160.7	2203.7	2252.6	2317.2	2398.7	2511.7	2663.3	2864.1	3105.5	3350.9
16°	2145.2	2116.6	2161.0	2257.7	2326.1	2413.3	2531.7	2694.1	2914.0	3179.8	3455.9
17°	2110.8	2090.6	2127.8	2249.2	2336.0	2428.1	2553.6	2727.0	2965.1	3259.6	3563.6
18°	2092.6	2086.0	2110.1	2211.4	2347.7	2443.7	2572.9	2759.8	3018.8	3342.8	3672.1
19°	2095.3	2089.2	2112.6	2186.8	2358.2	2455.2	2586.4	2787.5	3073.8	3427.1	3780.3
20°	2100.1	2093.6	2117.9	2174.3	2367.7	2463.1	2602.6	2814.9	3130.3	3513.1	3884.8
21°	2106.2	2100.8	2124.9	2179.9	2348.2	2473.0	2625.6	2846.3	3181.6	3600.9	3986.0
22°	2115.1	2108.8	2134.0	2189.4	2319.9	2491.1	2651.3	2882.7	3233.9	3685.9	4081.6
23°	2124.3	2119.3	2145.4	2200.2	2306.7	2510.1	2677.5	2922.3	3291.7	3770.5	4173.0
24°	2134.3	2129.4	2157.2	2212.4	2302.8	2525.9	2698.6	2961.9	3352.7	3851.0	4259.7
25°	2144.9	2139.1	2168.5	2225.6	2313.4	2538.1	2718.7	2998.0	3417.0	3922.3	4340.5
26°	2155.9	2150.7	2180.6	2240.7	2323.2	2550.8	2740.5	3031.9	3482.4	3987.4	4418.0
27°	2166.8	2162.6	2192.4	2254.8	2331.0	2566.6	2764.4	3068.2	3547.1	4052.2	4492.7
28°	2178.3	2150.5	2204.5	2269.1	2340.9	2579.8	2792.4	3107.5	3607.7	4114.4	4564.1
29°	2143.8	2074.1	2177.8	2283.3	2357.0	2575.7	2821.0	3149.0	3661.2	4174.8	4631.7
30°	2071.8	2033.0	2104.6	2295.1	2375.0	2572.5	2849.5	3192.8	3717.4	4235.3	4694.8
31°	2036.8	2038.1	2069.0	2299.8	2393.5	2572.3	2877.8	3237.9	3772.3	4292.3	4755.2
32°	2043.8	2054.1	2074.7	2246.6	2412.6	2573.1	2900.5	3283.0	3824.5	4346.8	4809.8
33°	2058.2	2070.9	2089.0	2192.4	2429.8	2572.6	2915.0	3327.2	3878.6	4399.3	4857.8
34°	2072.3	2088.2	2103.7	2168.6	2443.8	2586.3	2929.6	3371.2	3930.3	4445.1	4898.9
35°	2086.9	2107.2	2118.5	2177.9	2457.4	2601.6	2952.1	3406.5	3982.7	4485.4	4938.1
36°	2102.8	2124.6	2134.4	2192.7	2468.2	2618.7	2976.2	3435.7	4031.8	4525.3	4975.2
37°	2116.9	2141.1	2150.0	2203.7	2474.5	2637.8	3000.8	3468.6	4079.1	4563.5	5010.0
38°	2130.6	2154.2	2164.9	2213.0	2411.3	2652.6	3028.7	3505.8	4124.8	4602.1	5039.1
39°	2140.6	2075.5	2176.8	2223.3	2361.9	2665.6	3056.2	3542.6	4168.2	4638.4	5064.3
40°	2059.4	1999.9	2104.8	2239.3	2347.1	2684.4	3079.3	3579.0	4205.1	4672.6	5085.9
41°	1986.1	1983.9	2027.8	2256.4	2361.8	2709.4	3099.7	3615.8	4233.7	4706.6	5104.8
42°	1969.1	1995.2	2006.5	2271.9	2380.3	2735.5	3114.2	3652.1	4259.4	4740.5	5119.3
43°	1982.5	2007.7	2020.1	2241.5	2400.1	2761.4	3130.1	3686.1	4286.9	4772.5	5130.9
44°	1997.1	2019.4	2035.6	2161.4	2419.2	2788.0	3160.4	3717.0	4315.4	4801.6	5137.9

REPORT NUMBER: P1436724

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-HSS)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2012.1	2031.1	2050.6	2123.7	2432.8	2809.4	3194.2	3744.5	4345.8	4828.8	5137.9
46°	2027.5	2038.1	2066.1	2132.0	2441.9	2817.5	3228.3	3762.5	4377.7	4853.0	5131.7
47°	2042.0	1956.0	2078.7	2141.1	2453.7	2823.0	3261.7	3777.3	4407.3	4875.9	5119.3
48°	1964.0	1843.6	2013.3	2149.0	2469.6	2800.2	3287.6	3790.0	4435.1	4895.7	5104.5
49°	1854.3	1821.8	1901.3	2159.5	2439.7	2762.4	3294.8	3811.9	4460.1	4909.1	5085.3
50°	1835.0	1830.9	1874.5	2169.9	2363.4	2735.7	3300.1	3838.2	4482.4	4915.0	5061.8
51°	1850.2	1840.9	1889.6	2141.6	2320.6	2723.8	3295.5	3861.7	4498.4	4913.7	5034.5
52°	1866.1	1851.0	1903.7	2028.9	2333.7	2737.5	3296.6	3883.8	4510.5	4908.5	5000.4
53°	1880.4	1855.5	1917.2	1985.3	2352.0	2748.6	3309.8	3902.4	4517.2	4897.7	4962.8
54°	1887.4	1721.9	1925.1	2000.6	2363.9	2758.8	3313.2	3917.5	4514.3	4886.1	4918.7
55°	1766.4	1639.6	1804.6	2018.4	2375.2	2772.2	3315.5	3924.9	4504.3	4868.8	4871.8
56°	1676.8	1633.8	1713.9	2036.9	2378.9	2792.7	3315.8	3920.9	4487.3	4849.4	4820.3
57°	1670.8	1636.7	1704.3	2050.1	2320.8	2800.7	3311.5	3907.6	4464.9	4824.4	4762.5
58°	1673.4	1623.0	1706.3	1955.1	2237.7	2804.7	3309.7	3890.3	4441.3	4789.7	4700.8
59°	1642.0	1430.4	1680.5	1870.0	2229.3	2773.7	3304.8	3873.1	4417.2	4750.5	4634.0
60°	1472.6	1377.8	1509.5	1870.5	2253.6	2705.1	3281.8	3852.8	4387.2	4704.9	4560.6
61°	1439.8	1296.8	1472.4	1875.9	2279.6	2671.9	3254.2	3826.9	4350.6	4650.6	4482.4
62°	1435.5	1215.9	1463.2	1813.6	2302.6	2671.1	3238.3	3794.6	4306.1	4587.0	4401.1
63°	1351.9	1135.8	1377.4	1699.8	2255.4	2670.2	3209.9	3751.7	4251.5	4512.7	4316.0
64°	1268.4	1112.9	1291.6	1677.2	2174.8	2662.8	3172.5	3695.6	4185.4	4432.5	4229.8
65°	1184.7	1016.7	1205.1	1663.1	2162.9	2632.2	3119.9	3626.1	4103.9	4344.5	4136.8
66°	1053.8	850.3	1077.3	1515.5	2163.6	2543.2	3054.2	3543.2	4007.0	4249.3	4039.0
67°	920.8	810.7	939.7	1483.5	2074.3	2485.0	2975.7	3443.0	3901.3	4139.8	3941.6
68°	828.3	566.1	849.9	1425.3	2024.3	2487.3	2868.6	3270.0	3766.4	4018.6	3845.1
69°	674.9	467.4	693.4	1300.8	2005.3	2482.3	2739.5	3014.7	3579.4	3885.3	3751.9
70°	540.5	322.1	556.0	1176.2	1903.6	2462.5	2560.7	2680.3	3344.3	3738.2	3652.6
71°	371.7	176.7	371.3	1052.0	1858.3	2362.6	2336.6	2371.2	3049.7	3564.2	3548.5
72°	205.4	32.4	192.0	945.7	1780.2	2233.7	2097.6	2087.9	2736.9	3366.8	3444.1
73°	172.9	0.4	155.7	834.3	1700.6	2100.8	1866.0	1805.6	2430.8	3128.5	3327.4
74°	140.5	0.3	119.8	686.2	1582.8	1954.7	1651.0	1470.0	2127.5	2857.8	3190.9
75°	108.1	0.3	103.9	602.1	1451.2	1783.4	1326.5	1029.8	1765.9	2557.7	3000.6
76°	82.3	0.3	82.8	535.3	1265.3	1612.8	1001.9	596.6	1278.0	2241.1	2745.3
77°	57.9	0.4	65.6	471.9	1079.4	1366.8	677.3	383.3	761.3	1904.3	2388.9
78°	43.3	0.4	53.1	408.9	893.6	1120.8	348.6	175.1	569.6	1491.8	1926.7
79°	42.7	0.5	52.7	340.0	714.8	873.1	227.7	133.6	380.8	1008.8	1396.8
80°	57.2	0.5	63.6	294.3	555.2	499.2	108.1	113.3	192.1	589.5	869.1
81°	69.9	0.6	65.8	273.5	417.2	362.1	86.6	96.4	163.3	391.3	636.9
82°	61.7	0.7	41.0	254.9	323.7	224.9	71.3	81.1	139.5	196.1	410.5
83°	38.5	0.8	29.2	193.3	243.0	88.6	58.1	67.4	115.1	149.7	184.1
84°	28.2	0.9	17.3	131.6	162.3	73.8	46.8	55.2	91.1	123.3	153.1
85°	17.9	1.0	5.8	70.6	82.5	58.2	37.2	43.0	71.1	96.8	130.0
86°	7.9	1.0	5.2	35.9	45.9	43.3	28.7	30.8	57.1	75.1	108.3
87°	5.8	1.2	5.1	25.3	26.2	31.1	21.1	20.7	43.2	57.9	84.1
88°	4.3	1.3	4.5	14.7	18.3	21.7	14.9	12.1	29.3	42.1	58.5
89°	3.3	1.4	2.8	4.2	10.4	12.3	8.7	5.2	17.9	26.3	41.7



REPORT NUMBER: P1436724

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-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: P1436724

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-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: P1436724

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-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: P1436724

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-HSS)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
0°	2397.9	2397.9	2397.9
1°	2433.6	2438.7	2441.0
2°	2477.1	2486.9	2490.5
3°	2524.8	2539.6	2544.6
4°	2578.4	2599.1	2605.3
5°	2636.7	2665.1	2674.0
6°	2701.1	2737.5	2748.2
7°	2771.8	2814.7	2828.6
8°	2848.2	2899.3	2916.3
9°	2930.7	2991.7	3011.3
10°	3017.1	3091.7	3114.4
11°	3113.6	3198.4	3225.7
12°	3216.0	3315.2	3345.2
13°	3326.3	3438.2	3473.8
14°	3444.2	3571.1	3612.2
15°	3567.8	3711.6	3760.6
16°	3693.5	3855.1	3913.5
17°	3821.3	4002.6	4069.1
18°	3949.9	4148.9	4218.5
19°	4074.2	4289.7	4361.7
20°	4194.4	4420.4	4493.4
21°	4307.0	4539.4	4609.7
22°	4412.0	4648.0	4711.2
23°	4512.8	4742.8	4805.0
24°	4606.3	4827.5	4886.3
25°	4692.8	4901.8	4957.4
26°	4771.8	4967.3	5017.9
27°	4846.1	5023.9	5071.2
28°	4910.2	5073.2	5116.6
29°	4969.0	5113.9	5154.8
30°	5019.9	5147.7	5186.5
31°	5065.8	5176.3	5211.5
32°	5105.4	5199.2	5229.4
33°	5139.3	5215.4	5243.0
34°	5166.2	5226.6	5251.8
35°	5188.3	5232.4	5255.0
36°	5205.6	5231.7	5253.6
37°	5218.6	5228.4	5246.9
38°	5226.4	5222.1	5236.6
39°	5229.2	5210.7	5223.2
40°	5227.6	5197.1	5205.6
41°	5222.3	5180.8	5182.2
42°	5212.2	5160.3	5156.1
43°	5197.5	5136.7	5123.3
44°	5179.6	5108.8	5084.9

REPORT NUMBER: P1436724

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-HSS)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
45°	5157.2	5076.4	5041.7
46°	5131.9	5039.5	4991.4
47°	5101.9	4995.5	4934.8
48°	5069.4	4947.3	4875.5
49°	5030.6	4892.9	4809.0
50°	4984.9	4833.2	4734.7
51°	4932.6	4766.0	4654.1
52°	4871.8	4689.9	4565.1
53°	4806.1	4610.1	4473.0
54°	4734.2	4521.2	4375.2
55°	4659.7	4429.4	4273.1
56°	4578.4	4329.2	4168.6
57°	4493.4	4227.3	4063.2
58°	4403.1	4122.0	3954.8
59°	4309.5	4015.4	3843.6
60°	4215.0	3905.2	3726.0
61°	4120.5	3793.3	3605.2
62°	4025.8	3677.6	3478.9
63°	3934.6	3565.9	3356.0
64°	3848.8	3457.8	3238.1
65°	3765.5	3358.2	3144.4
66°	3684.8	3274.4	3074.3
67°	3608.0	3213.7	3034.8
68°	3537.3	3171.5	2990.9
69°	3474.5	3126.1	2892.2
70°	3425.0	3052.1	2702.0
71°	3374.4	2907.4	2409.0
72°	3312.1	2658.0	2108.9
73°	3220.1	2334.6	1788.8
74°	3052.0	1977.7	1425.6
75°	2784.0	1601.0	969.7
76°	2442.8	1171.6	537.6
77°	2055.8	698.8	415.5
78°	1592.7	524.5	296.2
79°	1046.9	355.4	176.9
80°	587.8	186.3	156.5
81°	442.5	162.4	140.0
82°	307.8	143.5	124.9
83°	173.0	126.3	110.9
84°	143.3	110.1	97.6
85°	116.2	95.3	84.9
86°	94.9	81.6	72.7
87°	76.1	68.7	60.6
88°	58.3	57.6	52.4
89°	45.0	46.4	44.2



REPORT NUMBER: P1436724

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-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: P1436724

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-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: P1436724

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-HSS)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)