

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: P1436748

Luminaire Tested: XAS180-SFPM (5000K-108W-T3-HSS)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436748
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 3/25/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: XAS180-SFPM (5000K-108W-T3-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 3 WITH HOUSE SIDE SHIELD
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 24748 (1 lamp)
Luminaire Lumens: 15431.7 lumens
Efficiency: 62.4%
Efficacy: 140.3 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

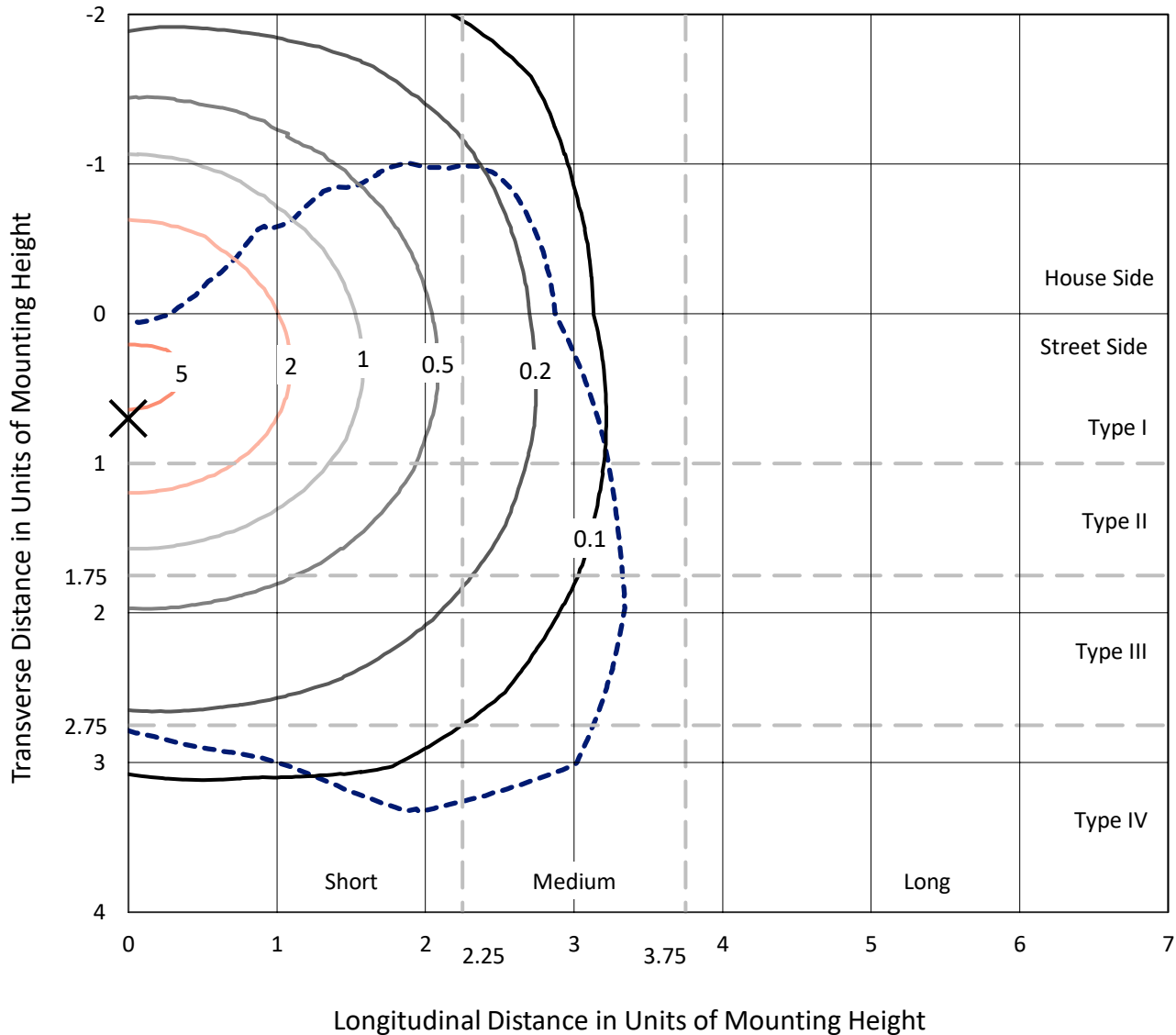
Input Watts (W): 110
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

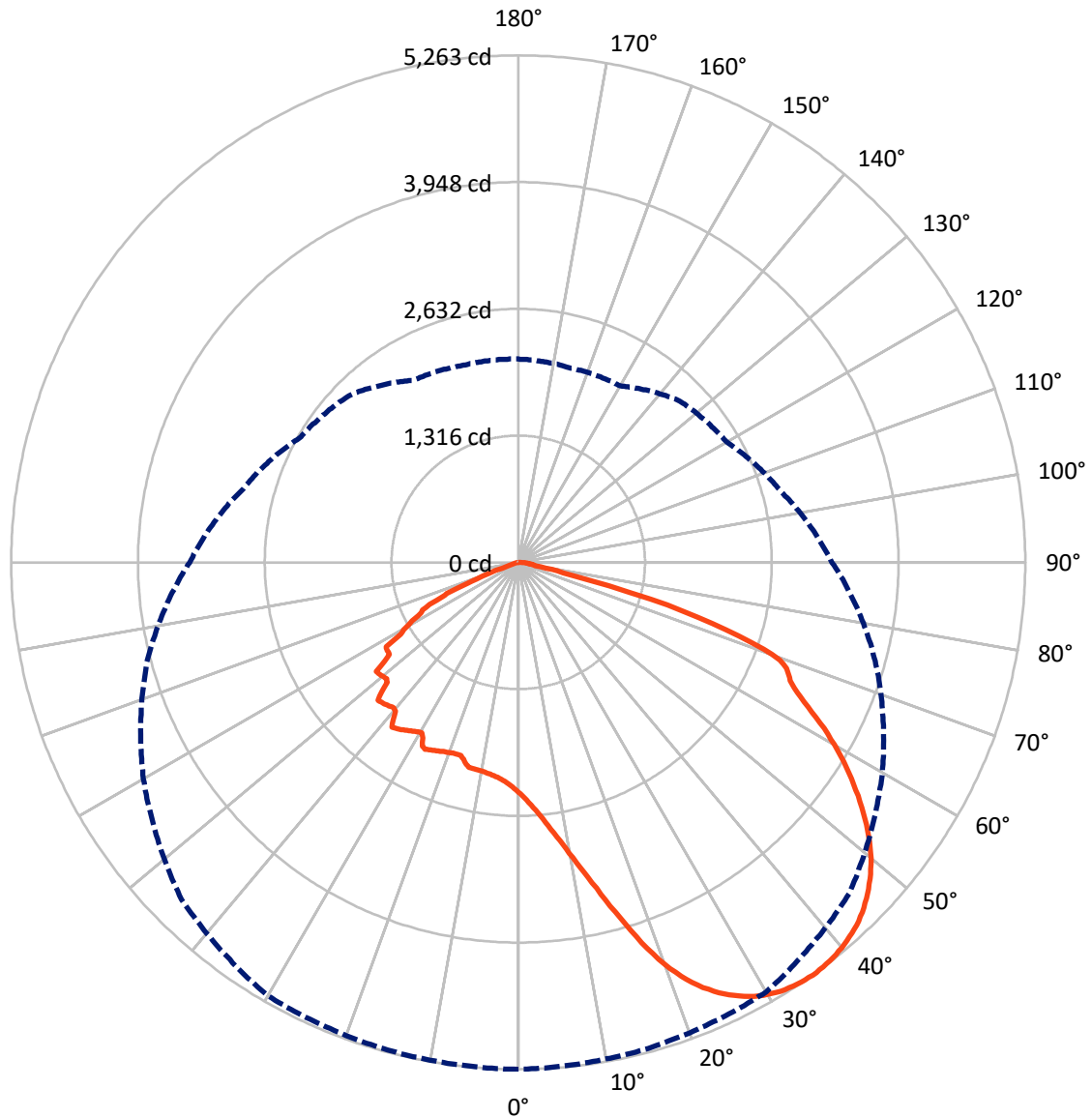
✕ Max cd
 - - - 1/2 Max cd



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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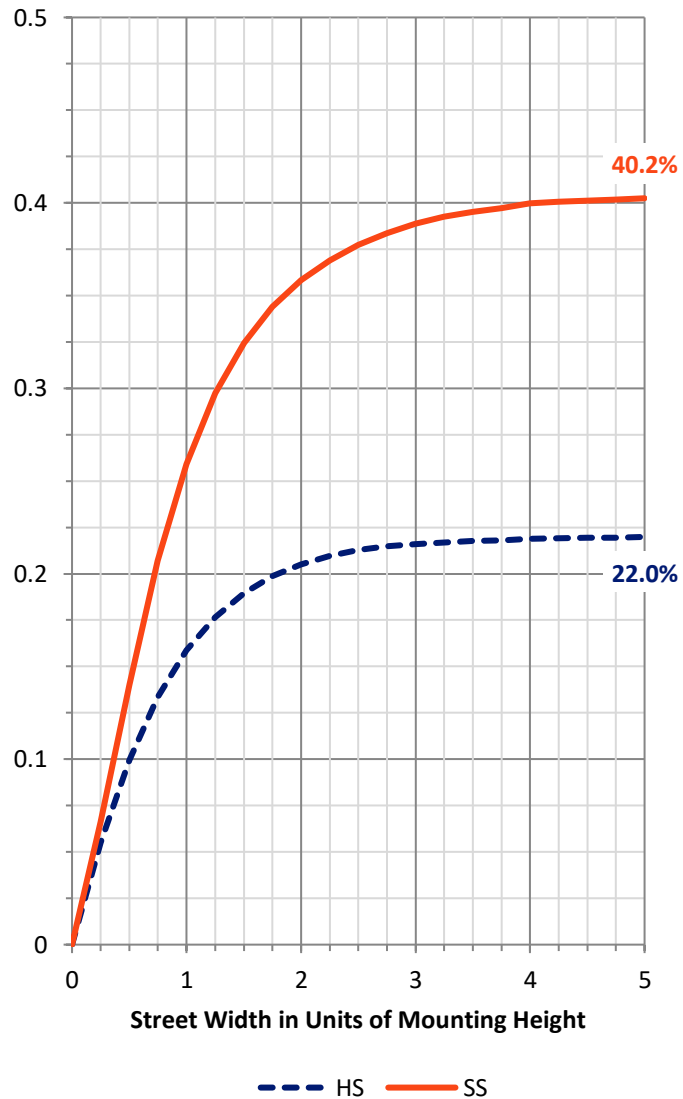
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5466.9	0.0	5466.9
	% Lamp	22.1	0.0	22.1
Street Side	Lumens	9964.8	0.0	9964.8
	% Lamp	40.3	0.0	40.3
Total	Lumens	15431.7	0.0	15431.7
	% Lamp	62.4	0.0	62.4

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	238.2	1.5	1.0
10°-20°	805.0	5.2	3.3
20°-30°	1522.1	9.9	6.2
30°-40°	2237.7	14.5	9.0
40°-50°	2826.6	18.3	11.4
50°-60°	3129.9	20.3	12.6
60°-70°	2944.8	19.1	11.9
70°-80°	1604.9	10.4	6.5
80°-90°	122.5	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°	15431.7	100.0	62.4
0°-180°	15431.7	100.0	62.4

Coefficient of Utilization



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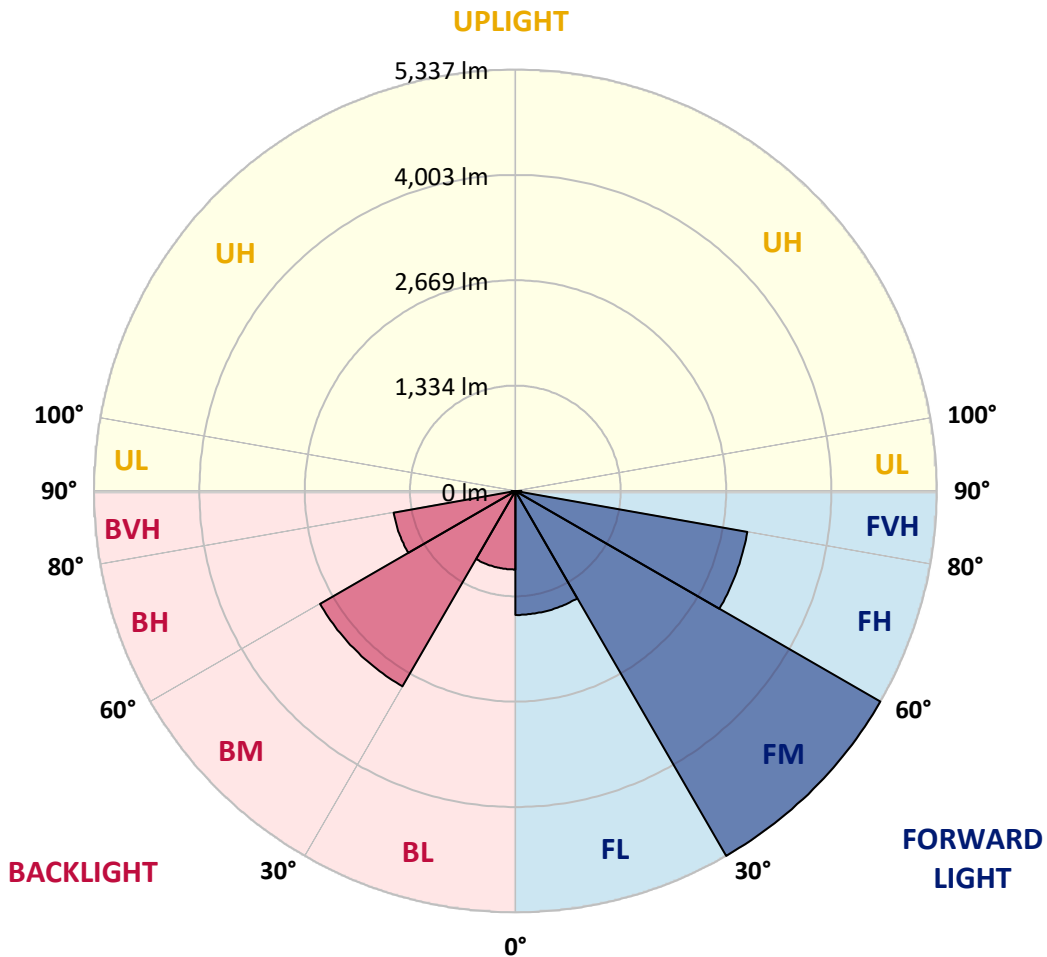
CATALOG NUMBER: XAS180-SFPM (5000K-108W-T3-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1570.1	6.3			
FM (30°-60°)	5337.4	21.6			
FH (60°-80°)	2983.2	12.1			G2/5000
FVH (80°-90°)	74.0	0.3			G1/100
BL (0°-30°)	995.2	4.0	B2/1000		
BM (30°-60°)	2856.8	11.5	B3/5000		
BH (60°-80°)	1566.5	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	9316.3	37.6			

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°	2401.8	2401.8	2401.8	2401.8	2401.8	2401.8	2401.8	2401.8	2401.8	2401.8	2401.8
1°	2444.9	2443.9	2441.1	2435.0	2425.5	2415.8	2395.8	2386.6	2379.1	2372.0	2367.2
2°	2494.5	2491.7	2483.5	2468.8	2449.1	2427.8	2396.9	2377.8	2360.9	2347.4	2337.6
3°	2548.7	2544.7	2529.5	2505.6	2476.0	2443.6	2401.6	2371.9	2346.5	2326.6	2311.6
4°	2609.4	2602.2	2579.9	2547.2	2506.4	2462.4	2407.6	2368.9	2335.2	2308.8	2289.9
5°	2678.3	2667.6	2637.9	2592.8	2539.7	2482.6	2415.7	2367.0	2326.5	2294.3	2272.9
6°	2752.6	2738.7	2701.2	2644.4	2576.4	2505.0	2425.5	2367.1	2319.4	2283.7	2258.8
7°	2833.2	2815.7	2770.8	2701.3	2616.5	2530.9	2437.8	2370.0	2314.7	2275.5	2247.8
8°	2921.0	2899.9	2844.3	2761.3	2660.0	2558.7	2453.6	2375.6	2313.5	2269.0	2239.0
9°	3016.2	2990.0	2924.4	2825.6	2708.4	2589.1	2470.9	2382.3	2314.2	2264.9	2231.8
10°	3119.4	3088.5	3011.1	2895.3	2759.2	2621.7	2489.3	2390.9	2317.3	2263.9	2226.4
11°	3230.9	3194.7	3103.5	2969.3	2813.0	2658.1	2510.2	2401.7	2321.5	2264.5	2223.6
12°	3350.5	3308.0	3201.9	3047.5	2869.3	2695.5	2532.6	2413.6	2327.9	2266.6	2223.1
13°	3479.3	3430.0	3307.1	3132.6	2929.2	2735.9	2556.0	2426.7	2335.1	2270.0	2224.3
14°	3618.0	3563.3	3421.5	3220.8	2991.8	2777.2	2580.0	2439.9	2342.4	2274.6	2225.4
15°	3766.6	3701.4	3542.6	3315.9	3057.5	2818.3	2605.1	2454.8	2351.7	2280.0	2228.4
16°	3919.8	3849.2	3666.6	3414.5	3127.4	2862.9	2632.4	2470.2	2361.9	2285.4	2231.6
17°	4075.6	3995.3	3791.5	3516.2	3200.0	2908.9	2660.2	2487.1	2372.9	2292.0	2219.6
18°	4225.3	4136.4	3915.3	3618.2	3276.7	2956.7	2687.9	2500.9	2384.4	2300.1	2180.8
19°	4368.6	4273.5	4038.6	3719.1	3354.9	3004.7	2707.1	2510.8	2390.6	2308.5	2153.4
20°	4500.6	4403.4	4156.3	3818.6	3432.8	3050.4	2731.3	2523.3	2394.4	2314.8	2138.0
21°	4617.1	4519.8	4269.4	3915.9	3513.0	3092.5	2758.3	2544.6	2400.8	2285.1	2144.3
22°	4718.8	4628.3	4374.8	4009.5	3591.8	3140.8	2792.2	2565.4	2415.6	2260.7	2152.0
23°	4812.7	4724.2	4473.7	4098.4	3670.1	3190.9	2826.5	2583.9	2429.5	2246.3	2161.0
24°	4894.2	4810.2	4566.5	4184.4	3738.0	3246.8	2858.1	2599.0	2438.9	2236.7	2171.7
25°	4965.4	4887.0	4651.2	4266.4	3802.6	3306.1	2886.5	2617.4	2449.2	2246.8	2182.5
26°	5026.0	4953.5	4728.7	4344.9	3869.0	3364.2	2917.2	2637.7	2461.1	2252.2	2195.2
27°	5079.4	5012.2	4799.6	4421.3	3932.5	3420.3	2950.2	2662.2	2478.6	2258.7	2207.4
28°	5124.8	5062.0	4865.3	4492.7	3994.1	3469.2	2986.2	2687.7	2488.9	2268.2	2219.1
29°	5163.0	5104.5	4922.9	4559.1	4054.7	3519.4	3026.0	2712.9	2475.4	2284.6	2232.2
30°	5194.8	5139.8	4975.9	4624.4	4115.7	3570.3	3066.7	2738.9	2476.2	2301.0	2242.8
31°	5219.8	5169.1	5021.6	4683.7	4173.3	3620.7	3108.3	2764.5	2469.0	2318.3	2246.1
32°	5237.8	5190.5	5060.2	4733.0	4227.9	3672.4	3150.1	2783.8	2474.8	2334.8	2179.9
33°	5251.4	5206.7	5095.6	4779.5	4277.5	3725.0	3191.4	2794.2	2469.8	2348.3	2124.9
34°	5260.2	5217.2	5123.6	4820.7	4321.8	3776.8	3229.9	2806.5	2483.5	2359.8	2103.4
35°	5263.4	5222.5	5148.5	4859.3	4363.3	3827.8	3257.4	2826.8	2497.9	2370.2	2115.3
36°	5262.0	5224.8	5166.4	4896.2	4404.3	3876.0	3282.1	2848.2	2515.1	2382.2	2127.5
37°	5255.3	5221.2	5180.4	4929.4	4443.4	3922.9	3312.0	2870.6	2532.1	2379.5	2137.0
38°	5245.0	5215.2	5189.3	4958.3	4481.3	3968.9	3348.5	2895.2	2544.0	2314.2	2145.0
39°	5231.6	5204.9	5194.4	4983.8	4517.7	4012.2	3382.9	2916.5	2555.0	2262.7	2157.3
40°	5213.9	5192.4	5192.7	5005.5	4552.9	4046.6	3417.7	2935.9	2574.1	2249.1	2173.1
41°	5190.5	5175.0	5188.7	5025.9	4586.9	4075.1	3452.7	2953.9	2597.7	2266.1	2188.7
42°	5164.4	5154.5	5178.8	5043.7	4620.2	4101.3	3487.6	2967.5	2620.9	2284.3	2202.1
43°	5131.6	5130.3	5165.7	5057.4	4653.5	4131.7	3517.0	2981.8	2644.5	2303.4	2155.5
44°	5093.0	5101.4	5148.6	5065.1	4684.9	4163.6	3544.0	3008.3	2669.0	2321.1	2080.7



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	5049.7	5068.8	5126.0	5067.4	4713.5	4197.2	3567.4	3040.2	2687.9	2332.7	2049.7
46°	4999.4	5030.6	5100.4	5064.1	4742.1	4230.0	3585.0	3072.6	2693.9	2340.4	2061.0
47°	4942.7	4985.8	5071.9	5055.6	4769.4	4262.0	3600.6	3102.5	2694.4	2353.3	2070.6
48°	4883.3	4935.8	5037.6	5042.6	4792.5	4291.6	3615.0	3119.0	2651.0	2368.5	2078.3
49°	4816.7	4879.4	4997.1	5026.9	4810.5	4323.0	3638.7	3129.7	2614.9	2321.1	2089.1
50°	4742.3	4816.4	4951.2	5006.0	4821.9	4350.0	3667.0	3136.5	2602.2	2247.6	2100.7
51°	4661.6	4746.5	4896.5	4980.2	4828.3	4372.4	3695.2	3132.3	2592.6	2216.0	2060.1
52°	4572.4	4669.9	4836.9	4948.0	4831.1	4391.5	3722.0	3153.8	2610.9	2232.9	1948.5
53°	4480.1	4585.5	4771.2	4910.9	4828.0	4408.5	3747.6	3166.2	2622.1	2250.6	1913.1
54°	4382.2	4493.6	4698.4	4870.5	4823.5	4416.9	3770.6	3173.4	2634.4	2263.4	1929.4
55°	4279.9	4397.6	4618.9	4822.8	4812.0	4417.3	3786.2	3188.5	2654.6	2275.0	1947.7
56°	4175.3	4297.2	4537.6	4769.6	4798.6	4414.7	3793.5	3197.3	2676.8	2278.4	1965.7
57°	4069.7	4195.0	4450.2	4713.8	4780.2	4403.9	3792.4	3201.7	2688.2	2199.9	1980.6
58°	3961.1	4087.5	4360.0	4652.2	4755.2	4396.7	3785.4	3210.0	2697.2	2128.7	1880.2
59°	3849.8	3982.9	4267.5	4585.4	4723.4	4388.2	3781.8	3209.9	2652.6	2126.4	1801.9
60°	3732.0	3873.9	4171.9	4514.9	4681.8	4373.3	3774.8	3196.1	2597.0	2151.7	1806.7
61°	3611.0	3761.0	4074.1	4439.5	4632.2	4351.3	3759.9	3178.3	2580.8	2179.2	1813.0
62°	3484.5	3646.0	3979.2	4359.2	4574.4	4319.9	3741.5	3169.1	2588.3	2205.9	1739.9
63°	3361.4	3529.5	3886.0	4276.9	4510.9	4276.7	3709.9	3144.3	2595.1	2152.2	1636.8
64°	3243.3	3417.4	3796.5	4191.6	4436.3	4220.1	3667.0	3115.1	2593.8	2085.1	1615.7
65°	3149.4	3314.2	3708.1	4102.7	4354.9	4152.6	3614.6	3071.8	2565.7	2084.3	1596.0
66°	3079.2	3231.8	3623.4	4014.1	4264.3	4068.6	3551.9	3014.4	2476.0	2097.2	1458.2
67°	3039.7	3170.1	3547.7	3924.2	4161.7	3973.3	3479.8	2940.3	2438.9	2011.4	1435.9
68°	2995.7	3128.3	3480.2	3833.8	4043.6	3864.1	3357.3	2860.9	2453.2	1963.9	1345.2
69°	2896.9	3083.1	3424.6	3745.2	3916.6	3716.0	3157.3	2768.4	2460.0	1957.5	1254.6
70°	2706.3	3001.6	3379.8	3656.4	3788.5	3517.6	2877.5	2633.4	2454.4	1862.4	1163.5
71°	2412.8	2844.4	3337.6	3567.8	3634.7	3267.4	2568.0	2449.1	2375.0	1832.4	1017.6
72°	2112.3	2590.8	3286.2	3474.2	3456.9	2982.2	2288.4	2232.1	2277.4	1762.6	911.8
73°	1791.6	2269.3	3204.0	3381.6	3252.1	2689.4	2033.0	2019.7	2168.8	1707.2	813.1
74°	1427.9	1924.3	3048.9	3270.3	3020.9	2408.0	1734.1	1831.5	2042.4	1609.3	687.1
75°	971.3	1549.9	2782.8	3114.2	2761.1	2086.0	1320.1	1625.8	1880.7	1511.0	613.3
76°	538.5	1099.7	2439.1	2886.0	2489.0	1650.0	906.1	1305.0	1735.8	1339.3	548.7
77°	416.2	628.4	2071.5	2559.2	2186.9	1089.2	492.5	981.8	1592.7	1167.7	483.6
78°	296.7	478.9	1627.0	2111.1	1812.0	606.0	237.2	566.6	1317.3	995.3	415.9
79°	177.2	330.4	1067.5	1586.7	1321.3	401.6	178.4	410.9	1041.9	785.5	345.0
80°	156.8	181.9	581.5	1044.2	814.4	205.0	119.9	255.3	765.4	598.2	291.7
81°	140.2	157.7	441.1	545.4	592.7	169.9	101.7	100.2	412.0	440.0	262.3
82°	125.1	139.4	305.3	361.7	375.0	145.1	86.2	79.8	302.7	351.2	259.0
83°	111.1	122.8	169.4	189.4	157.3	118.9	71.9	63.2	193.4	278.4	212.9
84°	97.8	107.2	141.3	154.9	127.5	92.6	58.7	50.2	87.2	214.1	163.7
85°	85.1	92.9	114.9	131.4	101.2	72.5	45.8	39.5	74.7	149.8	114.6
86°	72.8	79.8	93.7	109.5	77.9	58.4	34.2	30.4	58.9	85.9	65.7
87°	60.7	67.3	75.4	85.3	60.0	44.4	23.7	22.3	43.5	48.6	40.9
88°	52.5	56.6	58.5	59.0	43.6	30.3	16.6	15.9	30.2	33.4	28.1
89°	44.3	45.9	45.1	42.0	27.3	18.4	9.6	9.4	16.9	18.1	15.3



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CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436748

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436748

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436748

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2401.8	2401.8	2401.8	2401.8	2401.8	2401.8	2401.8	2401.8	2401.8	2401.8	2401.8
1°	2364.7	2365.0	2367.7	2372.9	2380.2	2387.6	2398.2	2399.9	2410.5	2421.1	2430.5
2°	2332.3	2332.0	2336.1	2345.7	2357.9	2374.3	2393.2	2405.1	2426.7	2447.4	2466.5
3°	2303.9	2302.8	2308.3	2320.3	2339.1	2362.1	2390.3	2412.8	2444.6	2477.5	2506.5
4°	2279.6	2278.4	2285.2	2300.2	2323.4	2353.9	2390.2	2422.4	2466.3	2510.7	2550.8
5°	2261.5	2259.6	2266.6	2284.2	2310.7	2347.3	2391.9	2434.7	2490.3	2547.1	2599.3
6°	2245.7	2242.8	2251.5	2271.9	2301.6	2342.8	2395.9	2449.3	2517.0	2587.0	2651.6
7°	2232.2	2229.0	2238.5	2261.2	2296.0	2342.0	2402.6	2466.7	2546.2	2630.9	2711.1
8°	2222.0	2218.1	2228.1	2253.9	2292.2	2343.5	2411.4	2485.2	2578.1	2679.3	2774.1
9°	2212.7	2209.1	2220.2	2248.6	2290.5	2346.7	2421.1	2505.0	2612.5	2730.3	2842.2
10°	2206.1	2201.4	2214.2	2245.7	2290.8	2351.2	2432.5	2527.8	2649.2	2784.6	2914.6
11°	2200.9	2196.1	2210.5	2244.5	2293.3	2358.6	2446.2	2553.5	2690.4	2842.3	2991.8
12°	2197.8	2193.0	2208.0	2245.3	2298.0	2367.2	2462.3	2579.4	2731.6	2903.9	3074.1
13°	2197.4	2191.8	2207.9	2247.3	2304.6	2377.7	2479.0	2607.2	2776.0	2969.0	3162.9
14°	2197.6	2191.0	2209.3	2251.4	2312.6	2389.3	2496.9	2636.2	2821.1	3037.1	3256.4
15°	2195.1	2164.2	2207.2	2256.2	2320.9	2402.5	2515.7	2667.6	2868.7	3110.4	3356.3
16°	2148.6	2120.0	2164.5	2261.3	2329.8	2417.1	2535.8	2698.4	2918.7	3184.9	3461.4
17°	2114.1	2094.0	2131.2	2252.8	2339.7	2432.0	2557.7	2731.4	2969.8	3264.8	3569.3
18°	2096.0	2089.3	2113.5	2214.9	2351.5	2447.6	2577.1	2764.3	3023.6	3348.2	3678.0
19°	2098.7	2092.5	2116.0	2190.3	2362.0	2459.2	2590.5	2791.9	3078.7	3432.6	3786.3
20°	2103.4	2097.0	2121.3	2177.8	2371.5	2467.0	2606.7	2819.4	3135.3	3518.7	3891.0
21°	2109.6	2104.2	2128.3	2183.4	2352.0	2476.9	2629.8	2850.9	3186.7	3606.7	3992.4
22°	2118.4	2112.1	2137.5	2193.0	2323.6	2495.1	2655.5	2887.3	3239.1	3691.8	4088.2
23°	2127.7	2122.7	2148.9	2203.7	2310.4	2514.1	2681.8	2926.9	3297.0	3776.5	4179.7
24°	2137.7	2132.8	2160.7	2216.0	2306.5	2530.0	2703.0	2966.7	3358.1	3857.2	4266.5
25°	2148.3	2142.6	2171.9	2229.1	2317.1	2542.2	2723.0	3002.8	3422.5	3928.5	4347.4
26°	2159.3	2154.1	2184.1	2244.3	2327.0	2554.9	2744.9	3036.7	3488.0	3993.8	4425.1
27°	2170.3	2166.0	2195.9	2258.4	2334.8	2570.7	2768.8	3073.2	3552.8	4058.7	4499.9
28°	2181.8	2154.0	2208.0	2272.8	2344.6	2584.0	2796.9	3112.5	3613.5	4121.0	4571.4
29°	2147.2	2077.4	2181.3	2286.9	2360.8	2579.9	2825.5	3154.1	3667.0	4181.5	4639.1
30°	2075.2	2036.3	2108.0	2298.8	2378.8	2576.6	2854.1	3197.9	3723.3	4242.1	4702.4
31°	2040.1	2041.4	2072.3	2303.5	2397.3	2576.4	2882.4	3243.1	3778.3	4299.2	4762.8
32°	2047.0	2057.4	2078.0	2250.2	2416.4	2577.2	2905.1	3288.3	3830.6	4353.7	4817.5
33°	2061.5	2074.2	2092.3	2196.0	2433.7	2576.7	2919.6	3332.6	3884.8	4406.4	4865.5
34°	2075.6	2091.5	2107.1	2172.1	2447.7	2590.5	2934.3	3376.6	3936.6	4452.3	4906.8
35°	2090.2	2110.6	2121.9	2181.4	2461.3	2605.7	2956.8	3412.0	3989.1	4492.6	4946.0
36°	2106.2	2128.0	2137.8	2196.2	2472.2	2622.9	2981.0	3441.2	4038.2	4532.6	4983.2
37°	2120.3	2144.5	2153.5	2207.2	2478.5	2642.0	3005.6	3474.2	4085.6	4570.8	5018.0
38°	2134.0	2157.7	2168.4	2216.6	2415.2	2656.9	3033.6	3511.4	4131.4	4609.5	5047.2
39°	2144.0	2078.8	2180.3	2226.8	2365.7	2669.9	3061.1	3548.3	4174.8	4645.9	5072.4
40°	2062.7	2003.1	2108.2	2242.8	2350.9	2688.7	3084.3	3584.7	4211.9	4680.0	5094.1
41°	1989.2	1987.1	2031.0	2260.0	2365.6	2713.7	3104.7	3621.6	4240.4	4714.2	5113.0
42°	1972.3	1998.4	2009.7	2275.6	2384.1	2739.9	3119.2	3657.9	4266.3	4748.1	5127.5
43°	1985.7	2010.9	2023.3	2245.1	2403.9	2765.8	3135.1	3692.0	4293.8	4780.2	5139.2
44°	2000.3	2022.6	2038.9	2164.9	2423.0	2792.5	3165.4	3723.0	4322.3	4809.3	5146.1



REPORT NUMBER: P1436748

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2015.4	2034.4	2053.9	2127.1	2436.7	2813.9	3199.4	3750.5	4352.8	4836.6	5146.1
46°	2030.7	2041.4	2069.4	2135.5	2445.8	2822.1	3233.5	3768.5	4384.7	4860.8	5139.9
47°	2045.3	1959.1	2082.0	2144.6	2457.7	2827.5	3267.0	3783.3	4414.4	4883.8	5127.5
48°	1967.2	1846.5	2016.5	2152.4	2473.6	2804.7	3292.8	3796.1	4442.2	4903.6	5112.7
49°	1857.2	1824.8	1904.4	2163.0	2443.6	2766.9	3300.1	3818.0	4467.2	4917.0	5093.5
50°	1838.0	1833.8	1877.5	2173.4	2367.2	2740.1	3305.4	3844.4	4489.6	4922.9	5069.9
51°	1853.1	1843.9	1892.6	2145.1	2324.3	2728.2	3300.8	3867.9	4505.6	4921.5	5042.6
52°	1869.1	1853.9	1906.7	2032.1	2337.4	2741.9	3301.9	3890.1	4517.7	4916.4	5008.4
53°	1883.4	1858.5	1920.3	1988.5	2355.8	2753.0	3315.1	3908.7	4524.5	4905.5	4970.8
54°	1890.5	1724.7	1928.2	2003.8	2367.7	2763.3	3318.5	3923.8	4521.5	4893.9	4926.6
55°	1769.3	1642.2	1807.5	2021.6	2379.0	2776.7	3320.8	3931.2	4511.5	4876.6	4879.6
56°	1679.5	1636.4	1716.6	2040.1	2382.7	2797.2	3321.1	3927.2	4494.5	4857.1	4828.0
57°	1673.5	1639.3	1707.0	2053.4	2324.5	2805.2	3316.8	3913.8	4472.0	4832.1	4770.1
58°	1676.1	1625.6	1709.0	1958.2	2241.3	2809.1	3315.0	3896.5	4448.4	4797.3	4708.4
59°	1644.7	1432.7	1683.1	1873.0	2232.9	2778.1	3310.1	3879.3	4424.3	4758.1	4641.4
60°	1474.9	1380.0	1511.9	1873.5	2257.2	2709.4	3287.0	3859.0	4394.3	4712.4	4567.9
61°	1442.1	1298.9	1474.8	1878.9	2283.2	2676.1	3259.4	3833.1	4357.6	4658.0	4489.5
62°	1437.8	1217.9	1465.6	1816.5	2306.3	2675.3	3243.4	3800.7	4313.0	4594.4	4408.1
63°	1354.1	1137.7	1379.6	1702.5	2259.0	2674.5	3215.0	3757.8	4258.3	4519.9	4322.9
64°	1270.4	1114.7	1293.7	1679.9	2178.2	2667.1	3177.5	3701.5	4192.1	4439.6	4236.6
65°	1186.6	1018.4	1207.1	1665.8	2166.4	2636.4	3124.9	3631.9	4110.5	4351.5	4143.4
66°	1055.5	851.6	1079.1	1517.9	2167.0	2547.3	3059.1	3548.9	4013.5	4256.1	4045.5
67°	922.2	812.0	941.2	1485.9	2077.7	2489.0	2980.4	3448.5	3907.6	4146.4	3947.9
68°	829.6	567.0	851.3	1427.6	2027.5	2491.3	2873.2	3275.3	3772.4	4025.1	3851.3
69°	676.0	468.2	694.5	1302.9	2008.5	2486.3	2743.9	3019.5	3585.2	3891.5	3757.9
70°	541.4	322.6	556.9	1178.1	1906.7	2466.4	2564.8	2684.6	3349.7	3744.2	3658.4
71°	372.3	177.0	371.9	1053.7	1861.2	2366.4	2340.3	2375.0	3054.6	3569.9	3554.2
72°	205.7	32.4	192.3	947.2	1783.0	2237.3	2101.0	2091.3	2741.3	3372.2	3449.7
73°	173.2	0.4	156.0	835.7	1703.3	2104.2	1869.0	1808.5	2434.7	3133.5	3332.7
74°	140.7	0.3	120.0	687.3	1585.4	1957.8	1653.7	1472.3	2130.9	2862.3	3196.1
75°	108.3	0.3	104.1	603.1	1453.6	1786.2	1328.6	1031.5	1768.8	2561.8	3005.4
76°	82.4	0.3	82.9	536.1	1267.4	1615.4	1003.5	597.6	1280.1	2244.7	2749.7
77°	58.0	0.4	65.7	472.6	1081.1	1369.0	678.4	383.9	762.5	1907.4	2392.7
78°	43.4	0.4	53.1	409.6	895.0	1122.6	349.2	175.4	570.5	1494.2	1929.8
79°	42.7	0.5	52.8	340.5	716.0	874.5	228.0	133.9	381.5	1010.4	1399.0
80°	57.2	0.5	63.7	294.8	556.1	500.0	108.2	113.5	192.4	590.4	870.5
81°	70.0	0.6	65.9	273.9	417.9	362.7	86.7	96.6	163.6	391.9	638.0
82°	61.8	0.7	41.1	255.3	324.2	225.3	71.4	81.2	139.7	196.4	411.2
83°	38.6	0.8	29.2	193.6	243.4	88.7	58.2	67.6	115.3	150.0	184.4
84°	28.3	0.9	17.3	131.8	162.5	73.9	46.8	55.3	91.3	123.5	153.3
85°	18.0	1.0	5.8	70.7	82.6	58.3	37.2	43.1	71.2	97.0	130.3
86°	7.9	1.1	5.2	35.9	46.0	43.4	28.7	30.9	57.2	75.2	108.5
87°	5.8	1.2	5.1	25.3	26.2	31.2	21.1	20.7	43.3	58.0	84.2
88°	4.3	1.3	4.5	14.7	18.3	21.8	14.9	12.1	29.4	42.2	58.6
89°	3.3	1.4	2.8	4.2	10.4	12.4	8.7	5.2	17.9	26.3	41.8



REPORT NUMBER: P1436748

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436748

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436748

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436748

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2401.8	2401.8	2401.8
1°	2437.5	2442.6	2444.9
2°	2481.0	2490.9	2494.5
3°	2528.9	2543.6	2548.7
4°	2582.6	2603.3	2609.4
5°	2640.9	2669.4	2678.3
6°	2705.4	2741.9	2752.6
7°	2776.3	2819.2	2833.2
8°	2852.8	2904.0	2921.0
9°	2935.4	2996.5	3016.2
10°	3021.9	3096.7	3119.4
11°	3118.6	3203.5	3230.9
12°	3221.1	3320.5	3350.5
13°	3331.6	3443.7	3479.3
14°	3449.7	3576.8	3618.0
15°	3573.5	3717.5	3766.6
16°	3699.4	3861.3	3919.8
17°	3827.5	4009.0	4075.6
18°	3956.2	4155.5	4225.3
19°	4080.8	4296.6	4368.6
20°	4201.1	4427.4	4500.6
21°	4313.9	4546.7	4617.1
22°	4419.1	4655.5	4718.8
23°	4520.0	4750.4	4812.7
24°	4613.7	4835.2	4894.2
25°	4700.4	4909.7	4965.4
26°	4779.4	4975.3	5026.0
27°	4853.9	5032.0	5079.4
28°	4918.1	5081.3	5124.8
29°	4977.0	5122.1	5163.0
30°	5027.9	5155.9	5194.8
31°	5073.9	5184.6	5219.8
32°	5113.6	5207.6	5237.8
33°	5147.6	5223.8	5251.4
34°	5174.5	5234.9	5260.2
35°	5196.7	5240.7	5263.4
36°	5213.9	5240.1	5262.0
37°	5227.0	5236.8	5255.3
38°	5234.8	5230.4	5245.0
39°	5237.6	5219.0	5231.6
40°	5235.9	5205.4	5213.9
41°	5230.6	5189.1	5190.5
42°	5220.6	5168.6	5164.4
43°	5205.8	5144.9	5131.6
44°	5187.9	5117.0	5093.0

REPORT NUMBER: P1436748

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	5165.5	5084.5	5049.7
46°	5140.2	5047.6	4999.4
47°	5110.0	5003.5	4942.7
48°	5077.6	4955.2	4883.3
49°	5038.7	4900.7	4816.7
50°	4992.9	4840.9	4742.3
51°	4940.5	4773.6	4661.6
52°	4879.6	4697.4	4572.4
53°	4813.8	4617.4	4480.1
54°	4741.8	4528.5	4382.2
55°	4667.1	4436.5	4279.9
56°	4585.8	4336.2	4175.3
57°	4500.6	4234.1	4069.7
58°	4410.2	4128.6	3961.1
59°	4316.4	4021.8	3849.8
60°	4221.7	3911.5	3732.0
61°	4127.1	3799.3	3611.0
62°	4032.3	3683.5	3484.5
63°	3940.9	3571.6	3361.4
64°	3855.0	3463.4	3243.3
65°	3771.5	3363.6	3149.4
66°	3690.7	3279.7	3079.2
67°	3613.8	3218.8	3039.7
68°	3542.9	3176.5	2995.7
69°	3480.0	3131.1	2896.9
70°	3430.5	3057.0	2706.3
71°	3379.8	2912.1	2412.8
72°	3317.4	2662.2	2112.3
73°	3225.3	2338.3	1791.6
74°	3056.9	1980.9	1427.9
75°	2788.5	1603.6	971.3
76°	2446.7	1173.5	538.5
77°	2059.1	699.9	416.2
78°	1595.3	525.4	296.7
79°	1048.6	356.0	177.2
80°	588.7	186.6	156.8
81°	443.2	162.6	140.2
82°	308.3	143.7	125.1
83°	173.3	126.5	111.1
84°	143.5	110.3	97.8
85°	116.4	95.4	85.1
86°	95.1	81.8	72.8
87°	76.2	68.8	60.7
88°	58.4	57.6	52.5
89°	45.1	46.5	44.3



REPORT NUMBER: P1436748

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436748

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436748

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)