

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: P1436701

Luminaire Tested: XAS180-SFPM (3000K-108W-T4)

Issue Date: 3/25/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1436701  
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 (3000K-108W-T4)  
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.  
LUMEN OUTPUT - 60% (108W)  
OPTICS - TYPE 4  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

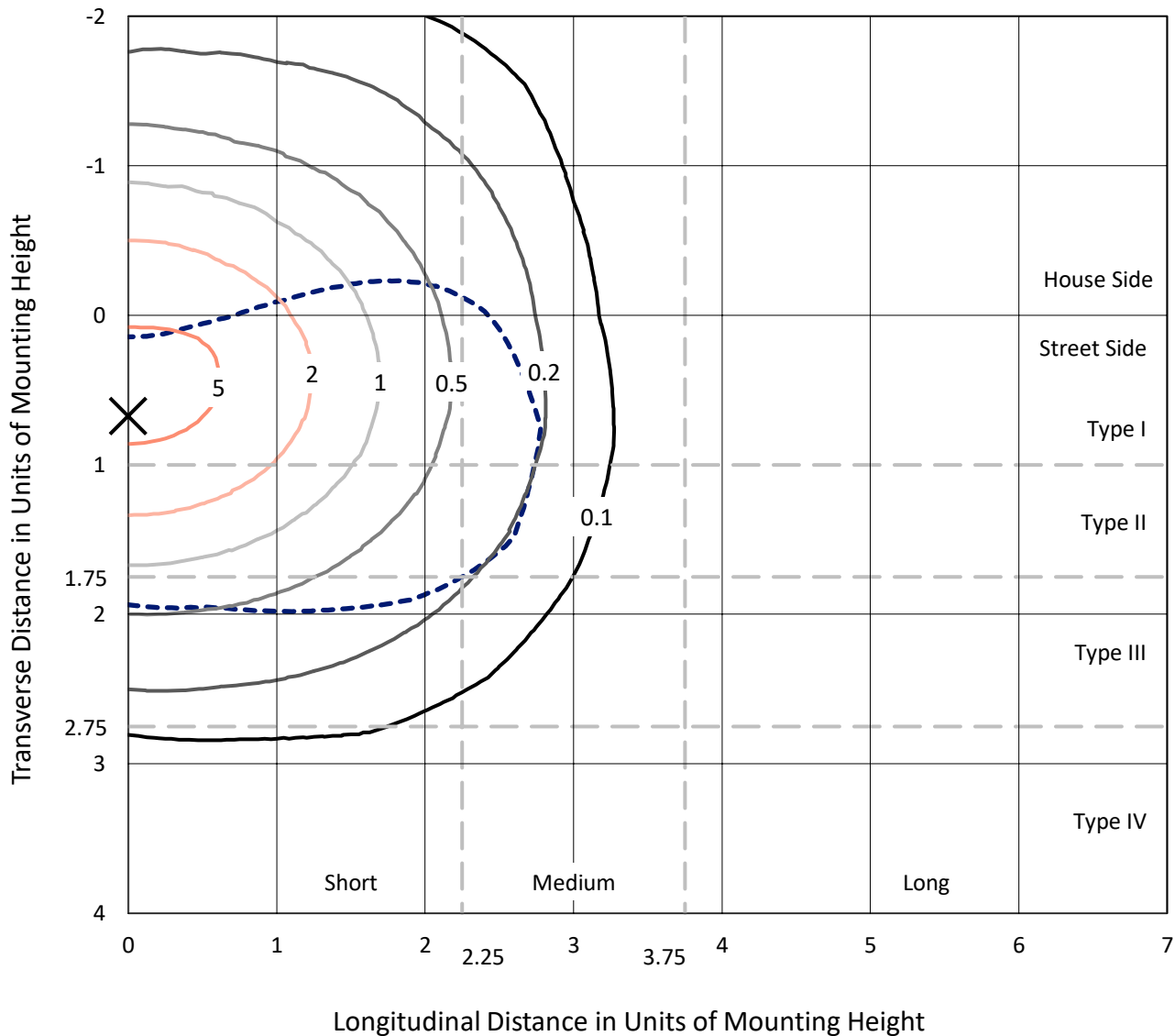
Lumens per Lamp: 24407 (1 lamp)  
Luminaire Lumens: 17054.3 lumens  
Efficiency: 69.9%  
Efficacy: 158.5 lumens/watt  
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 107.6  
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

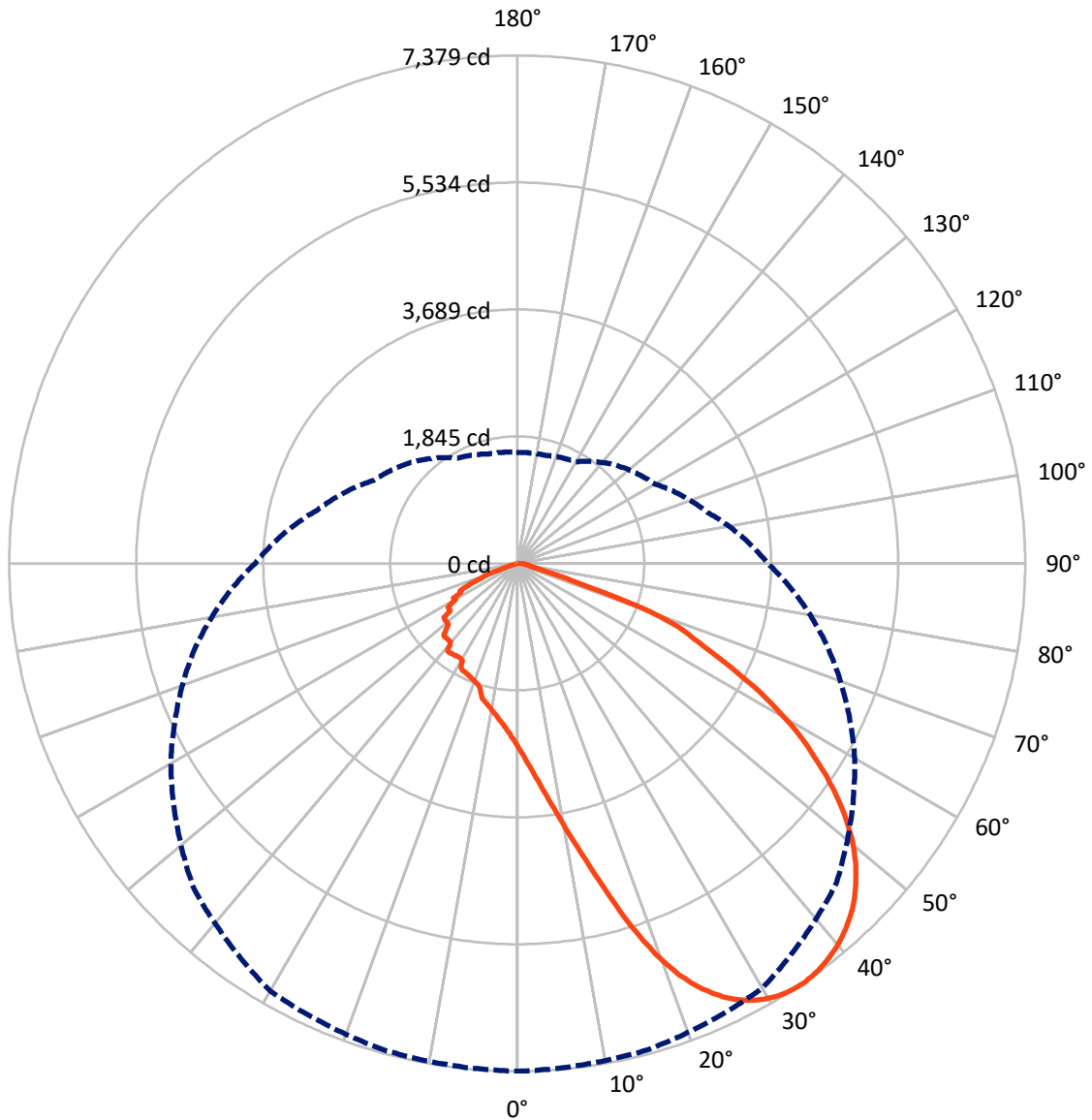
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 34-Deg Vertical

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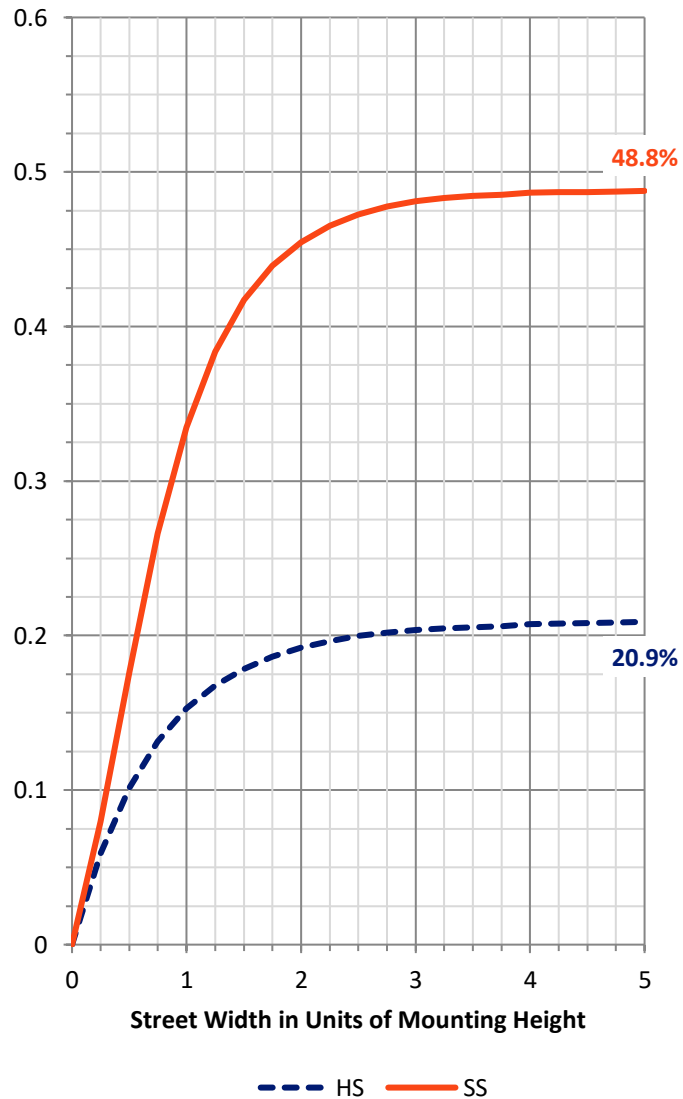
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5129.0	0.0	5129.0
	% Lamp	21.0	0.0	21.0
<b>Street Side</b>	Lumens	11925.3	0.0	11925.3
	% Lamp	48.9	0.0	48.9
<b>Total</b>	Lumens	17054.3	0.0	17054.3
	% Lamp	69.9	0.0	69.9

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	267.9	1.6	1.1
10°-20°	930.5	5.5	3.8
20°-30°	1805.3	10.6	7.4
30°-40°	2654.1	15.6	10.9
40°-50°	3293.3	19.3	13.5
50°-60°	3509.0	20.6	14.4
60°-70°	3050.6	17.9	12.5
70°-80°	1411.2	8.3	5.8
80°-90°	132.6	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°	17054.3	100.0	69.9
0°-180°	17054.3	100.0	69.9

**Coefficient of Utilization**



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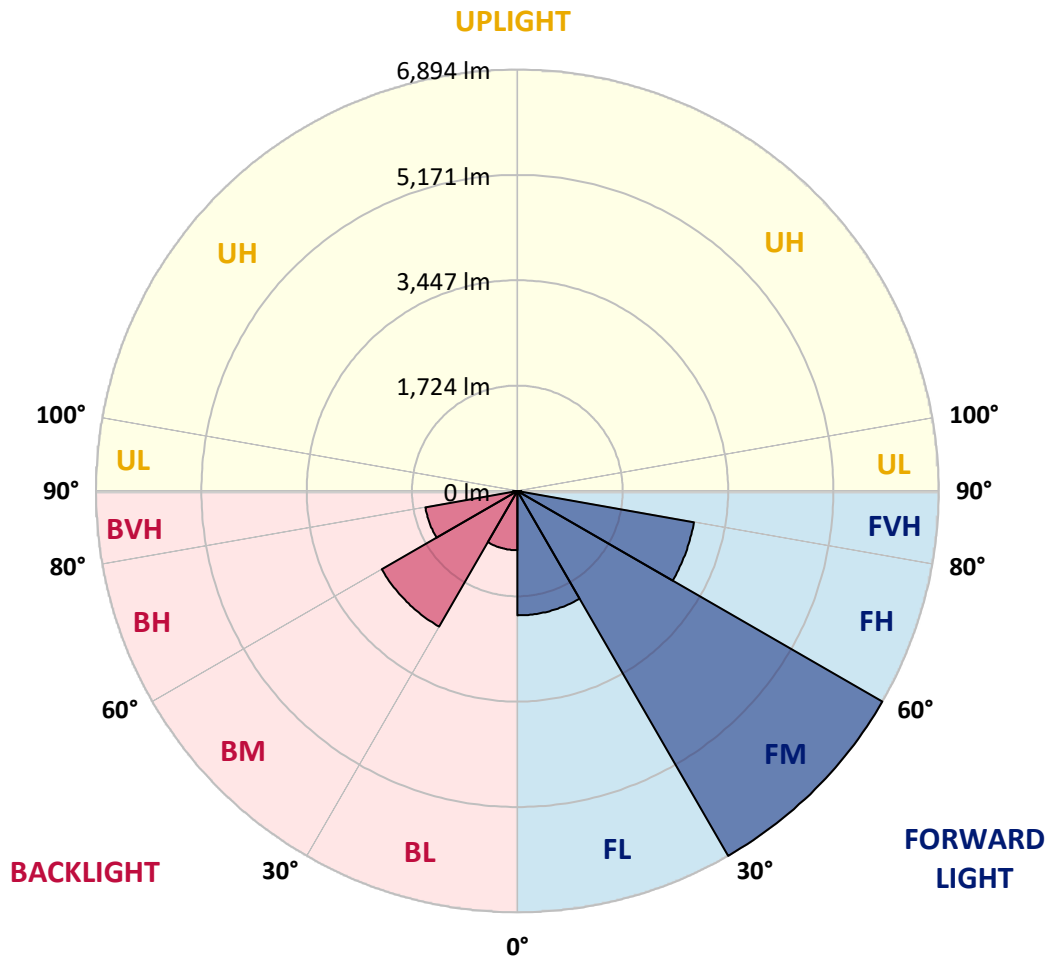
CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

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

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2035.4	8.3			
FM (30°-60°)	6894.4	28.2			
FH (60°-80°)	2933.4	12.0			G2/5000
FVH (80°-90°)	62.2	0.3			G1/100
BL (0°-30°)	968.3	4.0	B2/1000		
BM (30°-60°)	2562.0	10.5	B3/5000		
BH (60°-80°)	1528.5	6.3	B3/2500		G3/2500
BVH (80°-90°)	70.4	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	7352.7	30.1			

**BUG Rating: B3-U0-G3**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2680.1	2680.1	2680.1	2680.1	2680.1	2680.1	2680.1	2680.1	2680.1	2680.1	2680.1
1°	2763.7	2762.1	2755.4	2742.8	2726.0	2706.4	2670.9	2652.6	2636.0	2622.8	2613.2
2°	2854.4	2850.7	2832.8	2805.4	2769.2	2728.4	2672.2	2634.2	2600.5	2573.8	2552.9
3°	2953.1	2943.2	2915.4	2871.7	2817.2	2755.1	2676.5	2619.9	2569.6	2528.7	2498.4
4°	3061.5	3047.0	3007.4	2945.6	2868.1	2783.6	2683.0	2607.7	2541.7	2487.7	2449.4
5°	3179.8	3161.2	3105.9	3025.3	2923.3	2815.3	2691.7	2597.2	2516.4	2451.5	2405.9
6°	3309.8	3283.0	3214.9	3112.1	2985.3	2850.0	2702.2	2589.5	2493.2	2419.3	2366.0
7°	3447.3	3414.7	3331.0	3204.9	3050.1	2888.5	2717.0	2585.6	2474.3	2389.8	2328.3
8°	3597.7	3559.8	3457.3	3304.2	3120.2	2929.8	2734.5	2584.2	2458.1	2362.8	2294.7
9°	3761.4	3716.0	3591.8	3411.4	3194.9	2974.2	2753.7	2583.9	2445.3	2338.2	2262.9
10°	3932.5	3877.8	3736.0	3522.8	3274.1	3022.5	2776.0	2586.5	2433.3	2317.2	2233.0
11°	4118.4	4055.6	3889.2	3643.2	3358.1	3073.8	2800.3	2591.1	2423.6	2297.9	2206.1
12°	4320.1	4246.3	4051.1	3772.4	3445.7	3127.7	2826.3	2597.3	2416.2	2280.3	2182.0
13°	4534.7	4448.1	4226.5	3907.0	3539.3	3185.1	2853.9	2604.6	2410.0	2264.0	2159.7
14°	4768.0	4671.6	4414.8	4050.0	3637.0	3244.1	2881.3	2612.0	2404.4	2249.3	2138.8
15°	5017.7	4905.3	4614.3	4202.1	3739.6	3304.9	2911.6	2620.9	2400.0	2235.8	2117.9
16°	5275.1	5148.1	4821.0	4363.8	3846.8	3367.9	2943.7	2631.6	2396.7	2223.0	2098.9
17°	5528.5	5389.0	5024.0	4529.9	3960.2	3433.5	2976.7	2642.7	2394.3	2211.2	2079.8
18°	5781.1	5625.6	5228.1	4693.6	4079.5	3501.7	3010.2	2652.5	2392.6	2200.3	2050.5
19°	6015.6	5853.4	5429.1	4855.1	4202.2	3572.2	3033.7	2654.9	2387.7	2190.5	1981.8
20°	6230.4	6064.2	5624.4	5016.3	4324.6	3639.1	3063.0	2661.6	2376.8	2180.7	1933.1
21°	6423.0	6257.1	5808.1	5171.7	4449.0	3700.0	3092.7	2676.5	2368.5	2169.9	1920.1
22°	6590.7	6430.1	5981.1	5321.8	4570.5	3772.1	3131.6	2692.1	2369.9	2131.2	1908.3
23°	6738.9	6586.9	6138.9	5466.5	4690.9	3841.9	3172.8	2706.3	2371.5	2081.8	1898.3
24°	6868.5	6724.5	6288.2	5601.9	4796.9	3922.7	3211.3	2714.8	2368.2	2042.3	1890.8
25°	6980.7	6845.2	6422.8	5732.4	4898.9	4007.0	3243.7	2726.6	2365.0	2035.9	1883.5
26°	7075.5	6949.3	6545.6	5852.3	4999.6	4089.7	3277.9	2738.2	2362.9	2028.1	1877.7
27°	7155.1	7039.8	6659.1	5970.0	5096.5	4170.6	3316.1	2756.4	2367.6	2017.8	1871.4
28°	7220.8	7114.6	6757.8	6080.5	5187.0	4242.5	3355.4	2774.6	2374.5	2010.3	1865.6
29°	7275.3	7175.4	6844.2	6181.8	5275.6	4310.5	3401.7	2792.9	2380.5	2010.1	1861.1
30°	7316.5	7225.7	6920.8	6277.9	5365.7	4381.4	3447.9	2812.6	2372.5	2011.8	1856.7
31°	7348.7	7264.1	6986.8	6365.3	5449.1	4452.9	3496.2	2832.7	2337.2	2014.3	1848.2
32°	7368.2	7292.1	7041.2	6437.6	5527.3	4521.3	3543.9	2850.3	2329.7	2016.7	1836.9
33°	7378.0	7308.8	7088.0	6501.8	5598.5	4593.0	3592.0	2855.6	2301.8	2019.0	1765.2
34°	7378.7	7315.8	7124.4	6559.6	5660.6	4663.0	3638.5	2861.3	2304.9	2019.2	1703.5
35°	7370.3	7315.1	7151.6	6614.7	5716.0	4729.7	3672.7	2875.4	2309.4	2017.5	1699.8
36°	7354.3	7306.7	7167.7	6663.1	5767.9	4793.6	3701.0	2891.7	2315.3	2016.7	1701.2
37°	7329.8	7290.7	7175.4	6703.4	5818.6	4854.9	3733.3	2908.9	2325.7	2019.5	1702.3
38°	7299.1	7266.9	7176.1	6734.3	5868.2	4915.6	3773.4	2928.5	2332.1	2020.2	1701.2
39°	7261.3	7238.3	7168.4	6760.0	5912.2	4970.7	3809.5	2949.5	2333.7	1923.8	1700.0
40°	7218.0	7202.6	7150.9	6780.2	5954.5	5016.6	3848.2	2964.9	2343.9	1879.5	1704.3
41°	7166.3	7159.3	7127.9	6795.9	5991.3	5049.2	3885.4	2978.8	2359.2	1886.0	1708.4
42°	7106.9	7111.1	7096.4	6809.4	6030.3	5081.0	3923.5	2991.0	2374.6	1895.0	1713.1
43°	7039.1	7054.5	7057.3	6813.6	6067.0	5113.5	3959.3	2997.8	2391.0	1905.2	1714.9
44°	6962.7	6991.6	7011.9	6809.0	6100.0	5149.2	3989.3	3018.5	2408.5	1916.2	1659.7

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CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	6876.3	6919.4	6957.7	6794.6	6129.3	5183.4	4013.0	3047.2	2426.8	1925.7	1584.6
46°	6777.4	6837.8	6897.8	6772.3	6156.6	5217.4	4034.5	3076.8	2434.5	1925.5	1586.6
47°	6673.1	6744.5	6830.4	6740.3	6180.1	5249.6	4048.2	3107.3	2433.6	1930.5	1591.2
48°	6563.3	6644.1	6754.9	6700.0	6197.7	5276.3	4058.3	3139.2	2441.9	1941.9	1593.4
49°	6438.8	6528.9	6669.8	6653.9	6207.8	5302.6	4079.4	3166.5	2399.6	1949.0	1591.4
50°	6300.6	6405.1	6573.0	6599.0	6208.2	5327.0	4108.6	3172.3	2362.0	1887.2	1591.7
51°	6151.0	6266.7	6463.3	6533.0	6196.6	5342.6	4137.8	3151.7	2327.2	1811.6	1594.2
52°	5990.0	6116.3	6343.7	6456.9	6180.5	5350.9	4164.2	3170.7	2344.6	1817.5	1522.7
53°	5818.6	5952.9	6210.9	6372.9	6154.7	5354.5	4187.5	3177.0	2360.2	1828.8	1445.6
54°	5634.4	5775.3	6068.5	6276.6	6120.6	5353.8	4208.2	3173.5	2368.6	1844.0	1453.0
55°	5446.5	5592.4	5914.2	6170.0	6075.4	5339.1	4225.0	3192.5	2381.9	1852.4	1463.3
56°	5243.4	5400.3	5747.3	6054.4	6024.5	5313.4	4228.6	3204.8	2403.3	1858.5	1475.0
57°	5041.2	5199.2	5575.7	5926.2	5965.9	5280.5	4224.4	3204.8	2420.6	1855.9	1486.4
58°	4831.0	4992.7	5395.7	5787.5	5896.2	5250.0	4207.6	3215.8	2428.3	1756.4	1492.4
59°	4611.6	4783.1	5206.4	5643.0	5814.5	5218.0	4191.7	3226.2	2444.5	1732.8	1374.3
60°	4377.1	4564.0	5012.4	5485.1	5717.9	5178.5	4176.8	3218.4	2378.4	1756.6	1384.1
61°	4126.6	4332.5	4809.2	5320.8	5608.2	5129.9	4150.4	3190.7	2340.9	1784.8	1388.2
62°	3864.9	4091.9	4604.2	5146.2	5491.8	5067.9	4120.8	3182.1	2356.2	1815.0	1347.9
63°	3590.6	3840.3	4396.2	4963.6	5361.0	4991.6	4079.9	3159.3	2367.7	1837.9	1307.9
64°	3325.1	3592.1	4188.2	4777.2	5215.0	4901.5	4023.4	3123.0	2376.3	1752.2	1299.2
65°	3084.3	3344.7	3972.3	4585.1	5058.1	4794.7	3954.5	3080.8	2364.9	1761.4	1313.8
66°	2872.7	3120.6	3761.7	4390.2	4890.6	4670.4	3864.0	3018.2	2300.2	1783.8	1236.9
67°	2698.7	2916.5	3552.3	4196.6	4711.3	4525.7	3768.6	2952.2	2228.8	1769.4	1219.0
68°	2512.0	2737.4	3348.5	3997.8	4509.3	4364.0	3625.7	2855.2	2246.1	1725.6	1250.0
69°	2237.8	2548.7	3156.9	3804.2	4295.7	4169.9	3409.4	2739.8	2256.4	1737.5	1143.5
70°	1835.7	2299.5	2978.2	3608.4	4076.8	3929.4	3096.5	2584.2	2261.1	1691.0	1138.3
71°	1306.9	1951.4	2799.0	3413.7	3828.8	3644.2	2737.4	2381.2	2215.0	1694.9	985.2
72°	831.8	1477.7	2597.5	3211.6	3553.5	3309.2	2429.7	2155.3	2131.1	1685.2	950.1
73°	640.1	978.2	2355.8	3003.7	3245.9	2945.7	2137.2	1957.5	2047.4	1660.2	881.3
74°	454.5	594.6	2029.4	2769.1	2919.5	2576.5	1729.6	1811.4	1956.3	1674.3	798.7
75°	268.8	438.1	1576.6	2468.9	2564.0	2179.0	1321.9	1532.4	1852.5	1639.5	769.2
76°	237.1	286.3	1100.4	2098.5	2197.6	1683.8	914.0	1253.4	1761.0	1594.7	749.7
77°	212.1	245.9	717.9	1639.6	1817.1	1108.0	499.2	973.7	1685.2	1442.3	707.5
78°	191.7	217.1	561.3	1094.4	1410.6	637.3	260.4	561.9	1465.1	1289.7	638.3
79°	173.7	193.9	411.7	596.8	981.2	442.1	213.0	411.6	1245.0	1135.7	541.9
80°	157.3	173.8	262.1	411.9	613.3	248.5	165.6	261.3	1021.5	926.6	464.2
81°	142.1	155.8	221.6	234.9	402.6	209.8	118.8	113.4	567.2	693.3	419.5
82°	128.1	139.1	192.2	200.9	195.9	179.2	100.2	88.1	415.7	552.4	417.9
83°	114.5	123.4	166.4	175.3	152.0	145.5	83.5	68.0	264.2	437.6	343.2
84°	101.5	108.8	140.8	152.3	123.5	110.3	67.8	53.3	113.3	312.4	255.4
85°	89.1	95.1	113.8	130.5	98.4	84.2	52.4	41.1	99.5	231.2	180.4
86°	76.7	82.1	92.8	109.2	76.7	65.2	38.5	31.2	79.6	150.0	105.9
87°	66.0	69.8	75.1	86.1	59.9	49.2	29.5	24.2	59.0	69.7	64.9
88°	55.4	59.5	61.5	66.1	43.3	33.1	20.6	17.2	44.8	47.4	44.3
89°	44.8	49.1	48.0	46.3	26.7	19.3	11.6	10.2	30.5	25.1	23.6



REPORT NUMBER: P1436701

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**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: P1436701

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**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: P1436701

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**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: P1436701

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2680.1	2680.1	2680.1	2680.1	2680.1	2680.1	2680.1	2680.1	2680.1	2680.1	2680.1
1°	2608.8	2608.9	2612.7	2622.4	2635.2	2651.8	2669.8	2675.3	2696.7	2716.6	2734.1
2°	2542.7	2540.8	2548.6	2565.1	2589.4	2619.7	2655.9	2681.4	2723.6	2764.4	2800.5
3°	2482.6	2478.6	2488.6	2511.8	2547.3	2592.1	2644.7	2690.7	2753.4	2814.4	2869.3
4°	2428.3	2424.0	2435.1	2463.7	2508.6	2567.5	2636.8	2701.9	2786.0	2868.7	2945.7
5°	2380.3	2374.2	2386.7	2420.9	2473.9	2545.9	2631.5	2715.7	2822.1	2928.9	3027.9
6°	2334.6	2327.2	2342.3	2381.8	2443.9	2526.3	2628.0	2732.0	2861.6	2994.7	3117.5
7°	2293.1	2284.0	2300.7	2345.1	2415.8	2510.4	2627.5	2752.2	2903.8	3063.6	3213.4
8°	2254.6	2243.7	2262.3	2312.2	2390.6	2496.3	2629.2	2772.4	2949.5	3137.1	3316.4
9°	2218.1	2205.5	2226.3	2281.4	2368.3	2484.7	2632.2	2795.7	2999.2	3216.2	3427.1
10°	2184.1	2170.5	2193.3	2253.3	2347.1	2474.5	2636.7	2821.4	3050.6	3299.5	3542.8
11°	2152.7	2137.4	2162.7	2227.9	2329.5	2466.3	2643.5	2850.7	3107.3	3388.5	3667.5
12°	2124.0	2107.8	2133.3	2203.9	2313.4	2459.8	2652.8	2880.9	3164.5	3483.0	3799.5
13°	2097.8	2079.3	2107.1	2182.0	2299.1	2455.7	2663.6	2913.4	3225.9	3582.0	3941.1
14°	2072.5	2051.9	2082.0	2161.6	2286.8	2452.9	2675.6	2946.5	3289.4	3684.9	4091.1
15°	2047.8	2025.2	2057.4	2142.0	2275.6	2452.2	2688.1	2982.0	3355.8	3797.1	4252.0
16°	2019.3	1965.3	2030.1	2123.4	2264.7	2452.4	2701.2	3019.1	3425.0	3912.3	4421.3
17°	1941.7	1898.3	1956.3	2105.1	2254.8	2452.9	2716.9	3056.3	3497.2	4035.7	4592.0
18°	1887.1	1863.3	1900.3	2076.5	2246.2	2454.5	2732.6	3095.1	3572.0	4163.2	4764.9
19°	1867.1	1843.0	1879.1	2013.5	2237.6	2454.7	2738.9	3128.5	3649.0	4292.8	4939.4
20°	1849.9	1824.6	1861.8	1966.3	2229.3	2447.0	2749.8	3159.2	3729.8	4424.2	5108.6
21°	1834.8	1809.4	1846.4	1948.7	2219.5	2441.8	2765.7	3194.1	3803.2	4557.3	5271.0
22°	1822.6	1795.5	1834.3	1938.2	2181.4	2445.5	2786.1	3236.7	3877.7	4690.6	5424.6
23°	1812.0	1783.8	1824.5	1929.0	2135.8	2450.7	2806.4	3282.8	3962.6	4818.2	5567.2
24°	1802.2	1773.1	1815.3	1921.8	2102.4	2455.9	2824.2	3329.9	4047.3	4944.1	5703.3
25°	1793.5	1762.7	1806.7	1915.9	2093.4	2454.5	2836.7	3374.6	4138.9	5052.9	5830.4
26°	1784.6	1754.3	1799.3	1911.2	2089.6	2454.3	2852.9	3412.4	4230.9	5152.7	5951.4
27°	1777.2	1747.2	1792.5	1907.1	2081.0	2455.7	2868.2	3454.7	4323.9	5251.7	6065.3
28°	1771.2	1741.1	1787.0	1903.0	2074.7	2464.1	2890.6	3498.9	4410.9	5346.5	6173.7
29°	1765.1	1715.3	1781.0	1899.8	2074.1	2472.1	2913.5	3548.1	4487.5	5431.2	6272.6
30°	1717.2	1621.9	1740.6	1897.3	2077.4	2465.9	2936.8	3599.6	4564.6	5517.8	6366.4
31°	1636.2	1604.0	1658.3	1889.5	2081.4	2446.2	2959.5	3651.2	4641.6	5600.6	6453.9
32°	1622.8	1604.5	1643.6	1880.7	2086.7	2427.0	2981.5	3703.7	4713.8	5679.0	6533.1
33°	1621.7	1606.6	1642.9	1827.0	2091.8	2408.4	2991.2	3755.5	4784.8	5749.1	6599.2
34°	1622.4	1610.6	1643.6	1762.5	2096.9	2409.1	3001.1	3808.1	4856.3	5811.6	6655.8
35°	1623.8	1615.9	1645.7	1753.7	2097.8	2414.9	3017.6	3852.6	4924.6	5865.4	6705.5
36°	1626.3	1620.6	1649.0	1756.1	2098.3	2422.0	3036.2	3887.0	4988.5	5915.5	6752.6
37°	1627.2	1624.6	1651.1	1759.4	2098.7	2431.2	3056.8	3923.9	5049.0	5964.6	6793.6
38°	1627.5	1628.2	1652.5	1759.0	2099.1	2441.8	3079.8	3964.9	5106.8	6012.5	6827.5
39°	1627.0	1628.4	1653.6	1758.3	2020.3	2446.2	3104.7	4004.7	5161.3	6054.8	6852.0
40°	1623.7	1539.0	1651.7	1761.9	1974.0	2453.9	3128.3	4046.7	5208.8	6093.9	6872.7
41°	1531.9	1493.0	1571.2	1767.6	1974.9	2471.0	3144.4	4086.8	5243.4	6130.8	6885.3
42°	1481.3	1493.7	1511.8	1773.5	1983.7	2488.8	3156.9	4125.5	5271.8	6168.1	6892.4
43°	1480.4	1496.2	1511.2	1777.7	1993.9	2507.8	3164.9	4165.5	5301.3	6199.8	6892.8
44°	1481.6	1498.1	1513.8	1740.1	2005.5	2527.4	3189.1	4203.4	5329.1	6228.9	6886.6



REPORT NUMBER: P1436701

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1483.4	1498.1	1516.8	1655.6	2016.7	2546.2	3219.7	4231.8	5358.5	6252.4	6869.0
46°	1485.0	1495.9	1519.1	1651.4	2019.5	2556.2	3251.2	4253.0	5387.9	6273.1	6839.8
47°	1486.0	1442.1	1521.0	1656.7	2022.4	2557.6	3283.2	4266.3	5412.7	6289.1	6799.7
48°	1436.8	1388.3	1520.8	1659.6	2035.7	2567.6	3314.6	4273.6	5435.2	6298.0	6753.9
49°	1387.6	1335.4	1431.8	1656.9	2043.5	2560.4	3345.1	4292.5	5451.4	6300.6	6699.1
50°	1338.6	1332.4	1367.6	1656.6	2002.0	2503.4	3364.1	4316.6	5463.4	6290.1	6639.1
51°	1343.6	1330.9	1372.0	1660.0	1911.1	2469.3	3349.1	4338.0	5469.8	6266.0	6569.8
52°	1350.8	1331.1	1378.8	1605.8	1912.0	2481.2	3339.4	4357.5	5468.7	6235.5	6490.6
53°	1358.5	1330.7	1386.0	1515.1	1926.3	2498.9	3351.7	4372.5	5458.5	6196.4	6401.7
54°	1364.6	1324.6	1353.4	1522.8	1944.4	2507.8	3346.8	4382.4	5441.7	6149.6	6299.7
55°	1367.4	1199.2	1320.7	1534.5	1955.0	2513.6	3344.4	4389.1	5410.6	6095.4	6191.7
56°	1248.9	1179.7	1288.1	1548.3	1964.0	2536.6	3348.6	4381.9	5364.3	6035.7	6072.2
57°	1227.1	1185.0	1261.4	1562.5	1962.6	2553.6	3341.5	4360.9	5313.9	5969.8	5946.1
58°	1232.5	1191.1	1267.2	1572.7	1877.9	2559.0	3341.7	4329.3	5262.1	5889.7	5809.0
59°	1240.5	1138.6	1274.3	1457.8	1849.5	2569.8	3343.3	4298.4	5212.1	5802.3	5663.0
60°	1150.5	1034.6	1193.7	1459.5	1875.4	2514.9	3323.8	4264.6	5154.9	5701.2	5503.9
61°	1096.7	1046.0	1136.2	1467.6	1904.0	2453.2	3282.3	4221.9	5085.4	5587.9	5333.9
62°	1110.0	1056.8	1150.8	1483.1	1933.5	2454.8	3262.8	4171.8	5006.3	5463.5	5161.3
63°	1123.7	925.3	1162.9	1392.9	1957.0	2455.9	3237.3	4113.6	4915.8	5322.4	4978.8
64°	978.1	913.3	1013.1	1381.2	1872.1	2456.4	3189.7	4035.4	4811.7	5174.5	4793.8
65°	987.4	924.5	1017.6	1355.1	1874.0	2440.4	3140.5	3937.7	4691.2	5012.4	4599.3
66°	994.2	772.2	1030.6	1328.9	1885.8	2380.8	3068.4	3828.3	4547.8	4843.1	4398.6
67°	823.3	747.2	854.5	1304.3	1872.9	2289.3	2986.7	3696.8	4392.7	4656.8	4199.6
68°	837.2	576.8	864.4	1332.6	1824.5	2295.0	2866.6	3500.3	4206.7	4452.7	3997.6
69°	669.5	520.3	695.5	1225.7	1821.5	2294.5	2711.0	3219.5	3985.2	4233.2	3803.4
70°	639.4	356.1	656.5	1213.5	1777.7	2289.1	2508.9	2848.8	3710.2	3989.8	3596.6
71°	423.4	191.9	424.8	1057.4	1758.2	2234.6	2275.3	2498.1	3381.3	3718.5	3383.4
72°	262.7	29.3	248.5	1021.9	1745.8	2134.3	2046.1	2187.0	3009.8	3417.1	3166.8
73°	216.9	0.4	197.7	927.2	1708.8	2031.2	1835.5	1859.7	2626.7	3086.2	2932.2
74°	195.8	0.3	182.3	824.7	1705.4	1928.8	1575.7	1489.0	2248.2	2729.9	2674.3
75°	160.7	0.3	156.1	775.7	1618.4	1818.8	1315.7	1029.6	1841.3	2341.7	2354.8
76°	125.7	0.3	129.8	748.6	1484.8	1695.2	1054.8	598.4	1341.7	1955.5	1974.4
77°	91.1	0.3	103.6	705.1	1351.2	1485.9	650.0	396.7	823.5	1587.5	1511.4
78°	67.8	0.3	83.6	635.1	1217.3	1276.5	339.0	197.7	623.2	1200.9	995.2
79°	66.9	0.3	83.5	537.6	1053.5	1062.5	227.6	154.5	429.3	801.5	736.7
80°	91.2	0.4	102.1	469.0	869.4	643.6	118.8	130.6	235.4	596.5	484.7
81°	112.4	0.4	107.3	437.3	657.7	464.7	94.0	111.3	201.6	393.6	232.8
82°	101.3	0.5	65.9	411.5	507.9	285.7	76.4	93.4	172.3	190.7	200.7
83°	62.8	0.5	46.5	342.7	361.8	109.2	61.7	77.1	140.5	149.2	176.2
84°	34.3	0.6	27.0	246.0	260.9	92.3	49.1	62.7	109.4	121.5	152.9
85°	25.5	0.7	7.7	149.3	160.0	73.3	38.4	48.3	83.4	96.3	130.6
86°	16.8	0.7	6.8	55.0	61.5	54.0	29.2	34.0	66.2	74.5	108.9
87°	8.2	0.8	6.8	38.2	31.6	38.7	22.2	22.4	49.1	58.2	85.0
88°	5.6	0.9	5.9	21.4	21.8	26.8	15.1	12.9	32.0	42.1	65.3
89°	4.0	1.0	3.3	4.9	12.1	15.0	8.0	9.0	18.6	26.0	45.8



REPORT NUMBER: P1436701  
 CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**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: P1436701

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**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: P1436701

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**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: P1436701

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
0°	2680.1	2680.1	2680.1
1°	2748.6	2759.0	2763.7
2°	2827.9	2847.4	2854.4
3°	2913.5	2942.3	2953.1
4°	3008.2	3048.5	3061.5
5°	3108.5	3162.2	3179.8
6°	3219.9	3287.4	3309.8
7°	3338.5	3418.8	3447.3
8°	3464.8	3563.0	3597.7
9°	3601.8	3719.7	3761.4
10°	3747.0	3885.4	3932.5
11°	3906.5	4066.0	4118.4
12°	4074.2	4259.0	4320.1
13°	4256.2	4468.2	4534.7
14°	4447.2	4688.8	4768.0
15°	4652.2	4923.3	5017.7
16°	4858.1	5161.8	5275.1
17°	5069.6	5407.7	5528.5
18°	5281.3	5650.2	5781.1
19°	5485.0	5878.6	6015.6
20°	5680.3	6093.2	6230.4
21°	5864.5	6289.7	6423.0
22°	6035.0	6463.1	6590.7
23°	6197.4	6621.2	6738.9
24°	6348.9	6756.6	6868.5
25°	6486.1	6875.4	6980.7
26°	6610.4	6975.3	7075.5
27°	6722.7	7062.2	7155.1
28°	6822.0	7134.8	7220.8
29°	6908.1	7194.2	7275.3
30°	6983.5	7242.5	7316.5
31°	7047.5	7280.2	7348.7
32°	7099.9	7308.1	7368.2
33°	7141.8	7324.2	7378.0
34°	7176.1	7331.2	7378.7
35°	7200.5	7329.1	7370.3
36°	7215.2	7318.6	7354.3
37°	7220.8	7301.1	7329.8
38°	7218.7	7276.7	7299.1
39°	7207.5	7245.9	7261.3
40°	7188.7	7209.6	7218.0
41°	7163.5	7167.7	7166.3
42°	7130.7	7119.5	7106.9
43°	7089.4	7065.0	7039.1
44°	7040.5	7001.4	6962.7



REPORT NUMBER: P1436701

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
45°	6987.0	6931.1	6876.3
46°	6926.6	6852.1	6777.4
47°	6857.8	6760.4	6673.1
48°	6783.2	6664.4	6563.3
49°	6697.9	6552.6	6438.8
50°	6602.9	6432.6	6300.6
51°	6494.7	6298.2	6151.0
52°	6374.3	6149.9	5990.0
53°	6240.5	5989.4	5818.6
54°	6097.6	5816.7	5634.4
55°	5946.5	5635.3	5446.5
56°	5780.4	5439.2	5243.4
57°	5608.6	5232.5	5041.2
58°	5427.8	5027.2	4831.0
59°	5238.7	4814.3	4611.6
60°	5040.8	4595.1	4377.1
61°	4838.4	4362.0	4126.6
62°	4632.7	4125.2	3864.9
63°	4427.9	3878.2	3590.6
64°	4225.6	3632.5	3325.1
65°	4019.5	3387.8	3084.3
66°	3811.8	3165.4	2872.7
67°	3604.8	2961.9	2698.7
68°	3400.6	2785.5	2512.0
69°	3206.5	2596.2	2237.8
70°	3024.2	2359.8	1835.7
71°	2836.1	2034.4	1306.9
72°	2627.8	1576.6	831.8
73°	2378.0	1068.9	640.1
74°	2039.0	652.6	454.5
75°	1597.8	475.6	268.8
76°	1137.3	299.5	237.1
77°	762.2	254.5	212.1
78°	595.1	224.0	191.7
79°	432.7	199.3	173.7
80°	270.3	178.1	157.3
81°	225.7	159.4	142.1
82°	194.4	142.5	128.1
83°	167.4	126.5	114.5
84°	141.5	111.7	101.5
85°	114.5	97.3	89.1
86°	93.3	83.9	76.7
87°	75.2	71.0	66.0
88°	61.6	60.2	55.4
89°	48.1	49.5	44.8



REPORT NUMBER: P1436701

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**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: P1436701

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**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: P1436701  
CATALOG NUMBER: XAS180-SFPM (3000K-108W-T4)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)