

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: P1436699

Luminaire Tested: XAS180-SFPM (3000K-108W-T3)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436699
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-T3)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 3
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

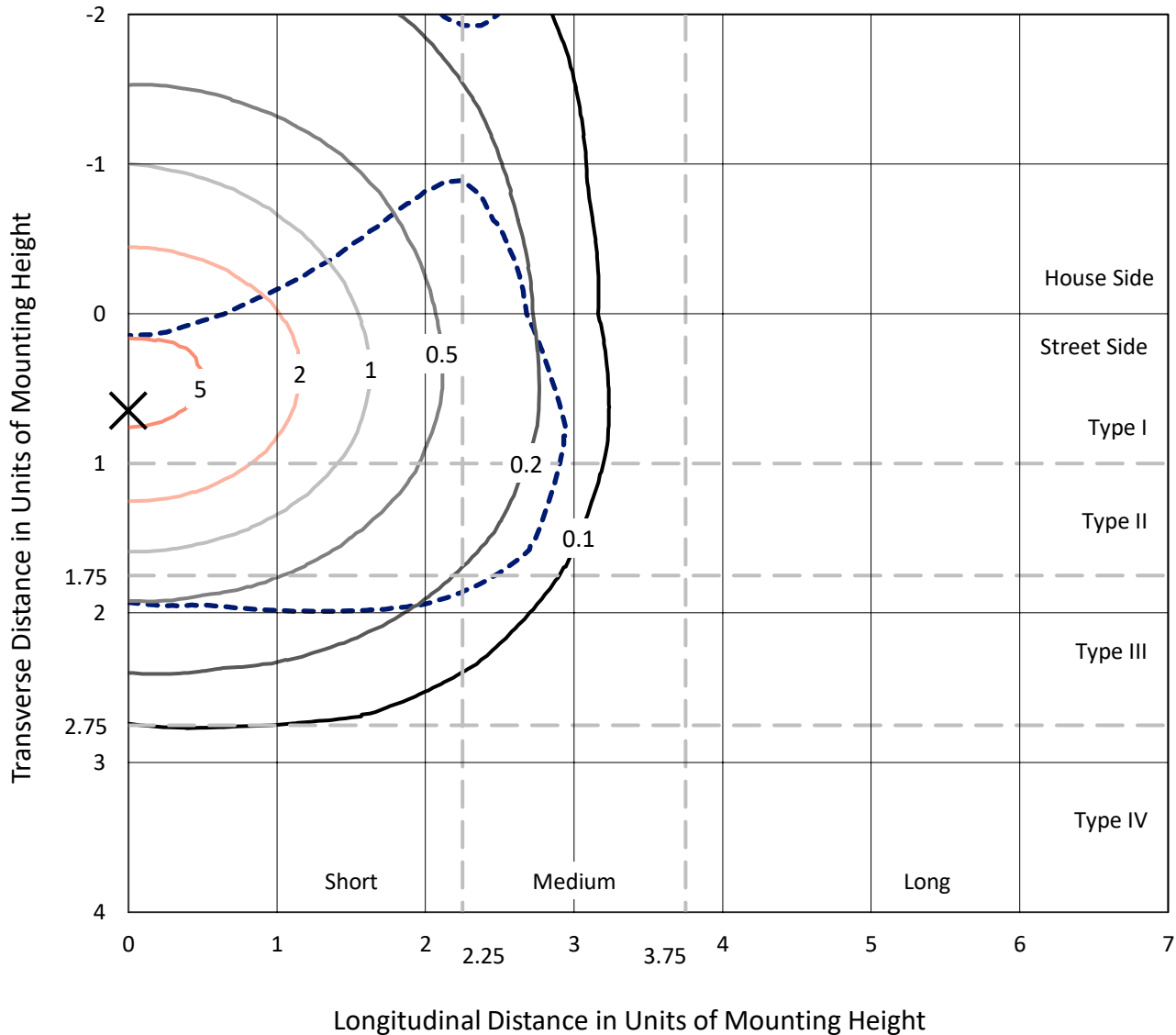
Lumens per Lamp: 27928 (1 lamp)
Luminaire Lumens: 16637 lumens
Efficiency: 59.6%
Efficacy: 151.4 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.35m x L: 0.35m x H: 0.35m)
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 109.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

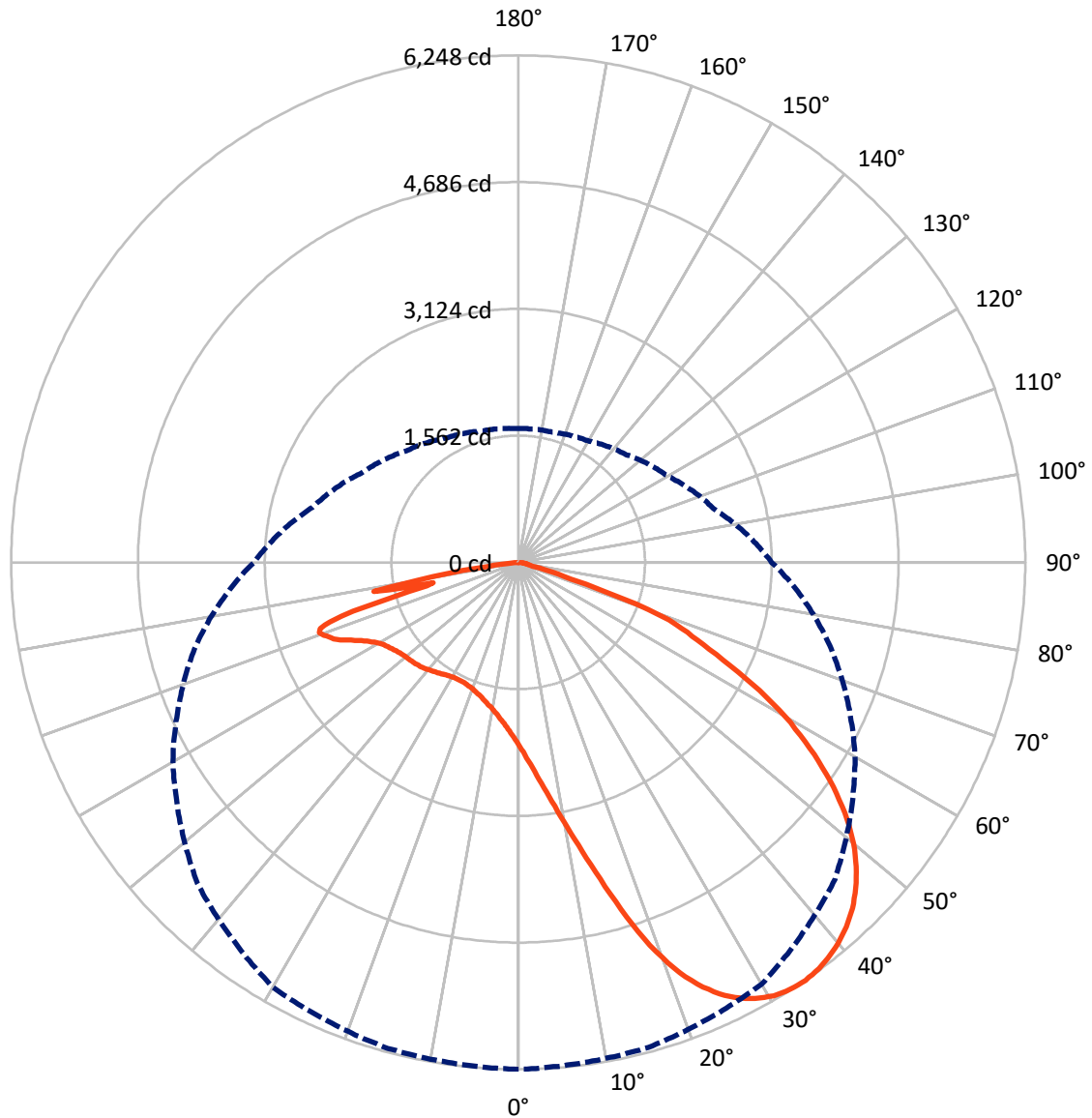
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 33-Deg Vertical

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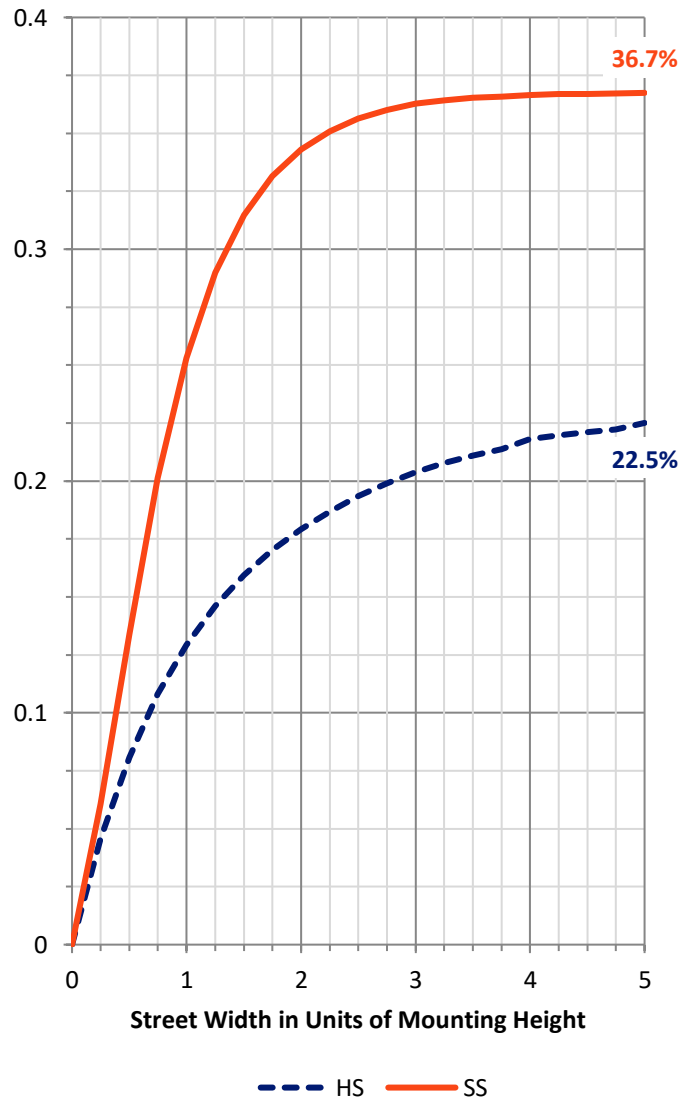
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6366.2	0.0	6366.2
	% Lamp	22.8	0.0	22.8
Street Side	Lumens	10270.8	0.0	10270.8
	% Lamp	36.8	0.0	36.8
Total	Lumens	16637.0	0.0	16637.0
	% Lamp	59.6	0.0	59.6

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	226.9	1.4	0.8
10°-20°	790.9	4.8	2.8
20°-30°	1553.8	9.3	5.6
30°-40°	2326.0	14.0	8.3
40°-50°	2961.5	17.8	10.6
50°-60°	3311.1	19.9	11.9
60°-70°	3199.0	19.2	11.5
70°-80°	1995.0	12.0	7.1
80°-90°	272.8	1.6	1.0
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°	16637.0	100.0	59.6
0°-180°	16637.0	100.0	59.6

Coefficient of Utilization



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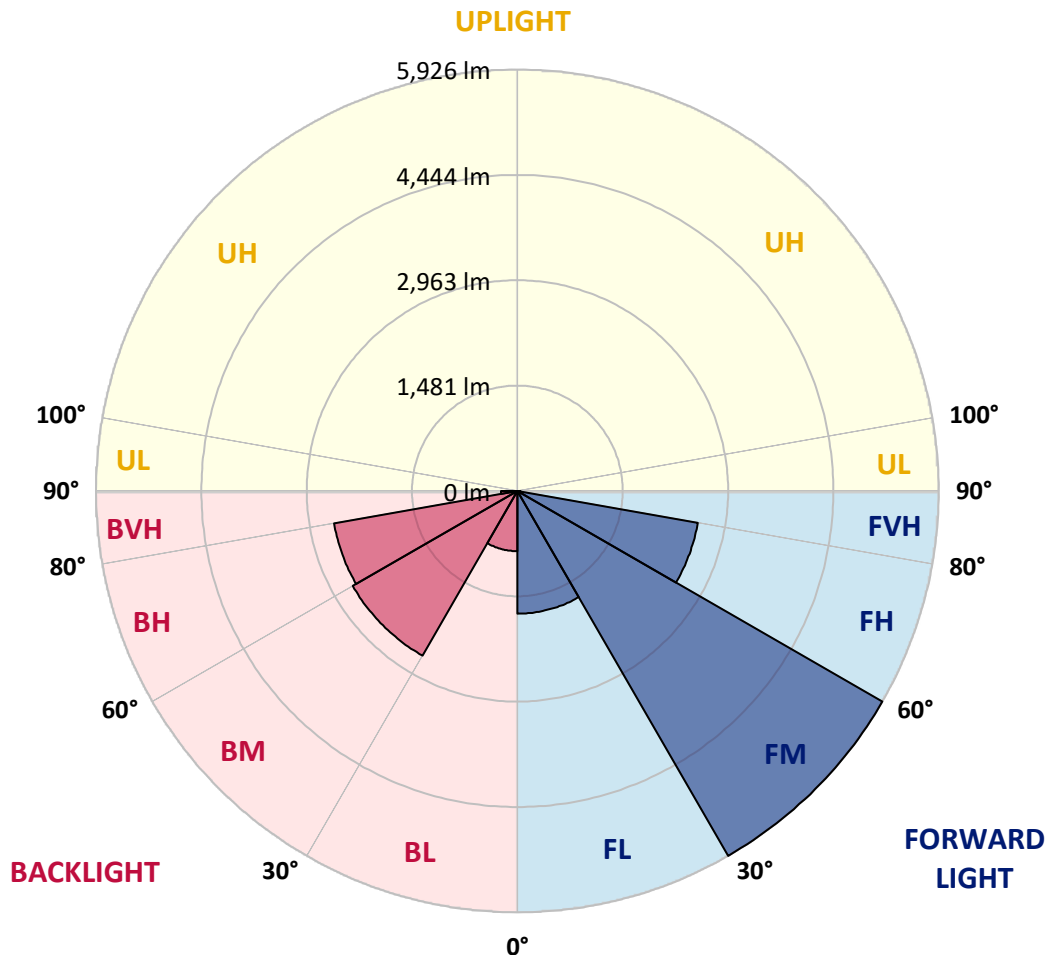
CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1725.2	6.2			
FM (30°-60°)	5925.9	21.2			
FH (60°-80°)	2576.5	9.2			G2/5000
FVH (80°-90°)	43.2	0.2			G1/100
BL (0°-30°)	846.3	3.0	B2/1000		
BM (30°-60°)	2672.7	9.6	B3/5000		
BH (60°-80°)	2617.5	9.4	B4/5000		G4/5000
BVH (80°-90°)	229.5	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	11291.0	40.4			

BUG Rating: B4-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2270.6	2270.6	2270.6	2270.6	2270.6	2270.6	2270.6	2270.6	2270.6	2270.6	2270.6
1°	2338.3	2336.5	2331.8	2322.0	2309.3	2293.9	2265.0	2248.3	2233.6	2221.8	2214.8
2°	2413.5	2409.4	2397.3	2373.9	2345.8	2312.2	2266.1	2233.4	2205.0	2181.5	2165.6
3°	2496.2	2489.3	2466.1	2430.2	2385.0	2333.8	2270.2	2221.5	2179.2	2145.5	2120.3
4°	2587.7	2577.0	2541.9	2491.1	2428.3	2357.8	2275.2	2211.2	2155.9	2111.6	2080.0
5°	2686.8	2672.6	2625.8	2557.2	2473.5	2383.1	2282.0	2202.7	2134.8	2082.0	2043.8
6°	2795.7	2774.7	2716.3	2629.8	2524.2	2411.9	2290.6	2196.1	2116.1	2054.6	2009.4
7°	2911.3	2886.4	2815.5	2707.5	2578.1	2443.6	2303.2	2193.1	2100.1	2029.4	1977.9
8°	3038.0	3005.7	2920.5	2790.3	2636.6	2478.3	2317.2	2191.9	2086.9	2006.3	1949.6
9°	3175.6	3136.4	3033.8	2879.5	2700.0	2515.4	2333.2	2192.2	2075.4	1985.6	1922.8
10°	3322.7	3275.2	3154.7	2974.7	2766.9	2555.7	2352.2	2194.3	2065.9	1967.8	1898.2
11°	3479.6	3426.2	3283.7	3077.1	2836.7	2598.2	2373.3	2198.6	2057.7	1951.4	1877.2
12°	3649.9	3586.3	3421.0	3183.7	2910.1	2643.7	2395.4	2204.3	2051.3	1937.1	1858.0
13°	3832.9	3759.4	3570.5	3297.2	2989.4	2691.4	2418.2	2211.1	2046.5	1924.2	1840.8
14°	4030.3	3947.5	3731.4	3419.2	3071.0	2741.0	2442.4	2217.9	2041.9	1913.1	1824.3
15°	4240.6	4143.6	3900.0	3546.6	3157.6	2792.2	2467.8	2225.7	2038.7	1903.4	1808.8
16°	4458.9	4351.2	4072.7	3683.7	3249.9	2846.0	2495.6	2235.1	2036.3	1894.1	1794.8
17°	4675.9	4555.1	4246.2	3823.7	3344.1	2902.1	2524.4	2245.5	2035.7	1885.6	1781.6
18°	4889.5	4756.6	4418.7	3964.4	3443.7	2959.6	2554.7	2256.9	2035.1	1878.1	1769.5
19°	5089.1	4948.3	4589.5	4100.7	3548.2	3019.5	2585.8	2269.9	2035.1	1871.6	1759.5
20°	5272.0	5129.5	4753.1	4236.6	3654.0	3081.8	2618.5	2283.7	2035.6	1865.8	1751.1
21°	5435.6	5294.3	4911.1	4371.0	3758.6	3146.2	2651.8	2298.7	2037.0	1860.4	1743.7
22°	5579.4	5441.8	5055.9	4498.1	3861.6	3214.1	2686.3	2313.1	2040.2	1856.3	1737.1
23°	5706.4	5573.8	5192.0	4620.8	3964.6	3282.6	2722.1	2328.4	2043.5	1853.2	1731.8
24°	5816.1	5691.1	5318.6	4736.7	4064.9	3353.5	2759.2	2345.2	2047.8	1851.3	1726.6
25°	5910.8	5794.7	5434.4	4845.6	4161.5	3425.3	2795.9	2362.0	2052.7	1850.7	1722.8
26°	5991.1	5882.8	5539.0	4948.9	4255.9	3497.7	2833.6	2379.2	2058.8	1851.5	1719.5
27°	6059.0	5958.4	5633.9	5048.4	4344.9	3570.4	2873.1	2396.0	2066.0	1852.5	1717.2
28°	6115.0	6023.9	5718.2	5141.7	4429.8	3641.6	2913.3	2413.0	2073.6	1854.5	1716.0
29°	6161.5	6075.1	5792.8	5228.6	4509.8	3711.1	2954.8	2430.2	2082.4	1857.7	1716.0
30°	6197.2	6117.4	5858.0	5310.9	4587.9	3779.4	2996.0	2448.7	2092.0	1861.6	1716.7
31°	6222.3	6150.8	5913.3	5386.4	4659.0	3846.2	3038.1	2467.2	2102.4	1866.6	1718.8
32°	6239.5	6173.4	5959.0	5455.0	4727.1	3911.6	3080.9	2486.6	2113.7	1872.3	1722.2
33°	6247.9	6187.7	5999.5	5519.5	4791.4	3975.7	3123.5	2507.1	2125.6	1878.4	1726.9
34°	6247.9	6193.7	6030.4	5577.2	4851.2	4036.2	3165.9	2526.8	2138.6	1885.6	1732.5
35°	6241.3	6192.5	6053.1	5628.9	4907.8	4093.8	3208.8	2548.1	2151.8	1894.1	1739.6
36°	6227.0	6184.7	6067.4	5674.7	4961.2	4150.1	3250.9	2569.9	2165.7	1903.4	1747.8
37°	6206.2	6171.0	6073.3	5714.1	5011.7	4204.2	3293.5	2591.8	2180.0	1914.2	1756.9
38°	6178.8	6151.4	6073.9	5746.4	5057.9	4255.3	3335.1	2614.7	2195.2	1925.7	1767.0
39°	6147.2	6127.0	6066.8	5774.1	5102.1	4304.9	3378.1	2638.0	2210.8	1938.4	1777.3
40°	6110.3	6096.6	6053.1	5795.7	5142.5	4352.0	3420.0	2662.9	2227.1	1952.2	1788.1
41°	6066.8	6059.6	6032.8	5811.5	5180.2	4396.7	3460.0	2688.9	2243.8	1966.2	1799.2
42°	6015.6	6019.7	6006.0	5822.5	5214.6	4439.6	3498.8	2714.6	2261.6	1981.4	1811.4
43°	5958.4	5971.5	5973.3	5826.2	5247.0	4481.2	3536.2	2741.0	2280.6	1997.8	1823.6
44°	5894.1	5916.2	5935.2	5823.3	5275.0	4520.6	3571.8	2768.7	2300.1	2014.4	1836.1



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	5820.5	5856.4	5889.2	5814.1	5300.1	4558.1	3605.9	2796.6	2321.0	2031.5	1848.6
46°	5737.7	5787.2	5838.1	5799.5	5324.0	4596.3	3640.5	2826.2	2343.3	2048.3	1861.5
47°	5650.3	5709.8	5781.8	5778.2	5343.5	4630.3	3673.6	2855.4	2366.4	2065.7	1875.1
48°	5555.0	5624.5	5718.1	5748.1	5359.3	4661.8	3704.4	2886.7	2389.9	2084.2	1890.0
49°	5450.8	5528.0	5646.5	5713.6	5371.8	4690.0	3732.5	2918.4	2415.4	2104.1	1905.4
50°	5334.2	5421.9	5565.4	5670.2	5378.9	4715.5	3759.9	2950.8	2441.7	2124.5	1922.5
51°	5206.6	5304.6	5476.7	5618.2	5381.1	4737.2	3786.8	2984.7	2469.1	2146.9	1940.5
52°	5069.1	5178.9	5377.8	5556.1	5377.5	4755.2	3811.1	3019.8	2498.0	2170.0	1959.1
53°	4922.7	5041.0	5272.2	5487.5	5367.7	4769.1	3833.1	3053.5	2528.2	2194.6	1978.7
54°	4768.3	4890.1	5153.9	5409.2	5349.1	4780.0	3852.0	3086.0	2561.1	2221.1	1999.6
55°	4605.3	4734.8	5026.7	5322.5	5321.7	4786.3	3868.7	3116.4	2595.2	2249.4	2022.8
56°	4435.2	4567.1	4887.7	5225.0	5285.7	4785.6	3881.6	3144.4	2630.1	2280.6	2047.1
57°	4260.7	4400.4	4743.2	5120.3	5239.5	4777.1	3892.5	3170.8	2666.1	2313.1	2074.2
58°	4079.3	4221.6	4589.6	5004.0	5180.6	4761.6	3898.6	3194.8	2703.2	2350.7	2104.6
59°	3893.6	4041.7	4433.1	4877.5	5111.8	4737.0	3898.3	3216.8	2741.4	2391.0	2138.4
60°	3693.3	3854.2	4268.6	4744.4	5032.1	4702.5	3892.2	3237.4	2780.6	2432.9	2175.5
61°	3480.7	3659.7	4099.0	4600.4	4938.9	4658.6	3879.4	3253.5	2818.8	2478.1	2216.1
62°	3254.3	3455.1	3926.3	4449.3	4839.1	4602.6	3858.8	3264.0	2857.8	2526.3	2259.0
63°	3023.6	3240.0	3750.2	4290.6	4729.5	4533.9	3827.7	3268.8	2896.0	2579.8	2305.7
64°	2795.3	3026.0	3571.5	4127.1	4608.9	4452.8	3784.8	3266.9	2933.5	2635.6	2359.6
65°	2586.3	2813.4	3387.3	3960.9	4478.8	4357.7	3733.0	3258.0	2969.2	2694.8	2420.6
66°	2405.5	2618.4	3203.0	3794.5	4335.2	4250.4	3666.9	3237.5	3001.8	2760.4	2486.5
67°	2254.6	2445.2	3021.5	3629.5	4184.7	4126.4	3581.9	3207.0	3029.6	2827.5	2564.2
68°	2099.1	2290.1	2846.6	3462.9	4017.3	3988.0	3450.0	3158.3	3052.5	2896.6	2653.6
69°	1872.2	2132.5	2682.5	3296.5	3841.8	3825.3	3255.8	3058.3	3064.0	2970.9	2754.5
70°	1536.7	1929.5	2527.5	3129.4	3653.5	3620.4	2997.9	2899.7	3067.0	3048.6	2860.9
71°	1088.7	1637.7	2376.0	2963.9	3441.5	3372.2	2683.1	2692.9	3047.2	3129.3	2940.6
72°	678.6	1241.8	2207.6	2797.3	3201.1	3078.4	2388.5	2471.6	2994.9	3206.0	3018.9
73°	511.4	816.9	2009.8	2621.8	2932.4	2756.9	2131.8	2284.2	2905.4	3274.7	3122.2
74°	345.8	606.1	1742.1	2420.5	2637.2	2423.6	1820.3	2124.7	2797.1	3313.4	3218.2
75°	180.3	402.4	1361.8	2164.4	2322.3	2063.7	1378.0	1902.2	2685.1	3329.5	3292.9
76°	153.9	198.6	947.9	1845.2	1996.1	1619.6	935.7	1468.0	2599.5	3285.7	3313.4
77°	133.3	163.9	607.6	1450.9	1655.5	1098.3	493.9	1033.7	2508.3	3175.9	3256.0
78°	116.7	139.9	466.4	976.6	1284.4	631.2	261.0	600.6	2323.5	2948.6	2974.4
79°	102.6	121.0	329.2	526.6	899.4	478.5	175.2	306.1	1920.4	2629.5	2560.1
80°	89.6	104.9	192.0	351.8	551.5	333.8	151.8	186.5	1313.5	2247.9	2130.0
81°	77.8	90.5	153.8	179.3	354.5	189.1	128.4	154.7	710.4	1730.3	1958.8
82°	66.9	77.7	129.4	148.1	162.9	160.6	105.1	122.8	338.8	1381.0	1887.6
83°	57.2	65.5	108.6	126.5	120.2	131.5	88.3	91.0	220.6	1031.6	1470.6
84°	47.3	55.0	88.1	107.6	96.0	99.6	72.5	72.5	180.1	683.7	1053.5
85°	37.5	44.7	66.3	89.6	74.2	75.0	57.2	56.7	149.5	430.0	637.2
86°	28.5	34.3	51.5	72.5	55.0	55.9	42.5	43.4	118.8	305.4	369.9
87°	19.7	25.1	36.7	54.1	40.1	41.0	29.3	31.7	88.2	180.8	296.2
88°	11.8	16.4	21.8	32.8	25.2	26.1	20.3	22.4	56.9	59.3	222.5
89°	5.5	7.8	9.8	11.5	12.0	12.7	11.4	13.0	38.5	40.0	148.8



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CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

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: P1436699

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

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: P1436699

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

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: P1436699

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2270.6	2270.6	2270.6	2270.6	2270.6	2270.6	2270.6	2270.6	2270.6	2270.6	2270.6
1°	2209.8	2209.3	2213.6	2221.7	2233.2	2247.8	2263.5	2268.7	2285.4	2300.6	2315.2
2°	2156.6	2154.3	2160.9	2175.1	2195.9	2222.1	2252.9	2274.1	2307.6	2340.6	2369.8
3°	2106.9	2103.4	2111.9	2131.4	2161.7	2199.9	2244.4	2281.8	2332.2	2383.1	2428.9
4°	2062.0	2057.9	2068.5	2092.2	2130.2	2179.7	2238.4	2291.4	2360.5	2429.4	2493.0
5°	2021.7	2016.3	2027.6	2057.0	2102.1	2162.2	2233.7	2303.3	2390.0	2478.8	2562.0
6°	1983.7	1976.5	1989.8	2024.2	2077.0	2146.5	2231.6	2317.0	2423.3	2533.3	2636.3
7°	1948.4	1940.0	1955.3	1993.2	2053.4	2133.4	2231.6	2333.2	2459.1	2591.8	2717.1
8°	1916.4	1907.2	1922.9	1965.6	2032.8	2122.5	2233.3	2351.4	2496.8	2653.6	2804.3
9°	1886.1	1875.9	1893.6	1939.9	2013.5	2112.9	2236.1	2370.2	2538.1	2720.9	2897.5
10°	1859.1	1847.6	1867.0	1916.3	1996.1	2104.1	2240.8	2392.6	2582.6	2791.7	2994.7
11°	1834.8	1822.0	1843.0	1896.0	1981.4	2097.5	2247.3	2417.4	2630.0	2867.1	3100.9
12°	1812.2	1798.8	1820.6	1877.9	1968.2	2092.6	2255.7	2442.9	2678.5	2945.7	3211.4
13°	1791.9	1776.5	1799.8	1861.2	1957.6	2089.2	2266.1	2470.1	2730.3	3030.3	3333.2
14°	1771.9	1755.8	1780.5	1845.6	1948.2	2087.7	2276.8	2499.1	2784.9	3117.4	3460.2
15°	1753.8	1737.2	1762.7	1830.6	1940.7	2087.7	2287.9	2529.1	2841.3	3211.0	3595.8
16°	1737.1	1718.9	1746.1	1816.9	1933.0	2088.3	2300.2	2561.0	2900.0	3310.6	3738.1
17°	1721.9	1703.2	1731.1	1804.7	1926.1	2089.7	2314.1	2593.6	2961.6	3414.3	3884.3
18°	1708.2	1687.8	1717.2	1793.2	1920.6	2092.5	2328.7	2627.4	3025.4	3521.9	4032.7
19°	1695.6	1674.3	1704.3	1783.9	1914.9	2096.1	2344.8	2662.4	3091.8	3632.5	4178.8
20°	1684.1	1662.2	1692.7	1775.9	1910.1	2099.6	2361.7	2698.4	3160.2	3745.6	4322.5
21°	1674.7	1651.4	1683.4	1769.0	1906.2	2104.1	2379.5	2736.7	3231.0	3859.7	4459.6
22°	1666.2	1642.2	1675.0	1763.6	1904.2	2109.2	2397.9	2775.1	3305.0	3972.6	4588.0
23°	1658.7	1634.8	1668.1	1758.9	1902.8	2115.2	2416.6	2815.5	3383.0	4081.9	4711.2
24°	1652.5	1629.0	1662.6	1755.2	1902.8	2121.9	2435.5	2856.7	3462.2	4186.9	4825.8
25°	1648.3	1624.6	1659.1	1752.2	1903.9	2129.3	2454.6	2898.5	3540.8	4288.6	4934.2
26°	1645.1	1621.7	1656.9	1750.8	1905.5	2137.4	2475.4	2940.9	3620.2	4383.9	5036.4
27°	1642.9	1620.1	1655.3	1749.8	1908.4	2145.8	2495.2	2984.1	3699.9	4474.4	5133.4
28°	1642.2	1620.7	1655.6	1750.2	1912.3	2155.2	2516.1	3028.7	3778.6	4558.4	5223.9
29°	1643.0	1623.2	1657.5	1751.5	1917.3	2165.3	2536.8	3074.4	3855.1	4639.4	5309.9
30°	1645.2	1627.3	1661.4	1754.0	1922.6	2176.6	2558.5	3120.1	3928.9	4715.2	5388.3
31°	1648.8	1632.7	1665.8	1757.9	1928.8	2188.7	2579.6	3165.6	4000.4	4784.9	5462.1
32°	1653.2	1639.8	1671.1	1763.4	1936.7	2201.8	2601.3	3211.2	4067.7	4851.1	5528.9
33°	1658.7	1647.9	1676.9	1769.7	1945.1	2215.1	2622.7	3257.2	4132.5	4913.6	5591.8
34°	1664.9	1656.3	1683.1	1776.7	1954.0	2228.8	2645.3	3303.2	4194.1	4972.4	5647.9
35°	1671.4	1666.1	1689.9	1784.6	1964.2	2243.5	2668.3	3349.8	4252.5	5027.6	5698.8
36°	1677.8	1676.6	1696.9	1793.5	1974.3	2258.6	2692.9	3395.8	4309.1	5078.6	5743.4
37°	1684.7	1687.1	1704.3	1803.6	1985.4	2273.8	2717.4	3441.2	4361.1	5126.3	5781.8
38°	1691.2	1698.0	1712.6	1814.1	1997.6	2289.7	2743.2	3485.8	4411.6	5171.6	5815.8
39°	1698.1	1709.0	1720.8	1825.7	2010.7	2306.7	2769.3	3529.4	4458.0	5213.8	5842.4
40°	1705.5	1719.7	1729.5	1838.2	2024.7	2324.4	2796.5	3572.6	4502.4	5252.3	5863.3
41°	1713.0	1730.4	1738.1	1851.1	2039.0	2342.9	2823.6	3612.5	4545.1	5287.4	5876.5
42°	1720.3	1741.1	1747.4	1864.1	2054.6	2362.6	2851.2	3652.2	4586.5	5319.7	5882.6
43°	1728.4	1751.4	1757.1	1878.1	2070.5	2383.3	2880.5	3691.0	4625.9	5347.6	5884.1
44°	1737.4	1761.6	1768.0	1891.9	2087.5	2404.8	2910.1	3730.6	4662.6	5372.5	5879.5



REPORT NUMBER: P1436699

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1747.1	1770.6	1779.1	1906.2	2105.1	2426.8	2940.0	3767.7	4696.9	5394.3	5866.3
46°	1757.4	1778.0	1790.7	1921.1	2123.7	2449.1	2970.8	3800.9	4727.2	5412.1	5846.5
47°	1768.5	1784.7	1803.2	1935.9	2142.7	2473.4	3001.9	3831.3	4755.1	5425.7	5819.3
48°	1780.9	1791.9	1816.3	1951.2	2163.4	2498.8	3032.4	3860.3	4778.6	5434.1	5785.8
49°	1794.7	1799.1	1830.4	1966.5	2183.7	2525.5	3063.9	3886.8	4798.0	5437.2	5744.7
50°	1810.2	1805.8	1846.0	1983.4	2205.6	2555.0	3096.1	3910.9	4813.4	5435.0	5697.1
51°	1828.0	1813.6	1862.8	2001.0	2228.4	2585.2	3128.2	3931.4	4824.7	5427.7	5640.5
52°	1847.0	1823.8	1880.9	2020.1	2253.1	2615.8	3160.4	3949.9	4831.6	5413.3	5574.5
53°	1866.0	1836.6	1900.2	2040.2	2279.8	2647.5	3189.2	3963.9	4834.0	5392.7	5501.2
54°	1886.4	1849.8	1921.8	2062.6	2309.2	2679.8	3217.1	3974.6	4830.9	5365.7	5420.3
55°	1909.9	1865.2	1945.3	2086.9	2340.9	2712.5	3242.0	3982.3	4821.1	5330.1	5330.4
56°	1934.8	1883.5	1969.7	2113.1	2374.9	2747.1	3264.5	3984.9	4802.3	5286.0	5230.6
57°	1960.9	1904.0	1996.1	2143.0	2411.2	2782.2	3284.5	3983.1	4775.7	5232.0	5122.5
58°	1987.1	1921.5	2023.6	2175.6	2449.4	2816.9	3301.6	3977.2	4741.7	5166.0	5002.5
59°	2012.7	1940.8	2049.7	2211.6	2491.8	2848.5	3314.5	3965.6	4700.9	5093.2	4875.7
60°	2041.4	1969.9	2079.1	2251.3	2535.2	2880.1	3325.4	3946.3	4650.5	5007.7	4739.1
61°	2078.9	2009.7	2117.7	2295.2	2582.1	2912.4	3332.1	3919.0	4590.5	4911.8	4592.7
62°	2122.8	2051.3	2163.3	2342.6	2630.3	2944.2	3333.2	3883.4	4520.1	4807.4	4439.8
63°	2172.2	2099.9	2213.3	2391.3	2682.0	2975.0	3327.7	3838.0	4438.7	4689.6	4282.6
64°	2229.0	2161.0	2273.2	2446.0	2735.5	3003.7	3317.4	3779.7	4347.2	4560.9	4118.8
65°	2295.3	2229.5	2340.9	2509.4	2793.1	3030.4	3297.8	3709.8	4240.9	4424.9	3952.1
66°	2372.1	2308.0	2416.9	2578.3	2852.0	3052.1	3266.6	3623.3	4120.0	4278.5	3784.6
67°	2455.5	2392.6	2498.0	2653.9	2910.0	3071.6	3221.2	3506.8	3987.3	4119.4	3617.1
68°	2544.7	2460.7	2582.7	2740.5	2971.3	3084.6	3138.6	3330.5	3828.9	3950.4	3447.4
69°	2599.6	2505.3	2632.7	2837.9	3039.7	3087.3	2997.5	3086.4	3636.3	3764.3	3279.6
70°	2646.4	2561.1	2677.0	2937.7	3107.9	3078.9	2792.3	2778.5	3395.9	3555.1	3108.2
71°	2712.7	2600.8	2738.7	3012.7	3178.1	3043.9	2551.8	2461.3	3100.3	3313.9	2928.8
72°	2755.2	2573.6	2777.3	3091.9	3242.4	2970.3	2332.0	2167.2	2769.2	3046.3	2746.9
73°	2742.3	2432.6	2765.5	3191.8	3293.4	2856.0	2138.7	1880.0	2424.0	2749.3	2545.7
74°	2655.3	2121.0	2682.0	3280.7	3308.3	2736.2	1927.0	1520.4	2082.1	2422.2	2315.4
75°	2402.9	1623.4	2442.5	3338.1	3283.5	2618.7	1513.1	1048.9	1698.7	2077.2	2036.8
76°	1961.8	1162.5	2010.2	3345.7	3178.2	2497.2	1099.2	595.9	1233.0	1737.1	1701.1
77°	1505.1	1078.0	1595.0	3274.4	3023.0	2331.7	687.2	444.2	749.0	1399.9	1293.7
78°	1445.3	1448.5	1579.6	2972.4	2779.3	1994.7	347.1	300.3	563.6	1041.4	841.4
79°	1813.4	1814.7	1939.4	2516.2	2498.0	1455.5	199.8	156.5	385.8	681.7	616.2
80°	2115.2	1437.9	2157.0	2040.8	2107.2	916.3	165.9	132.8	208.1	502.3	393.5
81°	1629.2	1061.2	1634.8	1888.5	1661.1	387.9	132.0	113.6	173.3	324.5	170.9
82°	1143.1	685.5	1112.7	1889.4	1214.9	234.7	98.6	96.0	147.7	146.6	143.9
83°	658.9	352.5	598.4	1421.1	770.6	181.2	80.5	79.9	119.7	112.1	123.7
84°	366.6	247.7	353.2	952.8	452.6	149.7	64.9	64.4	91.9	89.0	104.8
85°	263.8	143.0	231.2	495.2	324.0	118.1	50.7	51.0	68.7	67.3	86.7
86°	161.0	40.9	150.0	396.1	195.4	86.6	38.4	37.5	53.1	51.8	69.3
87°	58.8	27.6	69.6	297.0	70.2	60.6	27.5	24.1	37.4	36.5	49.2
88°	39.8	14.3	37.6	198.0	47.5	41.2	19.1	13.5	21.8	21.1	29.0
89°	20.9	1.0	5.7	98.9	24.7	21.7	10.6	5.0	9.2	8.8	8.8



REPORT NUMBER: P1436699

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

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: P1436699

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

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: P1436699

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

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: P1436699

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2270.6	2270.6	2270.6
1°	2326.4	2334.2	2338.3
2°	2393.8	2408.2	2413.5
3°	2464.6	2488.9	2496.2
4°	2543.5	2577.3	2587.7
5°	2628.8	2672.2	2686.8
6°	2721.6	2776.9	2795.7
7°	2822.3	2889.6	2911.3
8°	2927.7	3010.0	3038.0
9°	3045.4	3142.1	3175.6
10°	3167.5	3283.8	3322.7
11°	3300.9	3437.2	3479.6
12°	3445.0	3598.9	3649.9
13°	3597.6	3776.1	3832.9
14°	3762.3	3965.6	4030.3
15°	3932.2	4161.1	4240.6
16°	4108.7	4363.9	4458.9
17°	4288.2	4571.5	4675.9
18°	4468.4	4778.1	4889.5
19°	4639.7	4973.1	5089.1
20°	4808.3	5154.3	5272.0
21°	4961.1	5322.9	5435.6
22°	5106.0	5471.2	5579.4
23°	5245.4	5603.5	5706.4
24°	5372.2	5718.3	5816.1
25°	5488.9	5819.6	5910.8
26°	5596.0	5905.9	5991.1
27°	5689.8	5978.6	6059.0
28°	5773.5	6040.0	6115.0
29°	5848.3	6091.8	6161.5
30°	5911.5	6131.7	6197.2
31°	5966.1	6162.7	6222.3
32°	6010.2	6185.9	6239.5
33°	6045.9	6200.2	6247.9
34°	6074.5	6206.2	6247.9
35°	6095.4	6203.8	6241.3
36°	6107.3	6194.3	6227.0
37°	6112.1	6178.8	6206.2
38°	6109.7	6157.9	6178.8
39°	6100.1	6132.3	6147.2
40°	6084.7	6101.3	6110.3
41°	6062.0	6065.0	6066.8
42°	6033.4	6023.3	6015.6
43°	5998.3	5975.6	5958.4
44°	5957.8	5924.1	5894.1



REPORT NUMBER: P1436699

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	5911.4	5864.0	5820.5
46°	5860.2	5796.2	5737.7
47°	5800.9	5720.9	5650.3
48°	5736.6	5637.6	5555.0
49°	5665.6	5542.0	5450.8
50°	5585.2	5440.0	5334.2
51°	5496.1	5325.1	5206.6
52°	5395.8	5200.4	5069.1
53°	5288.1	5064.9	4922.7
54°	5171.1	4917.8	4768.3
55°	5046.1	4761.7	4605.3
56°	4907.5	4596.3	4435.2
57°	4761.6	4424.0	4260.7
58°	4607.3	4244.4	4079.3
59°	4448.3	4060.9	3893.6
60°	4282.0	3875.6	3693.3
61°	4111.9	3678.3	3480.7
62°	3937.3	3472.2	3254.3
63°	3762.0	3263.6	3023.6
64°	3585.8	3050.8	2795.3
65°	3408.4	2843.1	2586.3
66°	3232.4	2649.2	2405.5
67°	3054.5	2477.0	2254.6
68°	2879.8	2324.1	2099.1
69°	2714.3	2164.7	1872.2
70°	2559.6	1970.0	1536.7
71°	2400.9	1692.8	1088.7
72°	2222.9	1308.0	678.6
73°	2012.8	882.6	511.4
74°	1720.3	514.4	345.8
75°	1340.1	361.5	180.3
76°	947.5	210.0	153.9
77°	616.7	169.5	133.3
78°	475.0	144.1	116.7
79°	333.2	124.3	102.6
80°	191.5	107.6	89.6
81°	154.2	92.8	77.8
82°	128.8	79.6	66.9
83°	107.5	67.3	57.2
84°	86.4	56.8	47.3
85°	64.5	46.0	37.5
86°	49.7	35.2	28.5
87°	35.0	25.6	19.7
88°	20.2	16.4	11.8
89°	8.6	7.5	5.5



REPORT NUMBER: P1436699

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

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: P1436699

CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

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: P1436699
CATALOG NUMBER: XAS180-SFPM (3000K-108W-T3)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)