

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: P1436723

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

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436723
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 3/25/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: XAS180-SFPM (4000K-108W-T3)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 3
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

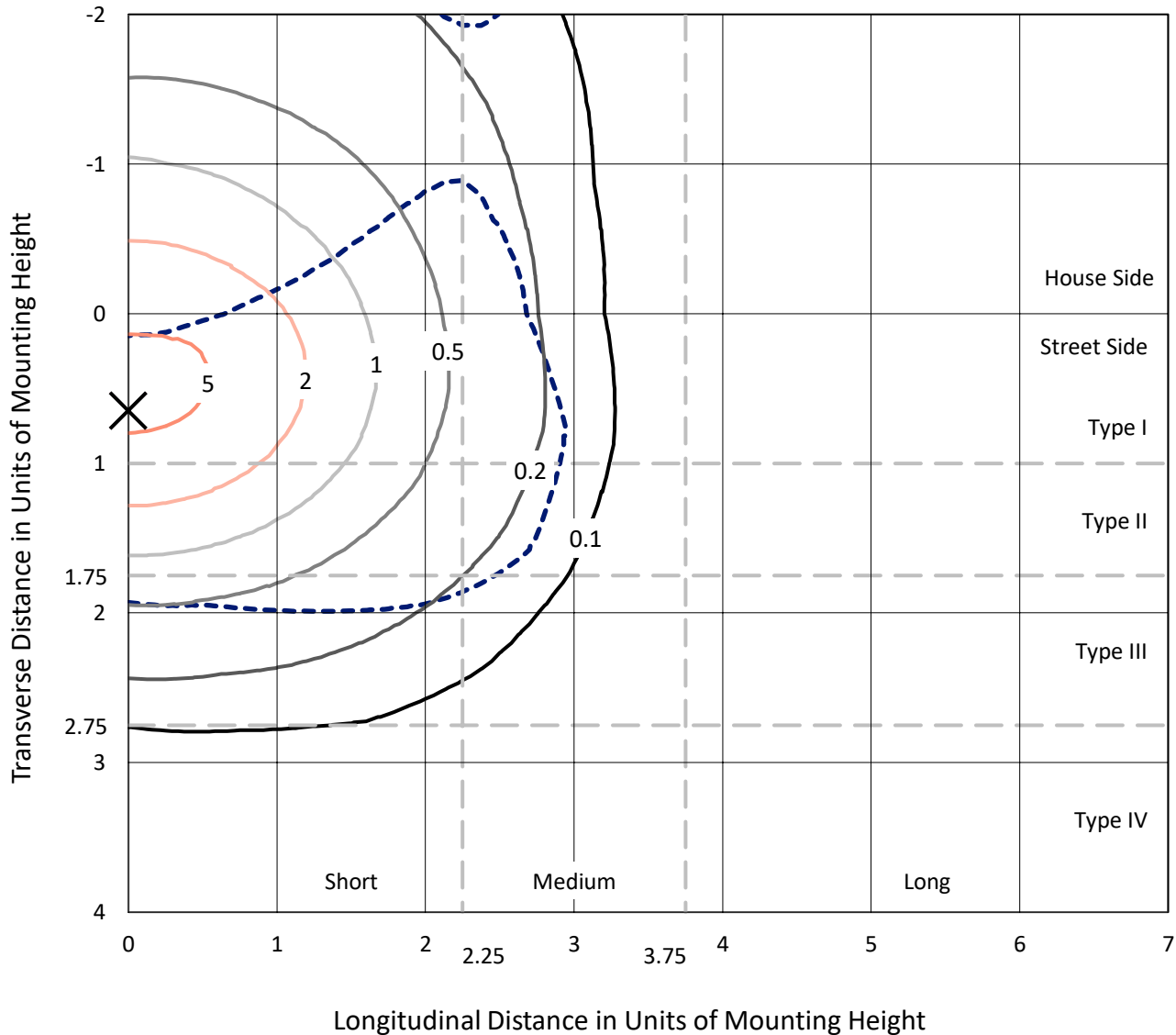
Lumens per Lamp: 27928 (1 lamp)
Luminaire Lumens: 17629.2 lumens
Efficiency: 63.1%
Efficacy: 164.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.35m x L: 0.35m x H: 0.35m)
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 107
Input Voltage (V): 120
Input Current (A_{in}): 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

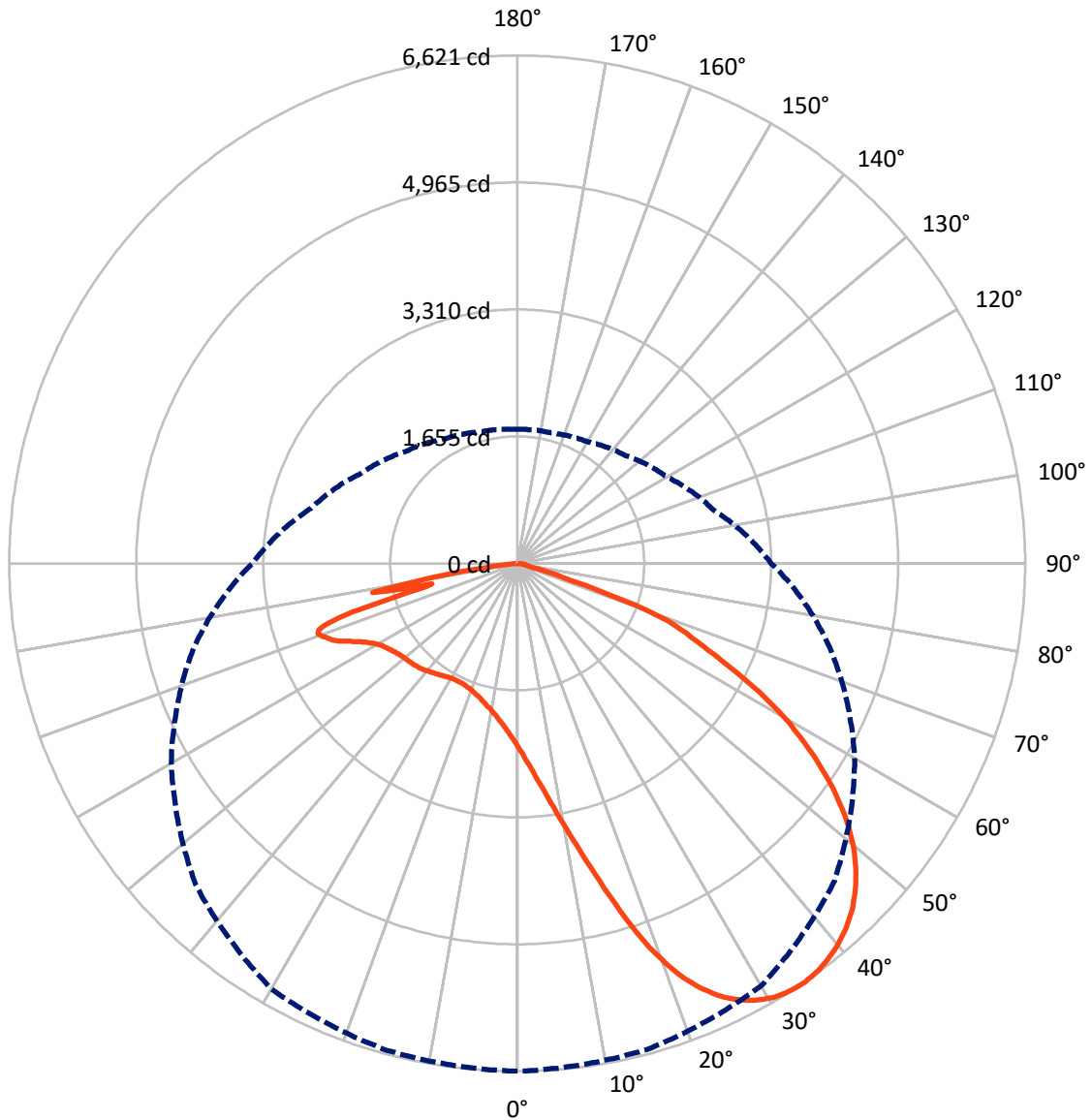
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 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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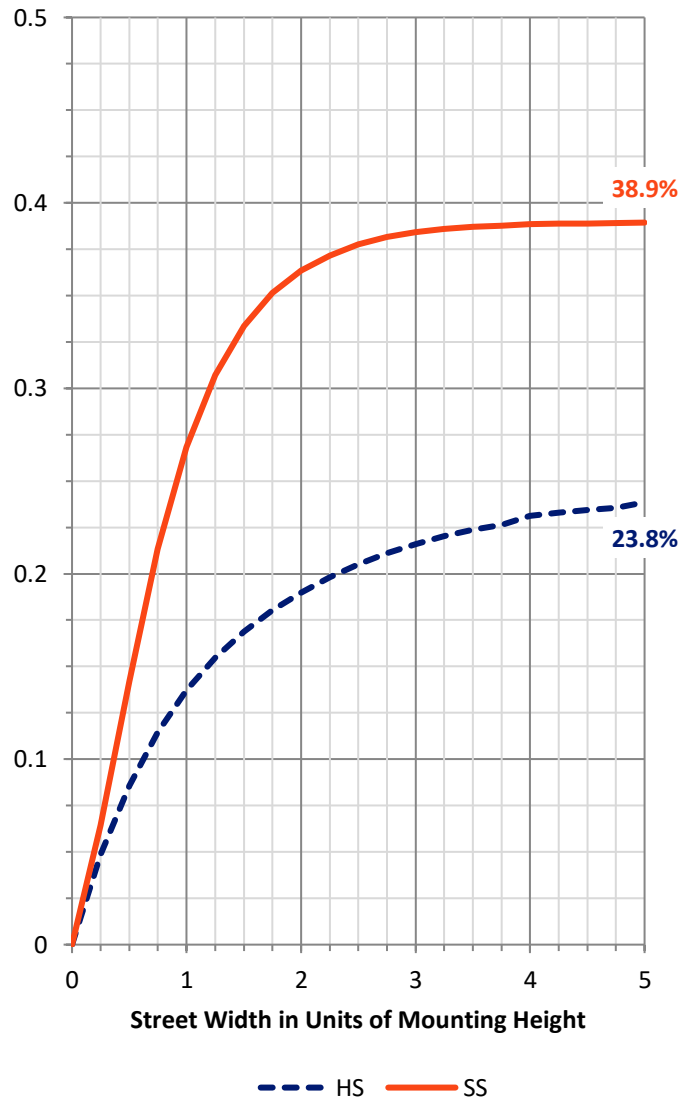
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6745.8	0.0	6745.8
	% Lamp	24.2	0.0	24.2
Street Side	Lumens	10883.4	0.0	10883.4
	% Lamp	39.0	0.0	39.0
Total	Lumens	17629.2	0.0	17629.2
	% Lamp	63.1	0.0	63.1

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	240.5	1.4	0.9
10°-20°	838.0	4.8	3.0
20°-30°	1646.4	9.3	5.9
30°-40°	2464.7	14.0	8.8
40°-50°	3138.2	17.8	11.2
50°-60°	3508.6	19.9	12.6
60°-70°	3389.8	19.2	12.1
70°-80°	2114.0	12.0	7.6
80°-90°	289.0	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°	17629.2	100.0	63.1
0°-180°	17629.2	100.0	63.1

Coefficient of Utilization



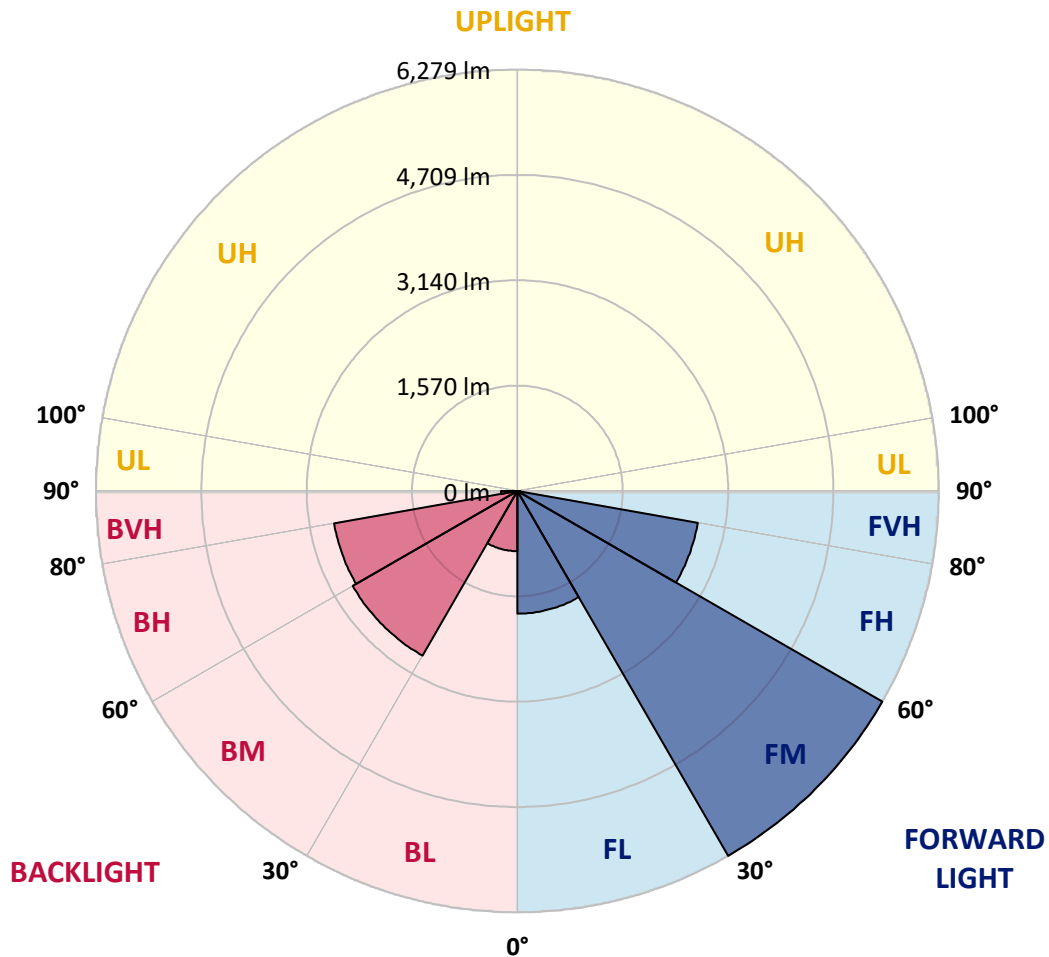
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1828.1	6.5			
FM (30°-60°)	6279.3	22.5			
FH (60°-80°)	2730.2	9.8			G2/5000
FVH (80°-90°)	45.8	0.2			G1/100
BL (0°-30°)	896.8	3.2	B2/1000		
BM (30°-60°)	2832.1	10.1	B3/5000		
BH (60°-80°)	2773.7	9.9	B4/5000		G4/5000
BVH (80°-90°)	243.2	0.9			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	10298.8	36.9			

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°	2406.0	2406.0	2406.0	2406.0	2406.0	2406.0	2406.0	2406.0	2406.0	2406.0	2406.0
1°	2477.7	2475.8	2470.9	2460.5	2447.0	2430.7	2400.1	2382.4	2366.9	2354.3	2346.9
2°	2557.5	2553.1	2540.3	2515.5	2485.7	2450.1	2401.2	2366.6	2336.6	2311.6	2294.7
3°	2645.0	2637.7	2613.2	2575.2	2527.3	2473.0	2405.6	2354.0	2309.2	2273.4	2246.7
4°	2742.1	2730.6	2693.5	2639.7	2573.1	2498.4	2410.9	2343.1	2284.5	2237.6	2204.1
5°	2847.0	2832.0	2782.4	2709.8	2621.0	2525.2	2418.1	2334.1	2262.1	2206.1	2165.7
6°	2962.4	2940.2	2878.3	2786.6	2674.8	2555.7	2427.2	2327.0	2242.3	2177.1	2129.3
7°	3085.0	3058.6	2983.4	2869.0	2731.9	2589.3	2440.6	2323.9	2225.3	2150.5	2095.9
8°	3219.2	3185.0	3094.7	2956.8	2793.9	2626.1	2455.4	2322.7	2211.4	2125.9	2065.9
9°	3365.0	3323.4	3214.7	3051.2	2861.0	2665.4	2472.4	2322.9	2199.2	2104.0	2037.5
10°	3520.8	3470.5	3342.8	3152.1	2931.9	2708.1	2492.5	2325.1	2189.2	2085.1	2011.4
11°	3687.2	3630.5	3479.6	3260.6	3005.9	2753.1	2514.8	2329.7	2180.4	2067.8	1989.1
12°	3867.6	3800.2	3625.1	3373.6	3083.6	2801.4	2538.3	2335.7	2173.6	2052.6	1968.9
13°	4061.5	3983.6	3783.4	3493.9	3167.7	2851.9	2562.4	2342.9	2168.5	2039.0	1950.6
14°	4270.6	4183.0	3953.9	3623.1	3254.1	2904.5	2588.1	2350.1	2163.7	2027.2	1933.1
15°	4493.5	4390.7	4132.6	3758.1	3345.9	2958.8	2614.9	2358.4	2160.3	2017.0	1916.7
16°	4724.9	4610.7	4315.6	3903.4	3443.7	3015.8	2644.5	2368.4	2157.8	2007.0	1901.8
17°	4954.8	4826.8	4499.4	4051.8	3543.6	3075.2	2675.0	2379.4	2157.2	1998.0	1887.9
18°	5181.1	5040.2	4682.2	4200.8	3649.0	3136.2	2707.0	2391.5	2156.5	1990.1	1875.1
19°	5392.6	5243.4	4863.2	4345.2	3759.8	3199.6	2740.0	2405.2	2156.5	1983.2	1864.4
20°	5586.4	5435.5	5036.6	4489.2	3871.9	3265.6	2774.6	2419.9	2157.0	1977.1	1855.5
21°	5759.8	5610.0	5204.0	4631.7	3982.8	3333.9	2810.0	2435.8	2158.5	1971.3	1847.7
22°	5912.1	5766.4	5357.4	4766.4	4091.9	3405.8	2846.5	2451.0	2161.9	1967.0	1840.7
23°	6046.8	5906.2	5501.7	4896.4	4201.1	3478.4	2884.4	2467.2	2165.4	1963.7	1835.1
24°	6162.9	6030.5	5635.8	5019.2	4307.4	3553.5	2923.8	2485.0	2169.9	1961.7	1829.6
25°	6263.4	6140.3	5758.5	5134.6	4409.7	3629.5	2962.6	2502.8	2175.1	1961.1	1825.5
26°	6348.4	6233.7	5869.4	5244.0	4509.7	3706.3	3002.6	2521.1	2181.6	1961.9	1822.1
27°	6420.4	6313.7	5969.9	5349.5	4604.1	3783.3	3044.5	2538.9	2189.2	1963.0	1819.6
28°	6479.7	6383.2	6059.3	5448.3	4694.0	3858.8	3087.0	2556.9	2197.2	1965.1	1818.3
29°	6529.0	6437.4	6138.2	5540.4	4778.7	3932.5	3131.0	2575.2	2206.6	1968.5	1818.4
30°	6566.9	6482.3	6207.4	5627.6	4861.5	4004.8	3174.7	2594.7	2216.7	1972.6	1819.1
31°	6593.4	6517.6	6265.9	5707.7	4936.9	4075.6	3219.3	2614.3	2227.8	1977.9	1821.3
32°	6611.7	6541.6	6314.4	5780.3	5009.1	4144.9	3264.7	2634.9	2239.8	1983.9	1824.9
33°	6620.5	6556.8	6357.3	5848.7	5077.1	4212.8	3309.8	2656.6	2252.4	1990.4	1829.9
34°	6620.5	6563.1	6390.1	5909.8	5140.6	4276.9	3354.7	2677.5	2266.2	1998.0	1835.9
35°	6613.6	6561.8	6414.1	5964.6	5200.5	4337.9	3400.2	2700.0	2280.1	2007.0	1843.4
36°	6598.4	6553.6	6429.2	6013.2	5257.1	4397.6	3444.8	2723.1	2294.9	2017.0	1852.1
37°	6576.3	6539.1	6435.6	6054.9	5310.5	4454.9	3490.0	2746.4	2310.0	2028.3	1861.7
38°	6547.3	6518.2	6436.2	6089.1	5359.5	4509.1	3534.0	2770.7	2326.1	2040.5	1872.3
39°	6513.8	6492.4	6428.6	6118.4	5406.4	4561.6	3579.5	2795.3	2342.7	2054.0	1883.3
40°	6474.7	6460.2	6414.1	6141.4	5449.2	4611.6	3624.0	2821.7	2360.0	2068.6	1894.7
41°	6428.6	6421.0	6392.6	6158.1	5489.1	4658.9	3666.3	2849.3	2377.7	2083.5	1906.5
42°	6374.3	6378.7	6364.2	6169.7	5525.6	4704.4	3707.4	2876.5	2396.5	2099.6	1919.4
43°	6313.7	6327.6	6329.5	6173.7	5559.9	4748.4	3747.1	2904.4	2416.7	2116.9	1932.3
44°	6245.7	6269.1	6289.2	6170.6	5589.6	4790.2	3784.8	2933.8	2437.3	2134.5	1945.6



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	6167.7	6205.7	6240.4	6160.8	5616.2	4830.0	3821.0	2963.4	2459.4	2152.7	1958.8
46°	6079.8	6132.4	6186.3	6145.4	5641.6	4870.4	3857.6	2994.8	2483.1	2170.5	1972.5
47°	5987.2	6050.3	6126.6	6122.8	5662.2	4906.5	3892.6	3025.7	2507.5	2188.9	1987.0
48°	5886.3	5959.9	6059.1	6090.9	5678.9	4939.8	3925.3	3058.9	2532.4	2208.5	2002.8
49°	5775.9	5857.6	5983.3	6054.3	5692.1	4969.7	3955.1	3092.5	2559.5	2229.6	2019.0
50°	5652.4	5745.3	5897.3	6008.4	5699.7	4996.8	3984.1	3126.8	2587.3	2251.2	2037.2
51°	5517.1	5620.9	5803.3	5953.3	5702.0	5019.7	4012.6	3162.7	2616.4	2274.9	2056.3
52°	5371.4	5487.8	5698.5	5887.5	5698.2	5038.8	4038.4	3199.9	2646.9	2299.4	2075.9
53°	5216.2	5341.7	5586.6	5814.7	5687.8	5053.6	4061.8	3235.6	2679.0	2325.5	2096.7
54°	5052.7	5181.7	5461.3	5731.8	5668.1	5065.1	4081.7	3270.0	2713.9	2353.5	2118.8
55°	4880.0	5017.2	5326.5	5639.9	5639.1	5071.7	4099.4	3302.2	2750.0	2383.6	2143.4
56°	4699.8	4839.4	5179.2	5536.7	5601.0	5071.1	4113.1	3331.9	2787.0	2416.6	2169.2
57°	4514.8	4662.9	5026.1	5425.6	5551.9	5062.0	4124.6	3359.9	2825.1	2451.1	2197.9
58°	4322.6	4473.4	4863.4	5302.4	5489.6	5045.6	4131.1	3385.3	2864.4	2490.9	2230.1
59°	4125.8	4282.8	4697.5	5168.4	5416.7	5019.5	4130.8	3408.6	2904.9	2533.6	2266.0
60°	3913.6	4084.1	4523.1	5027.3	5332.3	4982.9	4124.4	3430.5	2946.4	2577.9	2305.2
61°	3688.2	3878.0	4343.4	4874.8	5233.4	4936.5	4110.8	3447.6	2986.9	2625.9	2348.2
62°	3448.4	3661.2	4160.4	4714.7	5127.7	4877.1	4089.0	3458.7	3028.2	2677.0	2393.7
63°	3203.9	3433.2	3973.9	4546.5	5011.6	4804.4	4055.9	3463.8	3068.7	2733.7	2443.2
64°	2962.1	3206.5	3784.5	4373.3	4883.8	4718.4	4010.5	3461.7	3108.4	2792.8	2500.3
65°	2740.6	2981.2	3589.3	4197.1	4746.0	4617.6	3955.6	3452.3	3146.3	2855.6	2565.0
66°	2549.0	2774.5	3394.0	4020.8	4593.8	4503.9	3885.6	3430.6	3180.8	2925.1	2634.8
67°	2389.0	2591.1	3201.7	3845.9	4434.3	4372.5	3795.5	3398.3	3210.3	2996.1	2717.1
68°	2224.3	2426.7	3016.3	3669.4	4256.9	4225.8	3655.8	3346.7	3234.6	3069.3	2811.9
69°	1983.8	2259.7	2842.4	3493.1	4071.0	4053.5	3450.0	3240.7	3246.7	3148.1	2918.8
70°	1628.3	2044.6	2678.3	3316.1	3871.4	3836.3	3176.7	3072.6	3249.9	3230.5	3031.6
71°	1153.7	1735.4	2517.7	3140.7	3646.8	3573.4	2843.1	2853.5	3229.0	3315.9	3116.0
72°	719.1	1315.8	2339.2	2964.1	3392.0	3262.0	2531.0	2619.0	3173.5	3397.2	3199.0
73°	541.9	865.6	2129.7	2778.1	3107.3	2921.3	2259.0	2420.5	3078.7	3470.0	3308.4
74°	366.5	642.3	1846.0	2564.9	2794.5	2568.1	1928.8	2251.5	2963.9	3511.0	3410.2
75°	191.1	426.4	1443.0	2293.4	2460.8	2186.8	1460.2	2015.7	2845.2	3528.1	3489.3
76°	163.0	210.5	1004.4	1955.3	2115.1	1716.2	991.5	1555.5	2754.5	3481.7	3511.0
77°	141.2	173.6	643.8	1537.4	1754.2	1163.8	523.3	1095.4	2657.9	3365.3	3450.2
78°	123.6	148.2	494.2	1034.8	1361.0	668.9	276.6	636.4	2462.0	3124.4	3151.7
79°	108.7	128.2	348.8	558.0	953.1	507.1	185.7	324.3	2034.9	2786.3	2712.8
80°	94.9	111.2	203.5	372.8	584.4	353.7	160.9	197.6	1391.8	2381.9	2257.0
81°	82.4	95.9	162.9	190.0	375.6	200.4	136.1	163.9	752.8	1833.5	2075.7
82°	70.9	82.3	137.1	156.9	172.7	170.1	111.4	130.1	359.0	1463.4	2000.2
83°	60.6	69.4	115.1	134.0	127.4	139.3	93.6	96.4	233.7	1093.1	1558.3
84°	50.2	58.3	93.3	114.0	101.7	105.5	76.8	76.9	190.8	724.5	1116.4
85°	39.7	47.3	70.3	95.0	78.6	79.5	60.6	60.1	158.4	455.6	675.2
86°	30.2	36.3	54.6	76.9	58.2	59.3	45.1	46.0	125.9	323.6	392.0
87°	20.9	26.6	38.8	57.3	42.4	43.4	31.0	33.6	93.4	191.5	313.9
88°	12.5	17.4	23.1	34.8	26.7	27.6	21.5	23.7	60.3	62.8	235.8
89°	5.8	8.2	10.4	12.2	12.7	13.5	12.1	13.8	40.8	42.4	157.7



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CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436723

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436723

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436723

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2406.0	2406.0	2406.0	2406.0	2406.0	2406.0	2406.0	2406.0	2406.0	2406.0	2406.0
1°	2341.5	2341.0	2345.6	2354.2	2366.4	2381.9	2398.5	2404.0	2421.7	2437.8	2453.3
2°	2285.2	2282.8	2289.8	2304.8	2326.9	2354.7	2387.3	2409.7	2445.3	2480.2	2511.2
3°	2232.5	2228.9	2237.9	2258.5	2290.6	2331.1	2378.2	2417.9	2471.3	2525.2	2573.7
4°	2184.9	2180.6	2191.9	2217.0	2257.2	2309.7	2371.9	2428.0	2501.3	2574.3	2641.6
5°	2142.3	2136.6	2148.6	2179.6	2227.5	2291.1	2366.9	2440.7	2532.6	2626.6	2714.8
6°	2102.0	2094.3	2108.5	2144.9	2200.9	2274.6	2364.6	2455.2	2567.8	2684.4	2793.6
7°	2064.6	2055.7	2071.9	2112.0	2175.8	2260.7	2364.7	2472.4	2605.7	2746.4	2879.2
8°	2030.7	2020.9	2037.5	2082.9	2154.0	2249.1	2366.5	2491.7	2645.7	2811.9	2971.6
9°	1998.6	1987.7	2006.5	2055.6	2133.5	2238.9	2369.4	2511.6	2689.4	2883.2	3070.3
10°	1969.9	1957.7	1978.4	2030.6	2115.2	2229.6	2374.4	2535.3	2736.6	2958.1	3173.3
11°	1944.2	1930.7	1952.9	2009.1	2099.6	2222.6	2381.4	2561.5	2786.8	3038.1	3285.8
12°	1920.3	1906.1	1929.2	1989.9	2085.6	2217.4	2390.3	2588.6	2838.3	3121.4	3402.9
13°	1898.7	1882.5	1907.1	1972.2	2074.3	2213.8	2401.2	2617.5	2893.1	3211.0	3531.9
14°	1877.6	1860.5	1886.7	1955.7	2064.4	2212.2	2412.6	2648.1	2951.0	3303.3	3666.6
15°	1858.4	1840.8	1867.9	1939.8	2056.5	2212.2	2424.4	2679.9	3010.8	3402.5	3810.3
16°	1840.7	1821.5	1850.2	1925.2	2048.3	2212.8	2437.4	2713.7	3073.0	3508.1	3961.0
17°	1824.6	1804.8	1834.3	1912.4	2041.0	2214.3	2452.1	2748.3	3138.2	3617.9	4115.9
18°	1810.0	1788.5	1819.6	1900.1	2035.1	2217.3	2467.5	2784.0	3205.8	3732.0	4273.2
19°	1796.7	1774.1	1805.9	1890.3	2029.1	2221.1	2484.6	2821.2	3276.2	3849.2	4428.0
20°	1784.5	1761.3	1793.7	1881.8	2024.0	2224.8	2502.6	2859.4	3348.7	3969.0	4580.3
21°	1774.6	1749.9	1783.8	1874.5	2019.9	2229.6	2521.4	2899.9	3423.7	4089.9	4725.6
22°	1765.5	1740.2	1774.9	1868.8	2017.8	2235.0	2540.9	2940.6	3502.2	4209.5	4861.6
23°	1757.6	1732.3	1767.6	1863.8	2016.3	2241.4	2560.8	2983.4	3584.7	4325.3	4992.2
24°	1751.1	1726.1	1761.7	1859.8	2016.3	2248.4	2580.7	3027.1	3668.7	4436.6	5113.6
25°	1746.6	1721.5	1758.0	1856.7	2017.4	2256.3	2601.0	3071.4	3752.0	4544.4	5228.5
26°	1743.2	1718.4	1755.7	1855.2	2019.2	2264.8	2623.0	3116.3	3836.1	4645.3	5336.8
27°	1740.9	1716.7	1754.0	1854.2	2022.3	2273.7	2644.0	3162.1	3920.5	4741.3	5439.6
28°	1740.1	1717.4	1754.3	1854.6	2026.4	2283.8	2666.2	3209.3	4003.9	4830.3	5535.5
29°	1741.0	1720.0	1756.4	1855.9	2031.6	2294.4	2688.1	3257.7	4085.0	4916.1	5626.6
30°	1743.3	1724.4	1760.5	1858.6	2037.2	2306.4	2711.1	3306.2	4163.3	4996.4	5709.6
31°	1747.2	1730.1	1765.2	1862.7	2043.8	2319.3	2733.4	3354.4	4239.0	5070.2	5787.8
32°	1751.8	1737.6	1770.8	1868.6	2052.2	2333.1	2756.4	3402.7	4310.3	5140.4	5858.6
33°	1757.6	1746.2	1777.0	1875.2	2061.1	2347.2	2779.1	3451.5	4379.0	5206.6	5925.3
34°	1764.2	1755.1	1783.5	1882.6	2070.6	2361.7	2803.1	3500.2	4444.2	5268.9	5984.8
35°	1771.1	1765.5	1790.7	1891.0	2081.3	2377.3	2827.5	3549.6	4506.2	5327.4	6038.6
36°	1777.9	1776.6	1798.1	1900.4	2092.1	2393.3	2853.5	3598.4	4566.1	5381.4	6085.9
37°	1785.2	1787.7	1806.0	1911.2	2103.8	2409.4	2879.5	3646.4	4621.2	5432.0	6126.6
38°	1792.0	1799.3	1814.8	1922.3	2116.8	2426.3	2906.8	3693.7	4674.8	5480.0	6162.7
39°	1799.4	1810.9	1823.5	1934.6	2130.6	2444.3	2934.5	3739.9	4723.9	5524.7	6190.8
40°	1807.3	1822.3	1832.6	1947.8	2145.4	2463.1	2963.3	3785.7	4771.0	5565.5	6213.0
41°	1815.2	1833.6	1841.8	1961.5	2160.6	2482.6	2992.0	3827.9	4816.2	5602.8	6226.9
42°	1822.9	1844.9	1851.6	1975.3	2177.1	2503.5	3021.3	3870.0	4860.0	5637.0	6233.4
43°	1831.4	1855.9	1861.9	1990.1	2194.0	2525.5	3052.3	3911.1	4901.8	5666.5	6235.1
44°	1841.0	1866.7	1873.4	2004.8	2212.0	2548.2	3083.6	3953.1	4940.6	5692.9	6230.1

REPORT NUMBER: P1436723

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1851.3	1876.2	1885.2	2019.9	2230.6	2571.6	3115.4	3992.4	4977.0	5716.1	6216.2
46°	1862.2	1884.1	1897.5	2035.7	2250.4	2595.1	3148.0	4027.5	5009.1	5734.9	6195.2
47°	1874.0	1891.2	1910.8	2051.4	2270.5	2620.9	3180.9	4059.8	5038.7	5749.3	6166.4
48°	1887.1	1898.8	1924.7	2067.5	2292.4	2647.8	3213.3	4090.5	5063.6	5758.2	6130.9
49°	1901.8	1906.4	1939.6	2083.8	2314.0	2676.2	3246.6	4118.6	5084.2	5761.5	6087.3
50°	1918.2	1913.5	1956.1	2101.7	2337.1	2707.4	3280.8	4144.1	5100.5	5759.1	6036.9
51°	1937.0	1921.8	1973.9	2120.3	2361.3	2739.4	3314.7	4165.8	5112.5	5751.4	5976.9
52°	1957.1	1932.6	1993.1	2140.6	2387.5	2771.8	3348.9	4185.5	5119.8	5736.2	5907.0
53°	1977.3	1946.1	2013.5	2161.8	2415.8	2805.4	3379.4	4200.3	5122.2	5714.4	5829.3
54°	1998.9	1960.1	2036.4	2185.6	2447.0	2839.6	3408.9	4211.6	5119.0	5685.7	5743.5
55°	2023.8	1976.4	2061.3	2211.4	2480.5	2874.3	3435.3	4219.8	5108.7	5648.0	5648.3
56°	2050.2	1995.9	2087.2	2239.2	2516.5	2910.9	3459.2	4222.5	5088.7	5601.2	5542.6
57°	2077.8	2017.5	2115.2	2270.8	2555.0	2948.1	3480.4	4220.7	5060.5	5544.0	5428.0
58°	2105.6	2036.1	2144.3	2305.4	2595.4	2984.8	3498.6	4214.5	5024.5	5474.1	5300.9
59°	2132.7	2056.6	2171.9	2343.5	2640.4	3018.4	3512.1	4202.1	4981.2	5397.0	5166.5
60°	2163.2	2087.4	2203.0	2385.5	2686.4	3051.9	3523.7	4181.7	4927.9	5306.3	5021.7
61°	2202.9	2129.6	2244.0	2432.1	2736.1	3086.1	3530.8	4152.7	4864.3	5204.8	4866.6
62°	2249.4	2173.6	2292.4	2482.3	2787.1	3119.7	3532.0	4115.0	4789.6	5094.2	4704.6
63°	2301.7	2225.1	2345.3	2533.9	2842.0	3152.4	3526.1	4066.9	4703.4	4969.3	4538.0
64°	2361.9	2289.9	2408.8	2591.9	2898.6	3182.8	3515.2	4005.1	4606.5	4832.9	4364.4
65°	2432.2	2362.5	2480.5	2659.1	2959.7	3211.1	3494.5	3931.0	4493.8	4688.8	4187.8
66°	2513.6	2445.7	2561.1	2732.1	3022.1	3234.1	3461.4	3839.4	4365.8	4533.7	4010.3
67°	2602.0	2535.3	2646.9	2812.1	3083.6	3254.8	3413.3	3715.9	4225.1	4365.1	3832.9
68°	2696.4	2607.5	2736.8	2904.0	3148.5	3268.6	3325.8	3529.2	4057.2	4186.0	3653.0
69°	2754.6	2654.7	2789.7	3007.2	3221.0	3271.4	3176.3	3270.5	3853.1	3988.8	3475.2
70°	2804.2	2713.9	2836.6	3112.9	3293.2	3262.5	2958.8	2944.3	3598.4	3767.1	3293.6
71°	2874.5	2756.0	2902.0	3192.4	3367.6	3225.5	2704.0	2608.1	3285.2	3511.5	3103.5
72°	2919.5	2727.0	2942.9	3276.3	3435.7	3147.5	2471.1	2296.5	2934.3	3228.0	2910.7
73°	2905.9	2577.7	2930.4	3382.2	3489.8	3026.3	2266.3	1992.1	2568.5	2913.3	2697.5
74°	2813.7	2247.5	2841.9	3476.3	3505.6	2899.4	2041.9	1611.1	2206.3	2566.7	2453.5
75°	2546.3	1720.2	2588.2	3537.2	3479.4	2774.9	1603.3	1111.4	1800.0	2201.1	2158.3
76°	2078.8	1231.9	2130.1	3545.3	3367.8	2646.1	1164.7	631.4	1306.5	1840.7	1802.6
77°	1594.9	1142.2	1690.2	3469.7	3203.3	2470.8	728.1	470.7	793.7	1483.4	1370.9
78°	1531.5	1534.9	1673.8	3149.7	2945.1	2113.7	367.8	318.2	597.2	1103.5	891.6
79°	1921.5	1922.9	2055.0	2666.3	2647.0	1542.3	211.7	165.8	408.8	722.3	652.9
80°	2241.4	1523.7	2285.6	2162.5	2232.9	971.0	175.8	140.7	220.5	532.3	417.0
81°	1726.3	1124.5	1732.3	2001.1	1760.2	411.1	139.9	120.4	183.6	343.8	181.1
82°	1211.3	726.4	1179.0	2002.1	1287.4	248.7	104.4	101.7	156.5	155.3	152.4
83°	698.2	373.5	634.1	1505.8	816.5	192.1	85.3	84.7	126.8	118.8	131.0
84°	388.4	262.5	374.3	1009.6	479.6	158.6	68.8	68.2	97.4	94.3	111.0
85°	279.5	151.5	245.0	524.8	343.3	125.1	53.7	54.0	72.8	71.3	91.8
86°	170.6	43.3	159.0	419.8	207.1	91.8	40.7	39.8	56.2	54.9	73.5
87°	62.3	29.2	73.7	314.8	74.4	64.2	29.2	25.5	39.7	38.6	52.1
88°	42.2	15.1	39.8	209.8	50.3	43.6	20.2	14.3	23.1	22.4	30.7
89°	22.1	1.1	6.0	104.8	26.1	23.0	11.3	5.3	9.7	9.3	9.3



REPORT NUMBER: P1436723

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436723

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436723

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436723

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2406.0	2406.0	2406.0
1°	2465.1	2473.4	2477.7
2°	2536.6	2551.9	2557.5
3°	2611.6	2637.3	2645.0
4°	2695.2	2731.0	2742.1
5°	2785.6	2831.6	2847.0
6°	2883.9	2942.6	2962.4
7°	2990.6	3062.0	3085.0
8°	3102.3	3189.5	3219.2
9°	3227.1	3329.4	3365.0
10°	3356.5	3479.6	3520.8
11°	3497.8	3642.2	3687.2
12°	3650.4	3813.5	3867.6
13°	3812.2	4001.3	4061.5
14°	3986.7	4202.1	4270.6
15°	4166.7	4409.3	4493.5
16°	4353.7	4624.2	4724.9
17°	4543.9	4844.1	4954.8
18°	4734.9	5063.1	5181.1
19°	4916.5	5269.7	5392.6
20°	5095.1	5461.7	5586.4
21°	5257.0	5640.4	5759.8
22°	5410.5	5797.6	5912.1
23°	5558.2	5937.7	6046.8
24°	5692.6	6059.3	6162.9
25°	5816.3	6166.6	6263.4
26°	5929.7	6258.1	6348.4
27°	6029.2	6335.2	6420.4
28°	6117.8	6400.2	6479.7
29°	6197.1	6455.1	6529.0
30°	6264.0	6497.4	6566.9
31°	6321.9	6530.2	6593.4
32°	6368.6	6554.9	6611.7
33°	6406.5	6570.0	6620.5
34°	6436.8	6576.3	6620.5
35°	6458.9	6573.8	6613.6
36°	6471.5	6563.7	6598.4
37°	6476.6	6547.3	6576.3
38°	6474.1	6525.2	6547.3
39°	6464.0	6498.0	6513.8
40°	6447.5	6465.2	6474.7
41°	6423.6	6426.7	6428.6
42°	6393.3	6382.5	6374.3
43°	6356.0	6332.0	6313.7
44°	6313.1	6277.4	6245.7



REPORT NUMBER: P1436723

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	6264.0	6213.7	6167.7
46°	6209.7	6141.8	6079.8
47°	6146.9	6062.0	5987.2
48°	6078.8	5973.8	5886.3
49°	6003.5	5872.5	5775.9
50°	5918.2	5764.5	5652.4
51°	5823.9	5642.7	5517.1
52°	5717.6	5510.5	5371.4
53°	5603.5	5366.9	5216.2
54°	5479.5	5211.1	5052.7
55°	5347.0	5045.7	4880.0
56°	5200.2	4870.4	4699.8
57°	5045.6	4687.9	4514.8
58°	4882.1	4497.6	4322.6
59°	4713.6	4303.1	4125.8
60°	4537.3	4106.7	3913.6
61°	4357.2	3897.6	3688.2
62°	4172.2	3679.3	3448.4
63°	3986.4	3458.2	3203.9
64°	3799.7	3232.8	2962.1
65°	3611.7	3012.6	2740.6
66°	3425.1	2807.2	2549.0
67°	3236.7	2624.7	2389.0
68°	3051.6	2462.7	2224.3
69°	2876.1	2293.8	1983.8
70°	2712.3	2087.5	1628.3
71°	2544.0	1793.7	1153.7
72°	2355.4	1386.0	719.1
73°	2132.9	935.2	541.9
74°	1822.9	545.1	366.5
75°	1420.1	383.0	191.1
76°	1004.1	222.5	163.0
77°	653.5	179.6	141.2
78°	503.3	152.6	123.6
79°	353.1	131.7	108.7
80°	202.9	114.0	94.9
81°	163.4	98.3	82.4
82°	136.4	84.3	70.9
83°	113.9	71.3	60.6
84°	91.6	60.2	50.2
85°	68.4	48.8	39.7
86°	52.7	37.3	30.2
87°	37.1	27.1	20.9
88°	21.4	17.4	12.5
89°	9.1	8.0	5.8



REPORT NUMBER: P1436723

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436723

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436723
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)