

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: P1436725

Luminaire Tested: XAS180-SFPM (4000K-108W-T4)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436725
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-T4)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 4
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

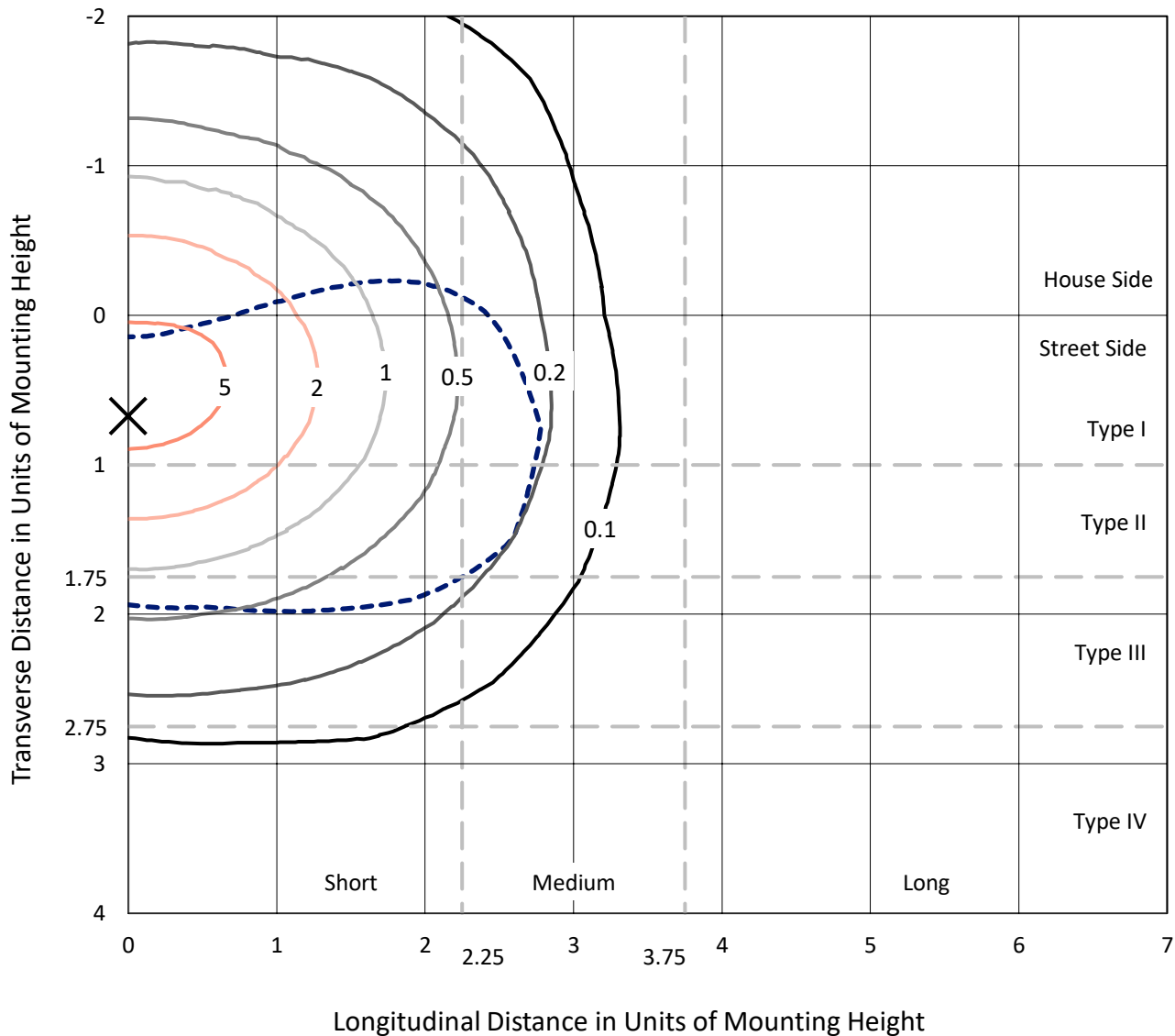
Lumens per Lamp: 24407 (1 lamp)
Luminaire Lumens: 18071.5 lumens
Efficiency: 74.0%
Efficacy: 172.3 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 104.9
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

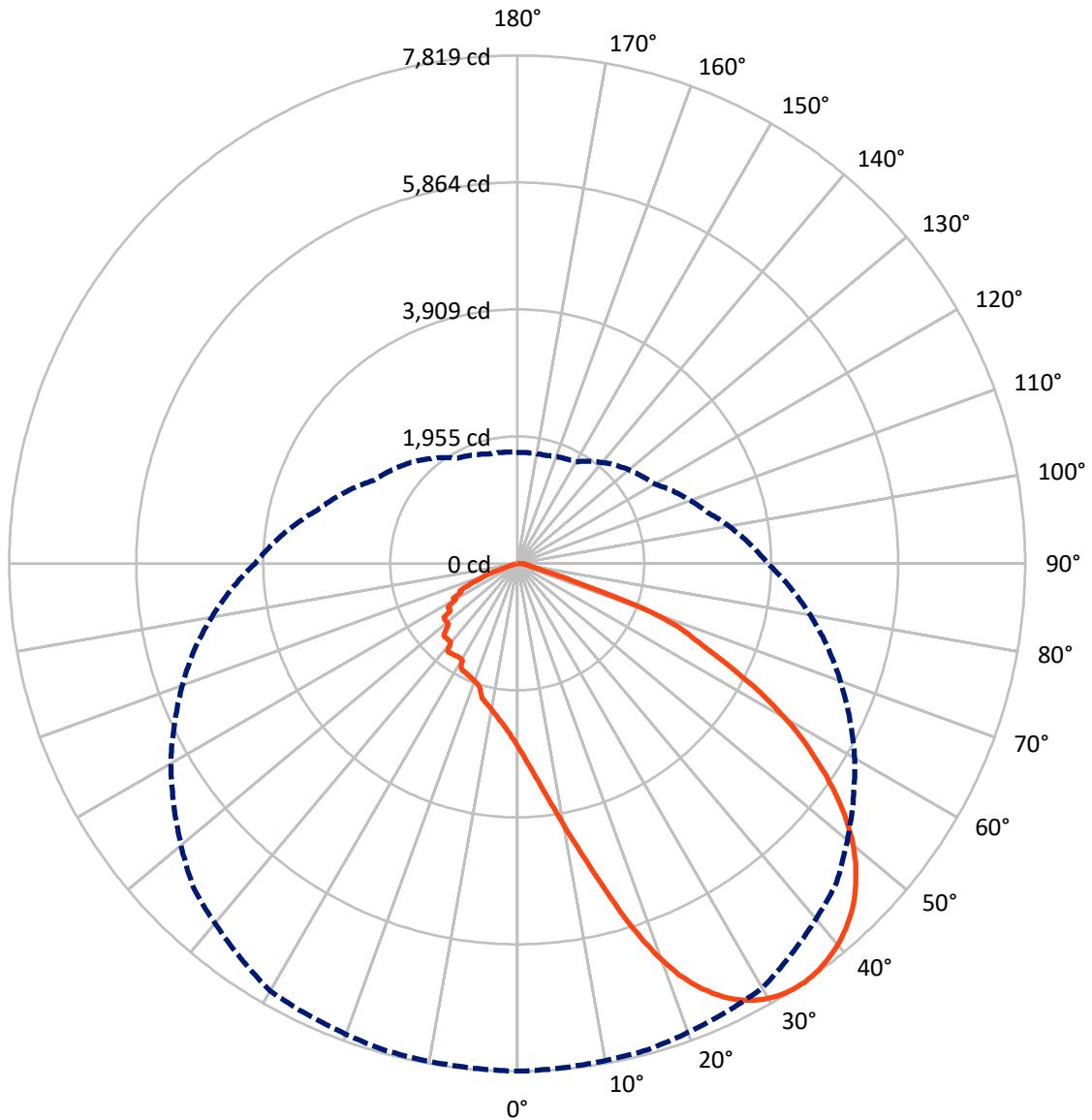
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 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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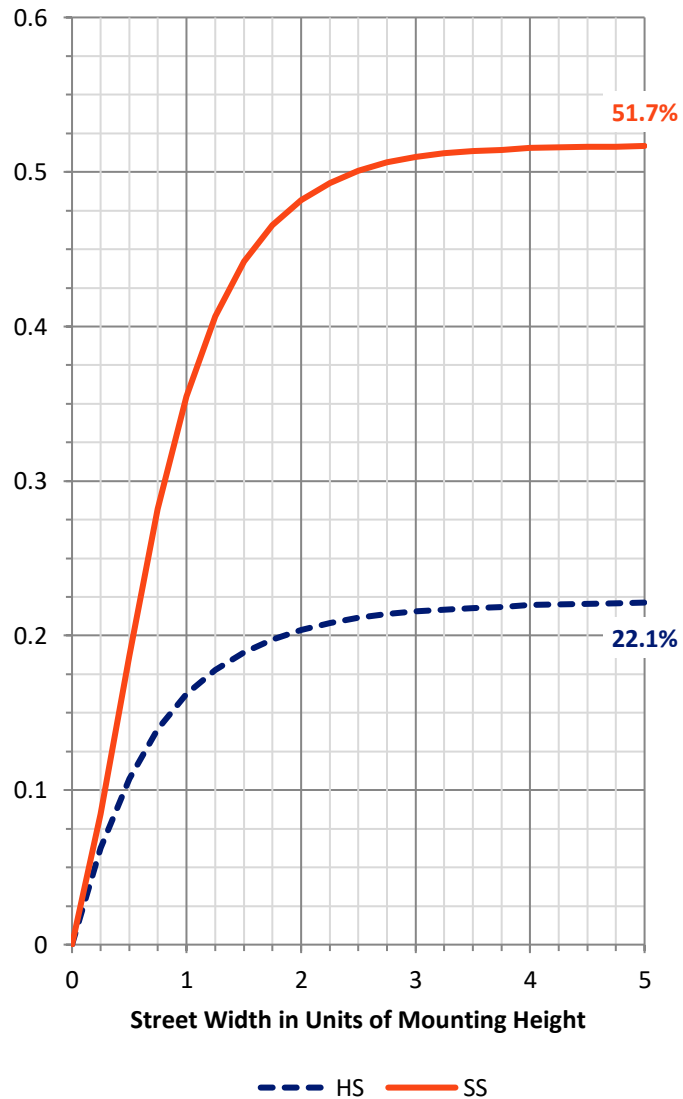
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5434.9	0.0	5434.9
	% Lamp	22.3	0.0	22.3
Street Side	Lumens	12636.5	0.0	12636.5
	% Lamp	51.8	0.0	51.8
Total	Lumens	18071.5	0.0	18071.5
	% Lamp	74.0	0.0	74.0

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	283.8	1.6	1.2
10°-20°	986.0	5.5	4.0
20°-30°	1913.0	10.6	7.8
30°-40°	2812.3	15.6	11.5
40°-50°	3489.7	19.3	14.3
50°-60°	3718.3	20.6	15.2
60°-70°	3232.5	17.9	13.2
70°-80°	1495.4	8.3	6.1
80°-90°	140.5	0.8	0.6
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°	18071.5	100.0	74.0
0°-180°	18071.5	100.0	74.0

Coefficient of Utilization



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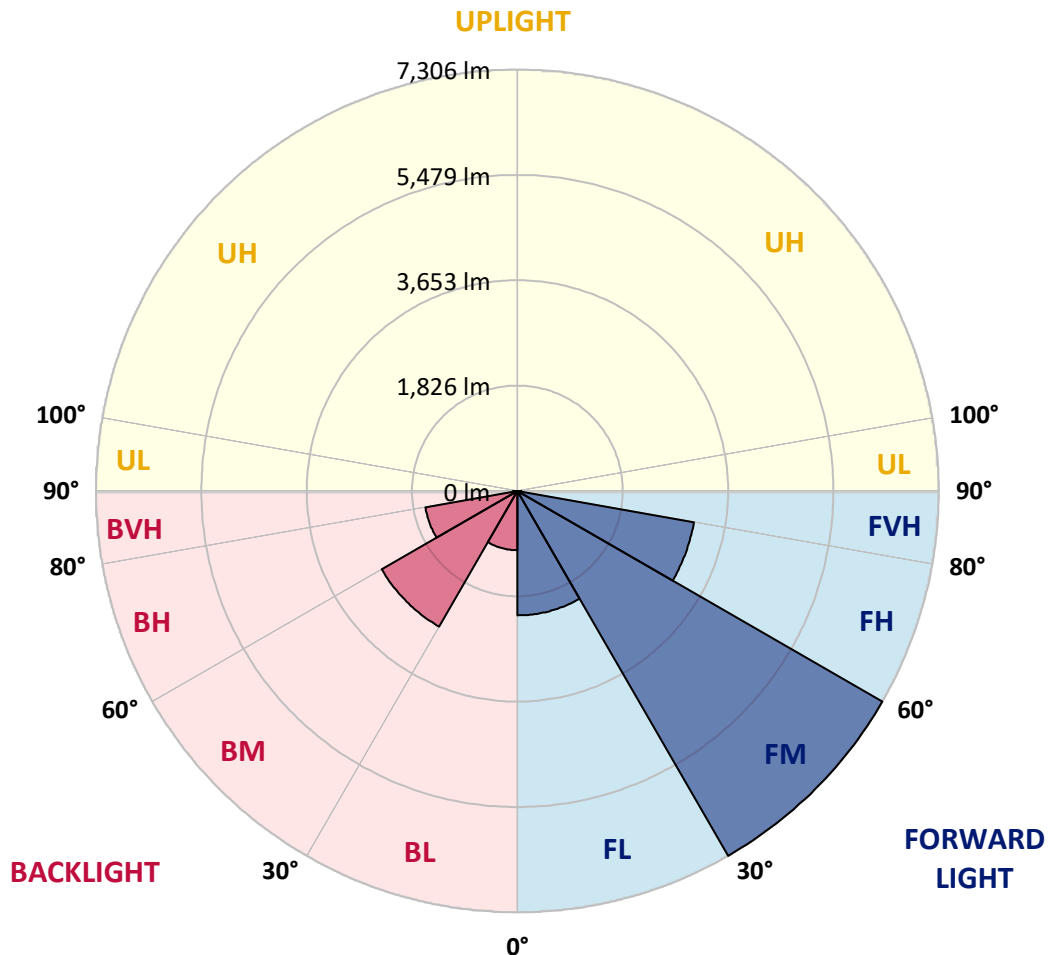
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2156.8	8.8			
FM (30°-60°)	7305.5	29.9			
FH (60°-80°)	3108.3	12.7			G2/5000
FVH (80°-90°)	65.9	0.3			G1/100
BL (0°-30°)	1026.0	4.2	B3/2500		
BM (30°-60°)	2714.8	11.1	B3/5000		
BH (60°-80°)	1619.6	6.6	B3/2500		G3/2500
BVH (80°-90°)	74.6	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	6335.5	26.0			

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°	2839.9	2839.9	2839.9	2839.9	2839.9	2839.9	2839.9	2839.9	2839.9	2839.9	2839.9
1°	2928.6	2926.9	2919.8	2906.4	2888.6	2867.8	2830.2	2810.8	2793.2	2779.2	2769.0
2°	3024.7	3020.7	3001.7	2972.8	2934.3	2891.1	2831.6	2791.3	2755.6	2727.3	2705.1
3°	3129.2	3118.8	3089.2	3043.0	2985.2	2919.4	2836.2	2776.2	2722.9	2679.5	2647.4
4°	3244.1	3228.7	3186.7	3121.3	3039.2	2949.7	2843.0	2763.2	2693.3	2636.1	2595.4
5°	3369.5	3349.8	3291.1	3205.8	3097.7	2983.2	2852.2	2752.0	2666.5	2597.7	2549.4
6°	3507.2	3478.8	3406.6	3297.7	3163.3	3019.9	2863.4	2744.0	2641.9	2563.6	2507.1
7°	3652.9	3618.3	3529.6	3396.1	3232.0	3060.7	2879.0	2739.8	2621.9	2532.3	2467.1
8°	3812.2	3772.1	3663.5	3501.3	3306.3	3104.5	2897.6	2738.3	2604.7	2503.7	2431.5
9°	3985.7	3937.6	3806.0	3614.9	3385.4	3151.6	2918.0	2738.1	2591.2	2477.6	2397.8
10°	4167.1	4109.1	3958.8	3732.9	3469.4	3202.8	2941.5	2740.8	2578.4	2455.4	2366.2
11°	4364.0	4297.5	4121.1	3860.4	3558.4	3257.2	2967.3	2745.6	2568.1	2434.9	2337.7
12°	4577.8	4499.6	4292.7	3997.3	3651.2	3314.2	2994.8	2752.2	2560.4	2416.3	2312.2
13°	4805.1	4713.4	4478.6	4140.0	3750.4	3375.0	3024.1	2759.9	2553.7	2399.0	2288.5
14°	5052.4	4950.3	4678.1	4291.5	3853.9	3437.6	3053.1	2767.8	2547.8	2383.5	2266.4
15°	5316.9	5197.9	4889.5	4452.7	3962.6	3502.0	3085.2	2777.2	2543.1	2369.1	2244.2
16°	5589.8	5455.2	5108.5	4624.0	4076.2	3568.8	3119.2	2788.5	2539.6	2355.6	2224.1
17°	5858.2	5710.4	5323.7	4800.1	4196.4	3638.3	3154.2	2800.3	2537.1	2343.0	2203.8
18°	6125.9	5961.1	5539.9	4973.5	4322.8	3710.5	3189.8	2810.7	2535.3	2331.5	2172.7
19°	6374.4	6202.5	5752.9	5144.6	4452.8	3785.2	3214.6	2813.2	2530.1	2321.1	2100.0
20°	6602.0	6425.8	5959.9	5315.4	4582.5	3856.2	3245.7	2820.3	2518.5	2310.8	2048.4
21°	6806.1	6630.3	6154.5	5480.2	4714.4	3920.7	3277.1	2836.2	2509.8	2299.3	2034.7
22°	6983.7	6813.6	6337.8	5639.1	4843.1	3997.1	3318.4	2852.7	2511.3	2258.3	2022.1
23°	7140.9	6979.7	6505.1	5792.5	4970.7	4071.0	3362.1	2867.7	2512.9	2205.9	2011.6
24°	7278.1	7125.5	6663.2	5936.0	5083.0	4156.6	3402.8	2876.7	2509.5	2164.1	2003.6
25°	7397.0	7253.5	6805.9	6074.3	5191.0	4246.0	3437.2	2889.2	2506.0	2157.3	1995.8
26°	7497.4	7363.8	6936.0	6201.3	5297.7	4333.6	3473.4	2901.5	2503.9	2149.1	1989.6
27°	7581.8	7459.7	7056.3	6326.1	5400.5	4419.4	3513.9	2920.8	2508.8	2138.1	1983.0
28°	7651.4	7538.9	7160.8	6443.2	5496.3	4495.6	3555.5	2940.1	2516.2	2130.2	1976.9
29°	7709.2	7603.3	7252.4	6550.4	5590.3	4567.5	3604.6	2959.5	2522.4	2130.0	1972.1
30°	7752.9	7656.6	7333.6	6652.3	5685.7	4642.7	3653.6	2980.3	2514.0	2131.8	1967.4
31°	7786.9	7697.3	7403.5	6745.0	5774.0	4718.5	3704.7	3001.6	2476.5	2134.5	1958.4
32°	7807.7	7727.0	7461.2	6821.6	5857.0	4791.0	3755.2	3020.3	2468.6	2137.0	1946.4
33°	7818.0	7744.7	7510.8	6889.6	5932.3	4866.9	3806.2	3025.9	2439.1	2139.4	1870.4
34°	7818.8	7752.1	7549.3	6950.9	5998.2	4941.1	3855.5	3031.9	2442.3	2139.6	1805.1
35°	7809.9	7751.4	7578.1	7009.2	6056.9	5011.8	3891.8	3046.9	2447.1	2137.9	1801.2
36°	7792.9	7742.5	7595.2	7060.4	6111.9	5079.5	3921.8	3064.2	2453.4	2137.0	1802.6
37°	7766.9	7725.5	7603.3	7103.2	6165.7	5144.4	3956.0	3082.4	2464.4	2139.9	1803.9
38°	7734.4	7700.3	7604.1	7136.0	6218.2	5208.7	3998.5	3103.2	2471.2	2140.7	1802.6
39°	7694.4	7670.0	7595.9	7163.2	6264.8	5267.2	4036.7	3125.4	2472.9	2038.5	1801.4
40°	7648.5	7632.2	7577.4	7184.5	6309.7	5315.8	4077.7	3141.7	2483.6	1991.6	1805.9
41°	7593.7	7586.3	7553.0	7201.2	6348.6	5350.4	4117.1	3156.5	2499.9	1998.5	1810.3
42°	7530.8	7535.2	7519.6	7215.6	6389.9	5384.0	4157.5	3169.3	2516.2	2008.0	1815.3
43°	7458.9	7475.2	7478.2	7219.9	6428.9	5418.5	4195.5	3176.6	2533.6	2018.8	1817.1
44°	7378.0	7408.6	7430.1	7215.0	6463.8	5456.3	4227.2	3198.5	2552.1	2030.5	1758.7



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CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	7286.4	7332.1	7372.7	7199.9	6494.8	5492.5	4252.3	3228.9	2571.5	2040.6	1679.1
46°	7181.6	7245.6	7309.2	7176.2	6523.8	5528.5	4275.2	3260.3	2579.7	2040.4	1681.2
47°	7071.1	7146.7	7237.8	7142.3	6548.7	5562.7	4289.7	3292.6	2578.7	2045.6	1686.1
48°	6954.8	7040.4	7157.8	7099.5	6567.3	5590.9	4300.3	3326.5	2587.5	2057.7	1688.4
49°	6822.8	6918.3	7067.6	7050.7	6578.0	5618.9	4322.7	3355.3	2542.7	2065.2	1686.3
50°	6676.3	6787.1	6965.0	6992.5	6578.5	5644.7	4353.6	3361.5	2502.9	1999.8	1686.6
51°	6517.9	6640.4	6848.8	6922.7	6566.2	5661.2	4384.6	3339.7	2466.0	1919.7	1689.3
52°	6347.3	6481.1	6722.1	6842.0	6549.1	5670.0	4412.6	3359.9	2484.5	1925.9	1613.5
53°	6165.7	6308.0	6581.3	6753.0	6521.7	5673.9	4437.2	3366.4	2501.0	1937.9	1531.8
54°	5970.4	6119.7	6430.4	6650.9	6485.7	5673.1	4459.1	3362.8	2509.9	1954.0	1539.6
55°	5771.3	5925.9	6266.9	6538.0	6437.8	5657.5	4477.0	3383.0	2523.9	1962.9	1550.6
56°	5556.1	5722.4	6090.1	6415.5	6383.9	5630.3	4480.8	3396.0	2546.7	1969.4	1563.0
57°	5341.9	5509.3	5908.2	6279.7	6321.7	5595.4	4476.3	3395.9	2564.9	1966.6	1575.1
58°	5119.1	5290.5	5717.5	6132.7	6247.8	5563.1	4458.6	3407.6	2573.2	1861.2	1581.4
59°	4886.6	5068.4	5516.9	5979.5	6161.3	5529.2	4441.7	3418.6	2590.3	1836.2	1456.2
60°	4638.2	4836.2	5311.3	5812.3	6059.0	5487.4	4425.9	3410.3	2520.2	1861.3	1466.7
61°	4372.7	4590.9	5096.1	5638.1	5942.6	5435.8	4397.9	3381.0	2480.5	1891.2	1471.0
62°	4095.5	4335.9	4878.8	5453.2	5819.3	5370.2	4366.6	3371.9	2496.7	1923.2	1428.3
63°	3804.8	4069.3	4658.4	5259.7	5680.7	5289.3	4323.2	3347.7	2508.9	1947.5	1385.9
64°	3523.4	3806.3	4438.0	5062.1	5526.0	5193.8	4263.4	3309.2	2518.1	1856.7	1376.7
65°	3268.3	3544.1	4209.3	4858.6	5359.8	5080.7	4190.3	3264.6	2505.9	1866.4	1392.1
66°	3044.0	3306.8	3986.0	4652.0	5182.3	4948.9	4094.4	3198.2	2437.4	1890.2	1310.7
67°	2859.7	3090.4	3764.2	4446.9	4992.3	4795.7	3993.4	3128.3	2361.7	1874.9	1291.7
68°	2661.8	2900.6	3548.2	4236.2	4778.2	4624.3	3841.9	3025.5	2380.1	1828.5	1324.5
69°	2371.3	2700.7	3345.2	4031.0	4551.9	4418.6	3612.8	2903.2	2391.0	1841.1	1211.7
70°	1945.1	2436.6	3155.8	3823.6	4319.9	4163.7	3281.1	2738.3	2395.9	1791.8	1206.2
71°	1384.8	2067.8	2966.0	3617.3	4057.2	3861.6	2900.6	2523.3	2347.1	1795.9	1044.0
72°	881.4	1565.8	2752.4	3403.2	3765.5	3506.5	2574.6	2283.9	2258.2	1785.7	1006.7
73°	678.3	1036.5	2496.3	3182.8	3439.4	3121.4	2264.7	2074.3	2169.5	1759.2	933.9
74°	481.6	630.1	2150.4	2934.3	3093.6	2730.2	1832.7	1919.5	2073.0	1774.2	846.4
75°	284.9	464.3	1670.6	2616.2	2717.0	2308.9	1400.8	1623.8	1963.0	1737.3	815.1
76°	251.3	303.4	1166.1	2223.6	2328.7	1784.3	968.5	1328.2	1866.1	1689.8	794.5
77°	224.8	260.6	760.7	1737.4	1925.4	1174.1	529.0	1031.8	1785.7	1528.3	749.7
78°	203.1	230.0	594.7	1159.6	1494.7	675.3	275.9	595.4	1552.4	1366.7	676.3
79°	184.0	205.5	436.2	632.4	1039.7	468.5	225.7	436.1	1319.3	1203.5	574.2
80°	166.6	184.2	277.7	436.5	649.9	263.3	175.5	276.9	1082.4	981.9	491.9
81°	150.6	165.0	234.8	248.9	426.6	222.3	125.9	120.2	601.0	734.7	444.5
82°	135.7	147.4	203.7	212.9	207.5	189.9	106.2	93.3	440.5	585.3	442.8
83°	121.4	130.8	176.3	185.8	161.1	154.1	88.5	72.1	280.0	463.7	363.7
84°	107.6	115.3	149.2	161.4	130.9	116.9	71.8	56.4	120.0	331.1	270.6
85°	94.4	100.8	120.5	138.2	104.3	89.2	55.5	43.6	105.4	245.0	191.2
86°	81.2	87.0	98.3	115.7	81.3	69.1	40.8	33.0	84.4	158.9	112.2
87°	69.9	74.0	79.6	91.2	63.5	52.1	31.3	25.6	62.6	73.8	68.8
88°	58.7	63.0	65.2	70.1	45.9	35.1	21.8	18.2	47.5	50.2	46.9
89°	47.5	52.0	50.9	49.0	28.3	20.5	12.3	10.8	32.4	26.6	25.0



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CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436725

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436725

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436725

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2839.9	2839.9	2839.9	2839.9	2839.9	2839.9	2839.9	2839.9	2839.9	2839.9	2839.9
1°	2764.3	2764.5	2768.5	2778.8	2792.3	2809.9	2829.0	2834.8	2857.5	2878.7	2897.2
2°	2694.3	2692.4	2700.6	2718.1	2743.8	2776.0	2814.3	2841.3	2886.0	2929.2	2967.5
3°	2630.7	2626.4	2637.0	2661.6	2699.2	2746.6	2802.5	2851.2	2917.6	2982.2	3040.4
4°	2573.1	2568.6	2580.3	2610.6	2658.2	2720.6	2794.1	2863.0	2952.2	3039.8	3121.4
5°	2522.2	2515.8	2529.0	2565.3	2621.4	2697.7	2788.4	2877.7	2990.5	3103.6	3208.4
6°	2473.9	2466.0	2482.0	2523.9	2589.7	2677.0	2784.7	2894.9	3032.3	3173.3	3303.4
7°	2429.8	2420.2	2437.9	2485.0	2559.8	2660.2	2784.3	2916.3	3077.0	3246.3	3405.0
8°	2389.1	2377.5	2397.2	2450.1	2533.2	2645.2	2786.0	2937.7	3125.4	3324.2	3514.2
9°	2350.4	2337.0	2359.1	2417.5	2509.6	2632.8	2789.1	2962.4	3178.1	3408.0	3631.5
10°	2314.3	2299.9	2324.2	2387.7	2487.1	2622.1	2794.0	2989.7	3232.6	3496.3	3754.1
11°	2281.1	2264.9	2291.7	2360.8	2468.4	2613.4	2801.2	3020.7	3292.6	3590.6	3886.2
12°	2250.6	2233.5	2260.5	2335.3	2451.4	2606.6	2811.0	3052.7	3353.3	3690.7	4026.2
13°	2222.9	2203.3	2232.8	2312.1	2436.2	2602.1	2822.5	3087.2	3418.3	3795.6	4176.2
14°	2196.1	2174.3	2206.2	2290.5	2423.2	2599.2	2835.1	3122.3	3485.6	3904.6	4335.1
15°	2169.9	2145.9	2180.2	2269.7	2411.3	2598.5	2848.4	3159.9	3556.0	4023.6	4505.6
16°	2139.7	2082.6	2151.2	2250.0	2399.8	2598.7	2862.3	3199.2	3629.2	4145.6	4685.0
17°	2057.5	2011.6	2073.0	2230.6	2389.2	2599.2	2879.0	3238.6	3705.8	4276.4	4865.9
18°	1999.6	1974.5	2013.6	2200.4	2380.2	2600.9	2895.6	3279.7	3785.0	4411.5	5049.1
19°	1978.5	1952.9	1991.2	2133.6	2371.1	2601.2	2902.3	3315.1	3866.7	4548.8	5234.0
20°	1960.2	1933.4	1972.8	2083.6	2362.2	2592.9	2913.8	3347.6	3952.3	4688.1	5413.2
21°	1944.3	1917.3	1956.5	2064.9	2351.9	2587.5	2930.6	3384.6	4030.1	4829.1	5585.3
22°	1931.3	1902.6	1943.7	2053.8	2311.5	2591.4	2952.3	3429.7	4109.0	4970.3	5748.1
23°	1920.1	1890.2	1933.3	2044.1	2263.2	2596.9	2973.8	3478.5	4199.0	5105.6	5899.2
24°	1909.7	1878.8	1923.6	2036.4	2227.8	2602.4	2992.6	3528.5	4288.7	5239.0	6043.4
25°	1900.4	1867.8	1914.4	2030.1	2218.2	2600.9	3005.9	3575.8	4385.8	5354.3	6178.1
26°	1891.0	1858.9	1906.6	2025.2	2214.2	2600.7	3023.0	3615.9	4483.3	5460.0	6306.3
27°	1883.2	1851.4	1899.4	2020.8	2205.1	2602.2	3039.3	3660.8	4581.8	5565.0	6427.0
28°	1876.9	1845.0	1893.5	2016.5	2198.4	2611.1	3062.9	3707.6	4673.9	5665.4	6541.9
29°	1870.4	1817.6	1887.2	2013.1	2197.8	2619.6	3087.3	3759.8	4755.1	5755.2	6646.7
30°	1819.6	1718.7	1844.4	2010.4	2201.3	2612.9	3112.0	3814.2	4836.8	5846.8	6746.1
31°	1733.8	1699.6	1757.2	2002.2	2205.5	2592.0	3136.0	3869.0	4918.4	5934.6	6838.8
32°	1719.6	1700.1	1741.6	1992.8	2211.1	2571.8	3159.3	3924.6	4994.9	6017.6	6922.7
33°	1718.4	1702.4	1740.9	1936.0	2216.6	2552.0	3169.6	3979.5	5070.1	6092.0	6992.8
34°	1719.2	1706.7	1741.7	1867.6	2222.0	2552.8	3180.1	4035.2	5146.0	6158.2	7052.7
35°	1720.6	1712.3	1743.9	1858.3	2222.9	2558.9	3197.6	4082.3	5218.3	6215.3	7105.5
36°	1723.3	1717.2	1747.3	1860.8	2223.4	2566.4	3217.2	4118.9	5286.0	6268.3	7155.4
37°	1724.3	1721.5	1749.5	1864.4	2223.9	2576.2	3239.1	4157.9	5350.1	6320.3	7198.8
38°	1724.6	1725.3	1751.0	1863.9	2224.3	2587.4	3263.5	4201.4	5411.4	6371.0	7234.7
39°	1724.1	1725.5	1752.3	1863.2	2140.8	2592.1	3289.9	4243.5	5469.1	6415.9	7260.7
40°	1720.6	1630.8	1750.2	1867.0	2091.7	2600.3	3314.8	4288.0	5519.5	6457.3	7282.6
41°	1623.3	1582.0	1664.9	1873.0	2092.7	2618.3	3331.9	4330.5	5556.1	6496.4	7295.9
42°	1569.6	1582.8	1602.0	1879.2	2102.0	2637.3	3345.2	4371.6	5586.2	6535.9	7303.4
43°	1568.6	1585.4	1601.3	1883.7	2112.8	2657.3	3353.7	4414.0	5617.5	6569.5	7303.9
44°	1570.0	1587.4	1604.0	1843.9	2125.1	2678.2	3379.3	4454.1	5646.9	6600.4	7297.3



REPORT NUMBER: P1436725

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1571.9	1587.4	1607.2	1754.3	2137.0	2698.1	3411.7	4484.2	5678.1	6625.3	7278.6
46°	1573.6	1585.1	1609.7	1749.9	2139.9	2708.7	3445.1	4506.7	5709.3	6647.2	7247.8
47°	1574.6	1528.1	1611.7	1755.5	2143.0	2710.1	3479.0	4520.7	5735.5	6664.2	7205.3
48°	1522.4	1471.1	1611.5	1758.6	2157.1	2720.7	3512.3	4528.4	5759.4	6673.7	7156.7
49°	1470.3	1415.0	1517.2	1755.7	2165.4	2713.1	3544.6	4548.5	5776.5	6676.3	7098.6
50°	1418.4	1411.8	1449.1	1755.4	2121.4	2652.7	3564.7	4574.1	5789.2	6665.2	7035.0
51°	1423.7	1410.3	1453.8	1759.0	2025.0	2616.6	3548.8	4596.7	5796.0	6639.7	6961.7
52°	1431.4	1410.5	1461.0	1701.6	2026.1	2629.1	3538.6	4617.4	5794.9	6607.4	6877.7
53°	1439.5	1410.0	1468.7	1605.4	2041.2	2647.9	3551.5	4633.3	5784.0	6565.9	6783.5
54°	1446.0	1403.6	1434.1	1613.7	2060.4	2657.3	3546.4	4643.8	5766.2	6516.3	6675.4
55°	1449.0	1270.8	1399.5	1626.0	2071.6	2663.5	3543.8	4650.8	5733.3	6458.9	6561.0
56°	1323.4	1250.0	1365.0	1640.7	2081.1	2687.9	3548.3	4643.3	5684.2	6395.7	6434.3
57°	1300.2	1255.7	1336.7	1655.7	2079.6	2705.9	3540.8	4621.0	5630.8	6325.8	6300.8
58°	1306.0	1262.1	1342.7	1666.5	1989.9	2711.6	3541.0	4587.5	5575.9	6241.0	6155.4
59°	1314.5	1206.5	1350.3	1544.7	1959.8	2723.0	3542.7	4554.8	5523.0	6148.3	6000.8
60°	1219.1	1096.3	1264.9	1546.5	1987.3	2664.9	3522.0	4518.9	5462.3	6041.3	5832.2
61°	1162.2	1108.4	1203.9	1555.1	2017.6	2599.5	3478.0	4473.7	5388.7	5921.2	5652.0
62°	1176.1	1119.8	1219.5	1571.6	2048.8	2601.2	3457.4	4420.6	5304.9	5789.3	5469.1
63°	1190.7	980.5	1232.3	1475.9	2073.8	2602.4	3430.3	4358.9	5209.0	5639.8	5275.7
64°	1036.4	967.8	1073.5	1463.6	1983.8	2602.9	3379.9	4276.1	5098.7	5483.1	5079.7
65°	1046.3	979.6	1078.3	1435.9	1985.8	2585.9	3327.8	4172.5	4971.0	5311.4	4873.6
66°	1053.5	818.3	1092.0	1408.2	1998.3	2522.8	3251.4	4056.7	4819.1	5132.0	4660.9
67°	872.4	791.8	905.5	1382.1	1984.6	2425.8	3164.8	3917.3	4654.7	4934.5	4450.1
68°	887.2	611.2	916.0	1412.0	1933.3	2431.9	3037.6	3709.0	4457.6	4718.3	4236.0
69°	709.4	551.3	737.0	1298.8	1930.2	2431.3	2872.7	3411.5	4222.9	4485.7	4030.2
70°	677.5	377.3	695.6	1285.9	1883.8	2425.7	2658.5	3018.7	3931.5	4227.8	3811.1
71°	448.6	203.3	450.1	1120.5	1863.1	2367.9	2411.0	2647.1	3583.0	3940.3	3585.2
72°	278.3	31.0	263.4	1082.9	1849.9	2261.6	2168.1	2317.4	3189.3	3620.9	3355.6
73°	229.8	0.4	209.5	982.5	1810.8	2152.4	1945.0	1970.6	2783.4	3270.3	3107.1
74°	207.4	0.3	193.2	873.9	1807.1	2043.8	1669.6	1577.8	2382.3	2892.7	2833.8
75°	170.3	0.3	165.4	821.9	1714.9	1927.2	1394.2	1091.0	1951.1	2481.4	2495.2
76°	133.2	0.3	137.6	793.3	1573.4	1796.3	1117.7	634.1	1421.7	2072.1	2092.1
77°	96.5	0.3	109.8	747.2	1431.8	1574.5	688.8	420.3	872.6	1682.2	1601.6
78°	71.8	0.3	88.6	673.0	1290.0	1352.7	359.2	209.4	660.4	1272.6	1054.6
79°	70.9	0.3	88.5	569.6	1116.3	1125.9	241.2	163.7	454.9	849.3	780.6
80°	96.6	0.4	108.2	497.0	921.3	682.0	125.9	138.4	249.5	632.1	513.7
81°	119.1	0.4	113.7	463.4	697.0	492.4	99.6	117.9	213.6	417.1	246.7
82°	107.3	0.5	69.9	436.0	538.2	302.8	81.0	99.0	182.5	202.1	212.7
83°	66.6	0.5	49.3	363.1	383.3	115.7	65.4	81.7	148.9	158.1	186.7
84°	36.3	0.6	28.6	260.7	276.4	97.8	52.0	66.4	115.9	128.8	162.1
85°	27.0	0.7	8.2	158.2	169.5	77.7	40.7	51.2	88.4	102.0	138.4
86°	17.8	0.8	7.2	58.3	65.2	57.2	31.0	36.0	70.2	78.9	115.4
87°	8.7	0.9	7.2	40.5	33.4	41.0	23.5	23.8	52.0	61.7	90.1
88°	6.0	1.0	6.3	22.6	23.2	28.4	16.0	13.7	33.9	44.7	69.2
89°	4.3	1.1	3.5	5.2	12.9	15.9	8.5	9.5	19.7	27.6	48.5



REPORT NUMBER: P1436725

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436725

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436725

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436725

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2839.9	2839.9	2839.9
1°	2912.6	2923.5	2928.6
2°	2996.6	3017.2	3024.7
3°	3087.2	3117.8	3129.2
4°	3187.6	3230.4	3244.1
5°	3293.9	3350.8	3369.5
6°	3411.9	3483.5	3507.2
7°	3537.6	3622.7	3652.9
8°	3671.5	3775.4	3812.2
9°	3816.6	3941.5	3985.7
10°	3970.5	4117.1	4167.1
11°	4139.5	4308.5	4364.0
12°	4317.1	4513.0	4577.8
13°	4510.1	4734.7	4805.1
14°	4712.4	4968.5	5052.4
15°	4929.6	5217.0	5316.9
16°	5147.8	5469.7	5589.8
17°	5371.9	5730.2	5858.2
18°	5596.3	5987.1	6125.9
19°	5812.1	6229.2	6374.4
20°	6019.1	6456.6	6602.0
21°	6214.3	6664.8	6806.1
22°	6394.9	6848.5	6983.7
23°	6567.0	7016.1	7140.9
24°	6727.6	7159.6	7278.1
25°	6873.0	7285.5	7397.0
26°	7004.7	7391.3	7497.4
27°	7123.6	7483.4	7581.8
28°	7228.8	7560.4	7651.4
29°	7320.1	7623.3	7709.2
30°	7400.0	7674.4	7752.9
31°	7467.8	7714.4	7786.9
32°	7523.4	7744.0	7807.7
33°	7567.8	7761.0	7818.0
34°	7604.1	7768.4	7818.8
35°	7630.0	7766.2	7809.9
36°	7645.5	7755.1	7792.9
37°	7651.4	7736.6	7766.9
38°	7649.2	7710.7	7734.4
39°	7637.4	7678.1	7694.4
40°	7617.4	7639.6	7648.5
41°	7590.7	7595.2	7593.7
42°	7555.9	7544.1	7530.8
43°	7512.2	7486.3	7458.9
44°	7460.4	7419.0	7378.0

REPORT NUMBER: P1436725

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	7403.7	7344.5	7286.4
46°	7339.7	7260.8	7181.6
47°	7266.8	7163.6	7071.1
48°	7187.8	7061.9	6954.8
49°	7097.3	6943.4	6822.8
50°	6996.7	6816.3	6676.3
51°	6882.0	6673.9	6517.9
52°	6754.5	6516.7	6347.3
53°	6612.7	6346.6	6165.7
54°	6461.3	6163.6	5970.4
55°	6301.1	5971.4	5771.3
56°	6125.2	5763.6	5556.1
57°	5943.1	5544.6	5341.9
58°	5751.5	5327.0	5119.1
59°	5551.1	5101.4	4886.6
60°	5341.4	4869.2	4638.2
61°	5126.9	4622.1	4372.7
62°	4908.9	4371.3	4095.5
63°	4692.0	4109.4	3804.8
64°	4477.7	3849.1	3523.4
65°	4259.2	3589.8	3268.3
66°	4039.2	3354.2	3044.0
67°	3819.8	3138.5	2859.7
68°	3603.4	2951.6	2661.8
69°	3397.7	2751.0	2371.3
70°	3204.5	2500.5	1945.1
71°	3005.3	2155.7	1384.8
72°	2784.5	1670.7	881.4
73°	2519.9	1132.6	678.3
74°	2160.6	691.5	481.6
75°	1693.1	504.0	284.9
76°	1205.2	317.4	251.3
77°	807.6	269.7	224.8
78°	630.6	237.4	203.1
79°	458.5	211.2	184.0
80°	286.4	188.7	166.6
81°	239.2	168.9	150.6
82°	206.0	151.0	135.7
83°	177.4	134.0	121.4
84°	149.9	118.4	107.6
85°	121.4	103.1	94.4
86°	98.8	88.9	81.2
87°	79.7	75.2	69.9
88°	65.3	63.8	58.7
89°	51.0	52.4	47.5



REPORT NUMBER: P1436725

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436725
CATALOG NUMBER: XAS180-SFPM (4000K-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: P1436725
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)