

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: P1436705

Luminaire Tested: XAS180-SFPM (3000K-144W-T3)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436705
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-144W-T3)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 80% (144W)
OPTICS - TYPE 3
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

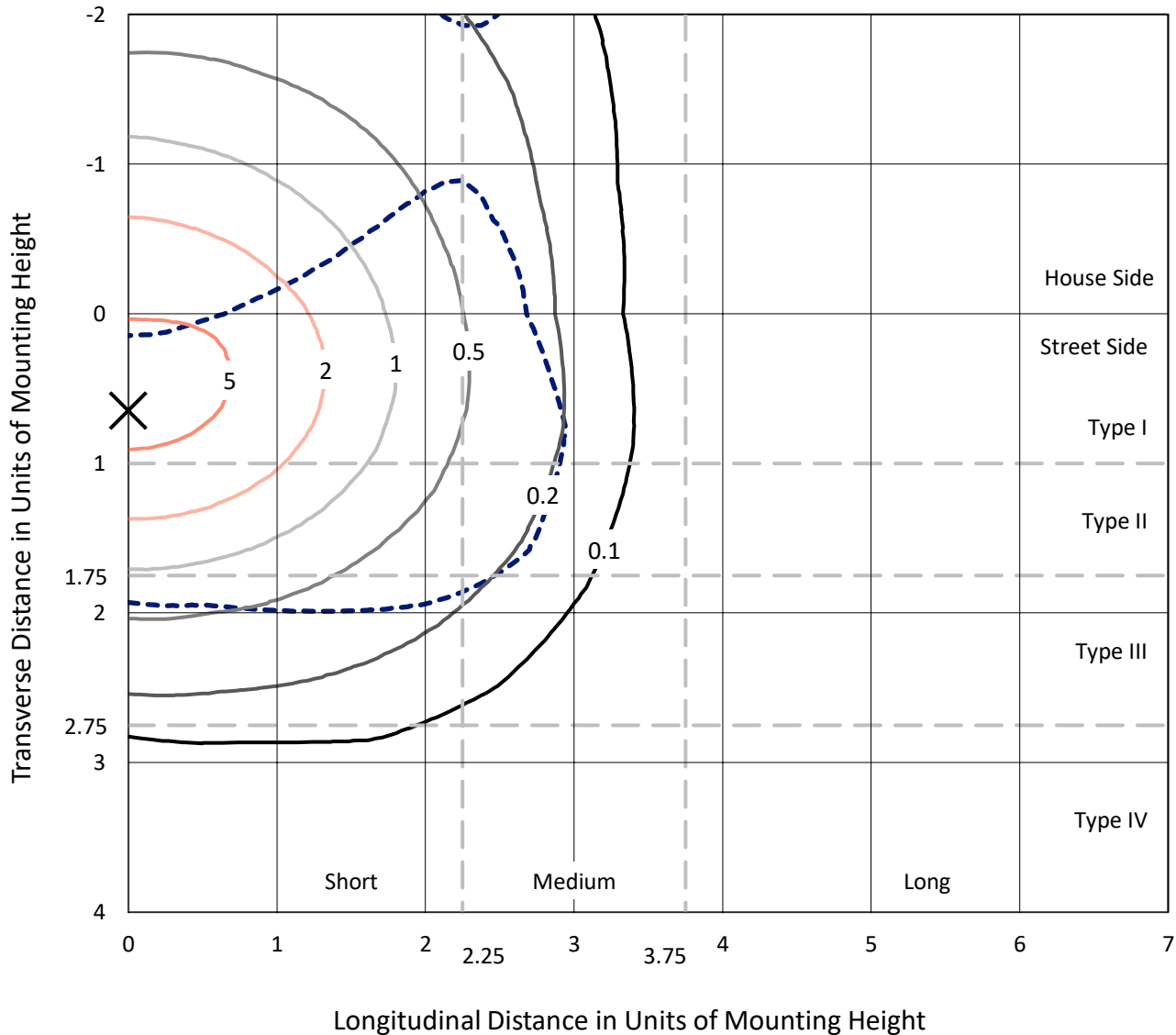
Lumens per Lamp: 27928 (1 lamp)
Luminaire Lumens: 21302.4 lumens
Efficiency: 76.3%
Efficacy: 145.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.35m x L: 0.35m x H: 0.35m)
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 146.1
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

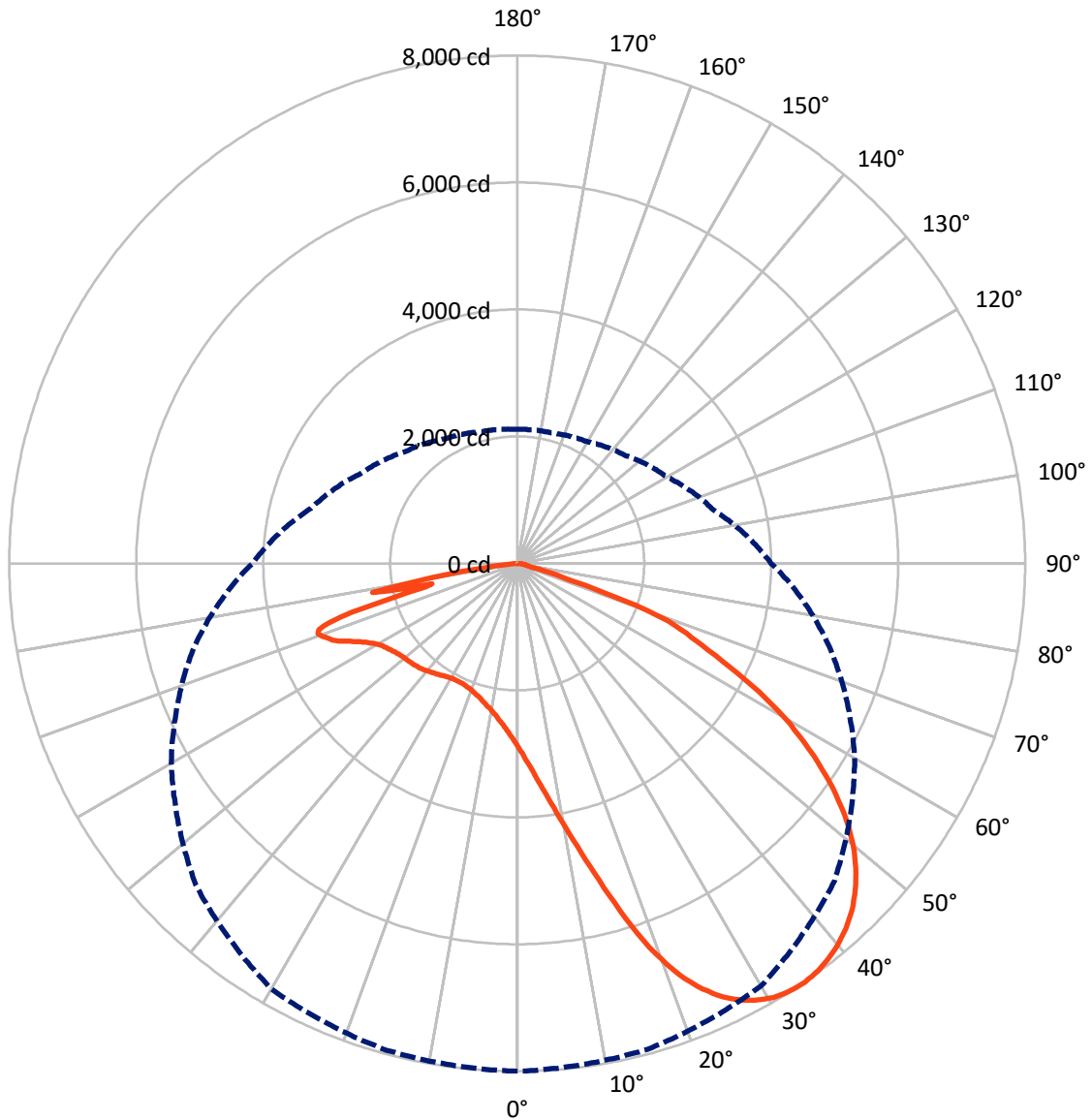
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 fc
 Type III - Short - Semi-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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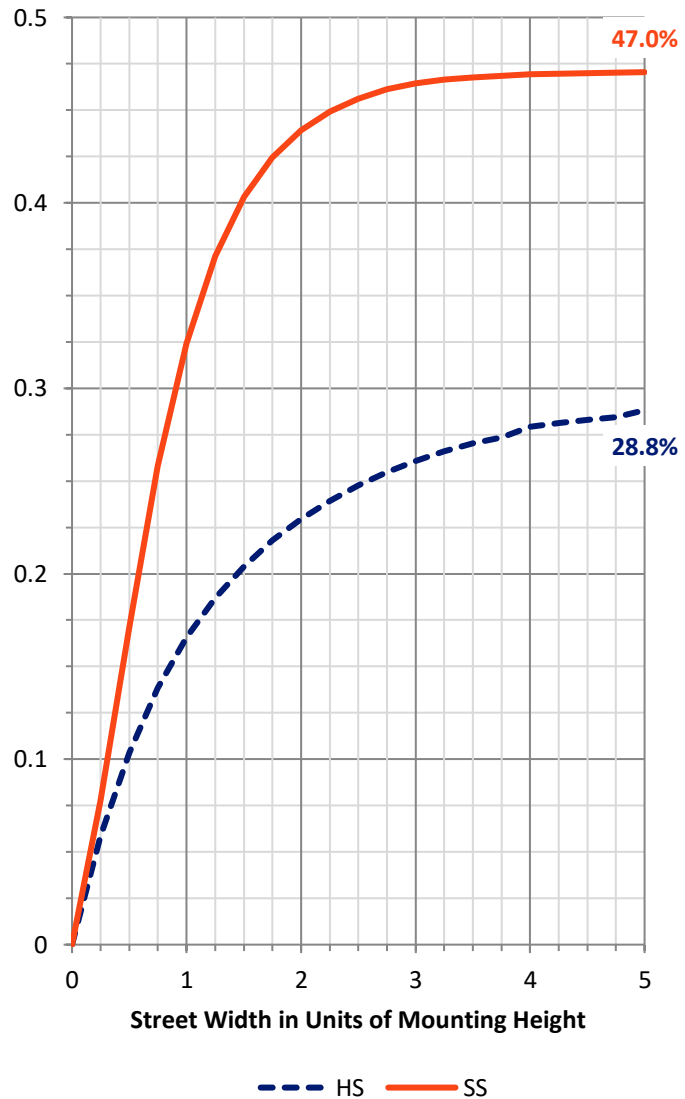
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8151.4	0.0	8151.4
	% Lamp	29.2	0.0	29.2
Street Side	Lumens	13151.0	0.0	13151.0
	% Lamp	47.1	0.0	47.1
Total	Lumens	21302.4	0.0	21302.4
	% Lamp	76.3	0.0	76.3

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	290.6	1.4	1.0
10°-20°	1012.6	4.8	3.6
20°-30°	1989.5	9.3	7.1
30°-40°	2978.2	14.0	10.7
40°-50°	3792.0	17.8	13.6
50°-60°	4239.7	19.9	15.2
60°-70°	4096.1	19.2	14.7
70°-80°	2554.5	12.0	9.1
80°-90°	349.2	1.6	1.3
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°	21302.4	100.0	76.3
0°-180°	21302.4	100.0	76.3

Coefficient of Utilization



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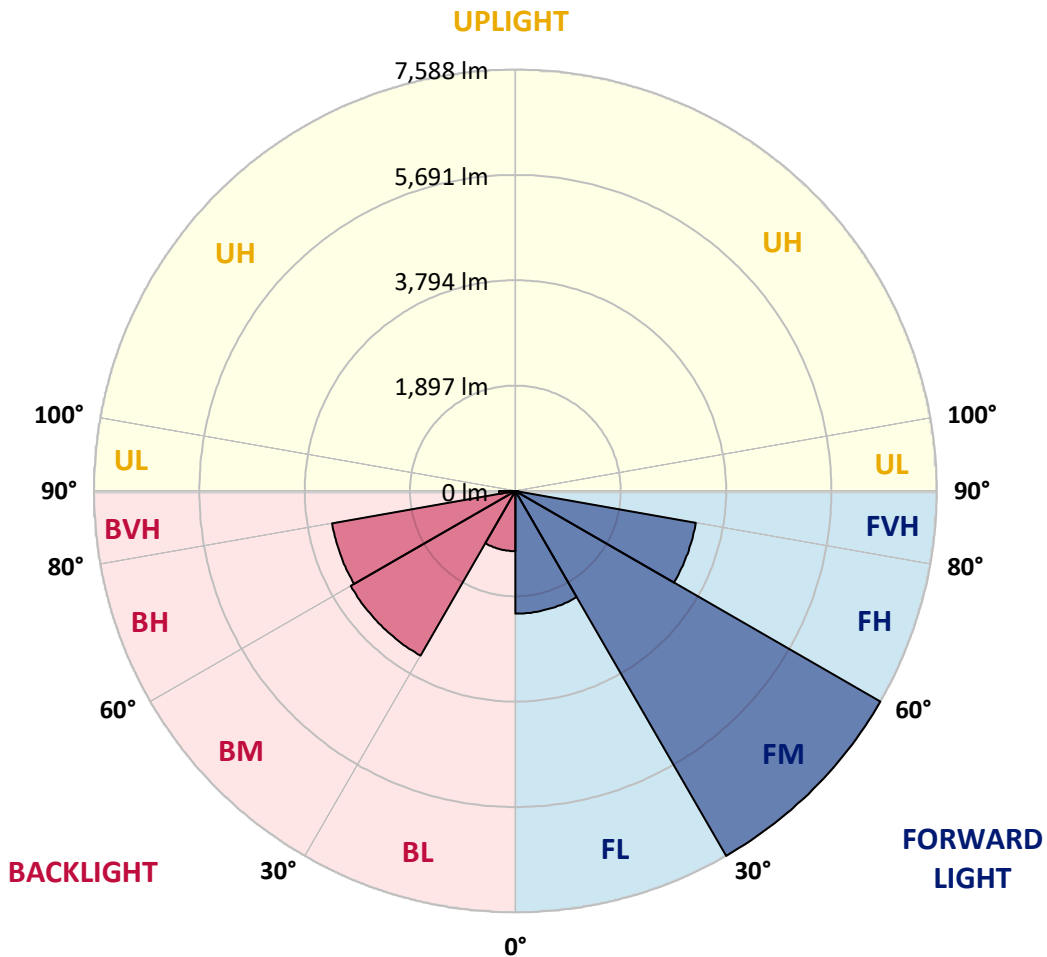
CATALOG NUMBER: XAS180-SFPM (3000K-144W-T3)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2209.0	7.9			
FM (30°-60°)	7587.7	27.2			
FH (60°-80°)	3299.0	11.8			G2/5000
FVH (80°-90°)	55.3	0.2			G1/100
BL (0°-30°)	1083.7	3.9	B3/2500		
BM (30°-60°)	3422.2	12.3	B3/5000		
BH (60°-80°)	3351.6	12.0	B4/5000		G4/5000
BVH (80°-90°)	293.9	1.1			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	6625.6	23.7			

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°	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3
1°	2993.9	2991.7	2985.7	2973.1	2956.9	2937.2	2900.1	2878.8	2860.0	2844.8	2835.9
2°	3090.4	3085.1	3069.6	3039.6	3003.6	2960.5	2901.5	2859.7	2823.4	2793.2	2772.8
3°	3196.2	3187.3	3157.6	3111.7	3053.8	2988.2	2906.8	2844.4	2790.3	2747.1	2714.8
4°	3313.4	3299.6	3254.7	3189.7	3109.2	3019.0	2913.2	2831.3	2760.5	2703.8	2663.3
5°	3440.2	3422.1	3362.1	3274.3	3167.1	3051.4	2921.9	2820.4	2733.4	2665.8	2616.9
6°	3579.7	3552.8	3478.0	3367.2	3232.1	3088.2	2932.9	2811.9	2709.5	2630.7	2572.9
7°	3727.7	3695.8	3605.0	3466.8	3301.1	3128.8	2949.1	2808.1	2689.0	2598.5	2532.5
8°	3890.0	3848.6	3739.5	3572.8	3376.0	3173.3	2967.0	2806.6	2672.1	2568.9	2496.3
9°	4066.1	4015.9	3884.5	3686.9	3457.1	3220.7	2987.5	2806.9	2657.4	2542.4	2462.0
10°	4254.4	4193.6	4039.3	3808.9	3542.8	3272.4	3011.8	2809.6	2645.3	2519.6	2430.5
11°	4455.4	4387.0	4204.5	3940.0	3632.2	3326.7	3038.8	2815.2	2634.7	2498.6	2403.6
12°	4673.4	4592.0	4380.4	4076.5	3726.1	3385.1	3067.2	2822.4	2626.5	2480.3	2379.1
13°	4907.7	4813.6	4571.7	4221.9	3827.7	3446.1	3096.3	2831.1	2620.3	2463.8	2357.0
14°	5160.4	5054.5	4777.8	4378.0	3932.2	3509.7	3127.4	2839.8	2614.5	2449.6	2335.9
15°	5429.8	5305.5	4993.6	4541.1	4043.1	3575.3	3159.8	2849.8	2610.4	2437.2	2316.1
16°	5709.3	5571.4	5214.8	4716.7	4161.2	3644.1	3195.5	2861.8	2607.4	2425.2	2298.1
17°	5987.1	5832.4	5436.9	4896.0	4281.9	3715.9	3232.3	2875.2	2606.6	2414.3	2281.2
18°	6260.7	6090.4	5657.8	5076.1	4409.3	3789.6	3271.1	2889.8	2605.8	2404.8	2265.7
19°	6516.2	6335.9	5876.5	5250.6	4543.2	3866.2	3310.9	2906.4	2605.8	2396.5	2252.8
20°	6750.4	6568.0	6086.0	5424.6	4678.6	3946.0	3352.8	2924.2	2606.4	2389.0	2242.2
21°	6959.9	6778.9	6288.3	5596.7	4812.6	4028.5	3395.5	2943.3	2608.2	2382.1	2232.6
22°	7143.9	6967.8	6473.6	5759.4	4944.4	4115.4	3439.6	2961.7	2612.3	2376.8	2224.2
23°	7306.6	7136.8	6648.0	5916.6	5076.4	4203.1	3485.4	2981.3	2616.6	2372.9	2217.4
24°	7447.0	7287.0	6810.0	6064.9	5204.8	4293.9	3533.0	3002.8	2622.0	2370.4	2210.8
25°	7568.4	7419.7	6958.3	6204.4	5328.5	4385.8	3579.9	3024.3	2628.3	2369.7	2205.9
26°	7671.2	7532.5	7092.3	6336.6	5449.4	4478.5	3628.2	3046.3	2636.1	2370.7	2201.7
27°	7758.1	7629.2	7213.8	6464.1	5563.3	4571.6	3678.8	3067.9	2645.4	2372.0	2198.7
28°	7829.8	7713.1	7321.7	6583.5	5672.0	4662.8	3730.2	3089.7	2655.0	2374.6	2197.2
29°	7889.3	7778.7	7417.2	6694.8	5774.4	4751.8	3783.3	3111.7	2666.3	2378.6	2197.2
30°	7935.1	7832.9	7500.8	6800.2	5874.5	4839.2	3836.2	3135.4	2678.6	2383.6	2198.1
31°	7967.1	7875.6	7571.5	6896.9	5965.5	4924.7	3890.0	3159.0	2692.0	2390.1	2200.7
32°	7989.2	7904.6	7630.0	6984.7	6052.7	5008.5	3944.9	3184.0	2706.5	2397.3	2205.2
33°	7999.9	7922.9	7681.9	7067.3	6135.0	5090.6	3999.4	3210.1	2721.7	2405.2	2211.1
34°	7999.9	7930.5	7721.5	7141.1	6211.6	5168.1	4053.7	3235.4	2738.3	2414.3	2218.4
35°	7991.5	7929.0	7750.5	7207.3	6284.0	5241.8	4108.7	3262.6	2755.2	2425.2	2227.4
36°	7973.2	7919.1	7768.8	7266.1	6352.4	5313.8	4162.6	3290.5	2773.0	2437.2	2238.0
37°	7946.5	7901.5	7776.4	7316.4	6417.0	5383.1	4217.1	3318.6	2791.3	2450.9	2249.6
38°	7911.4	7876.4	7777.2	7357.7	6476.2	5448.6	4270.4	3347.9	2810.8	2465.7	2262.5
39°	7871.0	7845.1	7768.0	7393.2	6532.8	5512.1	4325.4	3377.8	2830.8	2482.0	2275.6
40°	7823.7	7806.2	7750.5	7421.0	6584.6	5572.4	4379.1	3409.7	2851.7	2499.6	2289.5
41°	7768.0	7758.9	7724.6	7441.2	6632.8	5629.6	4430.2	3443.0	2873.0	2517.6	2303.7
42°	7702.4	7707.8	7690.2	7455.2	6676.9	5684.6	4479.9	3475.8	2895.8	2537.0	2319.4
43°	7629.2	7646.0	7648.3	7460.0	6718.3	5737.8	4527.9	3509.6	2920.2	2558.0	2334.9
44°	7547.0	7575.3	7599.5	7456.3	6754.2	5788.3	4573.4	3545.1	2945.1	2579.2	2350.9



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	7452.7	7498.6	7540.7	7444.5	6786.4	5836.3	4617.1	3580.8	2971.8	2601.2	2366.9
46°	7346.6	7410.1	7475.2	7425.8	6817.0	5885.2	4661.4	3618.7	3000.4	2622.7	2383.5
47°	7234.7	7310.9	7403.1	7398.6	6842.0	5928.8	4703.7	3656.1	3029.9	2645.0	2401.0
48°	7112.7	7201.7	7321.5	7360.0	6862.2	5969.1	4743.2	3696.2	3060.1	2668.7	2420.0
49°	6979.3	7078.1	7229.9	7315.8	6878.1	6005.1	4779.1	3736.8	3092.7	2694.1	2439.7
50°	6830.1	6942.3	7126.0	7260.3	6887.3	6037.9	4814.2	3778.2	3126.4	2720.3	2461.6
51°	6666.6	6792.1	7012.4	7193.7	6890.1	6065.6	4848.7	3821.7	3161.5	2748.9	2484.7
52°	6490.6	6631.2	6885.8	7114.2	6885.4	6088.7	4879.8	3866.6	3198.4	2778.5	2508.4
53°	6303.1	6454.6	6750.6	7026.3	6872.9	6106.5	4908.0	3909.8	3237.2	2810.0	2533.6
54°	6105.4	6261.3	6599.2	6926.0	6849.1	6120.5	4932.1	3951.4	3279.3	2843.9	2560.3
55°	5896.7	6062.6	6436.3	6815.0	6814.0	6128.5	4953.6	3990.3	3323.0	2880.2	2590.0
56°	5679.0	5847.8	6258.4	6690.3	6768.0	6127.6	4970.1	4026.1	3367.6	2920.1	2621.1
57°	5455.5	5634.4	6073.3	6556.1	6708.7	6116.7	4984.0	4059.9	3413.8	2961.8	2655.8
58°	5223.2	5405.4	5876.7	6407.2	6633.3	6096.9	4991.8	4090.7	3461.2	3009.9	2694.7
59°	4985.5	5175.1	5676.2	6245.3	6545.2	6065.3	4991.5	4118.8	3510.1	3061.5	2738.1
60°	4729.0	4935.0	5465.5	6074.8	6443.3	6021.1	4983.7	4145.3	3560.3	3115.1	2785.6
61°	4456.7	4686.0	5248.4	5890.5	6323.8	5965.0	4967.3	4165.9	3609.2	3173.0	2837.5
62°	4166.9	4424.0	5027.3	5697.0	6196.1	5893.3	4940.9	4179.3	3659.2	3234.8	2892.4
63°	3871.4	4148.6	4801.9	5493.8	6055.8	5805.4	4901.0	4185.5	3708.1	3303.2	2952.3
64°	3579.2	3874.6	4573.0	5284.5	5901.4	5701.5	4846.1	4183.0	3756.1	3374.7	3021.3
65°	3311.6	3602.3	4337.2	5071.6	5734.8	5579.7	4779.8	4171.7	3801.8	3450.5	3099.4
66°	3080.1	3352.6	4101.2	4858.6	5550.9	5442.3	4695.2	4145.4	3843.5	3534.5	3183.8
67°	2886.8	3130.9	3868.8	4647.2	5358.1	5283.6	4586.3	4106.4	3879.1	3620.3	3283.3
68°	2687.8	2932.3	3644.8	4434.0	5143.9	5106.3	4417.5	4044.0	3908.5	3708.8	3397.8
69°	2397.2	2730.6	3434.7	4220.9	4919.2	4898.0	4168.8	3915.9	3923.2	3804.0	3526.9
70°	1967.6	2470.6	3236.3	4007.0	4678.0	4635.6	3838.6	3712.8	3927.0	3903.5	3663.2
71°	1394.0	2096.9	3042.3	3795.1	4406.6	4317.9	3435.4	3448.0	3901.7	4006.8	3765.3
72°	868.9	1590.0	2826.6	3581.7	4098.7	3941.6	3058.3	3164.7	3834.7	4105.1	3865.5
73°	654.8	1046.0	2573.4	3356.9	3754.7	3529.9	2729.6	2924.8	3720.2	4192.9	3997.8
74°	442.8	776.1	2230.6	3099.3	3376.7	3103.2	2330.7	2720.6	3581.4	4242.5	4120.7
75°	230.9	515.2	1743.6	2771.3	2973.5	2642.4	1764.4	2435.7	3438.0	4263.2	4216.3
76°	197.0	254.3	1213.7	2362.7	2555.8	2073.8	1198.1	1879.6	3328.4	4207.1	4242.5
77°	170.7	209.8	777.9	1857.7	2119.7	1406.3	632.4	1323.6	3211.7	4066.5	4169.1
78°	149.4	179.1	597.2	1250.4	1644.5	808.2	334.2	769.0	2975.0	3775.4	3808.4
79°	131.4	154.9	421.5	674.3	1151.6	612.7	224.4	391.9	2458.9	3366.9	3278.0
80°	114.7	134.3	245.9	450.4	706.2	427.4	194.4	238.8	1681.8	2878.2	2727.3
81°	99.6	115.9	196.9	229.5	453.9	242.2	164.4	198.0	909.6	2215.5	2508.1
82°	85.7	99.4	165.7	189.6	208.6	205.6	134.6	157.3	433.8	1768.3	2416.9
83°	73.2	83.8	139.1	162.0	153.9	168.3	113.1	116.5	282.4	1320.9	1883.0
84°	60.6	70.5	112.8	137.7	122.9	127.5	92.8	92.9	230.6	875.4	1349.0
85°	48.0	57.2	84.9	114.7	95.0	96.0	73.2	72.7	191.4	550.6	815.9
86°	36.5	43.9	65.9	92.9	70.4	71.6	54.5	55.6	152.2	391.0	473.6
87°	25.2	32.2	46.9	69.3	51.3	52.4	37.5	40.6	112.9	231.4	379.3
88°	15.1	21.1	27.9	42.1	32.2	33.4	26.0	28.6	72.8	75.9	284.9
89°	7.0	10.0	12.5	14.7	15.3	16.3	14.6	16.7	49.3	51.2	190.5



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CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1436705

CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1436705

CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1436705

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T3)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3
1°	2829.4	2828.8	2834.4	2844.7	2859.5	2878.2	2898.3	2904.9	2926.2	2945.7	2964.4
2°	2761.3	2758.4	2766.9	2785.0	2811.7	2845.3	2884.7	2911.8	2954.7	2997.0	3034.4
3°	2697.7	2693.3	2704.2	2729.1	2767.9	2816.8	2873.7	2921.6	2986.2	3051.4	3110.0
4°	2640.2	2635.0	2648.6	2678.9	2727.5	2791.0	2866.1	2933.9	3022.5	3110.6	3192.0
5°	2588.6	2581.7	2596.2	2633.8	2691.6	2768.5	2860.1	2949.2	3060.2	3173.9	3280.4
6°	2539.9	2530.7	2547.8	2591.8	2659.5	2748.5	2857.3	2966.8	3102.9	3243.7	3375.6
7°	2494.7	2484.0	2503.6	2552.1	2629.2	2731.7	2857.4	2987.5	3148.6	3318.7	3479.1
8°	2453.8	2442.0	2462.1	2516.8	2602.8	2717.7	2859.6	3010.8	3197.0	3397.8	3590.7
9°	2415.0	2401.9	2424.6	2483.9	2578.1	2705.4	2863.1	3034.9	3249.8	3483.9	3710.0
10°	2380.4	2365.7	2390.6	2453.7	2555.9	2694.1	2869.2	3063.6	3306.8	3574.5	3834.5
11°	2349.3	2332.9	2359.9	2427.7	2537.0	2685.7	2877.5	3095.2	3367.5	3671.1	3970.4
12°	2320.4	2303.3	2331.2	2404.5	2520.1	2679.5	2888.3	3127.9	3429.6	3771.7	4111.9
13°	2294.3	2274.7	2304.5	2383.1	2506.5	2675.1	2901.5	3162.8	3495.9	3880.1	4267.8
14°	2268.8	2248.1	2279.8	2363.1	2494.6	2673.1	2915.3	3199.9	3565.9	3991.6	4430.5
15°	2245.6	2224.4	2257.0	2343.9	2485.0	2673.1	2929.5	3238.3	3638.1	4111.4	4604.2
16°	2224.2	2201.0	2235.8	2326.4	2475.0	2673.9	2945.3	3279.1	3713.2	4239.0	4786.3
17°	2204.8	2180.8	2216.5	2310.8	2466.3	2675.7	2963.0	3320.9	3792.0	4371.7	4973.5
18°	2187.2	2161.2	2198.7	2296.0	2459.2	2679.3	2981.7	3364.1	3873.8	4509.6	5163.5
19°	2171.1	2143.8	2182.2	2284.2	2451.9	2683.9	3002.3	3409.0	3958.8	4651.1	5350.6
20°	2156.3	2128.3	2167.4	2273.9	2445.7	2688.4	3024.0	3455.1	4046.4	4795.9	5534.7
21°	2144.4	2114.5	2155.4	2265.1	2440.7	2694.1	3046.7	3504.2	4137.0	4942.1	5710.2
22°	2133.4	2102.7	2144.7	2258.2	2438.2	2700.7	3070.3	3553.3	4231.8	5086.6	5874.5
23°	2123.9	2093.2	2135.9	2252.2	2436.4	2708.4	3094.3	3605.0	4331.6	5226.5	6032.4
24°	2115.9	2085.8	2128.8	2247.3	2436.4	2716.9	3118.4	3657.8	4433.1	5361.0	6179.0
25°	2110.5	2080.1	2124.3	2243.5	2437.7	2726.4	3142.9	3711.3	4533.7	5491.3	6317.9
26°	2106.4	2076.4	2121.5	2241.8	2439.9	2736.7	3169.5	3765.6	4635.3	5613.2	6448.8
27°	2103.6	2074.4	2119.5	2240.5	2443.6	2747.5	3194.9	3820.9	4737.4	5729.2	6572.9
28°	2102.7	2075.2	2119.8	2241.0	2448.6	2759.6	3221.7	3878.0	4838.2	5836.7	6688.8
29°	2103.8	2078.4	2122.3	2242.6	2454.9	2772.4	3248.2	3936.5	4936.2	5940.4	6798.9
30°	2106.5	2083.7	2127.3	2245.9	2461.7	2787.0	3276.0	3995.1	5030.7	6037.5	6899.2
31°	2111.2	2090.6	2132.9	2250.9	2469.7	2802.5	3302.9	4053.3	5122.2	6126.6	6993.8
32°	2116.8	2099.6	2139.7	2257.9	2479.8	2819.3	3330.7	4111.7	5208.4	6211.5	7079.3
33°	2123.9	2110.0	2147.2	2266.0	2490.5	2836.2	3358.2	4170.6	5291.3	6291.5	7159.9
34°	2131.8	2120.7	2155.1	2274.9	2502.0	2853.7	3387.2	4229.5	5370.2	6366.8	7231.7
35°	2140.1	2133.3	2163.7	2285.0	2515.0	2872.6	3416.6	4289.2	5445.0	6437.4	7296.8
36°	2148.3	2146.7	2172.7	2296.4	2528.0	2892.0	3448.1	4348.1	5517.5	6502.7	7353.9
37°	2157.1	2160.2	2182.3	2309.4	2542.2	2911.4	3479.4	4406.1	5584.0	6563.8	7403.1
38°	2165.4	2174.2	2192.9	2322.9	2557.8	2931.8	3512.5	4463.3	5648.8	6621.8	7446.7
39°	2174.3	2188.2	2203.4	2337.7	2574.6	2953.6	3545.9	4519.1	5708.1	6675.8	7480.7
40°	2183.8	2202.0	2214.5	2353.7	2592.4	2976.2	3580.7	4574.5	5765.0	6725.1	7507.5
41°	2193.4	2215.6	2225.5	2370.2	2610.8	2999.9	3615.5	4625.5	5819.7	6770.1	7524.3
42°	2202.7	2229.3	2237.4	2386.9	2630.7	3025.1	3650.8	4676.4	5872.6	6811.5	7532.2
43°	2213.0	2242.5	2249.8	2404.7	2651.2	3051.7	3688.2	4726.0	5923.1	6847.2	7534.2
44°	2224.6	2255.6	2263.7	2422.5	2672.8	3079.1	3726.1	4776.8	5970.0	6879.0	7528.2

REPORT NUMBER: P1436705

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T3)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2237.0	2267.1	2278.0	2440.7	2695.4	3107.4	3764.5	4824.3	6014.0	6907.0	7511.4
46°	2250.2	2276.6	2292.9	2459.9	2719.3	3135.8	3803.9	4866.7	6052.8	6929.8	7486.0
47°	2264.4	2285.2	2308.9	2478.8	2743.5	3167.0	3843.7	4905.7	6088.6	6947.2	7451.2
48°	2280.3	2294.4	2325.7	2498.3	2770.1	3199.5	3882.8	4942.8	6118.6	6957.9	7408.2
49°	2298.0	2303.6	2343.7	2518.0	2796.1	3233.8	3923.1	4976.7	6143.5	6961.9	7355.6
50°	2317.8	2312.2	2363.7	2539.6	2824.1	3271.4	3964.3	5007.6	6163.2	6959.1	7294.7
51°	2340.6	2322.2	2385.2	2562.1	2853.3	3310.2	4005.4	5033.8	6177.7	6949.7	7222.2
52°	2364.9	2335.3	2408.4	2586.6	2884.9	3349.3	4046.6	5057.5	6186.5	6931.4	7137.7
53°	2389.3	2351.6	2433.0	2612.3	2919.1	3389.9	4083.5	5075.5	6189.5	6905.0	7043.9
54°	2415.4	2368.5	2460.7	2641.0	2956.8	3431.2	4119.2	5089.1	6185.5	6870.3	6940.2
55°	2445.4	2388.2	2490.8	2672.1	2997.4	3473.2	4151.1	5099.0	6173.1	6824.8	6825.1
56°	2477.4	2411.7	2522.0	2705.7	3040.9	3517.4	4179.9	5102.3	6149.0	6768.3	6697.4
57°	2510.7	2437.9	2555.9	2744.0	3087.4	3562.4	4205.6	5100.1	6114.9	6699.2	6558.9
58°	2544.4	2460.4	2591.1	2785.7	3136.2	3606.8	4227.5	5092.6	6071.3	6614.7	6405.4
59°	2577.1	2485.1	2624.5	2831.8	3190.6	3647.3	4243.9	5077.6	6019.1	6521.4	6243.0
60°	2613.9	2522.3	2662.1	2882.6	3246.1	3687.8	4257.9	5053.0	5954.6	6411.9	6068.0
61°	2661.9	2573.3	2711.5	2938.9	3306.1	3729.1	4266.5	5018.0	5877.8	6289.2	5880.6
62°	2718.1	2626.5	2770.0	2999.5	3367.9	3769.8	4267.9	4972.4	5787.6	6155.5	5684.8
63°	2781.3	2688.8	2834.0	3061.9	3434.1	3809.3	4260.8	4914.3	5683.4	6004.7	5483.5
64°	2854.1	2767.0	2910.7	3131.9	3502.6	3846.0	4247.6	4839.6	5566.2	5839.9	5273.8
65°	2939.0	2854.7	2997.4	3213.1	3576.4	3880.1	4222.5	4750.1	5430.1	5665.8	5060.4
66°	3037.3	2955.3	3094.7	3301.3	3651.8	3908.0	4182.6	4639.3	5275.4	5478.3	4845.9
67°	3144.1	3063.5	3198.4	3398.1	3726.1	3933.0	4124.5	4490.1	5105.4	5274.6	4631.5
68°	3258.2	3150.8	3307.0	3509.0	3804.5	3949.6	4018.7	4264.5	4902.5	5058.2	4414.1
69°	3328.6	3207.8	3370.9	3633.8	3892.1	3953.1	3838.1	3951.9	4655.9	4819.9	4199.3
70°	3388.5	3279.3	3427.7	3761.4	3979.4	3942.3	3575.3	3557.7	4348.2	4552.0	3979.8
71°	3473.4	3330.2	3506.7	3857.6	4069.3	3897.5	3267.4	3151.5	3969.7	4243.1	3750.1
72°	3527.8	3295.2	3556.1	3958.9	4151.6	3803.2	2985.9	2775.0	3545.7	3900.6	3517.1
73°	3511.3	3114.8	3541.0	4086.8	4216.9	3656.9	2738.5	2407.1	3103.7	3520.3	3259.5
74°	3399.9	2715.8	3434.1	4200.6	4236.0	3503.6	2467.3	1946.7	2666.0	3101.5	2964.7
75°	3076.8	2078.6	3127.4	4274.2	4204.3	3353.1	1937.4	1343.0	2175.0	2659.7	2608.0
76°	2511.9	1488.5	2573.9	4283.9	4069.5	3197.5	1407.4	763.0	1578.7	2224.2	2178.2
77°	1927.2	1380.2	2042.3	4192.6	3870.7	2985.6	879.9	568.8	959.0	1792.4	1656.5
78°	1850.6	1854.7	2022.6	3805.9	3558.7	2554.1	444.4	384.5	721.6	1333.5	1077.3
79°	2321.9	2323.5	2483.2	3221.8	3198.5	1863.7	255.8	200.3	494.0	872.8	788.9
80°	2708.4	1841.2	2761.8	2613.1	2698.1	1173.3	212.5	170.0	266.4	643.2	503.9
81°	2086.0	1358.8	2093.3	2418.1	2126.9	496.7	169.1	145.5	221.9	415.4	218.8
82°	1463.7	877.7	1424.7	2419.2	1555.6	300.5	126.2	122.9	189.1	187.7	184.2
83°	843.6	451.4	766.2	1819.6	986.6	232.1	103.1	102.3	153.2	143.5	158.3
84°	469.4	317.2	452.3	1220.0	579.5	191.6	83.1	82.5	117.7	114.0	134.1
85°	337.7	183.1	296.0	634.1	414.9	151.2	64.9	65.2	88.0	86.2	111.0
86°	206.1	52.4	192.1	507.2	250.2	110.9	49.1	48.0	67.9	66.4	88.8
87°	75.3	35.3	89.1	380.3	89.9	77.6	35.3	30.8	48.0	46.7	63.0
88°	51.0	18.3	48.1	253.5	60.8	52.7	24.4	17.3	28.0	27.0	37.1
89°	26.7	1.3	7.3	126.6	31.6	27.8	13.6	6.4	11.7	11.2	11.2



REPORT NUMBER: P1436705

CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1436705

CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1436705

CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1436705

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T3)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2907.3	2907.3	2907.3
1°	2978.8	2988.8	2993.9
2°	3065.1	3083.6	3090.4
3°	3155.7	3186.9	3196.2
4°	3256.7	3300.0	3313.4
5°	3365.9	3421.6	3440.2
6°	3484.8	3555.6	3579.7
7°	3613.7	3700.0	3727.7
8°	3748.7	3854.0	3890.0
9°	3899.4	4023.2	4066.1
10°	4055.8	4204.6	4254.4
11°	4226.6	4401.0	4455.4
12°	4411.0	4608.1	4673.4
13°	4606.4	4835.0	4907.7
14°	4817.3	5077.7	5160.4
15°	5034.9	5327.9	5429.8
16°	5260.8	5587.7	5709.3
17°	5490.6	5853.4	5987.1
18°	5721.4	6118.0	6260.7
19°	5940.8	6367.7	6516.2
20°	6156.7	6599.7	6750.4
21°	6352.3	6815.6	6959.9
22°	6537.8	7005.5	7143.9
23°	6716.3	7174.8	7306.6
24°	6878.7	7321.8	7447.0
25°	7028.2	7451.5	7568.4
26°	7165.2	7562.0	7671.2
27°	7285.4	7655.2	7758.1
28°	7392.5	7733.7	7829.8
29°	7488.3	7800.1	7889.3
30°	7569.2	7851.2	7935.1
31°	7639.1	7890.8	7967.1
32°	7695.6	7920.6	7989.2
33°	7741.3	7938.9	7999.9
34°	7778.0	7946.5	7999.9
35°	7804.7	7943.5	7991.5
36°	7819.9	7931.3	7973.2
37°	7826.0	7911.4	7946.5
38°	7823.0	7884.7	7911.4
39°	7810.8	7851.9	7871.0
40°	7790.9	7812.3	7823.7
41°	7761.9	7765.8	7768.0
42°	7725.3	7712.4	7702.4
43°	7680.3	7651.3	7629.2
44°	7628.5	7585.3	7547.0



REPORT NUMBER: P1436705

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T3)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	7569.1	7508.4	7452.7
46°	7503.5	7421.5	7346.6
47°	7427.6	7325.1	7234.7
48°	7345.3	7218.5	7112.7
49°	7254.4	7096.1	6979.3
50°	7151.3	6965.5	6830.1
51°	7037.4	6818.4	6666.6
52°	6908.9	6658.7	6490.6
53°	6771.0	6485.1	6303.1
54°	6621.2	6296.9	6105.4
55°	6461.1	6097.0	5896.7
56°	6283.7	5885.1	5679.0
57°	6096.8	5664.6	5455.5
58°	5899.3	5434.7	5223.2
59°	5695.7	5199.7	4985.5
60°	5482.7	4962.3	4729.0
61°	5265.0	4709.7	4456.7
62°	5041.4	4445.9	4166.9
63°	4817.0	4178.8	3871.4
64°	4591.3	3906.4	3579.2
65°	4364.2	3640.3	3311.6
66°	4138.8	3392.0	3080.1
67°	3911.1	3171.6	2886.8
68°	3687.4	2975.9	2687.8
69°	3475.4	2771.7	2397.2
70°	3277.4	2522.4	1967.6
71°	3074.1	2167.5	1394.0
72°	2846.2	1674.7	868.9
73°	2577.2	1130.0	654.8
74°	2202.7	658.7	442.8
75°	1715.9	462.9	230.9
76°	1213.3	268.9	197.0
77°	789.7	217.0	170.7
78°	608.2	184.4	149.4
79°	426.7	159.2	131.4
80°	245.2	137.8	114.7
81°	197.4	118.8	99.6
82°	164.9	101.9	85.7
83°	137.6	86.2	73.2
84°	110.7	72.8	60.6
85°	82.6	58.9	48.0
86°	63.7	45.1	36.5
87°	44.8	32.7	25.2
88°	25.9	21.0	15.1
89°	11.0	9.6	7.0



REPORT NUMBER: P1436705

CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1436705

CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1436705
CATALOG NUMBER: XAS180-SFPM (3000K-144W-T3)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)