

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: P1436714

Luminaire Tested: XAS180-SFPM (3000K-180W-T4-HSS)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436714
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-180W-T4-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 100% (180W)
OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 28062 (1 lamp)
Luminaire Lumens: 22496.2 lumens
Efficiency: 80.2%
Efficacy: 127.0 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

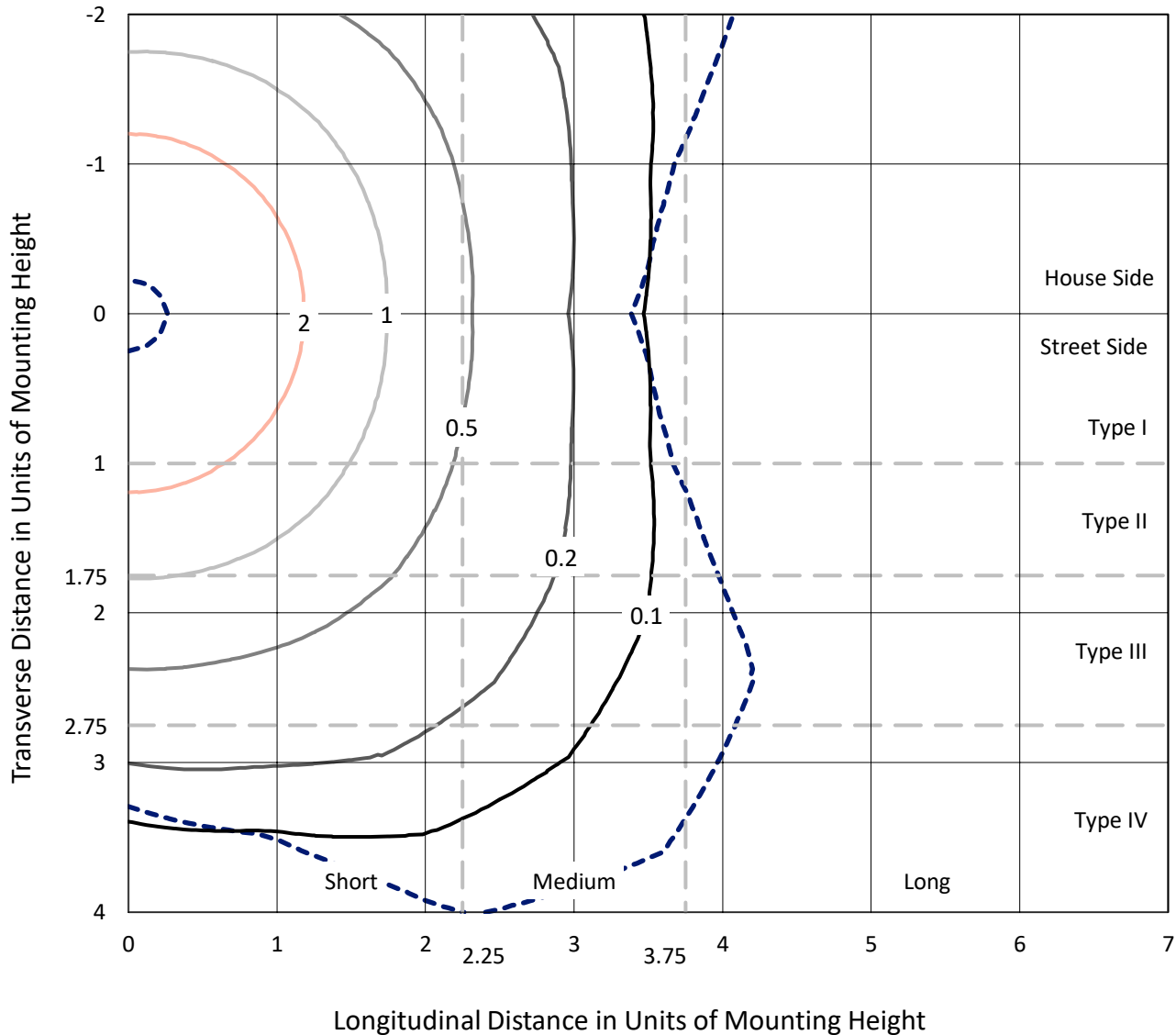
Input Watts (W): 177.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

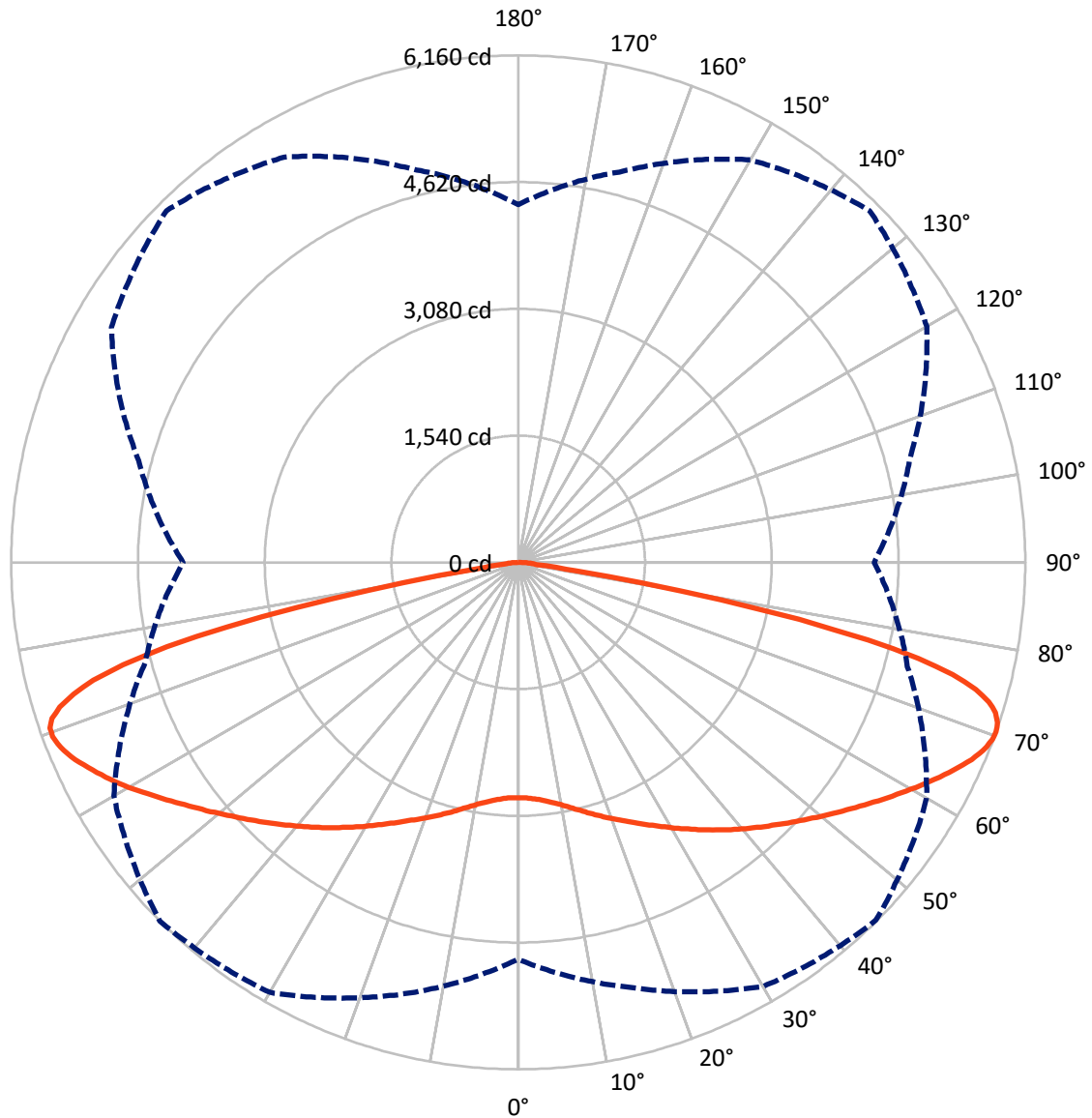


Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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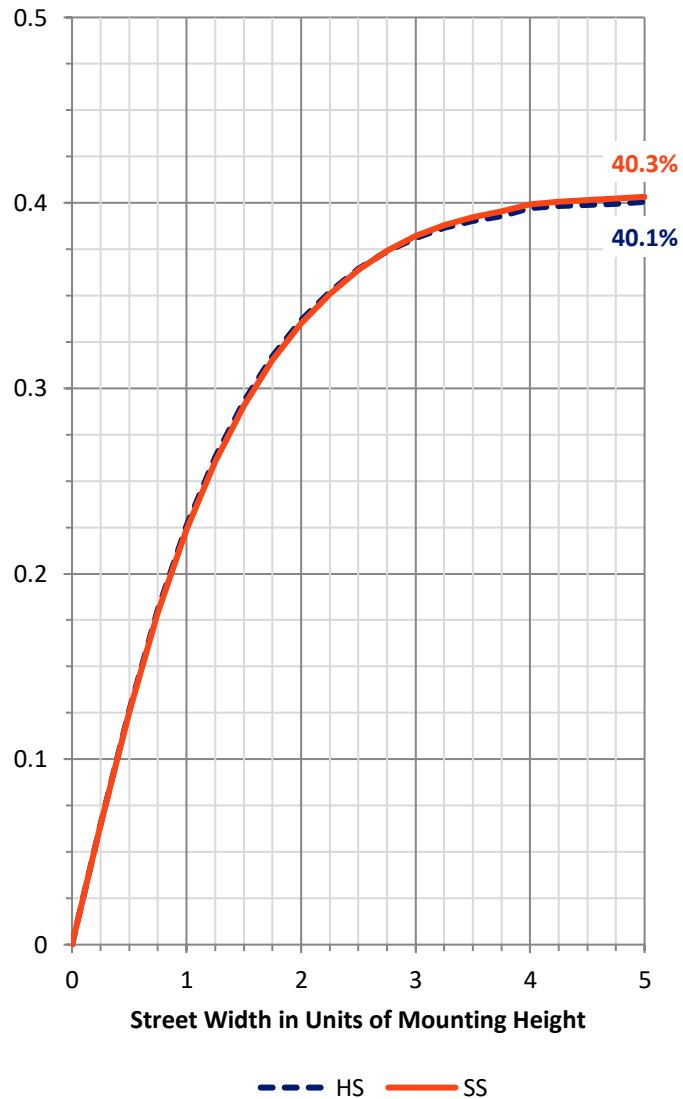
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11194.4	0.0	11194.4
	% Lamp	39.9	0.0	39.9
Street Side	Lumens	11301.7	0.0	11301.7
	% Lamp	40.3	0.0	40.3
Total	Lumens	22496.2	0.0	22496.2
	% Lamp	80.2	0.0	80.2

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	279.3	1.2	1.0
10°-20°	893.8	4.0	3.2
20°-30°	1625.1	7.2	5.8
30°-40°	2489.1	11.1	8.9
40°-50°	3469.3	15.4	12.4
50°-60°	4540.8	20.2	16.2
60°-70°	5426.6	24.1	19.3
70°-80°	3595.4	16.0	12.8
80°-90°	176.7	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°	22496.2	100.0	80.2
0°-180°	22496.2	100.0	80.2

Coefficient of Utilization



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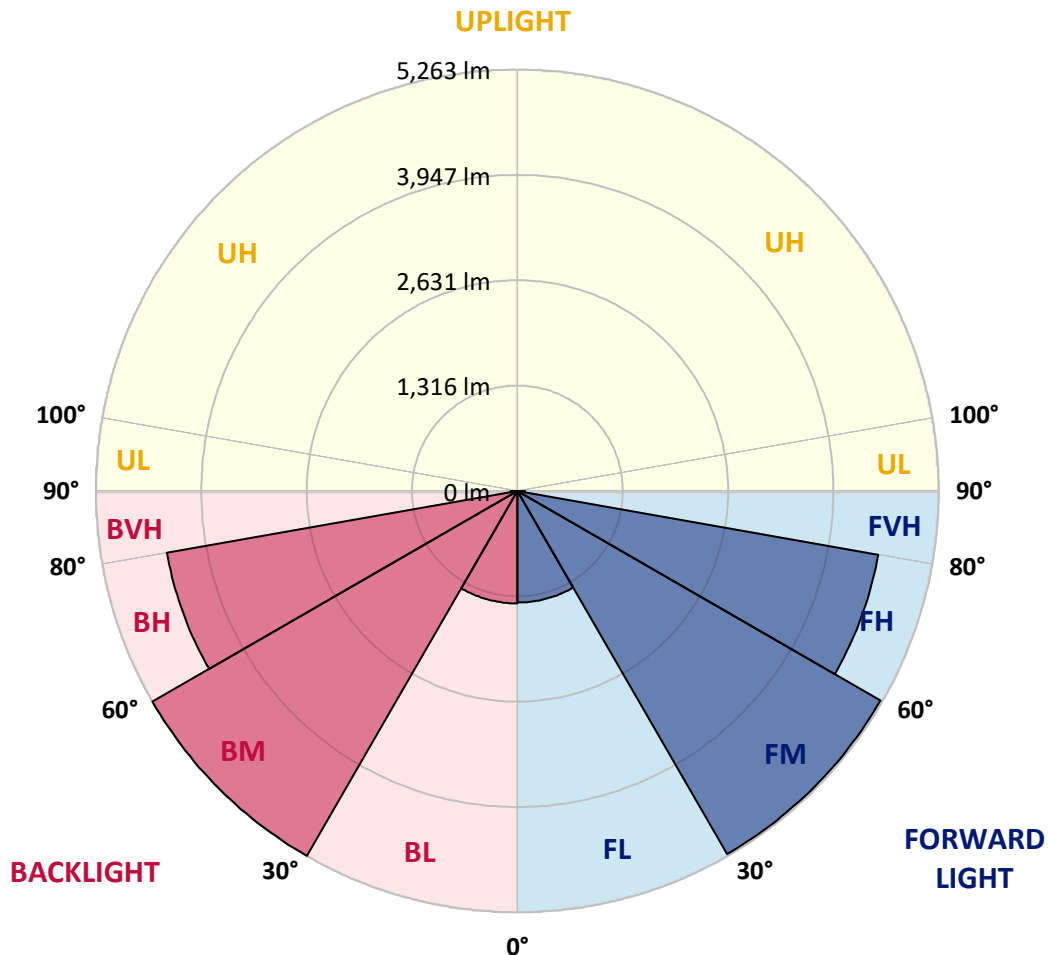
CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1393.7	5.0			
FM (30°-60°)	5236.2	18.7			
FH (60°-80°)	4577.0	16.3			G2/5000
FVH (80°-90°)	94.8	0.3			G1/100
BL (0°-30°)	1404.5	5.0	B3/2500		
BM (30°-60°)	5263.0	18.8	B4/8500		
BH (60°-80°)	4445.0	15.8	B4/5000		G2/5000
BVH (80°-90°)	81.9	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	5565.8	19.8			

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2859.6	2859.6	2859.6	2859.6	2859.6	2859.6	2859.6	2859.6	2859.6	2859.6	2859.6
1°	2860.9	2860.4	2860.9	2860.4	2860.4	2860.1	2858.0	2858.3	2858.3	2859.3	2859.9
2°	2865.4	2864.3	2864.0	2863.3	2862.2	2861.2	2859.4	2859.4	2859.9	2861.3	2862.8
3°	2872.9	2871.1	2870.0	2868.1	2867.5	2866.0	2864.1	2863.9	2864.4	2866.1	2868.5
4°	2883.6	2881.3	2879.1	2877.3	2875.4	2873.5	2871.4	2871.3	2872.0	2874.4	2877.3
5°	2895.8	2892.9	2890.5	2887.4	2884.7	2883.0	2880.3	2881.4	2883.2	2885.9	2889.0
6°	2909.6	2906.1	2904.5	2900.8	2896.5	2893.9	2891.2	2892.1	2895.0	2899.8	2903.7
7°	2924.7	2921.2	2920.2	2916.2	2911.9	2907.9	2904.7	2906.1	2908.7	2915.9	2921.3
8°	2942.4	2938.5	2936.8	2933.5	2928.7	2924.3	2922.1	2923.7	2926.8	2933.4	2941.1
9°	2961.6	2958.1	2955.5	2952.3	2948.2	2942.8	2939.6	2942.0	2947.7	2954.5	2962.3
10°	2982.6	2979.2	2976.9	2973.5	2969.9	2963.6	2960.7	2963.2	2970.2	2978.4	2985.2
11°	3005.7	3001.7	3000.7	2997.5	2992.8	2986.7	2982.9	2986.9	2994.6	3005.0	3010.9
12°	3029.3	3024.0	3024.7	3022.9	3017.6	3011.2	3006.7	3011.9	3020.8	3032.4	3039.2
13°	3052.0	3047.1	3050.2	3050.4	3043.8	3037.7	3031.2	3037.6	3049.3	3061.3	3069.5
14°	3077.3	3071.6	3075.7	3078.2	3071.8	3064.4	3056.9	3065.0	3077.4	3092.3	3100.1
15°	3102.1	3096.8	3102.0	3107.4	3100.6	3091.8	3084.5	3092.2	3107.6	3123.9	3130.6
16°	3129.1	3125.0	3129.3	3136.4	3130.9	3121.2	3114.1	3121.5	3138.8	3156.6	3163.1
17°	3158.1	3154.2	3159.3	3166.7	3162.7	3151.3	3143.7	3151.6	3172.0	3188.2	3195.5
18°	3188.2	3183.0	3189.4	3196.9	3194.2	3182.5	3174.9	3183.6	3204.8	3220.9	3226.8
19°	3219.3	3213.6	3221.0	3228.4	3227.0	3215.1	3207.4	3217.3	3238.8	3254.5	3258.2
20°	3252.9	3246.2	3253.0	3260.4	3260.5	3249.6	3241.9	3252.8	3273.8	3287.8	3289.6
21°	3287.2	3280.4	3285.2	3293.4	3295.2	3284.4	3276.7	3289.3	3309.2	3320.1	3322.5
22°	3323.6	3316.2	3319.5	3326.8	3332.2	3321.0	3314.2	3327.3	3347.0	3355.6	3357.1
23°	3362.0	3354.2	3354.8	3362.6	3369.6	3359.4	3352.4	3367.4	3385.0	3391.3	3393.8
24°	3402.4	3393.5	3391.5	3399.1	3407.7	3398.3	3392.8	3408.2	3424.8	3428.5	3431.5
25°	3444.5	3434.3	3429.8	3438.0	3448.0	3439.1	3435.3	3450.8	3464.1	3467.0	3468.7
26°	3488.5	3476.2	3469.7	3477.4	3488.3	3479.2	3478.4	3493.7	3504.6	3506.3	3507.0
27°	3533.7	3519.0	3509.8	3518.4	3528.3	3520.2	3522.2	3537.4	3545.6	3547.4	3546.6
28°	3581.0	3562.4	3551.1	3560.1	3569.3	3562.3	3567.7	3580.4	3588.3	3589.8	3586.5
29°	3629.2	3606.3	3594.0	3603.9	3610.3	3604.8	3615.4	3624.3	3630.9	3633.8	3628.3
30°	3678.4	3650.1	3638.0	3648.1	3652.3	3648.6	3664.3	3669.1	3674.4	3678.2	3670.4
31°	3728.5	3695.2	3683.6	3693.8	3694.6	3691.3	3713.7	3713.6	3718.4	3724.0	3714.7
32°	3778.2	3740.3	3728.9	3740.1	3737.2	3737.1	3762.2	3759.6	3763.3	3770.4	3759.0
33°	3827.8	3786.7	3776.7	3785.6	3782.4	3781.5	3812.2	3804.1	3809.3	3816.8	3804.8
34°	3877.7	3832.8	3823.5	3832.3	3827.2	3824.8	3860.9	3848.5	3855.4	3862.5	3850.7
35°	3930.6	3878.5	3871.7	3879.6	3873.0	3868.4	3911.2	3892.5	3902.0	3910.2	3899.1
36°	3982.7	3925.8	3921.0	3927.8	3920.5	3913.8	3961.1	3937.8	3951.0	3958.5	3948.6
37°	4034.9	3973.5	3971.2	3977.2	3968.3	3957.5	4010.6	3983.6	3999.5	4007.7	3999.1
38°	4087.9	4023.1	4021.5	4026.4	4015.9	4003.4	4062.0	4028.7	4046.9	4056.8	4049.3
39°	4139.9	4072.7	4071.5	4076.2	4063.6	4050.8	4113.9	4075.3	4096.0	4105.6	4098.4
40°	4191.3	4124.5	4121.4	4126.9	4112.2	4098.7	4165.5	4123.1	4145.6	4156.5	4149.7
41°	4241.9	4177.1	4172.9	4177.4	4162.4	4148.4	4217.1	4173.3	4194.4	4207.4	4198.8
42°	4294.8	4231.1	4225.7	4230.2	4212.9	4198.9	4266.6	4223.9	4245.0	4260.3	4252.5
43°	4346.1	4287.3	4279.3	4283.8	4265.3	4251.5	4314.7	4276.6	4296.0	4313.9	4305.7
44°	4396.3	4345.0	4333.4	4338.0	4317.7	4305.6	4361.0	4330.7	4347.0	4366.7	4360.1



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CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	4446.7	4402.6	4388.9	4391.6	4371.0	4362.0	4406.2	4385.6	4399.1	4421.3	4416.2
46°	4497.2	4463.4	4446.5	4447.5	4426.8	4420.2	4452.0	4442.9	4452.0	4476.8	4473.0
47°	4549.4	4527.9	4506.2	4506.1	4484.5	4480.4	4499.4	4500.4	4508.1	4534.8	4533.2
48°	4602.4	4591.4	4566.6	4565.7	4541.9	4541.6	4543.9	4560.2	4566.1	4591.8	4594.1
49°	4657.3	4658.2	4630.2	4627.3	4601.3	4603.2	4588.1	4619.1	4624.7	4650.9	4654.0
50°	4713.4	4723.3	4694.0	4689.2	4660.3	4665.6	4632.5	4677.9	4682.8	4713.4	4716.7
51°	4770.8	4790.7	4759.5	4752.5	4723.0	4726.8	4678.9	4735.7	4743.3	4776.5	4782.9
52°	4829.8	4859.6	4828.6	4820.2	4786.7	4787.4	4726.5	4795.2	4805.4	4843.0	4848.4
53°	4888.9	4927.2	4899.0	4887.1	4850.1	4845.8	4771.9	4853.7	4867.4	4908.1	4915.3
54°	4948.0	4994.5	4970.5	4958.7	4914.6	4902.7	4816.9	4909.5	4931.7	4974.8	4982.4
55°	5004.7	5056.2	5043.5	5029.1	4978.5	4956.2	4861.2	4960.2	4996.6	5046.7	5052.9
56°	5058.0	5117.4	5118.2	5103.5	5044.3	5006.6	4903.6	5011.1	5061.3	5119.0	5125.2
57°	5108.5	5174.8	5192.9	5181.4	5109.2	5053.3	4941.6	5056.9	5125.4	5192.9	5195.5
58°	5155.8	5229.1	5269.2	5260.4	5173.4	5094.8	4974.0	5097.7	5189.6	5269.4	5262.8
59°	5198.4	5279.5	5347.2	5340.4	5238.1	5129.3	5004.2	5135.4	5252.4	5347.3	5327.8
60°	5236.8	5325.1	5423.8	5423.8	5300.0	5158.5	5027.9	5167.5	5312.3	5426.1	5390.4
61°	5268.1	5366.4	5497.9	5506.6	5361.4	5184.7	5046.5	5195.3	5374.3	5503.7	5453.3
62°	5292.6	5400.9	5570.7	5591.9	5420.7	5203.4	5056.9	5215.7	5431.8	5580.4	5513.7
63°	5314.1	5432.0	5641.6	5677.8	5481.5	5213.2	5057.4	5231.5	5489.6	5651.1	5570.1
64°	5333.3	5457.3	5706.4	5762.8	5538.4	5215.3	5049.3	5241.0	5547.2	5719.5	5623.2
65°	5352.0	5478.8	5769.1	5846.5	5592.9	5214.3	5035.2	5242.8	5600.4	5789.5	5669.7
66°	5362.9	5499.2	5824.9	5926.7	5640.2	5203.9	5014.1	5235.2	5648.2	5859.6	5713.1
67°	5362.9	5513.5	5872.5	6001.1	5679.2	5185.1	4979.6	5218.7	5687.5	5924.4	5748.1
68°	5313.5	5510.6	5913.1	6066.6	5706.2	5154.4	4873.4	5184.9	5718.6	5975.8	5725.7
69°	5155.1	5468.9	5939.5	6115.6	5722.0	5069.9	4650.5	5100.5	5733.9	6016.5	5673.3
70°	4821.3	5348.6	5949.4	6146.8	5728.1	4895.2	4325.1	4929.3	5731.4	6039.9	5645.1
71°	4293.4	5077.2	5935.6	6159.7	5689.4	4623.8	3922.1	4660.3	5685.5	6036.1	5567.0
72°	3743.2	4633.4	5888.3	6141.4	5590.1	4277.3	3554.6	4307.6	5565.2	5973.8	5436.2
73°	3160.3	4055.0	5773.2	6077.3	5420.2	3905.1	3271.1	3927.0	5364.1	5839.0	5271.6
74°	2486.2	3424.0	5520.5	5940.5	5182.4	3566.6	2915.1	3576.9	5101.6	5633.7	5000.0
75°	1646.2	2736.6	5057.8	5697.4	4870.3	3190.1	2227.5	3207.1	4767.8	5360.1	4595.1
76°	851.2	1920.5	4433.4	5306.7	4500.9	2624.5	1539.7	2667.4	4399.8	4956.2	4042.6
77°	615.9	1033.2	3757.0	4735.1	4047.3	1766.3	853.0	1931.7	3961.4	4385.9	3357.9
78°	393.7	742.7	2936.4	3896.3	3416.5	915.5	367.3	1196.0	3354.0	3627.0	2537.1
79°	171.4	462.5	1904.9	2969.1	2535.0	661.9	289.3	465.5	2502.0	2744.7	1716.3
80°	142.4	182.2	971.9	1933.4	1534.9	415.1	211.3	359.5	1650.0	1856.8	898.5
81°	121.8	150.1	702.9	978.5	754.0	168.2	134.9	253.5	806.0	978.0	412.8
82°	103.7	126.8	444.8	703.6	555.9	143.1	115.3	147.6	358.9	395.6	314.9
83°	87.0	105.9	186.7	447.4	363.8	121.2	97.5	124.5	282.0	308.7	217.0
84°	71.9	86.8	146.3	191.2	171.8	100.9	80.8	103.3	205.1	221.9	120.0
85°	56.8	71.0	111.6	157.7	130.5	82.5	65.1	84.1	129.0	135.5	86.8
86°	41.7	55.3	83.7	126.8	95.8	66.2	50.4	66.7	92.5	106.1	58.1
87°	28.2	39.6	61.0	93.2	70.4	50.0	35.9	50.5	66.8	75.4	36.1
88°	16.2	25.6	38.2	74.7	45.3	33.8	25.1	35.9	46.2	46.9	25.6
89°	6.5	11.0	15.4	56.6	20.2	18.1	14.2	24.8	31.8	32.5	15.1



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CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

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: P1436714

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

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: P1436714

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

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: P1436714

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2859.6	2859.6	2859.6	2859.6	2859.6	2859.6	2859.6	2859.6	2859.6	2859.6	2859.6
1°	2860.4	2861.0	2861.6	2862.4	2862.9	2863.4	2863.7	2861.9	2861.5	2861.2	2861.6
2°	2864.0	2865.5	2866.0	2867.7	2868.5	2868.9	2869.3	2867.6	2867.7	2867.0	2867.2
3°	2870.0	2872.5	2874.1	2875.7	2877.2	2877.8	2878.7	2876.4	2876.6	2875.8	2876.3
4°	2879.9	2882.8	2884.8	2886.7	2888.4	2889.2	2890.2	2888.4	2887.9	2887.3	2886.9
5°	2892.1	2896.0	2898.2	2901.0	2902.4	2903.2	2903.6	2901.6	2901.3	2900.6	2900.1
6°	2907.7	2911.6	2915.0	2918.0	2919.4	2919.4	2919.5	2917.1	2917.2	2916.7	2916.2
7°	2926.1	2929.6	2934.0	2937.3	2938.6	2939.5	2940.4	2937.2	2936.7	2935.6	2935.1
8°	2946.0	2950.2	2955.0	2959.2	2961.2	2962.9	2962.1	2958.3	2957.5	2956.4	2954.9
9°	2967.6	2972.4	2978.1	2983.7	2986.9	2987.5	2985.7	2980.2	2980.4	2980.0	2978.4
10°	2991.6	2997.4	3003.9	3010.7	3014.4	3014.4	3011.2	3005.9	3005.5	3006.1	3002.9
11°	3018.0	3024.4	3031.9	3040.3	3044.5	3043.9	3039.9	3034.1	3034.0	3034.6	3030.5
12°	3045.5	3052.0	3061.4	3071.4	3076.5	3075.1	3070.4	3063.4	3064.3	3064.2	3059.4
13°	3073.8	3080.2	3090.7	3104.9	3111.0	3109.1	3101.9	3095.0	3096.1	3096.1	3090.3
14°	3103.5	3109.4	3121.7	3138.0	3146.5	3143.9	3136.0	3127.6	3129.3	3130.3	3122.5
15°	3133.4	3138.8	3153.1	3172.4	3183.4	3180.5	3170.6	3161.5	3163.9	3165.9	3155.4
16°	3164.1	3169.5	3184.7	3206.6	3221.0	3219.7	3206.8	3196.5	3199.4	3201.5	3189.0
17°	3195.0	3200.3	3217.1	3241.1	3258.9	3257.6	3245.0	3233.5	3235.8	3238.0	3223.9
18°	3226.8	3232.0	3250.3	3275.1	3296.4	3297.3	3283.6	3270.5	3274.3	3275.6	3259.2
19°	3258.9	3265.9	3283.2	3309.8	3334.9	3336.5	3322.4	3308.9	3313.0	3313.5	3293.5
20°	3291.8	3299.9	3317.9	3347.0	3372.5	3377.3	3362.8	3349.0	3353.4	3352.7	3329.6
21°	3326.5	3334.9	3353.9	3383.6	3411.0	3419.1	3405.7	3390.5	3393.9	3392.7	3365.3
22°	3362.7	3371.6	3391.3	3422.2	3451.9	3461.5	3449.3	3432.6	3436.8	3433.1	3404.0
23°	3398.5	3409.3	3431.0	3462.7	3492.7	3505.8	3492.0	3476.7	3481.2	3474.1	3443.6
24°	3437.4	3449.3	3471.3	3503.7	3535.3	3549.3	3536.4	3521.7	3525.5	3515.3	3482.3
25°	3475.6	3489.7	3512.4	3544.9	3578.6	3593.2	3582.7	3567.8	3570.0	3558.1	3522.4
26°	3516.2	3533.3	3555.0	3588.3	3622.6	3637.4	3628.6	3616.1	3614.3	3600.4	3564.9
27°	3556.8	3576.7	3597.6	3631.3	3666.3	3681.2	3674.2	3664.0	3659.2	3643.1	3607.0
28°	3598.0	3624.4	3641.2	3675.7	3713.3	3727.3	3721.2	3714.8	3705.1	3687.3	3651.7
29°	3640.6	3671.9	3686.1	3721.6	3759.2	3772.6	3768.7	3765.3	3751.0	3732.8	3698.5
30°	3684.6	3722.0	3731.8	3766.9	3806.2	3818.5	3815.7	3815.8	3796.4	3777.3	3745.9
31°	3729.8	3772.4	3778.0	3812.4	3851.0	3864.6	3861.6	3867.7	3842.5	3822.2	3793.4
32°	3775.0	3823.4	3824.6	3858.3	3898.7	3912.5	3909.3	3919.1	3887.0	3866.9	3841.1
33°	3821.6	3875.2	3871.2	3906.4	3946.3	3960.9	3956.6	3970.8	3933.4	3914.6	3890.9
34°	3868.0	3926.8	3917.1	3955.3	3995.4	4008.8	4004.5	4023.4	3979.3	3962.0	3940.7
35°	3913.5	3980.8	3965.2	4005.2	4044.6	4057.5	4051.5	4075.9	4026.7	4011.4	3992.9
36°	3960.5	4034.9	4013.7	4055.4	4093.2	4105.1	4099.2	4129.2	4073.9	4060.7	4044.2
37°	4006.6	4088.9	4062.8	4106.0	4142.6	4153.3	4148.8	4182.8	4122.6	4111.1	4095.7
38°	4055.1	4142.4	4113.3	4157.3	4193.3	4203.1	4197.9	4236.0	4171.6	4161.9	4148.3
39°	4104.6	4196.4	4164.2	4209.8	4245.4	4252.6	4249.1	4288.4	4221.1	4213.7	4200.0
40°	4156.4	4246.9	4217.5	4263.2	4297.2	4304.0	4300.1	4338.8	4271.8	4266.5	4253.0
41°	4210.3	4297.8	4271.3	4317.0	4351.0	4354.7	4351.3	4387.5	4324.0	4319.8	4305.9
42°	4263.5	4347.3	4327.5	4370.2	4404.2	4407.5	4404.0	4435.9	4378.7	4374.3	4361.1
43°	4318.7	4396.2	4384.1	4424.3	4459.7	4463.0	4459.6	4484.9	4435.0	4428.2	4414.7
44°	4375.7	4445.2	4442.1	4480.3	4515.9	4518.3	4515.6	4535.7	4492.9	4482.7	4470.7

REPORT NUMBER: P1436714

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	4433.8	4495.2	4501.0	4538.5	4574.0	4574.7	4575.0	4584.8	4551.9	4539.0	4527.1
46°	4494.1	4543.8	4562.5	4595.7	4632.5	4630.9	4634.1	4629.4	4613.8	4596.4	4584.9
47°	4557.5	4591.4	4624.9	4653.5	4691.7	4687.3	4693.1	4673.8	4673.0	4654.3	4645.3
48°	4621.6	4641.5	4689.3	4713.4	4751.7	4745.3	4751.0	4719.1	4732.9	4712.5	4706.7
49°	4686.1	4695.2	4755.6	4773.5	4813.8	4803.6	4808.6	4765.6	4791.6	4771.6	4768.7
50°	4753.9	4747.9	4822.9	4836.8	4875.7	4863.0	4864.9	4812.6	4849.7	4832.8	4831.9
51°	4825.0	4802.4	4890.1	4900.4	4939.6	4921.3	4920.9	4855.1	4906.0	4894.0	4896.6
52°	4892.9	4853.8	4955.6	4964.0	5004.7	4979.9	4974.3	4898.3	4960.8	4954.9	4962.9
53°	4953.9	4896.6	5016.4	5030.3	5071.5	5038.5	5023.9	4938.6	5009.8	5014.2	5029.7
54°	5006.9	4928.3	5071.5	5097.4	5139.2	5099.0	5069.9	4974.4	5056.6	5077.2	5099.8
55°	5055.0	4960.9	5119.2	5165.1	5208.5	5157.2	5113.0	5008.6	5099.1	5137.4	5172.7
56°	5104.0	4997.8	5165.8	5236.0	5278.9	5214.0	5151.5	5039.6	5137.6	5196.8	5247.8
57°	5150.4	5036.4	5211.6	5305.0	5349.4	5271.3	5185.4	5065.3	5170.2	5254.2	5320.1
58°	5194.1	5063.4	5255.8	5375.9	5421.1	5327.8	5214.2	5090.3	5197.3	5311.5	5396.2
59°	5227.7	5082.3	5288.6	5442.7	5496.0	5381.3	5238.5	5111.2	5219.8	5366.5	5471.7
60°	5255.3	5105.7	5316.0	5505.5	5569.7	5433.3	5260.5	5127.1	5238.9	5421.3	5548.8
61°	5282.0	5128.9	5342.5	5569.5	5644.1	5485.5	5278.1	5133.5	5257.0	5474.3	5626.4
62°	5307.3	5147.7	5367.0	5630.2	5712.1	5539.1	5289.8	5135.3	5267.6	5525.0	5705.2
63°	5330.2	5163.2	5390.0	5686.0	5773.7	5587.3	5294.6	5133.7	5270.2	5572.0	5783.0
64°	5350.8	5166.2	5409.4	5737.2	5831.9	5633.8	5297.2	5120.8	5267.1	5615.1	5861.2
65°	5347.8	5117.6	5402.1	5782.3	5888.7	5674.3	5289.4	5098.3	5255.3	5651.4	5934.8
66°	5281.8	5074.8	5329.6	5817.6	5942.7	5706.5	5275.6	5066.0	5237.0	5682.2	6004.7
67°	5239.7	5048.4	5284.4	5837.4	5984.9	5733.5	5248.5	4987.7	5204.9	5704.7	6064.4
68°	5214.2	4962.5	5245.6	5797.6	6017.9	5751.0	5181.9	4801.6	5128.9	5717.5	6114.2
69°	5111.7	4737.6	5132.5	5730.5	6039.7	5745.7	5036.9	4486.6	4965.9	5709.3	6148.7
70°	4919.3	4344.5	4945.5	5686.3	6042.7	5707.7	4773.6	4070.7	4690.9	5673.2	6159.8
71°	4625.6	3779.3	4650.3	5589.6	6013.6	5612.5	4413.3	3655.1	4315.0	5574.6	6138.9
72°	4176.5	3267.2	4193.7	5450.0	5921.6	5435.3	4004.7	3307.9	3905.0	5410.7	6081.2
73°	3627.5	2743.7	3637.5	5259.1	5754.2	5168.2	3609.3	2970.6	3515.0	5160.7	5963.1
74°	3058.8	2056.5	3070.5	4965.5	5514.3	4842.3	3234.2	2510.3	3135.2	4838.4	5768.7
75°	2328.1	1369.2	2342.7	4521.5	5194.1	4446.6	2764.6	1790.3	2644.0	4441.4	5454.2
76°	1597.5	692.6	1614.8	3930.2	4722.3	4015.2	2031.3	1014.9	1914.2	3984.9	5002.2
77°	873.2	508.0	893.4	3244.3	4079.8	3494.6	1297.9	728.6	1070.2	3435.0	4352.5
78°	368.5	323.3	386.3	2429.0	3243.1	2768.3	574.9	452.2	775.5	2697.1	3483.2
79°	287.2	143.0	299.6	1613.7	2367.6	2010.5	266.7	175.8	481.1	1788.0	2501.2
80°	206.0	117.9	213.0	804.7	1492.0	1252.8	222.7	147.0	186.7	981.5	1514.3
81°	124.9	98.2	127.6	361.6	630.8	496.9	178.8	125.7	153.5	709.3	713.3
82°	102.0	80.6	104.1	280.2	271.8	262.7	135.2	106.8	130.3	453.6	460.8
83°	81.3	64.0	83.3	198.8	224.5	213.3	113.9	89.5	109.6	197.8	223.4
84°	62.8	49.5	64.1	118.0	177.2	163.9	94.8	74.3	90.5	152.9	180.3
85°	45.7	35.3	46.6	84.1	129.9	114.5	76.6	59.1	74.4	114.6	149.6
86°	32.4	24.3	32.8	55.5	101.2	82.3	60.0	43.9	58.2	83.7	119.8
87°	19.1	13.4	19.0	40.0	71.0	59.5	44.8	30.0	42.1	60.5	84.4
88°	5.8	2.7	5.2	24.5	48.5	40.9	30.9	17.5	28.1	37.5	67.8
89°	4.2	2.4	3.8	9.1	25.9	22.4	17.0	7.0	12.7	14.5	51.5



REPORT NUMBER: P1436714

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

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: P1436714

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

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: P1436714

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

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: P1436714

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2859.6	2859.6	2859.6
1°	2861.7	2860.9	2860.9
2°	2866.9	2866.4	2865.4
3°	2875.4	2874.6	2872.9
4°	2886.6	2885.2	2883.6
5°	2899.4	2897.7	2895.8
6°	2914.5	2912.7	2909.6
7°	2931.1	2928.7	2924.7
8°	2950.3	2946.2	2942.4
9°	2972.2	2966.7	2961.6
10°	2996.0	2989.1	2982.6
11°	3021.6	3013.3	3005.7
12°	3049.0	3038.2	3029.3
13°	3078.2	3063.6	3052.0
14°	3106.9	3089.6	3077.3
15°	3135.9	3116.3	3102.1
16°	3166.8	3144.6	3129.1
17°	3197.7	3174.8	3158.1
18°	3230.2	3205.6	3188.2
19°	3263.5	3237.1	3219.3
20°	3296.0	3268.9	3252.9
21°	3330.7	3303.5	3287.2
22°	3367.0	3339.4	3323.6
23°	3404.9	3376.8	3362.0
24°	3443.8	3415.3	3402.4
25°	3482.8	3456.1	3444.5
26°	3524.9	3497.8	3488.5
27°	3568.4	3540.7	3533.7
28°	3611.9	3583.9	3581.0
29°	3658.2	3628.3	3629.2
30°	3705.5	3673.2	3678.4
31°	3752.8	3720.4	3728.5
32°	3800.3	3767.3	3778.2
33°	3848.5	3815.1	3827.8
34°	3896.8	3861.3	3877.7
35°	3947.0	3908.7	3930.6
36°	3999.3	3955.8	3982.7
37°	4049.8	4005.4	4034.9
38°	4102.4	4055.9	4087.9
39°	4153.8	4106.3	4139.9
40°	4208.0	4159.4	4191.3
41°	4261.6	4213.2	4241.9
42°	4316.8	4269.7	4294.8
43°	4372.5	4327.2	4346.1
44°	4428.5	4384.3	4396.3

REPORT NUMBER: P1436714

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	4485.9	4446.0	4446.7
46°	4544.7	4507.1	4497.2
47°	4604.6	4571.8	4549.4
48°	4666.7	4637.7	4602.4
49°	4730.4	4706.4	4657.3
50°	4795.9	4775.0	4713.4
51°	4862.8	4845.8	4770.8
52°	4931.7	4915.2	4829.8
53°	5003.4	4985.0	4888.9
54°	5073.3	5053.4	4948.0
55°	5146.7	5121.3	5004.7
56°	5221.9	5184.3	5058.0
57°	5295.8	5242.5	5108.5
58°	5372.5	5295.8	5155.8
59°	5446.7	5345.3	5198.4
60°	5521.0	5390.3	5236.8
61°	5595.3	5428.5	5268.1
62°	5667.7	5462.9	5292.6
63°	5737.3	5491.9	5314.1
64°	5806.8	5519.5	5333.3
65°	5870.8	5544.4	5352.0
66°	5930.4	5567.9	5362.9
67°	5978.8	5583.2	5362.9
68°	6015.7	5581.3	5313.5
69°	6033.7	5542.7	5155.1
70°	6033.2	5429.8	4821.3
71°	6005.2	5182.3	4293.4
72°	5935.2	4739.7	3743.2
73°	5788.2	4153.8	3160.3
74°	5497.4	3494.4	2486.2
75°	5017.0	2803.8	1646.2
76°	4399.7	2008.9	851.2
77°	3688.1	1113.6	615.9
78°	2806.8	803.1	393.7
79°	1773.9	494.5	171.4
80°	912.2	185.8	142.4
81°	654.5	156.3	121.8
82°	418.8	132.1	103.7
83°	183.0	109.8	87.0
84°	144.7	90.2	71.9
85°	109.5	73.6	56.8
86°	82.2	57.0	41.7
87°	59.2	40.5	28.2
88°	36.3	25.7	16.2
89°	13.4	10.5	6.5



REPORT NUMBER: P1436714

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

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: P1436714

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

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: P1436714

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)