

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: P1444981

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

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1444981
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/5/2026
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: 24748 (1 lamp)
Luminaire Lumens: 22496.2 lumens
Efficiency: 90.9%
Efficacy: 127.0 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

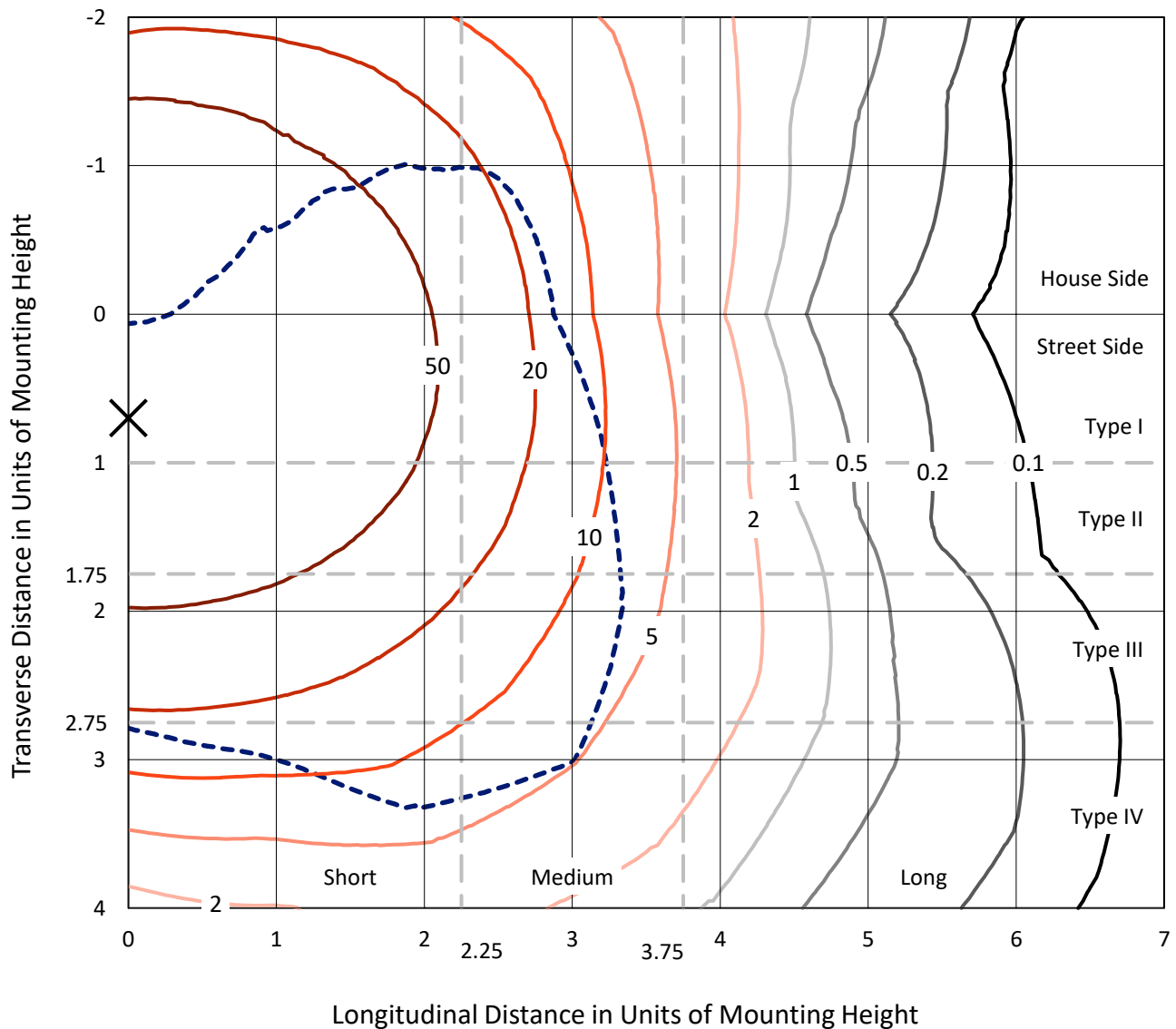
Input Watts (W): 177.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

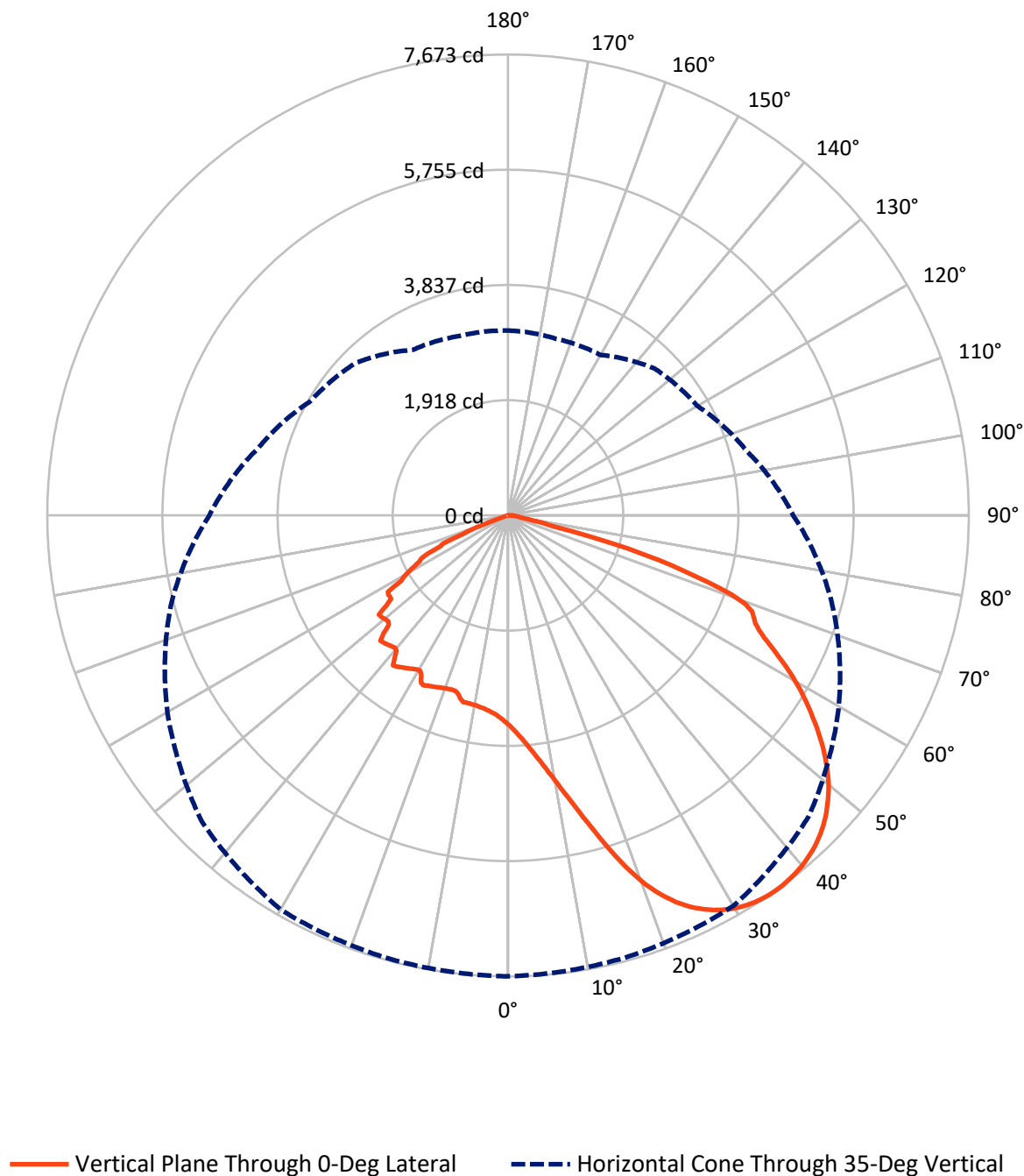


Based on 3 foot mounting height. Maximum calculated value = 607 fc
Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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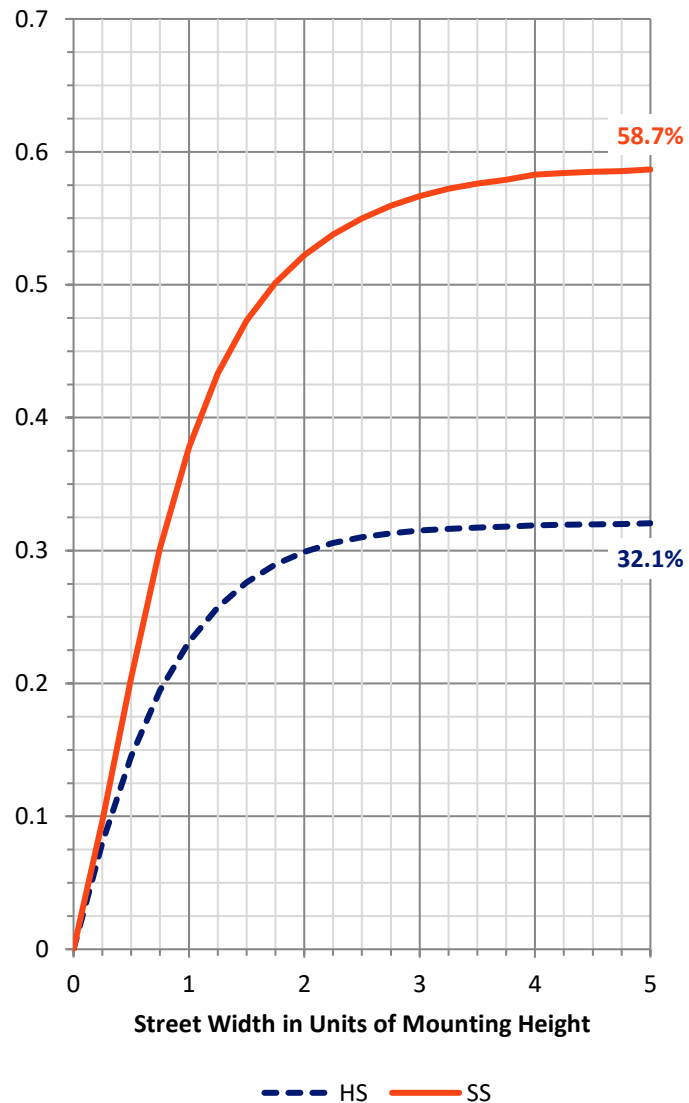
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7969.6	0.0	7969.6
	% Lamp	32.2	0.0	32.2
Street Side	Lumens	14526.6	0.0	14526.6
	% Lamp	58.7	0.0	58.7
Total	Lumens	22496.2	0.0	22496.2
	% Lamp	90.9	0.0	90.9

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	347.3	1.5	1.4
10°-20°	1173.5	5.2	4.7
20°-30°	2218.9	9.9	9.0
30°-40°	3262.1	14.5	13.2
40°-50°	4120.6	18.3	16.7
50°-60°	4562.7	20.3	18.4
60°-70°	4292.9	19.1	17.3
70°-80°	2339.7	10.4	9.5
80°-90°	178.5	0.8	0.7
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	90.9
0°-180°	22496.2	100.0	90.9

Coefficient of Utilization



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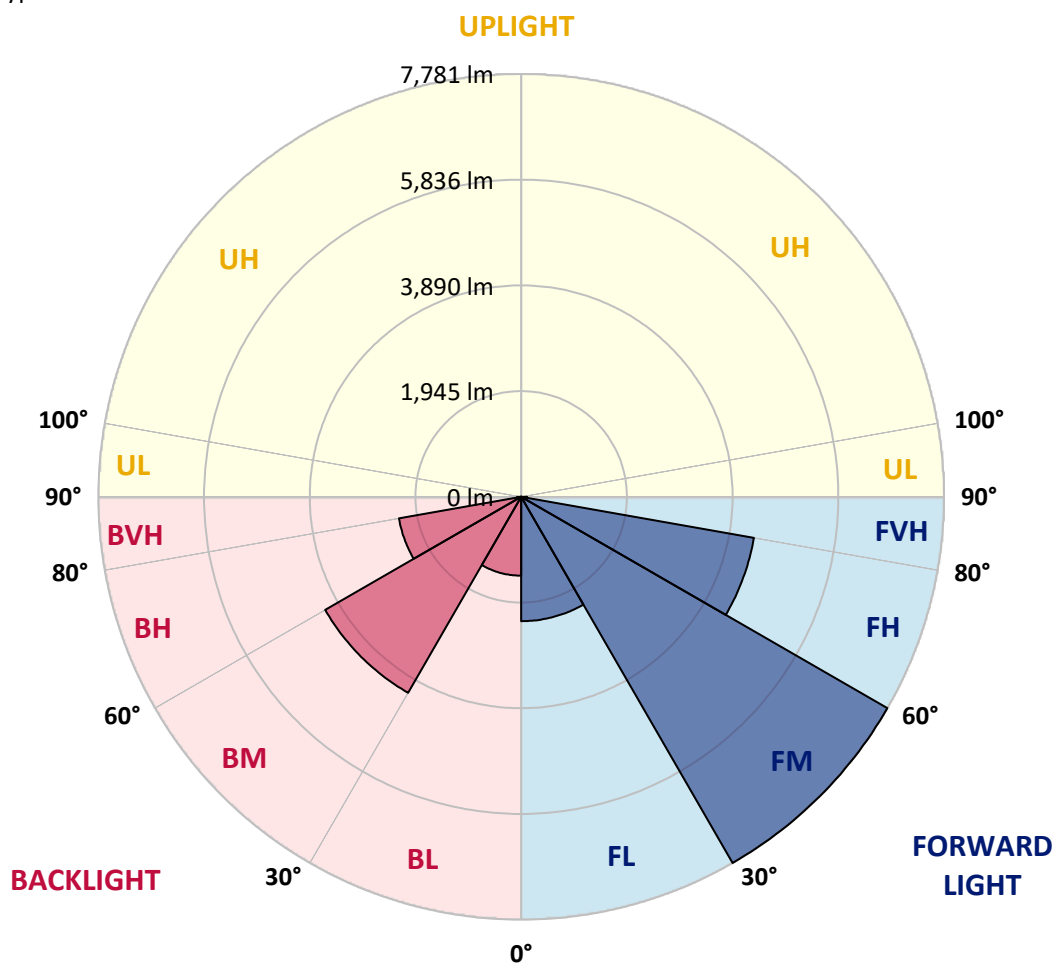
CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2288.9	9.2			
FM	(30°-60°)	7780.8	31.4			
FH	(60°-80°)	4348.9	17.6			G2/5000
FVH	(80°-90°)	107.9	0.4			G2/225
BL	(0°-30°)	1450.7	5.9	B3/2500		
BM	(30°-60°)	4164.6	16.8	B3/5000		
BH	(60°-80°)	2283.7	9.2	B3/2500		G3/2500
BVH	(80°-90°)	70.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		2251.8	9.1			

BUG Rating: B3-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	3501.3	3501.3	3501.3	3501.3	3501.3	3501.3	3501.3	3501.3	3501.3	3501.3	3501.3
1°	3564.2	3562.7	3558.7	3549.7	3535.9	3521.7	3492.6	3479.1	3468.2	3457.9	3450.9
2°	3636.5	3632.4	3620.4	3598.9	3570.3	3539.2	3494.2	3466.3	3441.7	3422.0	3407.8
3°	3715.5	3709.6	3687.5	3652.6	3609.6	3562.2	3501.0	3457.8	3420.8	3391.7	3369.9
4°	3804.0	3793.5	3760.9	3713.3	3653.8	3589.7	3509.8	3453.3	3404.2	3365.7	3338.1
5°	3904.4	3888.8	3845.5	3779.8	3702.4	3619.1	3521.6	3450.6	3391.5	3344.7	3313.4
6°	4012.7	3992.5	3937.8	3855.0	3755.8	3651.7	3535.8	3450.8	3381.2	3329.2	3292.9
7°	4130.1	4104.7	4039.2	3938.0	3814.4	3689.5	3553.8	3455.0	3374.3	3317.2	3276.9
8°	4258.2	4227.4	4146.4	4025.3	3877.7	3730.0	3576.8	3463.1	3372.6	3307.8	3264.1
9°	4396.9	4358.9	4263.2	4119.2	3948.3	3774.4	3602.0	3472.9	3373.6	3301.8	3253.5
10°	4547.4	4502.4	4389.6	4220.7	4022.3	3821.9	3628.8	3485.5	3378.1	3300.2	3245.6
11°	4710.0	4657.2	4524.2	4328.7	4100.7	3875.0	3659.4	3501.2	3384.3	3301.2	3241.6
12°	4884.3	4822.4	4667.7	4442.6	4182.9	3929.4	3692.0	3518.6	3393.6	3304.2	3240.8
13°	5072.2	5000.2	4821.1	4566.7	4270.2	3988.3	3726.2	3537.6	3404.0	3309.1	3242.6
14°	5274.2	5194.5	4987.8	4695.2	4361.4	4048.6	3761.1	3556.8	3414.7	3315.9	3244.1
15°	5490.9	5395.8	5164.4	4833.9	4457.2	4108.4	3797.6	3578.7	3428.3	3323.8	3248.6
16°	5714.2	5611.3	5345.1	4977.6	4559.1	4173.5	3837.5	3601.1	3443.2	3331.7	3253.1
17°	5941.3	5824.3	5527.3	5125.9	4664.9	4240.5	3878.1	3625.7	3459.1	3341.3	3235.8
18°	6159.6	6030.1	5707.6	5274.6	4776.8	4310.2	3918.4	3645.7	3476.0	3353.0	3179.1
19°	6368.6	6229.9	5887.4	5421.7	4890.7	4380.2	3946.3	3660.3	3484.9	3365.3	3139.2
20°	6561.0	6419.2	6059.0	5566.7	5004.3	4446.8	3981.7	3678.5	3490.6	3374.5	3116.7
21°	6730.8	6588.9	6223.9	5708.5	5121.2	4508.2	4021.0	3709.6	3499.9	3331.1	3126.0
22°	6879.0	6747.1	6377.6	5845.1	5236.1	4578.7	4070.4	3739.8	3521.5	3295.7	3137.2
23°	7015.9	6886.9	6521.7	5974.6	5350.3	4651.7	4120.4	3766.7	3541.8	3274.7	3150.3
24°	7134.7	7012.2	6657.0	6100.1	5449.2	4733.1	4166.5	3788.8	3555.5	3260.6	3165.9
25°	7238.5	7124.2	6780.4	6219.5	5543.5	4819.5	4208.0	3815.6	3570.4	3275.4	3181.7
26°	7326.8	7221.2	6893.4	6333.9	5640.2	4904.3	4252.7	3845.2	3587.7	3283.2	3200.1
27°	7404.7	7306.8	6996.8	6445.4	5732.7	4986.1	4300.8	3880.9	3613.3	3292.8	3217.9
28°	7470.8	7379.3	7092.6	6549.4	5822.6	5057.3	4353.3	3918.2	3628.3	3306.5	3235.1
29°	7526.6	7441.3	7176.5	6646.2	5910.9	5130.5	4411.3	3954.8	3608.6	3330.5	3254.1
30°	7572.9	7492.7	7253.9	6741.4	5999.9	5204.8	4470.6	3992.8	3609.7	3354.4	3269.6
31°	7609.5	7535.5	7320.4	6827.9	6083.8	5278.2	4531.2	4030.1	3599.3	3379.6	3274.4
32°	7635.6	7566.7	7376.7	6899.8	6163.4	5353.6	4592.2	4058.2	3607.7	3403.7	3177.9
33°	7655.4	7590.3	7428.3	6967.5	6235.8	5430.3	4652.5	4073.3	3600.5	3423.3	3097.6
34°	7668.3	7605.6	7469.2	7027.6	6300.2	5505.7	4708.5	4091.3	3620.4	3440.0	3066.3
35°	7673.0	7613.3	7505.5	7083.8	6360.8	5580.2	4748.6	4120.9	3641.5	3455.2	3083.6
36°	7670.9	7616.7	7531.6	7137.6	6420.6	5650.5	4784.6	4152.1	3666.6	3472.8	3101.4
37°	7661.1	7611.5	7551.9	7186.0	6477.6	5718.7	4828.2	4184.7	3691.3	3468.8	3115.2
38°	7646.2	7602.6	7564.9	7228.1	6532.7	5785.9	4881.4	4220.6	3708.6	3373.7	3127.0
39°	7626.5	7587.7	7572.4	7265.3	6585.9	5849.0	4931.5	4251.7	3724.6	3298.6	3144.9
40°	7600.8	7569.5	7569.8	7297.0	6637.2	5899.1	4982.3	4279.9	3752.5	3278.8	3168.0
41°	7566.7	7544.1	7564.1	7326.7	6686.8	5940.7	5033.2	4306.1	3786.9	3303.5	3190.7
42°	7528.6	7514.2	7549.6	7352.7	6735.3	5978.8	5084.1	4326.0	3820.7	3330.0	3210.2
43°	7480.7	7478.9	7530.5	7372.6	6783.8	6023.1	5127.1	4346.9	3855.1	3357.9	3142.3
44°	7424.6	7436.7	7505.6	7383.8	6829.6	6069.6	5166.4	4385.5	3890.8	3383.7	3033.3

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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	7361.5	7389.2	7472.6	7387.2	6871.3	6118.6	5200.5	4431.9	3918.4	3400.6	2988.0
46°	7288.0	7333.6	7435.4	7382.5	6913.1	6166.5	5226.2	4479.2	3927.2	3411.9	3004.5
47°	7205.4	7268.3	7393.8	7370.0	6952.8	6213.1	5249.0	4522.7	3927.8	3430.6	3018.4
48°	7118.9	7195.3	7343.8	7351.0	6986.5	6256.3	5269.9	4546.8	3864.5	3452.8	3029.7
49°	7021.8	7113.1	7284.8	7328.1	7012.7	6302.0	5304.4	4562.5	3812.0	3383.7	3045.4
50°	6913.2	7021.3	7217.9	7297.7	7029.3	6341.4	5345.8	4572.4	3793.5	3276.5	3062.3
51°	6795.6	6919.3	7138.0	7260.1	7038.7	6374.1	5386.8	4566.3	3779.5	3230.5	3003.2
52°	6665.6	6807.8	7051.1	7213.2	7042.8	6401.8	5425.9	4597.6	3806.1	3255.1	2840.5
53°	6531.1	6684.6	6955.4	7159.1	7038.2	6426.7	5463.2	4615.6	3822.5	3281.0	2788.9
54°	6388.4	6550.7	6849.3	7100.1	7031.6	6438.9	5496.7	4626.2	3840.4	3299.5	2812.7
55°	6239.2	6410.7	6733.4	7030.7	7015.0	6439.6	5519.5	4648.1	3869.9	3316.5	2839.4
56°	6086.7	6264.4	6614.9	6953.2	6995.3	6435.7	5530.2	4661.0	3902.3	3321.5	2865.5
57°	5932.8	6115.4	6487.5	6871.8	6968.5	6420.0	5528.5	4667.4	3918.9	3207.1	2887.4
58°	5774.4	5958.8	6355.9	6781.9	6932.2	6409.5	5518.3	4679.5	3932.0	3103.2	2740.9
59°	5612.2	5806.3	6221.1	6684.5	6885.8	6397.1	5513.1	4679.4	3867.0	3099.8	2626.7
60°	5440.5	5647.3	6081.8	6581.7	6825.1	6375.4	5502.8	4659.2	3785.9	3136.7	2633.8
61°	5264.0	5482.7	5939.2	6471.9	6752.7	6343.3	5481.1	4633.3	3762.3	3176.8	2642.9
62°	5079.7	5315.0	5800.9	6354.8	6668.5	6297.5	5454.4	4619.8	3773.3	3215.7	2536.4
63°	4900.2	5145.3	5664.9	6234.8	6576.0	6234.5	5408.3	4583.7	3783.2	3137.5	2386.0
64°	4728.1	4981.8	5534.5	6110.4	6467.2	6152.0	5345.8	4541.2	3781.2	3039.6	2355.4
65°	4591.2	4831.4	5405.6	5980.9	6348.6	6053.6	5269.3	4478.1	3740.3	3038.4	2326.7
66°	4488.8	4711.3	5282.2	5851.7	6216.4	5931.2	5178.0	4394.4	3609.5	3057.3	2125.8
67°	4431.2	4621.4	5171.8	5720.6	6066.9	5792.2	5072.9	4286.3	3555.5	2932.2	2093.3
68°	4367.0	4560.5	5073.4	5588.8	5894.8	5633.1	4894.3	4170.6	3576.2	2863.0	1961.1
69°	4223.0	4494.5	4992.3	5459.7	5709.6	5417.1	4602.6	4035.7	3586.2	2853.6	1828.9
70°	3945.3	4375.7	4927.0	5330.2	5522.8	5127.9	4194.8	3839.0	3578.0	2715.0	1696.1
71°	3517.4	4146.6	4865.5	5201.0	5298.6	4763.2	3743.6	3570.3	3462.3	2671.2	1483.4
72°	3079.3	3776.8	4790.5	5064.6	5039.4	4347.4	3336.0	3254.0	3320.0	2569.6	1329.2
73°	2611.8	3308.2	4670.8	4929.6	4740.8	3920.6	2963.6	2944.3	3161.6	2488.8	1185.3
74°	2081.5	2805.3	4444.7	4767.4	4403.9	3510.3	2527.9	2669.9	2977.4	2346.0	1001.6
75°	1416.0	2259.4	4056.8	4539.8	4025.2	3040.9	1924.5	2370.1	2741.6	2202.7	894.0
76°	785.0	1603.1	3555.8	4207.2	3628.5	2405.4	1321.0	1902.5	2530.4	1952.4	799.9
77°	606.7	916.1	3019.8	3730.8	3188.1	1587.8	718.0	1431.3	2321.9	1702.2	704.9
78°	432.5	698.1	2371.8	3077.6	2641.6	883.5	345.7	825.9	1920.4	1451.0	606.3
79°	258.2	481.6	1556.1	2313.1	1926.2	585.5	260.0	599.1	1518.9	1145.1	503.0
80°	228.6	265.2	847.8	1522.2	1187.2	298.9	174.8	372.2	1115.8	872.1	425.2
81°	204.4	229.9	643.0	795.1	864.1	247.7	148.2	146.0	600.6	641.4	382.4
82°	182.4	203.3	445.0	527.2	546.7	211.5	125.7	116.3	441.3	512.0	377.6
83°	161.9	179.1	247.0	276.0	229.3	173.4	104.8	92.1	282.0	405.9	310.4
84°	142.6	156.3	206.0	225.9	185.9	135.1	85.5	73.2	127.2	312.1	238.7
85°	124.0	135.5	167.5	191.5	147.5	105.7	66.8	57.6	109.0	218.4	167.0
86°	106.1	116.4	136.6	159.6	113.5	85.1	49.8	44.3	85.9	125.3	95.8
87°	88.5	98.1	109.9	124.3	87.5	64.7	34.5	32.6	63.4	70.9	59.7
88°	76.5	82.4	85.3	86.0	63.6	44.2	24.3	23.1	44.0	48.6	41.0
89°	64.6	66.9	65.7	61.2	39.8	26.9	14.0	13.6	24.7	26.3	22.3

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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: P1444981

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: P1444981
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: P1444981

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3501.3	3501.3	3501.3	3501.3	3501.3	3501.3	3501.3	3501.3	3501.3	3501.3	3501.3
1°	3447.3	3447.7	3451.6	3459.1	3469.8	3480.7	3496.1	3498.6	3514.0	3529.5	3543.2
2°	3399.9	3399.6	3405.6	3419.5	3437.4	3461.3	3488.8	3506.1	3537.7	3567.8	3595.7
3°	3358.6	3357.0	3365.0	3382.5	3409.9	3443.5	3484.6	3517.4	3563.7	3611.7	3653.9
4°	3323.2	3321.5	3331.4	3353.2	3387.0	3431.5	3484.4	3531.3	3595.4	3660.1	3718.6
5°	3296.9	3294.0	3304.2	3330.0	3368.6	3421.9	3486.9	3549.3	3630.3	3713.1	3789.3
6°	3273.8	3269.5	3282.2	3312.0	3355.2	3415.3	3492.8	3570.6	3669.2	3771.4	3865.4
7°	3254.1	3249.4	3263.3	3296.4	3347.0	3414.2	3502.5	3595.9	3711.8	3835.4	3952.3
8°	3239.1	3233.6	3248.1	3285.7	3341.5	3416.4	3515.4	3622.8	3758.3	3905.8	4044.1
9°	3225.6	3220.4	3236.6	3278.0	3339.1	3421.0	3529.5	3651.7	3808.5	3980.2	4143.3
10°	3216.1	3209.2	3227.8	3273.8	3339.5	3427.6	3546.0	3685.0	3862.0	4059.3	4248.9
11°	3208.5	3201.5	3222.4	3272.0	3343.2	3438.3	3566.1	3722.5	3922.1	4143.4	4361.4
12°	3204.0	3197.0	3218.9	3273.2	3350.0	3450.9	3589.5	3760.2	3982.2	4233.3	4481.4
13°	3203.4	3195.1	3218.6	3276.0	3359.6	3466.2	3613.8	3800.8	4046.8	4328.2	4610.9
14°	3203.6	3194.1	3220.7	3282.1	3371.2	3483.0	3640.0	3843.0	4112.5	4427.4	4747.2
15°	3200.1	3155.0	3217.7	3289.1	3383.4	3502.4	3667.4	3888.8	4182.0	4534.4	4892.8
16°	3132.2	3090.5	3155.3	3296.5	3396.4	3523.7	3696.6	3933.7	4254.9	4642.9	5046.1
17°	3082.0	3052.6	3106.9	3284.0	3410.9	3545.4	3728.6	3981.8	4329.4	4759.5	5203.3
18°	3055.5	3045.8	3081.1	3228.9	3427.9	3568.1	3756.8	4029.7	4407.9	4881.0	5361.8
19°	3059.4	3050.4	3084.7	3193.1	3443.3	3584.9	3776.5	4070.1	4488.1	5004.0	5519.7
20°	3066.3	3057.0	3092.4	3174.8	3457.2	3596.4	3800.1	4110.2	4570.7	5129.5	5672.3
21°	3075.3	3067.4	3102.6	3182.9	3428.7	3610.8	3833.7	4156.0	4645.6	5257.8	5820.1
22°	3088.2	3079.1	3116.0	3196.9	3387.3	3637.4	3871.2	4209.1	4721.9	5381.8	5959.7
23°	3101.7	3094.4	3132.6	3212.5	3368.1	3665.1	3909.4	4266.9	4806.4	5505.4	6093.1
24°	3116.3	3109.2	3149.8	3230.4	3362.4	3688.2	3940.3	4324.8	4895.3	5623.0	6219.7
25°	3131.8	3123.4	3166.2	3249.6	3377.9	3706.0	3969.6	4377.4	4989.2	5727.0	6337.7
26°	3147.9	3140.2	3184.0	3271.8	3392.2	3724.6	4001.4	4426.9	5084.8	5822.1	6450.8
27°	3163.9	3157.6	3201.1	3292.2	3403.6	3747.5	4036.3	4480.0	5179.2	5916.7	6559.9
28°	3180.6	3140.1	3218.9	3313.2	3417.9	3766.9	4077.2	4537.4	5267.8	6007.6	6664.2
29°	3130.2	3028.4	3179.9	3333.9	3441.6	3760.9	4119.1	4598.0	5345.8	6095.7	6762.9
30°	3025.2	2968.4	3073.0	3351.1	3467.8	3756.2	4160.7	4661.8	5427.8	6184.0	6855.1
31°	2974.0	2975.9	3021.0	3358.0	3494.8	3755.8	4202.0	4727.8	5508.0	6267.3	6943.2
32°	2984.2	2999.3	3029.3	3280.3	3522.7	3757.0	4235.0	4793.6	5584.3	6346.8	7023.0
33°	3005.2	3023.7	3050.2	3201.2	3547.8	3756.3	4256.2	4858.2	5663.3	6423.6	7093.0
34°	3025.8	3049.0	3071.7	3166.4	3568.2	3776.4	4277.6	4922.4	5738.7	6490.5	7153.0
35°	3047.1	3076.8	3093.3	3180.0	3588.1	3798.6	4310.4	4974.0	5815.3	6549.3	7210.2
36°	3070.3	3102.2	3116.5	3201.6	3603.9	3823.6	4345.7	5016.5	5886.9	6607.5	7264.5
37°	3090.9	3126.2	3139.3	3217.7	3613.1	3851.5	4381.5	5064.6	5956.0	6663.3	7315.2
38°	3111.0	3145.4	3161.1	3231.3	3520.8	3873.2	4422.3	5118.9	6022.7	6719.6	7357.7
39°	3125.5	3030.4	3178.4	3246.2	3448.7	3892.2	4462.4	5172.7	6086.1	6772.7	7394.5
40°	3007.0	2920.2	3073.3	3269.6	3427.1	3919.6	4496.2	5225.8	6140.0	6822.5	7426.1
41°	2899.9	2896.8	2960.8	3294.6	3448.5	3956.1	4526.0	5279.5	6181.7	6872.3	7453.6
42°	2875.2	2913.3	2929.7	3317.3	3475.6	3994.3	4547.2	5332.5	6219.3	6921.7	7474.8
43°	2894.7	2931.4	2949.5	3272.9	3504.4	4032.0	4570.4	5382.1	6259.5	6968.5	7491.8
44°	2916.1	2948.5	2972.3	3156.0	3532.3	4070.9	4614.6	5427.3	6301.0	7011.0	7502.0

REPORT NUMBER: P1444981

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2938.0	2965.7	2994.2	3100.9	3552.2	4102.1	4664.0	5467.4	6345.5	7050.7	7502.0
46°	2960.4	2975.9	3016.8	3113.1	3565.5	4114.0	4713.7	5493.7	6392.0	7086.0	7492.9
47°	2981.6	2856.0	3035.2	3126.3	3582.7	4122.0	4762.5	5515.3	6435.3	7119.5	7474.8
48°	2867.7	2691.8	2939.6	3137.8	3605.9	4088.7	4800.3	5533.9	6475.8	7148.4	7453.3
49°	2707.5	2660.1	2776.2	3153.2	3562.3	4033.5	4810.9	5565.9	6512.3	7167.9	7425.2
50°	2679.4	2673.3	2737.0	3168.3	3450.9	3994.4	4818.5	5604.3	6544.9	7176.6	7390.8
51°	2701.5	2688.0	2759.0	3127.1	3388.3	3977.2	4811.9	5638.6	6568.2	7174.6	7351.0
52°	2724.7	2702.7	2779.6	2962.4	3407.5	3997.1	4813.4	5670.9	6585.9	7167.0	7301.2
53°	2745.6	2709.3	2799.4	2898.8	3434.2	4013.3	4832.7	5698.0	6595.7	7151.2	7246.4
54°	2755.9	2514.2	2810.9	2921.1	3451.7	4028.3	4837.7	5720.1	6591.5	7134.3	7181.9
55°	2579.2	2394.0	2635.0	2947.1	3468.0	4047.8	4841.1	5730.9	6576.8	7109.0	7113.5
56°	2448.3	2385.6	2502.5	2974.1	3473.5	4077.7	4841.5	5725.1	6552.0	7080.7	7038.2
57°	2439.6	2389.8	2488.5	2993.4	3388.7	4089.3	4835.3	5705.5	6519.3	7044.2	6953.9
58°	2443.4	2369.8	2491.4	2854.6	3267.3	4095.2	4832.6	5680.3	6484.8	6993.5	6863.8
59°	2397.6	2088.6	2453.7	2730.5	3255.1	4049.9	4825.4	5655.2	6449.7	6936.3	6766.2
60°	2150.2	2011.7	2204.1	2731.1	3290.5	3949.8	4791.8	5625.6	6405.9	6869.7	6659.0
61°	2102.3	1893.5	2149.9	2739.0	3328.5	3901.3	4751.5	5587.8	6352.5	6790.4	6544.8
62°	2096.0	1775.4	2136.5	2648.0	3362.1	3900.1	4728.3	5540.7	6287.5	6697.6	6426.1
63°	1974.0	1658.5	2011.2	2481.9	3293.1	3898.9	4686.8	5478.0	6207.7	6589.1	6301.9
64°	1852.0	1624.9	1885.9	2448.9	3175.4	3888.1	4632.2	5396.0	6111.2	6472.0	6176.0
65°	1729.7	1484.6	1759.6	2428.4	3158.2	3843.4	4555.5	5294.6	5992.2	6343.6	6040.2
66°	1538.7	1241.5	1573.0	2212.8	3159.1	3713.5	4459.5	5173.5	5850.8	6204.5	5897.4
67°	1344.4	1183.7	1372.1	2166.2	3028.8	3628.4	4344.9	5027.2	5696.5	6044.6	5755.3
68°	1209.4	826.5	1241.0	2081.2	2955.7	3631.8	4188.5	4774.6	5499.4	5867.7	5614.4
69°	985.5	682.5	1012.4	1899.4	2928.0	3624.5	4000.0	4401.9	5226.4	5673.0	5478.3
70°	789.2	470.2	811.8	1717.5	2779.6	3595.6	3739.0	3913.6	4883.2	5458.3	5333.2
71°	542.7	258.0	542.2	1536.1	2713.3	3449.7	3411.7	3462.3	4452.9	5204.1	5181.2
72°	299.9	47.3	280.4	1380.8	2599.3	3261.5	3062.8	3048.6	3996.3	4916.0	5028.9
73°	252.5	0.6	227.4	1218.2	2483.1	3067.4	2724.6	2636.5	3549.3	4568.0	4858.4
74°	205.1	0.4	174.9	1001.9	2311.1	2854.1	2410.7	2146.3	3106.4	4172.7	4659.2
75°	157.9	0.4	151.7	879.2	2119.0	2603.9	1936.8	1503.7	2578.5	3734.6	4381.3
76°	120.1	0.5	120.9	781.5	1847.6	2355.0	1463.0	871.1	1866.1	3272.3	4008.4
77°	84.6	0.5	95.7	689.0	1576.0	1995.7	988.9	559.7	1111.5	2780.6	3488.0
78°	63.2	0.6	77.5	597.1	1304.8	1636.6	509.1	255.7	831.7	2178.2	2813.3
79°	62.3	0.7	77.0	496.4	1043.7	1274.8	332.4	195.1	556.1	1472.9	2039.4
80°	83.5	0.8	92.9	429.8	810.7	729.0	157.8	165.5	280.5	860.7	1269.0
81°	102.1	0.9	96.0	399.4	609.1	528.7	126.5	140.8	238.5	571.3	930.0
82°	90.1	1.0	59.9	372.2	472.6	328.4	104.1	118.4	203.7	286.3	599.4
83°	56.2	1.1	42.6	282.2	354.8	129.3	84.9	98.5	168.1	218.6	268.8
84°	41.2	1.3	25.3	192.2	237.0	107.7	68.3	80.6	133.0	180.1	223.5
85°	26.2	1.4	8.4	103.1	120.5	85.0	54.3	62.8	103.8	141.4	189.9
86°	11.5	1.5	7.5	52.4	67.1	63.2	41.8	45.0	83.4	109.6	158.1
87°	8.5	1.7	7.4	36.9	38.2	45.5	30.8	30.2	63.1	84.6	122.8
88°	6.2	1.8	6.6	21.5	26.7	31.7	21.7	17.7	42.8	61.5	85.4
89°	4.8	2.0	4.1	6.2	15.2	18.0	12.7	7.5	26.2	38.4	60.9

REPORT NUMBER: P1444981

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: P1444981

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: P1444981
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: P1444981

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	3501.3	3501.3	3501.3
1°	3553.4	3560.7	3564.2
2°	3616.8	3631.2	3636.5
3°	3686.6	3708.1	3715.5
4°	3764.8	3795.0	3804.0
5°	3849.9	3891.4	3904.4
6°	3943.9	3997.2	4012.7
7°	4047.2	4109.8	4130.1
8°	4158.8	4233.4	4258.2
9°	4279.2	4368.3	4396.9
10°	4405.3	4514.3	4547.4
11°	4546.3	4670.0	4710.0
12°	4695.7	4840.6	4884.3
13°	4856.8	5020.2	5072.2
14°	5029.0	5214.2	5274.2
15°	5209.4	5419.4	5490.9
16°	5392.9	5628.9	5714.2
17°	5579.6	5844.3	5941.3
18°	5767.4	6057.9	6159.6
19°	5948.9	6263.6	6368.6
20°	6124.3	6454.3	6561.0
21°	6288.8	6628.1	6730.8
22°	6442.1	6786.7	6879.0
23°	6589.3	6925.2	7015.9
24°	6725.8	7048.8	7134.7
25°	6852.2	7157.3	7238.5
26°	6967.4	7252.9	7326.8
27°	7076.0	7335.6	7404.7
28°	7169.6	7407.5	7470.8
29°	7255.4	7467.0	7526.6
30°	7329.7	7516.3	7572.9
31°	7396.7	7558.1	7609.5
32°	7454.6	7591.5	7635.6
33°	7504.1	7615.2	7655.4
34°	7543.4	7631.5	7668.3
35°	7575.6	7639.9	7673.0
36°	7600.8	7639.0	7670.9
37°	7619.8	7634.2	7661.1
38°	7631.3	7624.9	7646.2
39°	7635.3	7608.3	7626.5
40°	7632.9	7588.4	7600.8
41°	7625.2	7564.6	7566.7
42°	7610.5	7534.7	7528.6
43°	7589.0	7500.2	7480.7
44°	7562.9	7459.5	7424.6

REPORT NUMBER: P1444981

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	7530.2	7412.2	7361.5
46°	7493.3	7358.4	7288.0
47°	7449.4	7294.1	7205.4
48°	7402.0	7223.7	7118.9
49°	7345.4	7144.2	7021.8
50°	7278.6	7057.1	6913.2
51°	7202.2	6959.0	6795.6
52°	7113.5	6847.9	6665.6
53°	7017.5	6731.3	6531.1
54°	6912.5	6601.5	6388.4
55°	6803.7	6467.6	6239.2
56°	6685.1	6321.2	6086.7
57°	6560.9	6172.4	5932.8
58°	6429.1	6018.7	5774.4
59°	6292.4	5863.0	5612.2
60°	6154.4	5702.1	5440.5
61°	6016.5	5538.7	5264.0
62°	5878.3	5369.8	5079.7
63°	5745.0	5206.7	4900.2
64°	5619.7	5048.9	4728.1
65°	5498.1	4903.4	4591.2
66°	5380.2	4781.1	4488.8
67°	5268.1	4692.4	4431.2
68°	5164.9	4630.7	4367.0
69°	5073.2	4564.6	4223.0
70°	5000.9	4456.5	3945.3
71°	4927.1	4245.2	3517.4
72°	4836.1	3881.0	3079.3
73°	4701.8	3408.8	2611.8
74°	4456.3	2887.7	2081.5
75°	4065.1	2337.7	1416.0
76°	3566.8	1710.7	785.0
77°	3001.8	1020.4	606.7
78°	2325.6	765.9	432.5
79°	1528.6	519.0	258.2
80°	858.2	272.0	228.6
81°	646.1	237.1	204.4
82°	449.4	209.5	182.4
83°	252.7	184.4	161.9
84°	209.2	160.8	142.6
85°	169.6	139.1	124.0
86°	138.6	119.2	106.1
87°	111.1	100.3	88.5
88°	85.1	84.0	76.5
89°	65.7	67.8	64.6

REPORT NUMBER: P1444981

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: P1444981

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: P1444981

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)