

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: P1444974

Luminaire Tested: XAS180-SFPM (3000K-144W-T4)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1444974
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-144W-T4)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 80% (144W)
OPTICS - TYPE 4
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 28628 (1 lamp)
Luminaire Lumens: 21836.7 lumens
Efficiency: 76.3%
Efficacy: 152.6 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 143.1
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

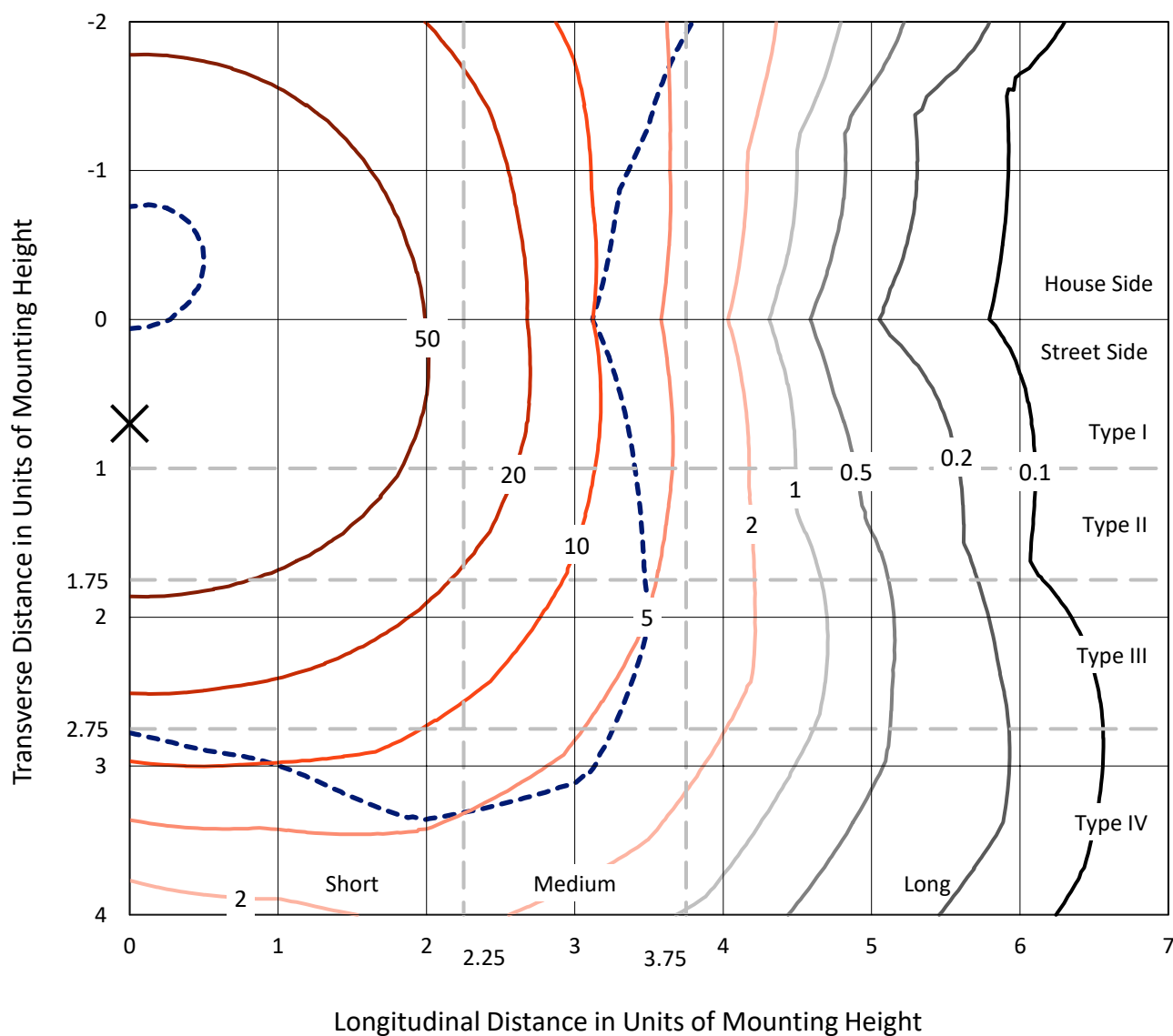
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

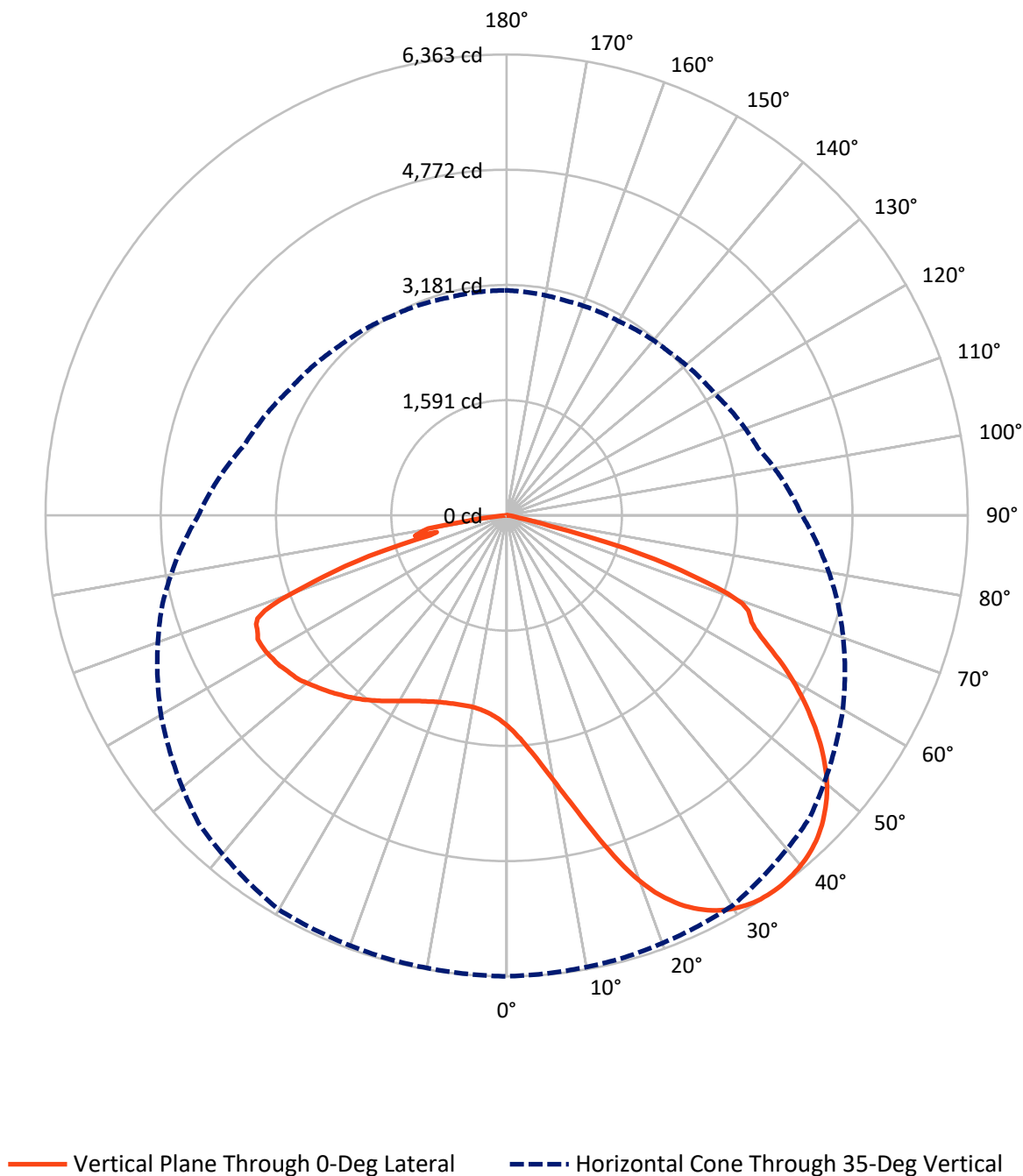


Based on 3 foot mounting height. Maximum calculated value = 504 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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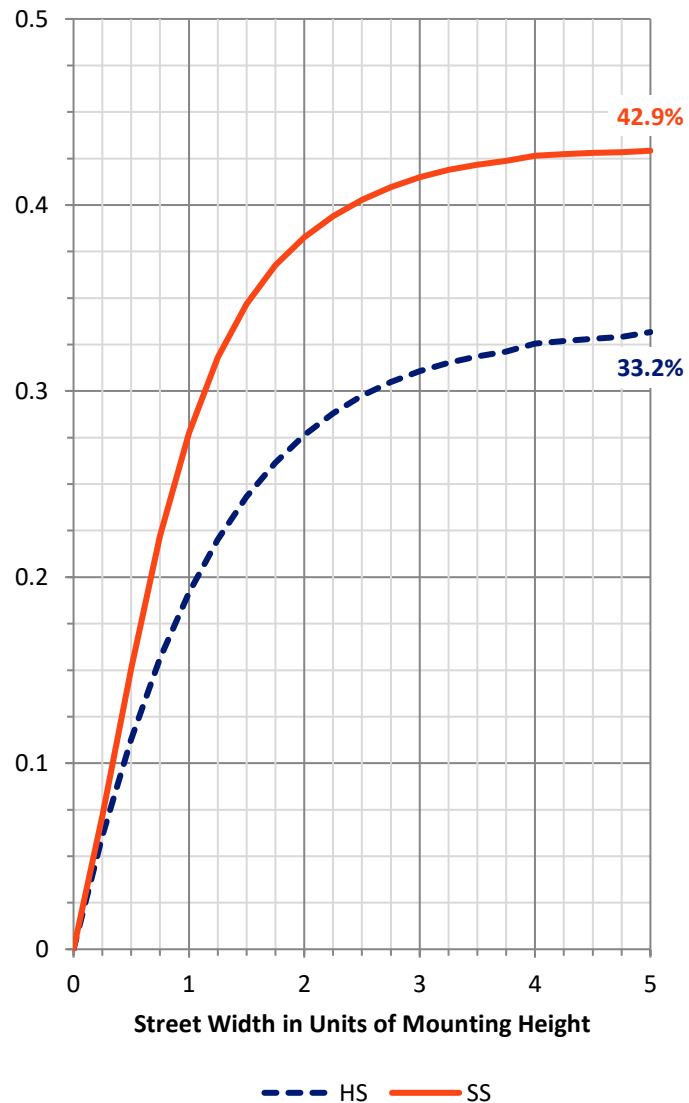
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9559.8	0.0	9559.8
	% Lamp	33.4	0.0	33.4
Street Side	Lumens	12276.9	0.0	12276.9
	% Lamp	42.9	0.0	42.9
Total	Lumens	21836.7	0.0	21836.7
	% Lamp	76.3	0.0	76.3

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	289.3	1.3	1.0
10°-20°	981.8	4.5	3.4
20°-30°	1884.6	8.6	6.6
30°-40°	2839.0	13.0	9.9
40°-50°	3712.7	17.0	13.0
50°-60°	4366.3	20.0	15.3
60°-70°	4555.5	20.9	15.9
70°-80°	2916.5	13.4	10.2
80°-90°	291.1	1.3	1.0
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	21836.7	100.0	76.3
0°-180°	21836.7	100.0	76.3

Coefficient of Utilization



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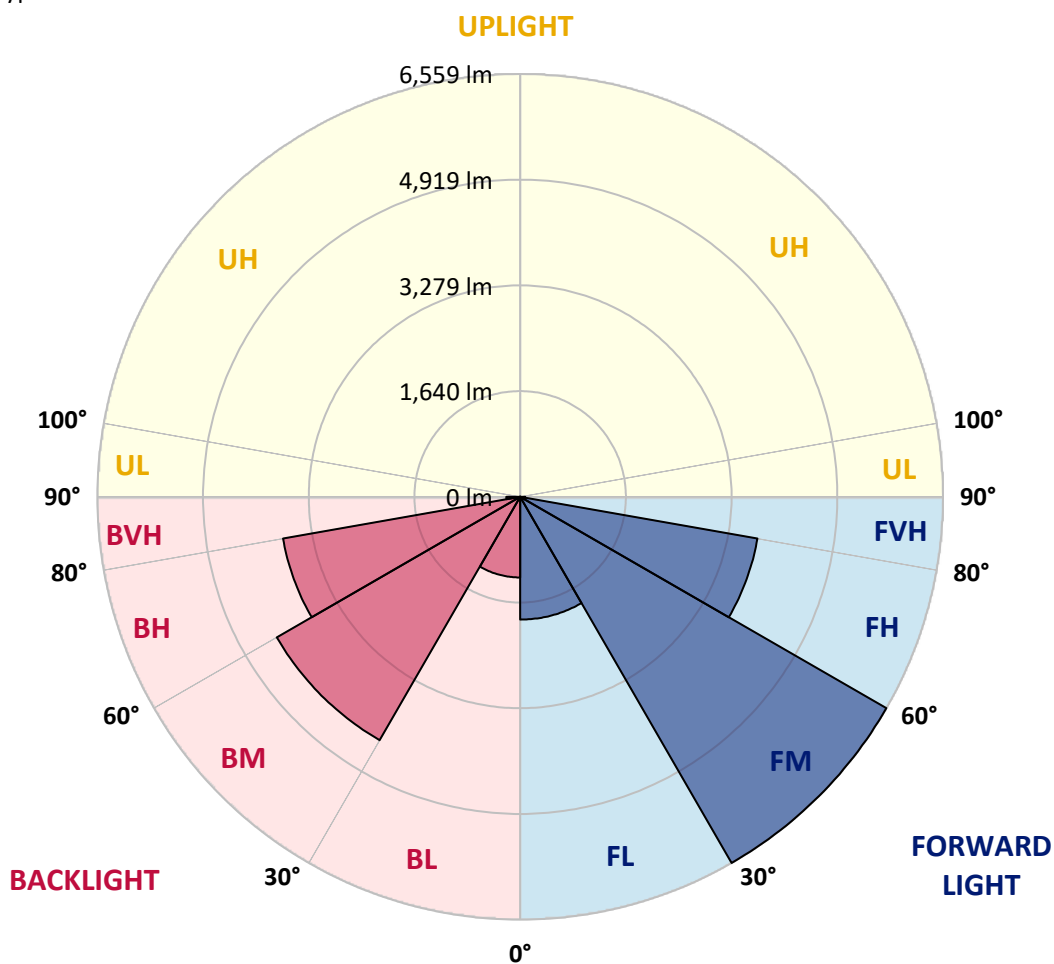
CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1904.4	6.7			
FM	(30°-60°)	6558.8	22.9			
FH	(60°-80°)	3737.1	13.1			G2/5000
FVH	(80°-90°)	76.7	0.3			G1/100
BL	(0°-30°)	1251.4	4.4	B3/2500		
BM	(30°-60°)	4359.1	15.2	B3/5000		
BH	(60°-80°)	3734.9	13.0	B4/5000		G4/5000
BVH	(80°-90°)	214.4	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		6791.3	23.7			

BUG Rating: B4-U0-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2916.4	2916.4	2916.4	2916.4	2916.4	2916.4	2916.4	2916.4	2916.4	2916.4	2916.4
1°	2966.0	2965.1	2961.1	2954.1	2944.2	2933.8	2911.3	2899.4	2889.9	2881.7	2876.6
2°	3023.2	3020.6	3010.5	2993.3	2970.8	2947.0	2912.1	2889.7	2869.9	2853.7	2843.4
3°	3087.8	3082.7	3064.6	3037.0	3003.0	2965.3	2917.2	2883.2	2853.7	2830.5	2814.0
4°	3159.7	3150.8	3125.0	3086.2	3038.3	2986.1	2924.1	2879.4	2840.9	2811.3	2790.1
5°	3240.5	3228.3	3193.1	3140.0	3077.9	3010.6	2933.6	2877.4	2830.9	2795.0	2769.6
6°	3329.7	3312.6	3268.6	3200.5	3120.9	3036.8	2944.8	2878.2	2823.8	2782.4	2752.6
7°	3426.7	3405.6	3350.8	3268.0	3167.9	3066.6	2960.2	2882.0	2819.0	2772.5	2739.8
8°	3533.0	3506.3	3440.3	3338.9	3218.7	3100.5	2978.3	2889.1	2817.5	2764.4	2729.1
9°	3647.6	3618.3	3536.5	3415.8	3275.9	3135.9	2998.4	2897.2	2818.8	2759.7	2721.0
10°	3771.6	3733.7	3640.2	3499.7	3337.5	3174.8	3021.5	2908.8	2822.2	2758.7	2715.5
11°	3906.4	3863.7	3751.9	3590.1	3402.0	3216.8	3046.2	2922.9	2827.7	2759.9	2713.3
12°	4051.7	3999.0	3870.4	3683.4	3468.3	3262.8	3073.4	2938.0	2835.4	2762.8	2714.9
13°	4205.7	4147.2	3999.1	3783.6	3540.2	3311.4	3101.8	2954.7	2844.4	2768.2	2718.3
14°	4376.0	4307.5	4136.6	3890.7	3616.4	3360.1	3130.7	2971.4	2854.4	2775.2	2722.2
15°	4557.4	4479.5	4281.6	4003.3	3694.7	3410.7	3161.7	2989.4	2866.3	2783.5	2728.3
16°	4744.3	4654.6	4432.9	4124.3	3779.1	3464.7	3195.0	3010.0	2878.8	2792.9	2736.1
17°	4930.8	4831.8	4583.7	4248.3	3867.0	3520.7	3229.6	3030.6	2893.4	2802.8	2745.0
18°	5114.7	5005.1	4735.1	4373.2	3958.9	3577.9	3265.8	3054.1	2909.0	2815.2	2753.4
19°	5287.4	5171.3	4884.4	4494.3	4054.0	3637.6	3303.4	3078.5	2924.9	2828.1	2763.9
20°	5446.5	5328.4	5025.9	4615.1	4150.7	3700.0	3343.1	3104.5	2942.1	2841.8	2775.9
21°	5589.8	5474.0	5163.2	4732.5	4246.3	3764.7	3383.4	3131.5	2960.1	2855.0	2788.8
22°	5713.4	5598.6	5291.8	4846.6	4342.6	3831.2	3425.7	3159.7	2980.8	2870.5	2803.3
23°	5825.4	5718.5	5411.3	4956.0	4437.9	3900.7	3469.5	3188.5	3003.3	2887.1	2819.3
24°	5923.8	5821.9	5522.2	5058.8	4531.2	3972.1	3514.0	3219.0	3026.3	2905.8	2836.6
25°	6008.4	5914.3	5625.0	5159.4	4622.7	4044.5	3561.1	3250.4	3050.0	2926.1	2854.1
26°	6081.3	5996.0	5721.2	5253.4	4710.7	4116.2	3608.9	3283.0	3074.8	2946.7	2873.5
27°	6146.9	6065.5	5806.2	5343.7	4796.4	4189.4	3656.9	3315.9	3099.9	2968.7	2893.6
28°	6202.2	6124.7	5882.9	5430.4	4877.3	4261.9	3706.7	3347.9	3126.4	2992.6	2914.9
29°	6248.1	6176.4	5953.1	5512.6	4954.1	4334.2	3757.5	3381.6	3152.3	3018.5	2937.3
30°	6284.3	6217.7	6015.9	5592.0	5030.2	4404.2	3810.0	3415.8	3180.4	3044.1	2960.4
31°	6314.0	6250.9	6070.8	5665.1	5100.8	4473.6	3862.5	3449.3	3209.5	3070.2	2984.6
32°	6335.5	6278.0	6119.3	5733.3	5168.4	4541.9	3915.6	3484.5	3238.4	3097.4	3010.6
33°	6351.9	6297.6	6161.7	5798.1	5233.7	4608.3	3968.5	3520.9	3268.8	3124.3	3037.5
34°	6359.3	6309.2	6195.5	5856.2	5295.8	4673.0	4021.8	3555.6	3299.6	3152.2	3065.0
35°	6362.7	6314.8	6224.0	5909.9	5357.1	4735.6	4074.9	3591.0	3331.0	3181.1	3094.4
36°	6360.8	6316.4	6246.6	5959.3	5413.4	4796.2	4127.9	3626.4	3363.1	3210.4	3124.9
37°	6352.0	6311.5	6262.6	6004.2	5468.2	4854.6	4179.7	3663.0	3395.5	3241.1	3156.3
38°	6338.9	6302.5	6273.3	6044.6	5520.8	4912.0	4233.1	3700.4	3427.9	3273.1	3188.1
39°	6322.7	6291.3	6277.1	6078.7	5571.4	4968.2	4286.6	3737.7	3461.1	3305.2	3219.6
40°	6301.3	6275.3	6277.0	6109.7	5619.2	5022.7	4341.0	3777.5	3495.2	3338.1	3251.6
41°	6271.9	6253.6	6270.1	6135.8	5663.6	5075.0	4392.6	3819.1	3530.3	3371.4	3284.3
42°	6239.6	6226.6	6258.7	6158.3	5707.7	5126.5	4442.6	3861.0	3565.7	3406.2	3317.5
43°	6200.0	6197.0	6243.1	6174.8	5747.5	5177.6	4491.9	3901.6	3601.1	3442.6	3351.1
44°	6153.8	6162.8	6221.8	6184.5	5785.3	5226.4	4537.0	3944.2	3637.6	3478.8	3386.0

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CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	6100.2	6120.5	6192.7	6191.6	5822.2	5275.2	4583.4	3989.0	3676.5	3515.6	3421.2
46°	6037.2	6075.6	6163.0	6192.8	5857.2	5323.4	4628.5	4035.4	3716.7	3553.5	3457.4
47°	5969.4	6020.6	6126.6	6188.7	5891.0	5372.3	4672.2	4082.1	3757.4	3591.7	3495.1
48°	5897.0	5960.7	6084.4	6177.2	5921.1	5416.9	4713.2	4129.5	3799.8	3630.6	3533.1
49°	5814.5	5892.6	6038.2	6163.9	5947.5	5460.1	4752.4	4177.3	3843.5	3671.7	3572.2
50°	5725.5	5816.0	5982.5	6141.8	5971.0	5502.6	4790.3	4224.7	3887.5	3713.2	3613.2
51°	5625.2	5732.3	5921.4	6115.4	5991.1	5541.6	4828.6	4272.7	3933.6	3757.9	3654.3
52°	5518.7	5637.4	5851.5	6080.4	6007.2	5577.3	4864.3	4322.6	3980.9	3804.1	3698.9
53°	5405.3	5536.3	5777.1	6038.8	6019.0	5609.9	4898.0	4369.9	4028.9	3850.0	3741.3
54°	5287.9	5424.7	5694.2	5992.7	6023.4	5638.5	4930.2	4416.1	4079.7	3897.7	3786.9
55°	5164.1	5305.7	5602.4	5938.3	6021.0	5661.8	4958.2	4457.6	4131.0	3948.0	3833.7
56°	5032.3	5184.7	5502.5	5876.8	6013.1	5679.4	4983.7	4497.8	4182.5	3999.6	3881.6
57°	4904.3	5057.8	5400.9	5810.0	5994.8	5690.6	5006.4	4534.6	4234.3	4054.0	3930.9
58°	4768.8	4928.9	5291.9	5736.0	5967.1	5692.5	5021.6	4567.9	4286.3	4110.6	3977.2
59°	4634.9	4797.6	5182.6	5653.6	5930.4	5684.6	5030.6	4597.8	4338.4	4170.1	4023.0
60°	4491.0	4665.4	5067.5	5565.1	5883.6	5666.9	5035.0	4623.3	4390.6	4230.5	4068.2
61°	4341.8	4526.3	4952.6	5473.3	5826.0	5640.9	5030.0	4643.8	4442.9	4291.6	4113.8
62°	4185.8	4384.6	4838.6	5374.4	5761.0	5601.0	5015.8	4658.3	4493.2	4352.3	4158.5
63°	4032.0	4241.8	4725.8	5271.0	5688.6	5546.2	4989.7	4666.5	4542.7	4411.9	4201.9
64°	3887.3	4103.3	4613.9	5166.2	5603.2	5477.1	4951.0	4668.3	4591.3	4471.5	4243.2
65°	3770.4	3976.9	4505.0	5058.8	5511.0	5394.9	4902.5	4660.5	4637.7	4531.9	4282.3
66°	3684.6	3872.7	4400.3	4951.9	5406.9	5296.1	4836.4	4641.2	4678.1	4598.5	4317.9
67°	3635.9	3796.5	4305.5	4846.7	5288.5	5185.2	4751.4	4609.2	4712.0	4661.3	4350.8
68°	3585.3	3744.4	4222.8	4742.6	5157.4	5054.8	4602.5	4553.4	4737.3	4720.5	4349.5
69°	3469.7	3693.9	4155.7	4639.0	5011.2	4883.3	4363.7	4442.8	4746.6	4773.6	4331.8
70°	3241.6	3600.8	4102.6	4534.4	4858.0	4643.7	4032.8	4258.8	4740.5	4816.9	4334.7
71°	2895.9	3416.7	4054.7	4435.2	4675.2	4332.4	3629.7	3992.9	4695.7	4844.3	4309.7
72°	2522.6	3116.9	3997.6	4332.5	4451.4	3963.2	3248.5	3684.9	4586.5	4833.4	4258.8
73°	2137.2	2728.9	3906.9	4222.4	4191.4	3586.2	2928.0	3379.4	4414.2	4774.5	4189.2
74°	1692.7	2310.9	3730.4	4090.0	3899.6	3219.0	2545.8	3089.7	4192.6	4665.2	4052.1
75°	1135.2	1860.0	3419.4	3898.1	3568.2	2814.9	1936.1	2750.0	3943.7	4494.8	3846.7
76°	617.9	1319.9	3000.2	3618.4	3222.6	2263.0	1326.3	2129.0	3697.8	4218.6	3568.3
77°	404.1	736.7	2550.3	3218.7	2845.4	1533.8	721.5	1507.8	3419.9	3813.7	3238.8
78°	192.1	542.6	2009.6	2666.8	2367.6	840.7	350.2	890.3	3007.4	3262.9	2834.1
79°	153.0	352.0	1325.2	2020.6	1752.5	623.9	218.2	433.9	2279.5	2661.5	2378.9
80°	132.0	161.3	700.8	1332.9	1073.5	420.7	188.8	241.5	1551.6	2124.5	1955.7
81°	113.5	136.3	447.7	697.8	766.4	217.4	159.3	202.2	826.4	1679.7	1774.1
82°	96.9	115.9	199.6	449.4	471.9	183.5	129.9	162.8	396.8	1237.9	1500.1
83°	81.6	97.1	160.2	203.9	177.4	151.0	109.4	123.6	261.0	927.1	1226.1
84°	67.7	79.9	129.7	159.7	142.3	116.9	90.0	99.9	209.5	652.6	949.2
85°	53.9	65.5	99.2	131.8	109.6	89.8	71.3	79.5	171.5	420.9	586.9
86°	40.0	51.1	74.3	105.7	80.6	70.6	53.9	61.8	133.6	302.4	414.7
87°	27.3	36.8	53.9	77.0	59.5	51.6	37.5	45.9	97.6	183.9	242.4
88°	15.8	24.0	33.4	61.9	38.4	32.6	26.1	35.0	64.5	67.9	72.2
89°	6.7	10.4	13.9	47.0	17.4	16.4	14.6	24.1	43.9	46.1	48.8

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CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1444974

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1444974
CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1444974

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2916.4	2916.4	2916.4	2916.4	2916.4	2916.4	2916.4	2916.4	2916.4	2916.4	2916.4
1°	2874.1	2873.7	2876.1	2883.7	2891.3	2902.0	2913.5	2916.0	2927.3	2939.5	2949.2
2°	2837.6	2836.2	2841.7	2852.5	2867.4	2885.5	2908.1	2921.9	2946.8	2970.8	2991.6
3°	2805.8	2803.9	2810.8	2825.3	2846.5	2873.7	2905.9	2931.6	2968.2	3006.0	3039.6
4°	2779.3	2776.9	2785.3	2803.1	2830.2	2864.7	2906.5	2943.6	2993.4	3044.9	3092.2
5°	2756.9	2753.4	2763.4	2784.9	2816.4	2858.9	2909.4	2958.1	3022.7	3088.5	3148.5
6°	2738.0	2734.1	2745.6	2769.5	2807.0	2855.7	2914.8	2975.8	3053.7	3135.6	3213.2
7°	2721.8	2718.2	2730.1	2757.3	2799.3	2855.5	2924.2	2996.9	3089.2	3188.5	3283.3
8°	2710.0	2705.6	2719.0	2748.9	2794.8	2857.6	2935.6	3019.3	3126.9	3245.8	3358.9
9°	2700.1	2695.7	2710.2	2743.3	2793.0	2862.0	2948.6	3044.3	3168.3	3307.1	3439.7
10°	2693.6	2688.8	2704.9	2740.3	2793.8	2867.9	2963.4	3071.8	3212.3	3372.0	3527.2
11°	2690.7	2685.3	2702.6	2740.9	2798.3	2876.6	2981.5	3102.6	3261.6	3441.8	3622.2
12°	2689.6	2684.6	2702.9	2744.1	2804.8	2888.2	3001.7	3134.8	3312.0	3516.4	3720.8
13°	2692.0	2685.6	2704.8	2749.1	2813.1	2901.1	3023.5	3169.5	3365.3	3595.0	3828.5
14°	2694.6	2689.1	2709.7	2756.3	2824.3	2915.9	3046.1	3204.9	3420.9	3677.6	3941.7
15°	2699.6	2693.5	2716.0	2764.9	2837.3	2933.2	3069.9	3241.8	3478.5	3765.1	4063.7
16°	2705.5	2699.4	2722.7	2773.7	2850.2	2951.5	3095.4	3281.4	3539.1	3858.0	4191.2
17°	2712.3	2706.2	2731.0	2784.6	2865.3	2971.4	3122.6	3322.2	3602.8	3954.5	4321.3
18°	2720.6	2714.2	2741.1	2795.8	2881.2	2991.1	3150.1	3364.0	3666.9	4055.5	4454.0
19°	2729.7	2724.2	2751.3	2808.7	2897.1	3013.2	3179.5	3407.1	3733.7	4158.4	4585.2
20°	2741.7	2735.4	2763.9	2823.2	2914.1	3035.2	3210.0	3451.8	3805.3	4262.1	4710.5
21°	2754.6	2749.2	2777.7	2838.9	2931.1	3058.6	3242.5	3498.5	3876.1	4370.1	4832.5
22°	2768.9	2763.1	2793.4	2856.0	2950.2	3083.3	3275.6	3546.6	3952.8	4474.0	4949.5
23°	2784.6	2779.9	2810.5	2874.3	2970.7	3109.1	3308.7	3596.3	4032.2	4577.1	5060.9
24°	2801.6	2798.6	2829.3	2894.3	2992.0	3134.8	3342.8	3647.2	4110.5	4675.1	5164.6
25°	2820.1	2817.7	2849.4	2915.3	3015.4	3162.0	3378.6	3697.7	4190.2	4771.2	5263.5
26°	2840.5	2839.3	2871.0	2936.7	3039.4	3189.3	3414.1	3750.5	4270.8	4860.5	5359.1
27°	2860.9	2862.3	2893.6	2959.2	3064.3	3216.1	3450.3	3804.1	4351.8	4946.8	5447.6
28°	2882.7	2888.4	2917.0	2983.5	3090.3	3245.4	3486.7	3860.2	4431.8	5029.8	5533.6
29°	2906.4	2915.4	2941.8	3008.1	3117.2	3274.6	3523.9	3914.7	4509.1	5108.3	5615.6
30°	2931.8	2944.7	2968.7	3033.2	3143.1	3304.8	3560.7	3970.3	4586.3	5182.6	5692.0
31°	2958.5	2974.4	2996.7	3059.2	3171.2	3335.1	3597.2	4026.0	4659.8	5252.4	5763.8
32°	2986.2	3006.5	3024.9	3087.5	3200.4	3366.7	3634.8	4082.6	4730.4	5318.9	5831.4
33°	3015.3	3038.7	3053.7	3115.5	3229.3	3398.1	3671.9	4139.5	4799.6	5384.9	5896.0
34°	3044.1	3071.3	3082.7	3144.7	3259.8	3430.2	3709.3	4196.1	4863.4	5446.5	5955.9
35°	3073.0	3104.7	3111.6	3175.2	3290.1	3463.5	3747.0	4253.4	4927.3	5507.7	6009.5
36°	3102.9	3138.7	3140.6	3206.4	3320.9	3496.7	3787.1	4311.9	4989.1	5562.8	6059.2
37°	3130.4	3172.0	3170.3	3237.3	3352.5	3531.2	3827.3	4367.8	5047.7	5617.3	6103.9
38°	3160.8	3206.9	3201.4	3270.8	3384.9	3564.8	3868.8	4425.1	5106.0	5668.7	6145.6
39°	3191.3	3240.8	3232.5	3303.5	3417.9	3601.2	3910.4	4479.8	5160.0	5717.6	6180.9
40°	3222.6	3273.6	3265.1	3337.0	3452.3	3636.1	3952.7	4533.4	5212.2	5764.1	6211.6
41°	3255.3	3304.9	3297.6	3371.3	3487.5	3672.3	3995.5	4586.5	5262.2	5807.7	6234.6
42°	3287.7	3336.3	3331.4	3404.8	3524.4	3710.4	4039.1	4636.8	5313.0	5851.3	6252.6
43°	3320.5	3366.6	3366.3	3441.8	3560.5	3749.5	4085.4	4686.2	5362.6	5889.9	6268.0
44°	3355.2	3398.4	3402.2	3478.2	3598.1	3791.1	4131.8	4735.0	5411.4	5925.2	6275.7

REPORT NUMBER: P1444974

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	3390.8	3430.1	3438.2	3515.9	3637.3	3830.7	4179.0	4782.7	5457.6	5959.4	6279.5
46°	3427.1	3459.7	3475.1	3553.0	3676.3	3873.3	4225.7	4826.6	5502.2	5989.9	6276.3
47°	3465.3	3488.8	3514.2	3590.7	3717.2	3914.7	4273.2	4866.9	5545.2	6018.3	6268.1
48°	3504.2	3519.8	3554.2	3629.7	3758.3	3958.2	4320.6	4907.1	5584.5	6041.8	6255.2
49°	3544.6	3552.0	3594.0	3668.1	3800.0	4002.5	4366.2	4945.0	5621.8	6062.6	6236.3
50°	3585.6	3582.9	3635.8	3708.3	3843.7	4049.0	4412.2	4980.8	5654.1	6081.4	6213.0
51°	3629.6	3615.2	3677.9	3749.2	3886.5	4094.5	4457.1	5013.1	5684.3	6093.7	6182.4
52°	3672.3	3646.4	3720.1	3792.0	3933.6	4140.1	4500.9	5043.0	5708.9	6101.5	6144.0
53°	3711.8	3671.2	3758.4	3834.7	3980.3	4187.0	4540.8	5069.9	5727.4	6102.9	6100.1
54°	3746.0	3688.8	3794.0	3879.5	4029.7	4233.1	4578.9	5090.5	5741.9	6101.5	6050.9
55°	3776.9	3707.4	3825.0	3925.1	4078.9	4280.0	4613.8	5107.7	5749.4	6090.3	5997.0
56°	3808.9	3730.2	3855.3	3972.1	4132.1	4327.6	4643.4	5121.0	5748.7	6072.6	5934.7
57°	3839.3	3754.4	3886.3	4018.3	4184.0	4375.6	4671.4	5128.0	5738.8	6044.8	5865.5
58°	3869.2	3771.8	3915.9	4068.2	4238.8	4421.5	4693.9	5131.1	5720.5	6009.4	5788.4
59°	3893.6	3784.8	3940.0	4114.7	4296.2	4465.5	4711.7	5128.6	5693.2	5964.7	5705.1
60°	3914.5	3800.3	3961.0	4161.7	4354.8	4509.0	4727.0	5118.6	5657.2	5910.7	5614.1
61°	3936.0	3815.1	3982.7	4205.8	4414.5	4552.9	4736.9	5097.3	5613.1	5846.0	5517.5
62°	3957.0	3824.7	4003.5	4252.3	4471.4	4597.6	4740.1	5065.5	5557.3	5771.4	5415.9
63°	3973.3	3832.2	4021.9	4296.5	4526.2	4638.4	4737.5	5024.7	5487.4	5686.4	5310.4
64°	3987.4	3835.4	4038.3	4338.3	4581.2	4676.5	4729.2	4972.1	5407.3	5594.8	5203.8
65°	3988.6	3806.3	4039.5	4377.2	4636.5	4710.3	4708.7	4903.5	5311.8	5490.6	5092.2
66°	3950.9	3781.4	3998.4	4409.6	4690.9	4736.6	4678.1	4817.5	5202.2	5374.5	4979.1
67°	3929.5	3768.8	3976.3	4434.5	4739.3	4757.8	4629.0	4691.4	5078.6	5247.9	4868.9
68°	3920.7	3721.6	3960.8	4424.6	4785.2	4769.1	4537.4	4477.1	4918.9	5110.6	4756.9
69°	3864.4	3587.5	3899.4	4399.7	4823.1	4761.0	4372.1	4162.7	4690.5	4954.3	4645.8
70°	3753.6	3343.9	3789.9	4396.8	4852.2	4727.2	4112.4	3757.3	4386.2	4774.9	4534.2
71°	3577.3	2984.6	3614.6	4365.6	4857.2	4642.0	3785.7	3340.2	4006.4	4557.9	4414.8
72°	3294.9	2650.0	3334.3	4313.9	4823.3	4489.8	3441.6	2972.2	3602.3	4294.3	4290.3
73°	2946.0	2332.5	2974.7	4233.8	4734.4	4270.1	3115.0	2609.9	3212.1	3989.3	4147.3
74°	2603.9	1978.0	2644.5	4090.1	4589.3	4022.3	2780.5	2150.6	2815.6	3642.5	3979.8
75°	2244.1	1506.3	2293.6	3869.1	4370.7	3748.9	2330.0	1495.3	2337.7	3261.5	3743.0
76°	1811.4	1088.1	1857.8	3577.4	4033.3	3457.3	1675.6	846.7	1684.7	2862.9	3417.3
77°	1394.1	991.1	1472.5	3242.0	3575.6	3105.5	1025.7	620.3	985.4	2424.7	2968.2
78°	1311.7	1292.7	1429.7	2826.8	3014.1	2554.5	506.2	406.1	729.1	1882.4	2373.2
79°	1616.3	1229.5	1721.3	2346.2	2462.4	1776.1	269.4	191.9	484.2	1246.6	1713.9
80°	1888.9	1166.4	1471.1	1872.5	1998.7	1003.3	223.9	163.5	239.3	704.1	1054.7
81°	1474.3	1097.3	1221.0	1699.4	1535.0	481.9	178.4	140.1	198.5	457.5	761.7
82°	1059.6	629.9	966.9	1404.9	1071.4	285.0	132.9	118.6	168.8	212.4	476.8
83°	603.8	447.8	547.7	1110.4	741.3	220.4	110.5	99.0	137.9	161.7	192.0
84°	340.6	265.8	330.8	814.7	449.2	180.8	90.1	80.2	107.6	129.4	152.0
85°	226.0	86.1	265.8	456.9	327.6	141.3	71.7	63.6	82.2	97.9	125.3
86°	112.2	58.3	200.8	365.8	206.0	102.0	55.0	47.2	63.7	71.1	100.0
87°	77.9	30.5	135.8	274.7	85.9	72.0	40.3	30.7	45.5	51.1	70.1
88°	43.6	2.8	70.7	183.6	58.3	49.0	27.8	17.4	27.2	31.1	41.0
89°	9.7	1.8	6.4	92.5	30.7	26.0	15.2	6.5	11.8	12.4	11.9

REPORT NUMBER: P1444974

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1444974

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1444974
CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1444974

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2916.4	2916.4	2916.4
1°	2957.6	2963.4	2966.0
2°	3009.4	3021.0	3023.2
3°	3065.6	3082.7	3087.8
4°	3128.7	3153.8	3159.7
5°	3199.3	3231.9	3240.5
6°	3277.5	3318.0	3329.7
7°	3361.1	3412.9	3426.7
8°	3451.5	3514.6	3533.0
9°	3551.5	3623.7	3647.6
10°	3657.6	3744.4	3771.6
11°	3773.1	3877.3	3906.4
12°	3898.4	4016.0	4051.7
13°	4032.8	4166.8	4205.7
14°	4175.2	4329.4	4376.0
15°	4323.8	4497.8	4557.4
16°	4476.5	4673.5	4744.3
17°	4634.4	4852.7	4930.8
18°	4789.4	5030.6	5114.7
19°	4940.0	5199.0	5287.4
20°	5085.5	5359.1	5446.5
21°	5221.6	5504.0	5589.8
22°	5349.2	5633.6	5713.4
23°	5471.0	5748.9	5825.4
24°	5583.7	5852.5	5923.8
25°	5689.8	5941.8	6008.4
26°	5784.8	6021.3	6081.3
27°	5873.4	6088.7	6146.9
28°	5951.7	6147.3	6202.2
29°	6022.6	6196.7	6248.1
30°	6082.9	6239.1	6284.3
31°	6138.2	6271.1	6314.0
32°	6185.0	6298.5	6335.5
33°	6225.0	6317.4	6351.9
34°	6257.5	6329.9	6359.3
35°	6285.0	6334.9	6362.7
36°	6305.9	6334.6	6360.8
37°	6319.2	6330.3	6352.0
38°	6327.9	6320.6	6338.9
39°	6330.6	6307.6	6322.7
40°	6328.7	6290.1	6301.3
41°	6320.8	6268.8	6271.9
42°	6308.1	6243.3	6239.6
43°	6290.4	6215.0	6200.0
44°	6266.8	6179.7	6153.8

REPORT NUMBER: P1444974

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	6240.1	6140.4	6100.2
46°	6207.6	6093.9	6037.2
47°	6170.9	6040.8	5969.4
48°	6129.1	5982.5	5897.0
49°	6082.0	5914.7	5814.5
50°	6028.4	5842.4	5725.5
51°	5966.9	5761.2	5625.2
52°	5897.8	5668.4	5518.7
53°	5820.6	5569.4	5405.3
54°	5739.7	5463.3	5287.9
55°	5651.7	5347.0	5164.1
56°	5554.8	5226.7	5032.3
57°	5452.1	5102.0	4904.3
58°	5342.7	4970.9	4768.8
59°	5232.4	4839.9	4634.9
60°	5120.7	4705.4	4491.0
61°	5004.9	4566.9	4341.8
62°	4892.2	4426.7	4185.8
63°	4780.6	4285.2	4032.0
64°	4672.6	4154.3	3887.3
65°	4569.1	4029.8	3770.4
66°	4471.1	3928.2	3684.6
67°	4377.8	3853.3	3635.9
68°	4294.0	3801.9	3585.3
69°	4221.1	3748.6	3469.7
70°	4165.5	3659.6	3241.6
71°	4108.2	3488.6	2895.9
72°	4035.3	3187.4	2522.6
73°	3923.0	2793.0	2137.2
74°	3718.7	2355.7	1692.7
75°	3396.7	1895.9	1135.2
76°	2976.0	1371.8	617.9
77°	2505.5	788.2	404.1
78°	1916.8	581.9	192.1
79°	1229.2	375.8	153.0
80°	655.7	169.7	132.0
81°	429.9	140.5	113.5
82°	207.0	119.3	96.9
83°	159.8	100.2	81.6
84°	128.3	82.7	67.7
85°	97.5	67.7	53.9
86°	72.5	52.7	40.0
87°	51.8	37.7	27.3
88°	31.2	23.9	15.8
89°	12.2	10.1	6.7

REPORT NUMBER: P1444974

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
90°	0.0	0.0	0.0
91°	0.0	0.0	0.0
92°	0.0	0.0	0.0
93°	0.0	0.0	0.0
94°	0.0	0.0	0.0
95°	0.0	0.0	0.0
96°	0.0	0.0	0.0
97°	0.0	0.0	0.0
98°	0.0	0.0	0.0
99°	0.0	0.0	0.0
100°	0.0	0.0	0.0
101°	0.0	0.0	0.0
102°	0.0	0.0	0.0
103°	0.0	0.0	0.0
104°	0.0	0.0	0.0
105°	0.0	0.0	0.0
106°	0.0	0.0	0.0
107°	0.0	0.0	0.0
108°	0.0	0.0	0.0
109°	0.0	0.0	0.0
110°	0.0	0.0	0.0
111°	0.0	0.0	0.0
112°	0.0	0.0	0.0
113°	0.0	0.0	0.0
114°	0.0	0.0	0.0
115°	0.0	0.0	0.0
116°	0.0	0.0	0.0
117°	0.0	0.0	0.0
118°	0.0	0.0	0.0
119°	0.0	0.0	0.0
120°	0.0	0.0	0.0
121°	0.0	0.0	0.0
122°	0.0	0.0	0.0
123°	0.0	0.0	0.0
124°	0.0	0.0	0.0
125°	0.0	0.0	0.0
126°	0.0	0.0	0.0
127°	0.0	0.0	0.0
128°	0.0	0.0	0.0
129°	0.0	0.0	0.0
130°	0.0	0.0	0.0
131°	0.0	0.0	0.0
132°	0.0	0.0	0.0
133°	0.0	0.0	0.0
134°	0.0	0.0	0.0

REPORT NUMBER: P1444974

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
135°	0.0	0.0	0.0
136°	0.0	0.0	0.0
137°	0.0	0.0	0.0
138°	0.0	0.0	0.0
139°	0.0	0.0	0.0
140°	0.0	0.0	0.0
141°	0.0	0.0	0.0
142°	0.0	0.0	0.0
143°	0.0	0.0	0.0
144°	0.0	0.0	0.0
145°	0.0	0.0	0.0
146°	0.0	0.0	0.0
147°	0.0	0.0	0.0
148°	0.0	0.0	0.0
149°	0.0	0.0	0.0
150°	0.0	0.0	0.0
151°	0.0	0.0	0.0
152°	0.0	0.0	0.0
153°	0.0	0.0	0.0
154°	0.0	0.0	0.0
155°	0.0	0.0	0.0
156°	0.0	0.0	0.0
157°	0.0	0.0	0.0
158°	0.0	0.0	0.0
159°	0.0	0.0	0.0
160°	0.0	0.0	0.0
161°	0.0	0.0	0.0
162°	0.0	0.0	0.0
163°	0.0	0.0	0.0
164°	0.0	0.0	0.0
165°	0.0	0.0	0.0
166°	0.0	0.0	0.0
167°	0.0	0.0	0.0
168°	0.0	0.0	0.0
169°	0.0	0.0	0.0
170°	0.0	0.0	0.0
171°	0.0	0.0	0.0
172°	0.0	0.0	0.0
173°	0.0	0.0	0.0
174°	0.0	0.0	0.0
175°	0.0	0.0	0.0
176°	0.0	0.0	0.0
177°	0.0	0.0	0.0
178°	0.0	0.0	0.0
179°	0.0	0.0	0.0

REPORT NUMBER: P1444974

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)