

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: P1444998

Luminaire Tested: XAS180-SFPM (4000K-144W-T4)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1444998
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 (4000K-144W-T4)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 80% (144W)
OPTICS - TYPE 4
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 28628 (1 lamp)
Luminaire Lumens: 23401.3 lumens
Efficiency: 81.7%
Efficacy: 168.8 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): 138.6
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

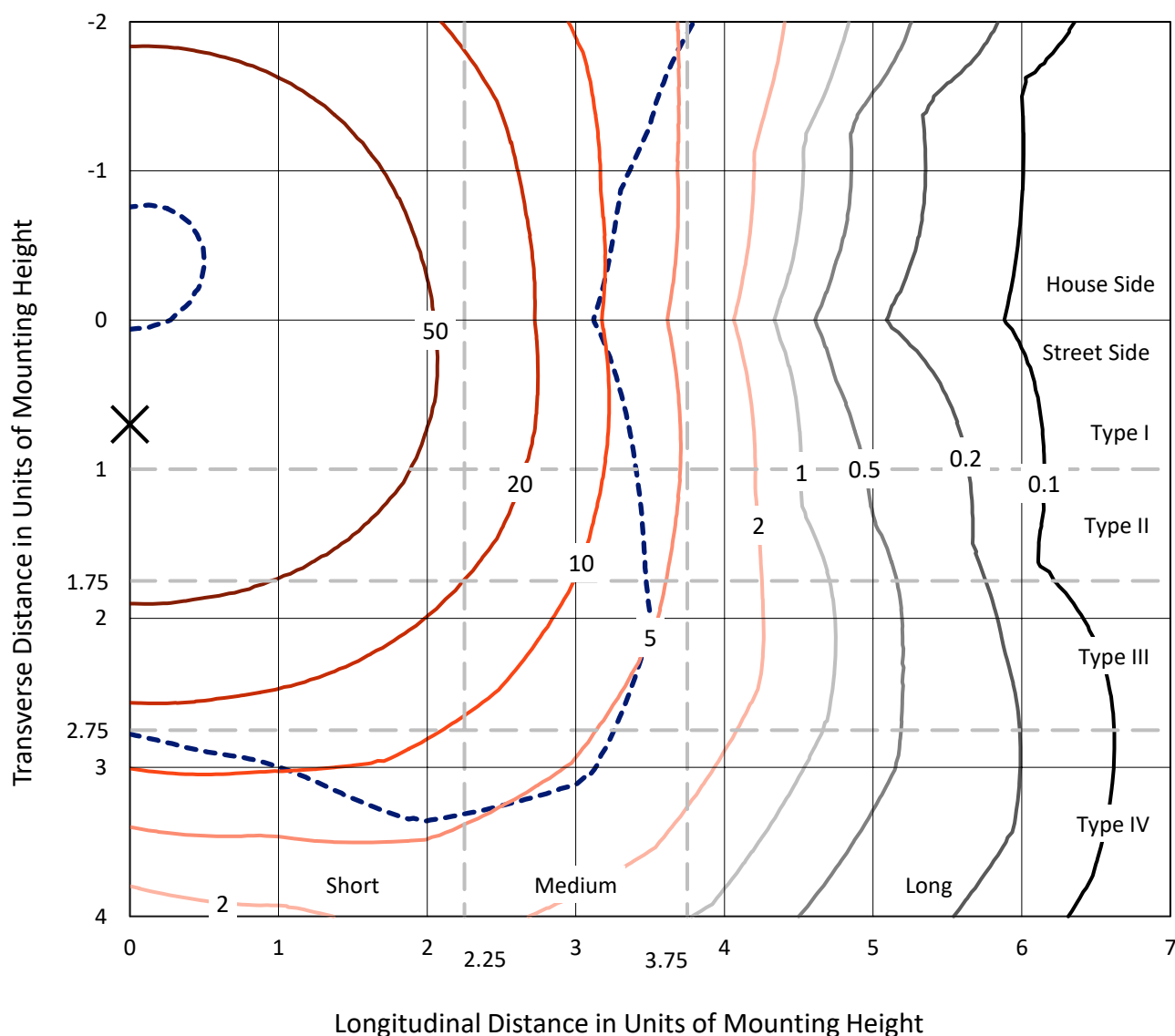
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

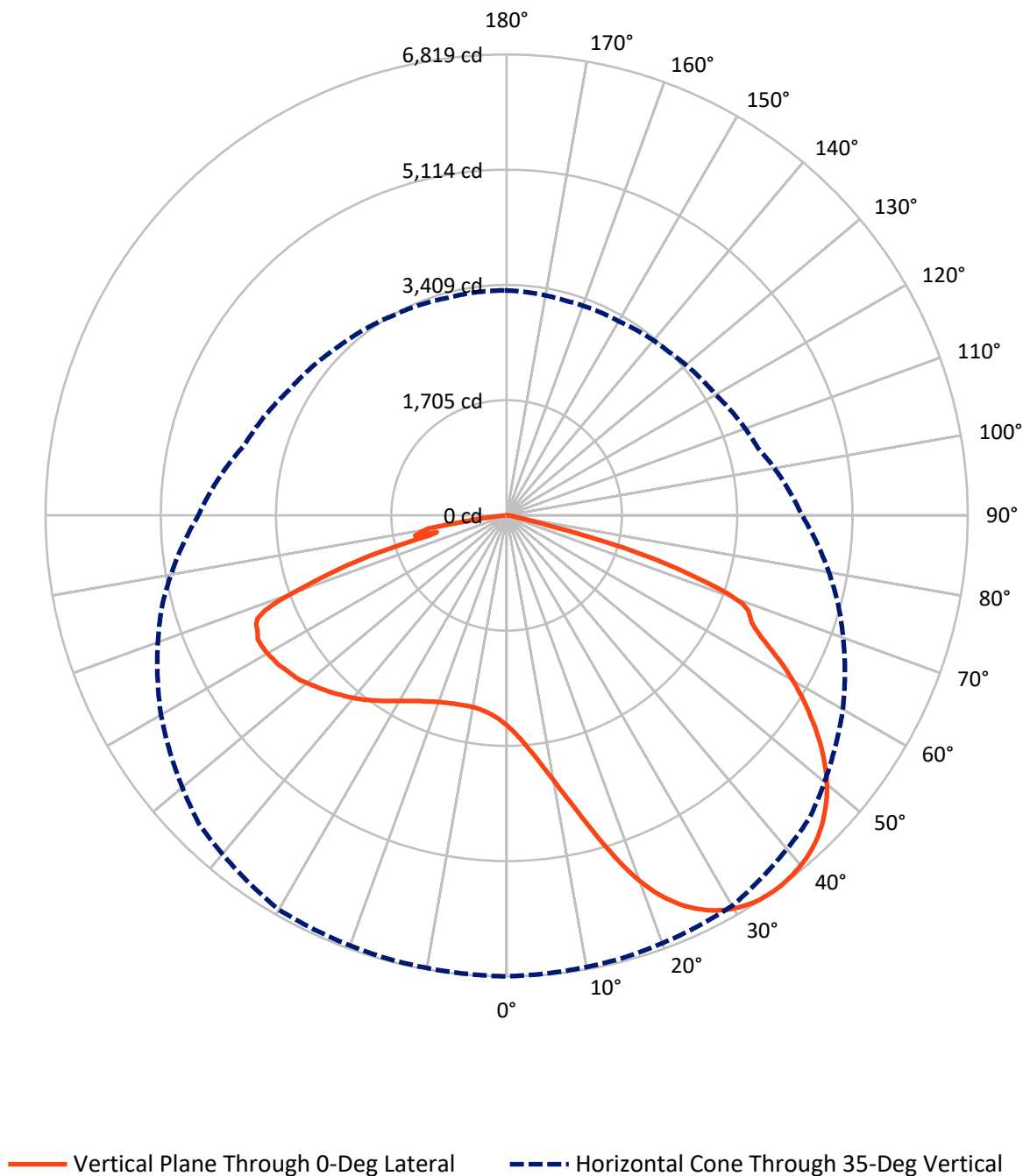


Based on 3 foot mounting height. Maximum calculated value = 540.2 fc
Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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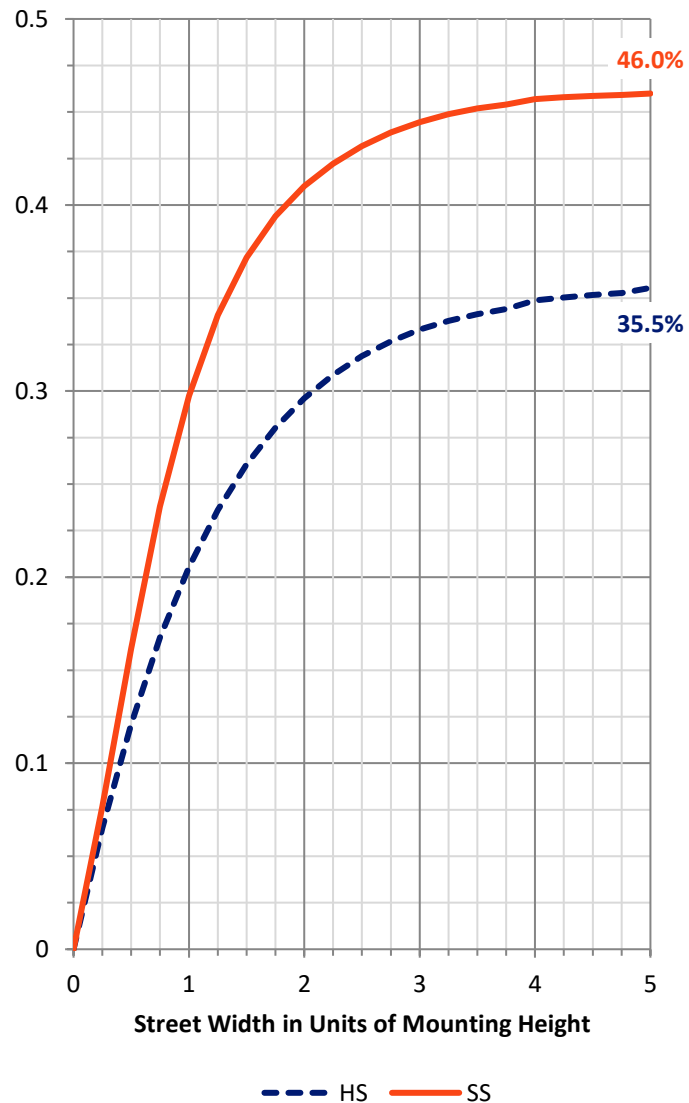
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10244.7	0.0	10244.7
	% Lamp	35.8	0.0	35.8
Street Side	Lumens	13156.5	0.0	13156.5
	% Lamp	46.0	0.0	46.0
Total	Lumens	23401.3	0.0	23401.3
	% Lamp	81.7	0.0	81.7

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	310.0	1.3	1.1
10°-20°	1052.1	4.5	3.7
20°-30°	2019.7	8.6	7.1
30°-40°	3042.4	13.0	10.6
40°-50°	3978.7	17.0	13.9
50°-60°	4679.1	20.0	16.3
60°-70°	4881.9	20.9	17.1
70°-80°	3125.5	13.4	10.9
80°-90°	311.9	1.3	1.1
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°	23401.3	100.0	81.7
0°-180°	23401.3	100.0	81.7

Coefficient of Utilization



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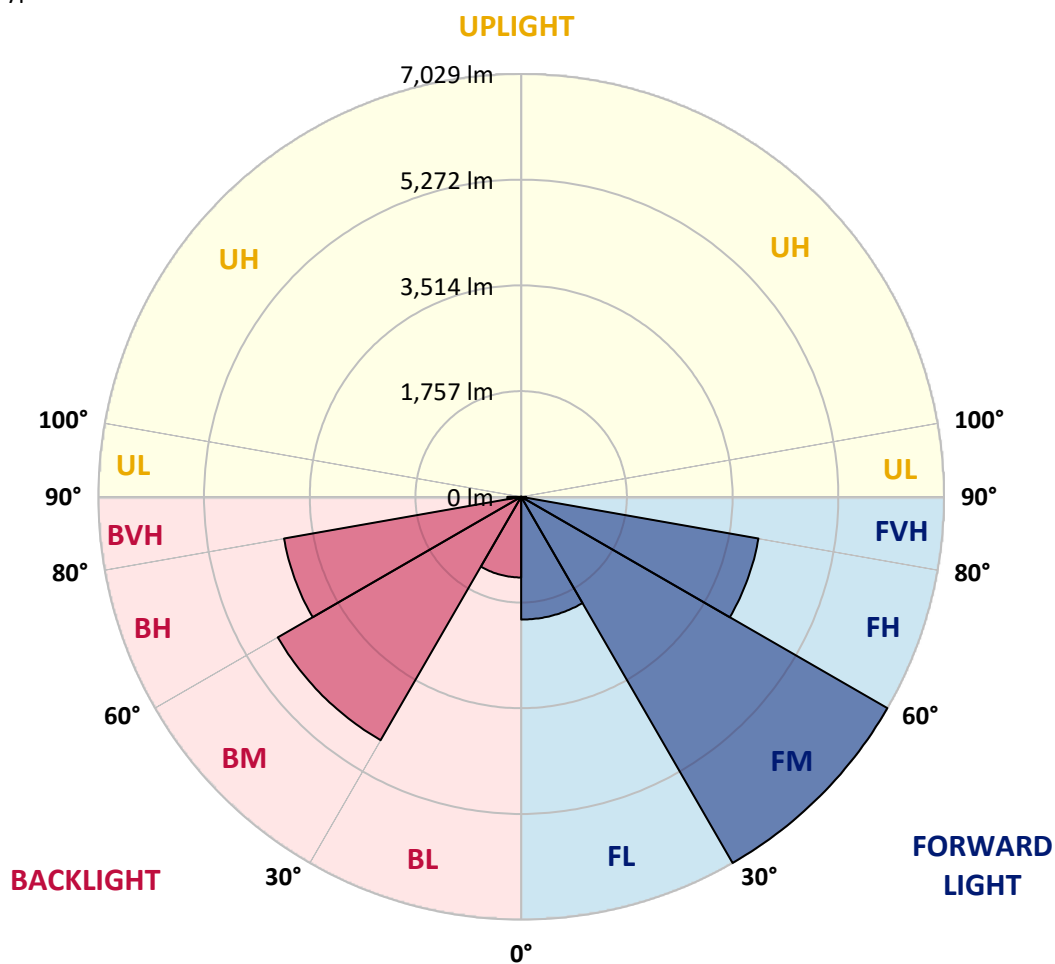
CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2040.8	7.1			
FM	(30°-60°)	7028.7	24.6			
FH	(60°-80°)	4004.8	14.0			G2/5000
FVH	(80°-90°)	82.2	0.3			G1/100
BL	(0°-30°)	1341.0	4.7	B3/2500		
BM	(30°-60°)	4671.5	16.3	B3/5000		
BH	(60°-80°)	4002.5	14.0	B4/5000		G4/5000
BVH	(80°-90°)	229.8	0.8			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		5226.7	18.3			

BUG Rating: B4-U0-G4

Type IV Short



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CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4)

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	3125.4	3125.4	3125.4	3125.4	3125.4	3125.4	3125.4	3125.4	3125.4	3125.4	3125.4
1°	3178.5	3177.6	3173.3	3165.7	3155.2	3144.0	3119.8	3107.1	3097.0	3088.2	3082.7
2°	3239.8	3237.0	3226.2	3207.8	3183.6	3158.2	3120.7	3096.7	3075.5	3058.2	3047.1
3°	3309.1	3303.5	3284.1	3254.6	3218.2	3177.7	3126.2	3089.8	3058.2	3033.3	3015.6
4°	3386.1	3376.6	3348.9	3307.4	3256.0	3200.0	3133.6	3085.7	3044.5	3012.7	2990.0
5°	3472.7	3459.6	3421.9	3365.0	3298.4	3226.3	3143.8	3083.5	3033.8	2995.3	2968.0
6°	3568.3	3549.9	3502.8	3429.8	3344.5	3254.4	3155.8	3084.4	3026.1	2981.7	2949.8
7°	3672.3	3649.6	3590.9	3502.1	3394.8	3286.3	3172.3	3088.5	3021.0	2971.2	2936.1
8°	3786.1	3757.5	3686.8	3578.2	3449.3	3322.6	3191.7	3096.1	3019.4	2962.4	2924.6
9°	3909.0	3877.6	3789.9	3660.6	3510.7	3360.6	3213.3	3104.8	3020.8	2957.4	2916.0
10°	4041.8	4001.2	3901.0	3750.5	3576.6	3402.3	3238.0	3117.2	3024.4	2956.4	2910.1
11°	4186.2	4140.5	4020.7	3847.3	3645.7	3447.3	3264.4	3132.3	3030.3	2957.7	2907.7
12°	4342.0	4285.5	4147.7	3947.3	3716.8	3496.6	3293.5	3148.5	3038.5	2960.8	2909.4
13°	4507.0	4444.3	4285.6	4054.7	3793.8	3548.7	3324.0	3166.4	3048.2	2966.6	2913.0
14°	4689.5	4616.1	4432.9	4169.5	3875.5	3600.8	3355.0	3184.3	3058.9	2974.0	2917.3
15°	4883.9	4800.5	4588.3	4290.1	3959.4	3655.1	3388.2	3203.5	3071.7	2982.9	2923.7
16°	5084.3	4988.1	4750.5	4419.8	4049.8	3713.0	3423.9	3225.6	3085.1	2993.0	2932.2
17°	5284.1	5178.0	4912.1	4552.7	4144.1	3773.0	3461.0	3247.7	3100.7	3003.6	2941.6
18°	5481.1	5363.7	5074.4	4686.5	4242.6	3834.3	3499.8	3272.9	3117.5	3016.8	2950.6
19°	5666.3	5541.9	5234.3	4816.3	4344.4	3898.2	3540.1	3299.0	3134.5	3030.7	2961.9
20°	5836.7	5710.2	5386.0	4945.8	4448.1	3965.1	3582.7	3326.9	3152.9	3045.5	2974.8
21°	5990.3	5866.2	5533.1	5071.5	4550.5	4034.5	3625.8	3355.9	3172.2	3059.6	2988.6
22°	6122.7	5999.7	5670.9	5193.9	4653.7	4105.6	3671.1	3386.1	3194.3	3076.2	3004.2
23°	6242.8	6128.2	5799.0	5311.1	4755.8	4180.2	3718.0	3417.0	3218.4	3093.9	3021.3
24°	6348.2	6239.0	5917.9	5421.2	4855.9	4256.7	3765.8	3449.6	3243.1	3114.0	3039.8
25°	6438.9	6338.0	6028.0	5529.0	4953.9	4334.3	3816.2	3483.3	3268.5	3135.7	3058.6
26°	6517.0	6425.6	6131.1	5629.8	5048.2	4411.1	3867.5	3518.2	3295.1	3157.9	3079.4
27°	6587.3	6500.0	6222.2	5726.6	5140.0	4489.6	3918.9	3553.5	3322.0	3181.4	3101.0
28°	6646.6	6563.5	6304.4	5819.5	5226.7	4567.2	3972.2	3587.8	3350.4	3207.1	3123.8
29°	6695.8	6618.9	6379.6	5907.6	5309.1	4644.7	4026.7	3623.9	3378.1	3234.8	3147.7
30°	6734.6	6663.2	6446.9	5992.7	5390.6	4719.7	4083.0	3660.6	3408.3	3262.2	3172.5
31°	6766.3	6698.7	6505.8	6071.0	5466.2	4794.2	4139.2	3696.4	3439.5	3290.2	3198.4
32°	6789.4	6727.8	6557.7	6144.0	5538.7	4867.3	4196.1	3734.1	3470.4	3319.3	3226.3
33°	6807.0	6748.8	6603.2	6213.5	5608.6	4938.4	4252.8	3773.2	3503.0	3348.1	3255.1
34°	6814.9	6761.3	6639.4	6275.7	5675.2	5007.8	4309.9	3810.3	3536.0	3378.1	3284.6
35°	6818.6	6767.2	6670.0	6333.3	5740.9	5074.9	4366.9	3848.2	3569.7	3409.0	3316.1
36°	6816.5	6769.0	6694.2	6386.2	5801.2	5139.8	4423.6	3886.2	3604.0	3440.4	3348.8
37°	6807.1	6763.7	6711.3	6434.4	5860.0	5202.5	4479.1	3925.4	3638.8	3473.3	3382.4
38°	6793.1	6754.0	6722.8	6477.6	5916.3	5263.9	4536.4	3965.5	3673.5	3507.6	3416.5
39°	6775.7	6742.1	6726.9	6514.2	5970.6	5324.2	4593.7	4005.5	3709.0	3542.0	3450.3
40°	6752.8	6724.9	6726.7	6547.4	6021.8	5382.5	4652.0	4048.1	3745.6	3577.3	3484.6
41°	6721.3	6701.6	6719.3	6575.4	6069.3	5438.6	4707.3	4092.7	3783.3	3613.0	3519.6
42°	6686.6	6672.7	6707.1	6599.5	6116.6	5493.8	4760.9	4137.6	3821.2	3650.3	3555.2
43°	6644.2	6641.0	6690.4	6617.3	6159.3	5548.6	4813.8	4181.2	3859.1	3689.3	3591.2
44°	6594.7	6604.3	6667.5	6627.6	6199.8	5600.9	4862.1	4226.8	3898.3	3728.0	3628.6

REPORT NUMBER: P1444998

CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	6537.2	6559.0	6636.4	6635.2	6239.4	5653.1	4911.8	4274.8	3940.0	3767.5	3666.3
46°	6469.7	6510.9	6604.6	6636.5	6276.8	5704.8	4960.1	4324.5	3983.0	3808.1	3705.1
47°	6397.1	6452.0	6565.5	6632.0	6313.1	5757.2	5006.9	4374.6	4026.6	3849.0	3745.5
48°	6319.5	6387.7	6520.3	6619.8	6345.4	5805.0	5050.8	4425.3	4072.1	3890.7	3786.3
49°	6231.1	6314.8	6470.9	6605.5	6373.7	5851.3	5092.9	4476.6	4118.9	3934.8	3828.1
50°	6135.7	6232.7	6411.1	6581.9	6398.8	5896.9	5133.6	4527.4	4166.0	3979.3	3872.1
51°	6028.2	6143.0	6345.6	6553.5	6420.3	5938.6	5174.5	4578.8	4215.4	4027.1	3916.1
52°	5914.1	6041.3	6270.7	6516.1	6437.6	5976.9	5212.8	4632.3	4266.1	4076.6	3963.9
53°	5792.6	5932.9	6191.0	6471.4	6450.3	6011.8	5248.9	4683.0	4317.5	4125.8	4009.4
54°	5666.8	5813.3	6102.2	6422.1	6455.0	6042.5	5283.4	4732.4	4372.0	4176.9	4058.2
55°	5534.1	5685.9	6003.8	6363.8	6452.4	6067.5	5313.5	4777.0	4427.0	4230.9	4108.3
56°	5392.8	5556.2	5896.7	6297.8	6443.9	6086.3	5340.8	4820.1	4482.2	4286.1	4159.7
57°	5255.7	5420.1	5787.8	6226.3	6424.3	6098.4	5365.0	4859.5	4537.7	4344.4	4212.5
58°	5110.4	5282.0	5671.0	6147.0	6394.7	6100.4	5381.4	4895.2	4593.4	4405.1	4262.2
59°	4967.0	5141.3	5554.0	6058.7	6355.3	6091.9	5391.0	4927.2	4649.2	4468.9	4311.2
60°	4812.8	4999.7	5430.6	5963.8	6305.2	6072.9	5395.8	4954.5	4705.1	4533.6	4359.7
61°	4652.9	4850.6	5307.4	5865.5	6243.4	6045.1	5390.4	4976.5	4761.2	4599.1	4408.6
62°	4485.7	4698.7	5185.2	5759.5	6173.8	6002.3	5375.2	4992.1	4815.2	4664.1	4456.5
63°	4320.9	4545.7	5064.4	5648.7	6096.1	5943.6	5347.1	5000.8	4868.2	4728.0	4502.9
64°	4165.8	4397.3	4944.5	5536.3	6004.7	5869.5	5305.7	5002.8	4920.2	4791.9	4547.2
65°	4040.6	4261.8	4827.8	5421.2	5905.9	5781.4	5253.8	4994.4	4970.0	4856.6	4589.2
66°	3948.5	4150.1	4715.5	5306.7	5794.3	5675.6	5182.9	4973.7	5013.2	4928.0	4627.2
67°	3896.4	4068.5	4614.0	5194.0	5667.4	5556.7	5091.9	4939.4	5049.6	4995.2	4662.6
68°	3842.2	4012.7	4525.4	5082.4	5526.9	5417.0	4932.2	4879.7	5076.7	5058.7	4661.2
69°	3718.3	3958.5	4453.5	4971.4	5370.3	5233.2	4676.3	4761.1	5086.7	5115.7	4642.1
70°	3473.9	3858.8	4396.6	4859.3	5206.1	4976.4	4321.8	4564.0	5080.2	5162.0	4645.3
71°	3103.4	3661.5	4345.2	4753.0	5010.1	4642.8	3889.8	4279.0	5032.1	5191.4	4618.5
72°	2703.4	3340.2	4284.0	4642.9	4770.4	4247.1	3481.2	3949.0	4915.1	5179.7	4563.9
73°	2290.3	2924.4	4186.8	4524.9	4491.7	3843.1	3137.7	3621.6	4730.5	5116.6	4489.3
74°	1813.9	2476.5	3997.7	4383.0	4179.0	3449.7	2728.2	3311.0	4493.0	4999.4	4342.5
75°	1216.6	1993.3	3664.4	4177.3	3823.9	3016.6	2074.8	2947.0	4226.3	4816.9	4122.3
76°	662.2	1414.5	3215.2	3877.7	3453.5	2425.1	1421.3	2281.5	3962.8	4520.8	3824.0
77°	433.0	789.5	2733.0	3449.3	3049.3	1643.7	773.2	1615.9	3664.9	4086.9	3470.8
78°	205.9	581.5	2153.6	2857.9	2537.2	901.0	375.3	954.1	3222.8	3496.7	3037.1
79°	164.0	377.2	1420.2	2165.3	1878.1	668.6	233.9	465.0	2442.8	2852.2	2549.4
80°	141.4	172.9	751.0	1428.4	1150.4	450.8	202.3	258.8	1662.8	2276.7	2095.9
81°	121.6	146.0	479.7	747.8	821.3	233.0	170.7	216.7	885.6	1800.0	1901.2
82°	103.8	124.2	213.9	481.5	505.7	196.6	139.2	174.5	425.2	1326.6	1607.6
83°	87.4	104.1	171.7	218.5	190.1	161.8	117.3	132.4	279.7	993.6	1313.9
84°	72.6	85.6	139.0	171.2	152.5	125.3	96.5	107.0	224.5	699.3	1017.2
85°	57.7	70.1	106.3	141.2	117.5	96.2	76.5	85.2	183.8	451.0	628.9
86°	42.9	54.8	79.7	113.2	86.4	75.7	57.7	66.2	143.2	324.0	444.4
87°	29.3	39.4	57.7	82.5	63.7	55.3	40.2	49.1	104.6	197.0	259.8
88°	16.9	25.7	35.8	66.3	41.2	35.0	27.9	37.5	69.1	72.8	77.3
89°	7.2	11.2	14.9	50.3	18.6	17.6	15.6	25.8	47.0	49.4	52.3

REPORT NUMBER: P1444998

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1444998

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1444998
CATALOG NUMBER: XAS180-SFPM (4000K-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: P1444998

CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3125.4	3125.4	3125.4	3125.4	3125.4	3125.4	3125.4	3125.4	3125.4	3125.4	3125.4
1°	3080.0	3079.6	3082.2	3090.3	3098.4	3110.0	3122.2	3124.9	3137.0	3150.1	3160.5
2°	3040.9	3039.4	3045.3	3056.8	3072.8	3092.2	3116.5	3131.2	3157.9	3183.7	3205.9
3°	3006.9	3004.8	3012.2	3027.7	3050.4	3079.6	3114.1	3141.7	3180.9	3221.4	3257.3
4°	2978.4	2975.9	2984.8	3003.9	3033.0	3070.0	3114.7	3154.5	3207.9	3263.1	3313.7
5°	2954.4	2950.7	2961.4	2984.5	3018.2	3063.8	3117.8	3170.0	3239.3	3309.8	3374.1
6°	2934.2	2930.0	2942.3	2968.0	3008.1	3060.3	3123.7	3189.0	3272.5	3360.2	3443.4
7°	2916.8	2913.0	2925.7	2954.9	2999.8	3060.1	3133.7	3211.6	3310.5	3416.9	3518.5
8°	2904.2	2899.5	2913.9	2945.8	2995.0	3062.3	3145.9	3235.7	3350.9	3478.4	3599.6
9°	2893.5	2888.8	2904.4	2939.8	2993.1	3067.0	3159.9	3262.4	3395.3	3544.0	3686.2
10°	2886.6	2881.5	2898.6	2936.7	2994.0	3073.4	3175.8	3291.9	3442.4	3613.6	3779.9
11°	2883.4	2877.6	2896.3	2937.3	2998.8	3082.7	3195.1	3324.9	3495.3	3688.4	3881.8
12°	2882.3	2876.9	2896.5	2940.7	3005.7	3095.1	3216.7	3359.4	3549.3	3768.3	3987.4
13°	2884.8	2878.0	2898.6	2946.1	3014.6	3109.0	3240.2	3396.5	3606.5	3852.6	4102.8
14°	2887.6	2881.8	2903.9	2953.7	3026.7	3124.8	3264.4	3434.5	3666.0	3941.1	4224.1
15°	2893.0	2886.5	2910.6	2963.0	3040.6	3143.3	3289.9	3474.0	3727.8	4034.9	4354.9
16°	2899.3	2892.8	2917.8	2972.5	3054.4	3163.0	3317.2	3516.5	3792.7	4134.4	4491.5
17°	2906.6	2900.0	2926.7	2984.2	3070.6	3184.3	3346.3	3560.3	3860.9	4237.8	4630.9
18°	2915.5	2908.7	2937.5	2996.1	3087.6	3205.4	3375.8	3605.1	3929.6	4346.1	4773.2
19°	2925.3	2919.3	2948.4	3010.0	3104.6	3229.1	3407.2	3651.2	4001.2	4456.3	4913.7
20°	2938.1	2931.4	2961.9	3025.4	3122.9	3252.7	3439.9	3699.1	4077.9	4567.4	5048.0
21°	2951.9	2946.1	2976.7	3042.3	3141.1	3277.7	3474.8	3749.2	4153.8	4683.2	5178.8
22°	2967.2	2961.1	2993.6	3060.7	3161.5	3304.2	3510.3	3800.8	4236.0	4794.6	5304.1
23°	2984.2	2979.1	3011.9	3080.3	3183.5	3331.9	3545.8	3854.0	4321.0	4905.0	5423.5
24°	3002.3	2999.1	3032.0	3101.7	3206.3	3359.3	3582.3	3908.5	4405.0	5010.0	5534.7
25°	3022.2	3019.5	3053.5	3124.2	3231.4	3388.5	3620.7	3962.6	4490.4	5113.0	5640.6
26°	3044.0	3042.7	3076.7	3147.1	3257.2	3417.8	3658.7	4019.2	4576.8	5208.8	5743.1
27°	3065.9	3067.4	3100.9	3171.3	3283.9	3446.6	3697.5	4076.6	4663.5	5301.2	5837.9
28°	3089.3	3095.3	3126.0	3197.3	3311.7	3478.0	3736.5	4136.8	4749.3	5390.1	5930.0
29°	3114.6	3124.3	3152.6	3223.6	3340.5	3509.2	3776.4	4195.2	4832.2	5474.3	6017.9
30°	3141.8	3155.7	3181.4	3250.5	3368.3	3541.5	3815.8	4254.7	4914.9	5553.9	6099.8
31°	3170.4	3187.5	3211.4	3278.3	3398.4	3574.0	3854.9	4314.5	4993.7	5628.7	6176.7
32°	3200.2	3221.9	3241.6	3308.7	3429.6	3607.9	3895.2	4375.1	5069.3	5699.9	6249.2
33°	3231.3	3256.4	3272.5	3338.7	3460.7	3641.6	3935.0	4436.1	5143.4	5770.7	6318.4
34°	3262.2	3291.3	3303.5	3370.1	3493.4	3675.9	3975.1	4496.8	5211.9	5836.7	6382.7
35°	3293.1	3327.1	3334.5	3402.7	3525.9	3711.7	4015.4	4558.2	5280.4	5902.3	6440.0
36°	3325.2	3363.6	3365.6	3436.1	3558.8	3747.2	4058.4	4620.8	5346.6	5961.4	6493.3
37°	3354.7	3399.2	3397.4	3469.3	3592.7	3784.2	4101.5	4680.8	5409.4	6019.7	6541.2
38°	3387.3	3436.7	3430.8	3505.1	3627.4	3820.2	4145.9	4742.1	5471.8	6074.8	6585.9
39°	3419.9	3473.0	3464.1	3540.2	3662.8	3859.2	4190.6	4800.8	5529.7	6127.2	6623.7
40°	3453.5	3508.1	3499.0	3576.1	3699.6	3896.6	4235.9	4858.2	5585.6	6177.1	6656.7
41°	3488.5	3541.6	3533.9	3612.8	3737.3	3935.4	4281.7	4915.1	5639.2	6223.8	6681.3
42°	3523.2	3575.3	3570.1	3648.7	3776.9	3976.3	4328.5	4969.0	5693.6	6270.5	6700.6
43°	3558.4	3607.8	3607.5	3688.4	3815.5	4018.2	4378.1	5022.0	5746.8	6311.9	6717.1
44°	3595.6	3641.9	3645.9	3727.3	3855.8	4062.7	4427.9	5074.2	5799.1	6349.7	6725.3

REPORT NUMBER: P1444998

CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	3633.8	3675.9	3684.5	3767.8	3897.9	4105.2	4478.4	5125.4	5848.6	6386.3	6729.4
46°	3672.7	3707.6	3724.1	3807.5	3939.7	4150.9	4528.4	5172.4	5896.5	6419.0	6726.0
47°	3713.6	3738.7	3765.9	3848.0	3983.5	4195.2	4579.3	5215.6	5942.5	6449.5	6717.2
48°	3755.2	3772.0	3808.8	3889.8	4027.6	4241.8	4630.1	5258.7	5984.7	6474.7	6703.4
49°	3798.5	3806.5	3851.5	3930.9	4072.3	4289.2	4679.1	5299.2	6024.5	6497.0	6683.1
50°	3842.5	3839.6	3896.3	3974.0	4119.1	4339.1	4728.3	5337.7	6059.2	6517.1	6658.1
51°	3889.7	3874.2	3941.4	4017.9	4165.0	4387.8	4776.4	5372.3	6091.6	6530.3	6625.3
52°	3935.4	3907.7	3986.6	4063.7	4215.4	4436.7	4823.4	5404.4	6117.9	6538.7	6584.2
53°	3977.7	3934.2	4027.7	4109.5	4265.5	4487.0	4866.2	5433.1	6137.8	6540.2	6537.1
54°	4014.3	3953.0	4065.8	4157.5	4318.4	4536.4	4907.0	5455.2	6153.3	6538.6	6484.4
55°	4047.4	3973.1	4099.0	4206.4	4371.1	4586.6	4944.3	5473.7	6161.3	6526.6	6426.7
56°	4081.8	3997.5	4131.6	4256.7	4428.1	4637.6	4976.1	5487.9	6160.6	6507.7	6359.9
57°	4114.4	4023.4	4164.7	4306.2	4483.8	4689.0	5006.1	5495.4	6150.0	6477.9	6285.8
58°	4146.4	4042.1	4196.5	4359.7	4542.5	4738.3	5030.2	5498.7	6130.3	6440.0	6203.1
59°	4172.5	4056.0	4222.3	4409.5	4604.0	4785.4	5049.3	5496.1	6101.1	6392.1	6113.8
60°	4194.9	4072.6	4244.8	4459.8	4666.8	4832.0	5065.7	5485.4	6062.6	6334.2	6016.3
61°	4218.0	4088.4	4268.1	4507.2	4730.8	4879.1	5076.3	5462.5	6015.2	6264.9	5912.8
62°	4240.5	4098.7	4290.4	4556.9	4791.8	4927.0	5079.7	5428.4	5955.5	6184.9	5803.9
63°	4258.0	4106.7	4310.1	4604.3	4850.5	4970.7	5076.9	5384.7	5880.6	6093.9	5690.9
64°	4273.1	4110.1	4327.6	4649.1	4909.4	5011.5	5068.1	5328.3	5794.7	5995.7	5576.7
65°	4274.4	4079.0	4328.9	4690.8	4968.7	5047.8	5046.0	5254.9	5692.4	5883.9	5457.1
66°	4234.0	4052.4	4284.9	4725.5	5027.0	5076.0	5013.2	5162.7	5574.9	5759.5	5335.9
67°	4211.0	4038.9	4261.2	4752.2	5078.9	5098.7	4960.7	5027.5	5442.5	5623.8	5217.7
68°	4201.6	3988.3	4244.6	4741.6	5128.0	5110.7	4862.5	4797.8	5271.4	5476.7	5097.8
69°	4141.3	3844.6	4178.8	4714.9	5168.7	5102.1	4685.4	4460.9	5026.6	5309.3	4978.7
70°	4022.5	3583.5	4061.4	4711.8	5199.8	5065.9	4407.0	4026.5	4700.5	5117.0	4859.1
71°	3833.6	3198.4	3873.6	4678.3	5205.2	4974.6	4056.9	3579.5	4293.4	4884.4	4731.1
72°	3530.9	2839.9	3573.2	4623.0	5168.9	4811.5	3688.2	3185.2	3860.4	4602.0	4597.7
73°	3157.1	2499.7	3187.9	4537.2	5073.6	4576.0	3338.2	2796.9	3442.2	4275.1	4444.5
74°	2790.5	2119.7	2834.0	4383.2	4918.1	4310.5	2979.7	2304.7	3017.3	3903.5	4265.0
75°	2404.9	1614.2	2457.9	4146.3	4683.8	4017.5	2496.9	1602.4	2505.2	3495.2	4011.2
76°	1941.2	1166.0	1990.9	3833.7	4322.3	3705.0	1795.6	907.3	1805.4	3068.0	3662.1
77°	1494.0	1062.2	1578.0	3474.3	3831.7	3328.0	1099.2	664.7	1056.0	2598.4	3180.8
78°	1405.6	1385.3	1532.2	3029.4	3230.0	2737.5	542.5	435.2	781.3	2017.2	2543.2
79°	1732.1	1317.6	1844.6	2514.3	2638.8	1903.4	288.7	205.6	518.9	1335.9	1836.7
80°	2024.3	1249.9	1576.5	2006.7	2141.9	1075.2	240.0	175.3	256.4	754.6	1130.2
81°	1579.9	1175.9	1308.4	1821.1	1645.0	516.4	191.2	150.2	212.7	490.3	816.3
82°	1135.5	675.0	1036.2	1505.6	1148.1	305.4	142.5	127.1	180.9	227.6	511.0
83°	647.0	479.9	586.9	1190.0	794.4	236.1	118.4	106.1	147.8	173.2	205.7
84°	365.0	284.8	354.5	873.1	481.4	193.8	96.6	85.9	115.3	138.7	162.8
85°	242.2	92.3	284.8	489.6	351.1	151.4	76.9	68.2	88.1	104.9	134.3
86°	120.2	62.5	215.2	392.0	220.8	109.3	59.0	50.6	68.3	76.2	107.2
87°	83.5	32.7	145.5	294.4	92.0	77.1	43.2	32.9	48.7	54.7	75.2
88°	46.8	3.0	75.8	196.7	62.5	52.5	29.8	18.6	29.2	33.3	43.9
89°	10.4	1.9	6.8	99.1	32.9	27.9	16.3	7.0	12.6	13.3	12.7

REPORT NUMBER: P1444998

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1444998

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1444998
CATALOG NUMBER: XAS180-SFPM (4000K-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: P1444998

CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	3125.4	3125.4	3125.4
1°	3169.5	3175.8	3178.5
2°	3225.0	3237.5	3239.8
3°	3285.3	3303.5	3309.1
4°	3352.8	3379.8	3386.1
5°	3428.5	3463.5	3472.7
6°	3512.3	3555.7	3568.3
7°	3601.9	3657.5	3672.3
8°	3698.8	3766.4	3786.1
9°	3806.0	3883.3	3909.0
10°	3919.6	4012.6	4041.8
11°	4043.4	4155.1	4186.2
12°	4177.7	4303.7	4342.0
13°	4321.8	4465.3	4507.0
14°	4474.3	4639.6	4689.5
15°	4633.6	4820.1	4883.9
16°	4797.2	5008.3	5084.3
17°	4966.4	5200.4	5284.1
18°	5132.5	5391.0	5481.1
19°	5293.9	5571.4	5666.3
20°	5449.9	5743.0	5836.7
21°	5595.7	5898.3	5990.3
22°	5732.5	6037.2	6122.7
23°	5862.9	6160.8	6242.8
24°	5983.8	6271.8	6348.2
25°	6097.5	6367.5	6438.9
26°	6199.3	6452.7	6517.0
27°	6294.2	6524.9	6587.3
28°	6378.1	6587.7	6646.6
29°	6454.1	6640.7	6695.8
30°	6518.8	6686.1	6734.6
31°	6578.0	6720.4	6766.3
32°	6628.1	6749.8	6789.4
33°	6671.0	6770.0	6807.0
34°	6705.9	6783.4	6814.9
35°	6735.3	6788.7	6818.6
36°	6757.7	6788.4	6816.5
37°	6771.9	6783.8	6807.1
38°	6781.2	6773.5	6793.1
39°	6784.2	6759.6	6775.7
40°	6782.1	6740.8	6752.8
41°	6773.6	6718.0	6721.3
42°	6760.1	6690.7	6686.6
43°	6741.1	6660.2	6644.2
44°	6715.7	6622.5	6594.7

REPORT NUMBER: P1444998

CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	6687.2	6580.3	6537.2
46°	6652.3	6530.5	6469.7
47°	6613.0	6473.6	6397.1
48°	6568.2	6411.1	6319.5
49°	6517.8	6338.4	6231.1
50°	6460.3	6260.9	6135.7
51°	6394.4	6174.0	6028.2
52°	6320.4	6074.6	5914.1
53°	6237.6	5968.5	5792.6
54°	6150.9	5854.7	5666.8
55°	6056.7	5730.1	5534.1
56°	5952.8	5601.2	5392.8
57°	5842.7	5467.6	5255.7
58°	5725.5	5327.0	5110.4
59°	5607.2	5186.7	4967.0
60°	5487.6	5042.6	4812.8
61°	5363.5	4894.1	4652.9
62°	5242.7	4743.8	4485.7
63°	5123.1	4592.2	4320.9
64°	5007.4	4451.9	4165.8
65°	4896.4	4318.5	4040.6
66°	4791.5	4209.6	3948.5
67°	4691.5	4129.4	3896.4
68°	4601.7	4074.3	3842.2
69°	4523.5	4017.2	3718.3
70°	4463.9	3921.8	3473.9
71°	4402.5	3738.5	3103.4
72°	4324.4	3415.7	2703.4
73°	4204.1	2993.1	2290.3
74°	3985.2	2524.4	1813.9
75°	3640.0	2031.8	1216.6
76°	3189.2	1470.0	662.2
77°	2685.1	844.6	433.0
78°	2054.1	623.6	205.9
79°	1317.3	402.7	164.0
80°	702.7	181.8	141.4
81°	460.7	150.6	121.6
82°	221.8	127.9	103.8
83°	171.3	107.4	87.4
84°	137.5	88.6	72.6
85°	104.5	72.5	57.7
86°	77.7	56.4	42.9
87°	55.5	40.4	29.3
88°	33.4	25.6	16.9
89°	13.1	10.8	7.2

REPORT NUMBER: P1444998

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1444998

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1444998

CATALOG NUMBER: XAS180-SFPM (4000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)