

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: P1445005

Luminaire Tested: XAS180-SFPM (4000K-180W-T4-HSS)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1445005
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-180W-T4-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 100% (180W)
OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 24748 (1 lamp)
Luminaire Lumens: 24376.9 lumens
Efficiency: 98.5%
Efficacy: 142.9 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): 170.6
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

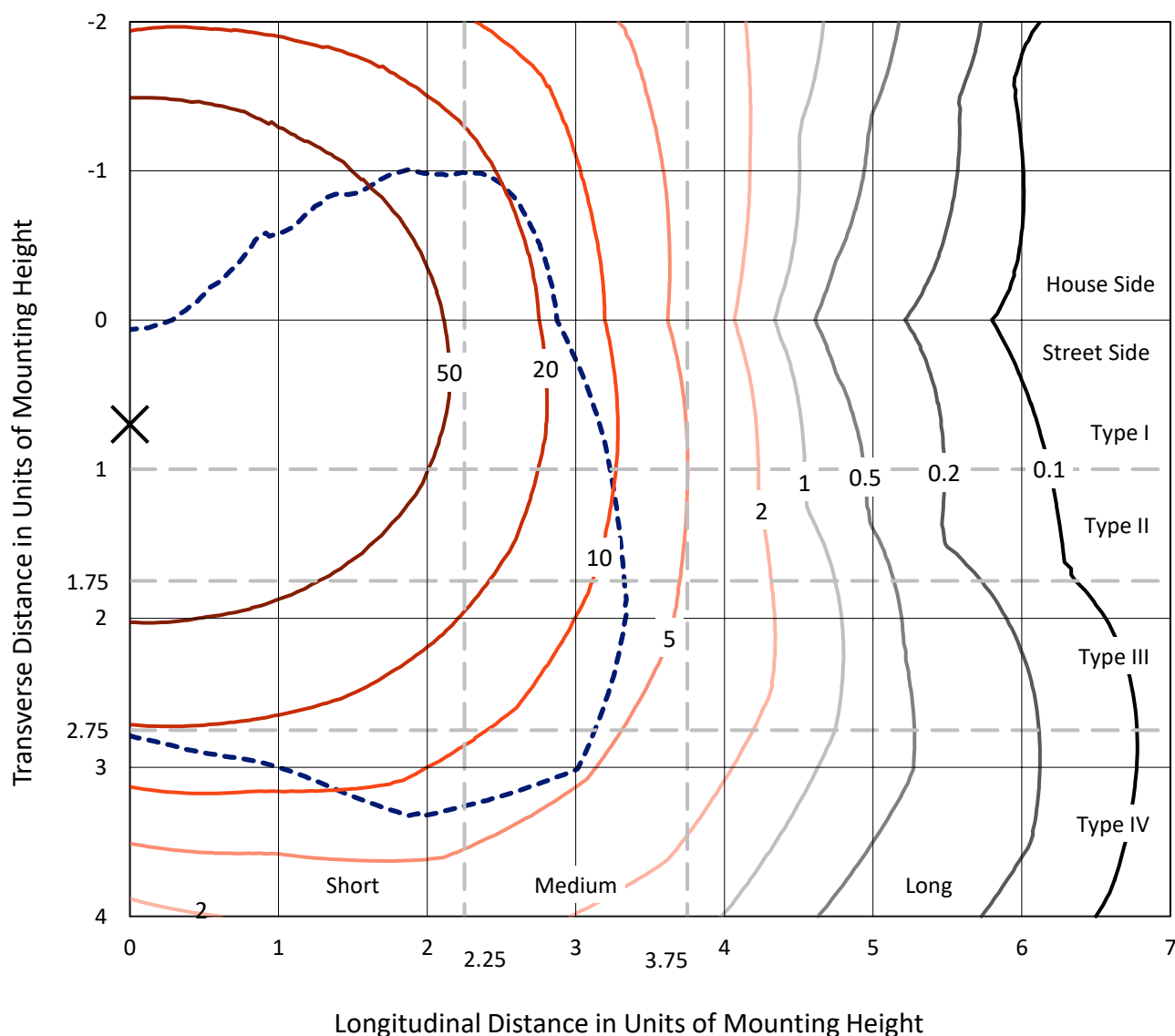
REPORT NUMBER: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

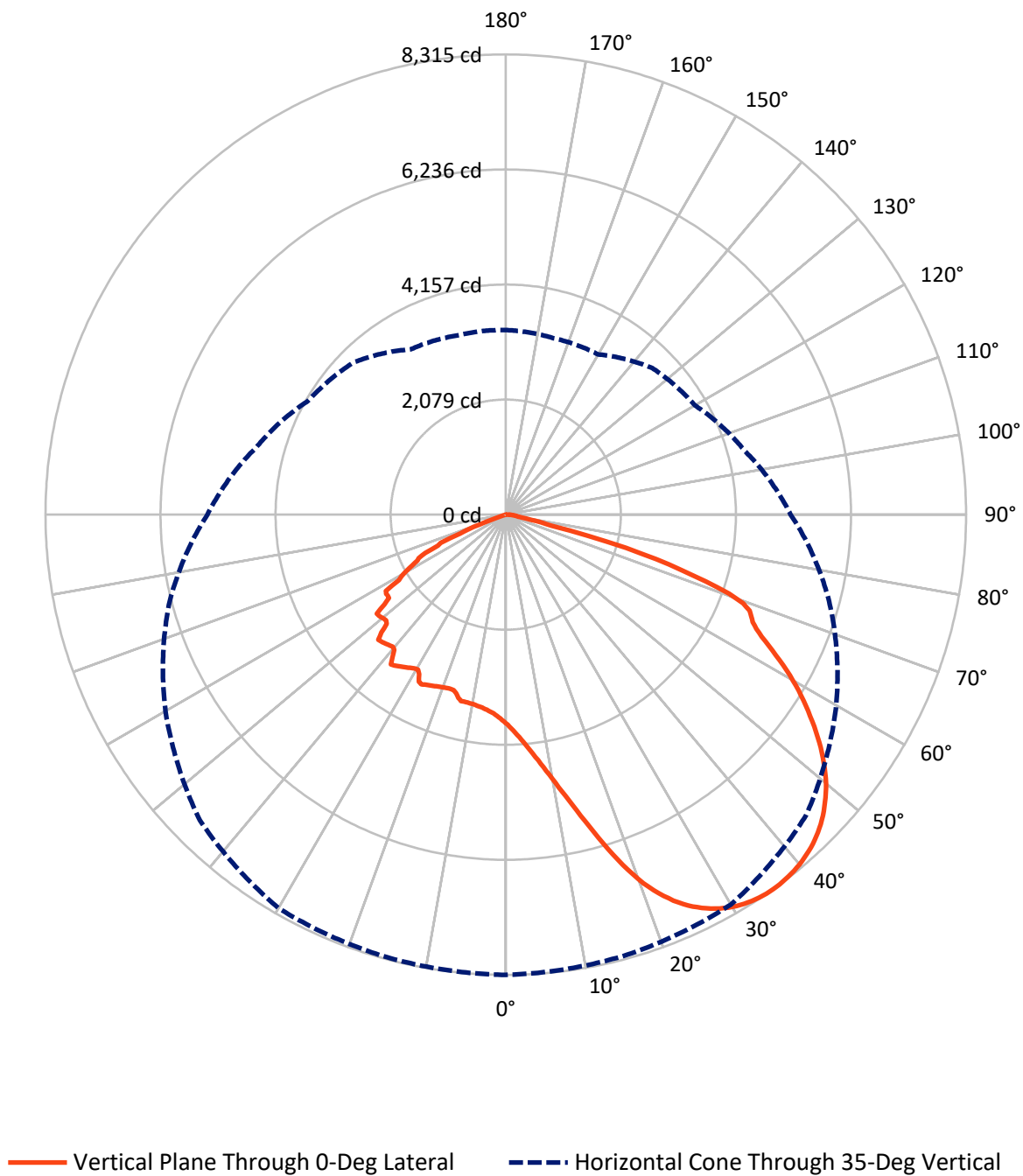


Based on 3 foot mounting height. Maximum calculated value = 657.8 fc
 Type IV - Short - Full Cutoff

REPORT NUMBER: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

Luminous Intensity Polar Plot



REPORT NUMBER: P1445005

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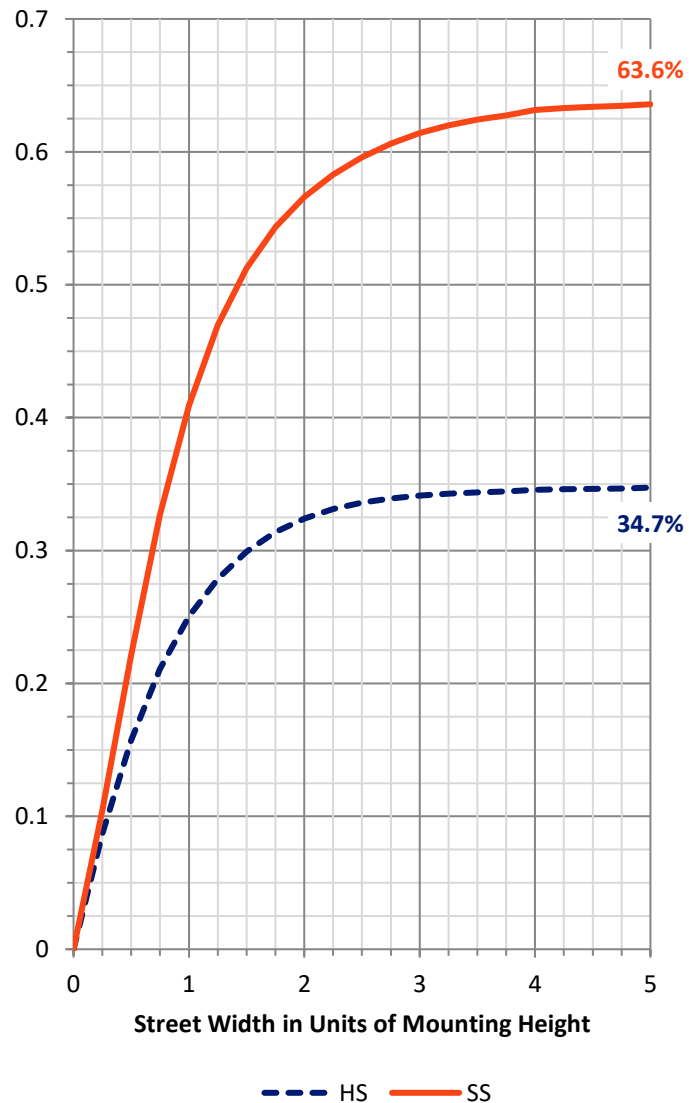
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8635.9	0.0	8635.9
	% Lamp	34.9	0.0	34.9
Street Side	Lumens	15741.0	0.0	15741.0
	% Lamp	63.6	0.0	63.6
Total	Lumens	24376.9	0.0	24376.9
	% Lamp	98.5	0.0	98.5

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	376.3	1.5	1.5
10°-20°	1271.6	5.2	5.1
20°-30°	2404.4	9.9	9.7
30°-40°	3534.9	14.5	14.3
40°-50°	4465.1	18.3	18.0
50°-60°	4944.2	20.3	20.0
60°-70°	4651.8	19.1	18.8
70°-80°	2535.3	10.4	10.2
80°-90°	193.5	0.8	0.8
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°	24376.9	100.0	98.5
0°-180°	24376.9	100.0	98.5

Coefficient of Utilization



REPORT NUMBER: P1445005

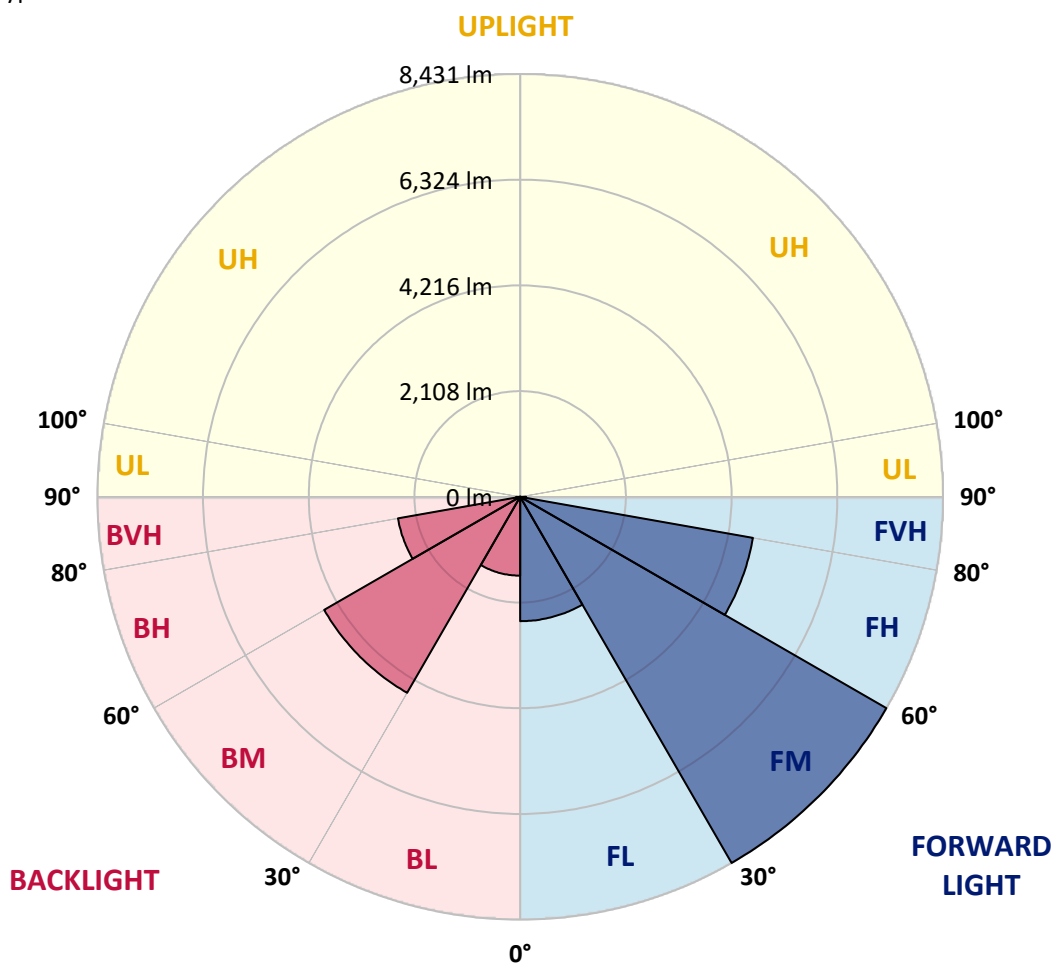
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2480.3	10.0			
FM	(30°-60°)	8431.3	34.1			
FH	(60°-80°)	4712.5	19.0			G2/5000
FVH	(80°-90°)	116.9	0.5			G2/225
BL	(0°-30°)	1572.0	6.4	B3/2500		
BM	(30°-60°)	4512.8	18.2	B3/5000		
BH	(60°-80°)	2474.6	10.0	B3/2500		G3/2500
BVH	(80°-90°)	76.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		371.1	1.5			

BUG Rating: B3-U0-G3

Type IV Short



REPORT NUMBER: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	3794.0	3794.0	3794.0	3794.0	3794.0	3794.0	3794.0	3794.0	3794.0	3794.0	3794.0
1°	3862.2	3860.6	3856.2	3846.4	3831.6	3816.1	3784.6	3770.0	3758.2	3746.9	3739.5
2°	3940.5	3936.1	3923.1	3899.8	3868.8	3835.1	3786.3	3756.1	3729.4	3708.1	3692.7
3°	4026.1	4019.8	3995.8	3958.0	3911.3	3860.0	3793.7	3746.8	3706.8	3675.2	3651.6
4°	4122.0	4110.6	4075.3	4023.7	3959.3	3889.8	3803.3	3742.0	3688.8	3647.1	3617.2
5°	4230.9	4213.9	4167.0	4095.8	4011.9	3921.7	3816.0	3739.1	3675.0	3624.3	3590.4
6°	4348.2	4326.3	4267.0	4177.3	4069.8	3957.0	3831.5	3739.3	3663.9	3607.6	3568.2
7°	4475.4	4447.9	4376.9	4267.2	4133.3	3997.9	3850.9	3743.9	3656.4	3594.6	3550.8
8°	4614.2	4580.8	4493.1	4361.9	4201.9	4041.8	3875.9	3752.7	3654.5	3584.3	3536.9
9°	4764.5	4723.3	4619.6	4463.5	4278.3	4089.9	3903.2	3763.3	3655.6	3577.8	3525.5
10°	4927.6	4878.8	4756.6	4573.6	4358.6	4141.4	3932.2	3776.9	3660.6	3576.1	3516.9
11°	5103.8	5046.5	4902.4	4690.6	4443.5	4199.0	3965.3	3793.9	3667.3	3577.2	3512.6
12°	5292.7	5225.6	5058.0	4814.0	4532.6	4258.0	4000.7	3812.7	3677.3	3580.5	3511.7
13°	5496.2	5418.2	5224.1	4948.4	4627.2	4321.8	4037.7	3833.3	3688.6	3585.8	3513.7
14°	5715.2	5628.8	5404.8	5087.7	4726.0	4387.1	4075.5	3854.2	3700.2	3593.1	3515.4
15°	5950.0	5847.0	5596.2	5238.0	4829.8	4451.9	4115.1	3877.8	3714.9	3601.7	3520.2
16°	6191.9	6080.4	5792.0	5393.8	4940.3	4522.4	4158.4	3902.2	3731.1	3610.2	3525.1
17°	6438.1	6311.2	5989.4	5554.4	5054.9	4595.0	4202.3	3928.9	3748.3	3620.7	3506.3
18°	6674.6	6534.2	6184.8	5715.6	5176.2	4670.6	4246.0	3950.5	3766.6	3633.4	3444.9
19°	6901.0	6750.7	6379.6	5874.9	5299.6	4746.4	4276.3	3966.3	3776.3	3646.7	3401.7
20°	7109.5	6955.9	6565.5	6032.1	5422.7	4818.6	4314.6	3986.0	3782.4	3656.6	3377.3
21°	7293.5	7139.8	6744.2	6185.8	5549.4	4885.1	4357.1	4019.7	3792.5	3609.6	3387.3
22°	7454.1	7311.2	6910.8	6333.7	5673.9	4961.4	4410.7	4052.5	3815.9	3571.2	3399.4
23°	7602.4	7462.7	7067.0	6474.1	5797.6	5040.6	4464.9	4081.6	3837.9	3548.5	3413.7
24°	7731.2	7598.5	7213.5	6610.0	5904.8	5128.8	4514.8	4105.6	3852.7	3533.2	3430.6
25°	7843.7	7719.8	7347.3	6739.5	6006.9	5222.5	4559.8	4134.6	3868.9	3549.3	3447.7
26°	7939.4	7824.9	7469.7	6863.5	6111.7	5314.3	4608.2	4166.6	3887.7	3557.7	3467.7
27°	8023.7	7917.6	7581.7	6984.2	6212.0	5402.9	4660.3	4205.4	3915.4	3568.1	3486.9
28°	8095.4	7996.2	7685.6	7096.9	6309.4	5480.1	4717.3	4245.7	3931.6	3582.9	3505.5
29°	8155.9	8063.4	7776.5	7201.8	6405.1	5559.4	4780.1	4285.4	3910.3	3608.9	3526.2
30°	8206.0	8119.2	7860.3	7305.1	6501.5	5639.9	4844.3	4326.6	3911.5	3634.8	3542.9
31°	8245.6	8165.5	7932.4	7398.7	6592.4	5719.5	4910.0	4367.0	3900.2	3662.1	3548.2
32°	8274.0	8199.3	7993.4	7476.6	6678.7	5801.2	4976.1	4397.5	3909.4	3688.2	3443.6
33°	8295.5	8224.8	8049.3	7550.0	6757.1	5884.3	5041.4	4413.9	3901.5	3709.5	3356.6
34°	8309.4	8241.5	8093.6	7615.1	6826.9	5966.0	5102.1	4433.4	3923.1	3727.6	3322.7
35°	8314.5	8249.8	8132.9	7676.0	6892.6	6046.7	5145.6	4465.4	3945.9	3744.1	3341.4
36°	8312.2	8253.5	8161.2	7734.3	6957.4	6122.9	5184.6	4499.3	3973.1	3763.1	3360.7
37°	8301.6	8247.8	8183.3	7786.8	7019.1	6196.8	5231.8	4534.5	3999.9	3758.8	3375.7
38°	8285.4	8238.2	8197.4	7832.4	7078.9	6269.6	5289.4	4573.5	4018.7	3655.7	3388.4
39°	8264.2	8222.1	8205.4	7872.7	7136.5	6338.0	5343.8	4607.1	4036.0	3574.4	3407.8
40°	8236.3	8202.3	8202.7	7907.1	7192.1	6392.3	5398.9	4637.7	4066.3	3552.9	3432.8
41°	8199.3	8174.8	8196.5	7939.2	7245.9	6437.4	5454.0	4666.1	4103.5	3579.7	3457.4
42°	8158.0	8142.4	8180.8	7967.4	7298.4	6478.6	5509.2	4687.7	4140.2	3608.4	3478.6
43°	8106.2	8104.2	8160.0	7988.9	7351.0	6526.7	5555.7	4710.3	4177.4	3638.6	3405.0
44°	8045.3	8058.5	8133.1	8001.2	7400.6	6577.0	5598.3	4752.1	4216.1	3666.6	3286.8

REPORT NUMBER: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	7976.9	8007.0	8097.4	8004.8	7445.8	6630.1	5635.3	4802.5	4245.9	3684.9	3237.8
46°	7897.3	7946.7	8057.0	7999.7	7491.0	6682.0	5663.2	4853.7	4255.5	3697.1	3255.7
47°	7807.8	7876.0	8012.0	7986.2	7534.1	6732.6	5687.8	4900.9	4256.2	3717.4	3270.8
48°	7714.0	7796.9	7957.7	7965.6	7570.6	6779.4	5710.5	4927.0	4187.6	3741.4	3283.0
49°	7608.8	7707.8	7893.8	7940.8	7599.0	6828.9	5747.9	4943.9	4130.7	3666.6	3300.0
50°	7491.2	7608.3	7821.3	7907.8	7617.0	6871.6	5792.7	4954.6	4110.6	3550.4	3318.4
51°	7363.8	7497.8	7734.8	7867.1	7627.2	6907.0	5837.2	4948.0	4095.4	3500.6	3254.2
52°	7222.9	7377.0	7640.6	7816.3	7631.6	6937.1	5879.6	4981.9	4124.3	3527.3	3077.9
53°	7077.1	7243.5	7536.9	7757.7	7626.7	6964.0	5919.9	5001.5	4142.0	3555.3	3022.1
54°	6922.5	7098.4	7421.9	7693.7	7619.5	6977.2	5956.3	5013.0	4161.4	3575.4	3047.9
55°	6760.8	6946.7	7296.3	7618.5	7601.4	6977.9	5980.9	5036.7	4193.4	3593.8	3076.7
56°	6595.6	6788.1	7167.9	7534.5	7580.2	6973.7	5992.5	5050.7	4228.5	3599.2	3105.1
57°	6428.8	6626.7	7029.8	7446.3	7551.1	6956.8	5990.7	5057.6	4246.5	3475.2	3128.8
58°	6257.2	6457.0	6887.3	7348.9	7511.7	6945.3	5979.6	5070.7	4260.7	3362.6	2970.1
59°	6081.4	6291.7	6741.2	7243.4	7461.5	6931.9	5974.0	5070.6	4190.3	3358.9	2846.4
60°	5895.3	6119.4	6590.2	7132.0	7395.7	6908.4	5962.9	5048.7	4102.4	3398.9	2854.0
61°	5704.1	5941.1	6435.8	7013.0	7317.3	6873.6	5939.4	5020.6	4076.8	3442.4	2863.9
62°	5504.4	5759.4	6285.9	6886.1	7226.1	6824.0	5910.4	5006.1	4088.7	3484.5	2748.4
63°	5309.8	5575.5	6138.5	6756.0	7125.8	6755.7	5860.5	4967.0	4099.5	3399.8	2585.5
64°	5123.4	5398.3	5997.2	6621.3	7007.9	6666.4	5792.7	4920.9	4097.3	3293.7	2552.3
65°	4975.0	5235.4	5857.5	6480.9	6879.3	6559.7	5709.8	4852.5	4053.0	3292.5	2521.2
66°	4864.1	5105.2	5723.8	6340.9	6736.1	6427.0	5610.9	4761.8	3911.2	3312.9	2303.5
67°	4801.7	5007.7	5604.2	6198.9	6574.1	6276.4	5497.0	4644.7	3852.7	3177.3	2268.3
68°	4732.1	4941.7	5497.6	6056.1	6387.6	6104.0	5303.4	4519.3	3875.2	3102.4	2125.0
69°	4576.1	4870.2	5409.7	5916.2	6187.0	5870.0	4987.4	4373.1	3886.0	3092.2	1981.8
70°	4275.1	4741.5	5338.9	5775.8	5984.6	5556.6	4545.5	4160.0	3877.2	2942.0	1837.9
71°	3811.5	4493.3	5272.3	5635.9	5741.6	5161.4	4056.6	3868.8	3751.8	2894.5	1607.4
72°	3336.7	4092.6	5191.0	5488.0	5460.7	4710.9	3614.9	3526.0	3597.6	2784.4	1440.4
73°	2830.2	3584.8	5061.3	5341.8	5137.2	4248.4	3211.4	3190.4	3425.9	2696.8	1284.4
74°	2255.6	3039.8	4816.3	5165.9	4772.0	3803.8	2739.3	2893.1	3226.4	2542.2	1085.4
75°	1534.3	2448.3	4396.0	4919.4	4361.7	3295.1	2085.3	2568.3	2970.9	2386.9	968.7
76°	850.6	1737.1	3853.0	4559.0	3931.8	2606.5	1431.4	2061.5	2741.9	2115.7	866.8
77°	657.4	992.7	3272.3	4042.7	3454.6	1720.6	778.0	1551.0	2516.0	1844.5	763.9
78°	468.6	756.5	2570.1	3334.9	2862.4	957.4	374.7	895.0	2080.9	1572.3	657.0
79°	279.8	521.9	1686.2	2506.4	2087.2	634.4	281.7	649.2	1645.9	1240.8	545.0
80°	247.7	287.3	918.7	1649.5	1286.4	323.9	189.4	403.3	1209.1	945.0	460.7
81°	221.5	249.2	696.7	861.6	936.3	268.4	160.6	158.2	650.8	695.0	414.4
82°	197.7	220.3	482.2	571.3	592.4	229.2	136.2	126.0	478.2	554.9	409.1
83°	175.4	194.0	267.7	299.1	248.4	187.9	113.6	99.8	305.6	439.8	336.3
84°	154.5	169.4	223.2	244.7	201.4	146.3	92.7	79.3	137.8	338.2	258.7
85°	134.4	146.8	181.5	207.5	159.8	114.6	72.4	62.5	118.1	236.6	181.0
86°	115.0	126.1	148.0	172.9	123.0	92.2	54.0	48.0	93.1	135.8	103.9
87°	95.9	106.3	119.1	134.7	94.8	70.1	37.4	35.3	68.7	76.8	64.7
88°	82.9	89.3	92.5	93.2	68.9	47.9	26.3	25.0	47.7	52.7	44.4
89°	70.0	72.5	71.2	66.3	43.1	29.1	15.2	14.8	26.7	28.5	24.1

REPORT NUMBER: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1445005
CATALOG NUMBER: XAS180-SFPM (4000K-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: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3794.0	3794.0	3794.0	3794.0	3794.0	3794.0	3794.0	3794.0	3794.0	3794.0	3794.0
1°	3735.5	3735.9	3740.1	3748.3	3759.9	3771.7	3788.4	3791.1	3807.8	3824.6	3839.4
2°	3684.2	3683.8	3690.3	3705.4	3724.8	3750.7	3780.4	3799.2	3833.4	3866.1	3896.3
3°	3639.4	3637.7	3646.3	3665.3	3694.9	3731.4	3775.9	3811.5	3861.7	3913.6	3959.4
4°	3601.1	3599.2	3609.9	3633.6	3670.2	3718.4	3775.7	3826.5	3896.0	3966.1	4029.4
5°	3572.5	3569.3	3580.5	3608.4	3650.2	3708.0	3778.5	3846.0	3933.8	4023.5	4106.1
6°	3547.5	3542.8	3556.6	3588.8	3635.7	3700.8	3784.8	3869.1	3976.0	4086.7	4188.6
7°	3526.2	3521.1	3536.2	3572.0	3626.9	3699.7	3795.3	3896.6	4022.1	4156.0	4282.7
8°	3509.9	3503.9	3519.7	3560.4	3620.9	3702.0	3809.3	3925.7	4072.5	4232.3	4382.2
9°	3495.3	3489.7	3507.2	3552.0	3618.3	3707.0	3824.6	3957.0	4126.9	4312.9	4489.7
10°	3484.9	3477.5	3497.6	3547.5	3618.7	3714.1	3842.5	3993.1	4184.9	4398.7	4604.1
11°	3476.8	3469.2	3491.8	3545.6	3622.7	3725.8	3864.3	4033.7	4250.0	4489.8	4726.0
12°	3471.8	3464.2	3488.0	3546.9	3630.1	3739.4	3889.6	4074.6	4315.1	4587.2	4856.0
13°	3471.2	3462.3	3487.7	3549.9	3640.5	3756.0	3916.0	4118.6	4385.1	4690.1	4996.4
14°	3471.4	3461.1	3490.0	3556.5	3653.1	3774.2	3944.3	4164.3	4456.3	4797.5	5144.1
15°	3467.6	3418.7	3486.7	3564.1	3666.3	3795.2	3974.0	4213.9	4531.6	4913.5	5301.9
16°	3394.1	3348.9	3419.1	3572.1	3680.4	3818.3	4005.7	4262.6	4610.6	5031.1	5467.9
17°	3339.6	3307.8	3366.6	3558.6	3696.0	3841.8	4040.4	4314.7	4691.4	5157.4	5638.3
18°	3311.0	3300.4	3338.7	3498.8	3714.5	3866.4	4070.9	4366.6	4776.4	5289.1	5810.0
19°	3315.2	3305.5	3342.6	3460.0	3731.2	3884.6	4092.2	4410.3	4863.3	5422.3	5981.1
20°	3322.7	3312.6	3351.0	3440.2	3746.3	3897.1	4117.8	4453.8	4952.8	5558.4	6146.5
21°	3332.5	3323.9	3362.0	3449.0	3715.3	3912.7	4154.2	4503.4	5033.9	5697.3	6306.7
22°	3346.4	3336.5	3376.5	3464.1	3670.5	3941.5	4194.8	4560.9	5116.7	5831.8	6458.0
23°	3361.0	3353.1	3394.5	3481.1	3649.7	3971.5	4236.3	4623.6	5208.2	5965.7	6602.6
24°	3376.9	3369.2	3413.1	3500.5	3643.5	3996.5	4269.8	4686.3	5304.6	6093.1	6739.7
25°	3393.6	3384.6	3431.0	3521.3	3660.3	4015.8	4301.5	4743.4	5406.4	6205.8	6867.5
26°	3411.1	3402.8	3450.2	3545.3	3675.8	4035.9	4336.0	4797.0	5509.9	6308.8	6990.2
27°	3428.4	3421.6	3468.8	3567.5	3688.1	4060.9	4373.8	4854.6	5612.2	6411.4	7108.4
28°	3446.5	3402.6	3488.0	3590.2	3703.7	4081.8	4418.1	4916.7	5708.2	6509.9	7221.3
29°	3391.8	3281.6	3445.7	3612.6	3729.3	4075.3	4463.4	4982.4	5792.7	6605.3	7328.3
30°	3278.1	3216.6	3329.9	3631.3	3757.8	4070.2	4508.5	5051.6	5881.6	6701.1	7428.2
31°	3222.6	3224.7	3273.5	3638.8	3786.9	4069.8	4553.3	5123.1	5968.5	6791.3	7523.6
32°	3233.7	3250.0	3282.5	3554.6	3817.2	4071.1	4589.1	5194.4	6051.2	6877.5	7610.1
33°	3256.4	3276.5	3305.2	3468.9	3844.5	4070.3	4612.1	5264.3	6136.7	6960.6	7686.0
34°	3278.8	3303.9	3328.5	3431.1	3866.5	4092.1	4635.2	5334.0	6218.5	7033.1	7751.1
35°	3301.8	3334.0	3352.0	3445.8	3888.1	4116.2	4670.8	5389.8	6301.4	7096.8	7813.0
36°	3327.0	3361.6	3377.1	3469.3	3905.2	4143.3	4709.0	5435.9	6379.1	7160.0	7871.8
37°	3349.3	3387.6	3401.8	3486.7	3915.2	4173.5	4747.8	5488.0	6453.9	7220.3	7926.8
38°	3371.1	3408.4	3425.3	3501.5	3815.2	4197.0	4792.0	5546.8	6526.2	7281.4	7972.9
39°	3386.8	3283.8	3444.2	3517.6	3737.0	4217.6	4835.5	5605.1	6594.9	7338.9	8012.7
40°	3258.4	3164.3	3330.2	3542.9	3713.6	4247.3	4872.1	5662.7	6653.4	7392.9	8047.0
41°	3142.3	3139.0	3208.3	3570.0	3736.8	4286.8	4904.4	5720.9	6698.5	7446.8	8076.8
42°	3115.6	3156.8	3174.7	3594.7	3766.1	4328.2	4927.4	5778.3	6739.3	7500.4	8099.8
43°	3136.7	3176.5	3196.1	3546.5	3797.4	4369.1	4952.5	5832.1	6782.8	7551.1	8118.2
44°	3159.9	3195.0	3220.8	3419.8	3827.6	4411.2	5000.4	5881.0	6827.8	7597.1	8129.2

REPORT NUMBER: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	3183.6	3213.7	3244.5	3360.1	3849.2	4445.0	5053.9	5924.5	6876.0	7640.2	8129.2
46°	3207.8	3224.7	3269.0	3373.3	3863.6	4457.9	5107.8	5953.0	6926.4	7678.5	8119.4
47°	3230.9	3094.8	3288.9	3387.7	3882.3	4466.6	5160.7	5976.4	6973.3	7714.7	8099.8
48°	3107.5	2916.9	3185.4	3400.1	3907.4	4430.5	5201.6	5996.6	7017.2	7746.0	8076.4
49°	2933.8	2882.5	3008.3	3416.8	3860.1	4370.7	5213.1	6031.3	7056.7	7767.2	8046.0
50°	2903.4	2896.8	2965.8	3433.2	3739.4	4328.4	5221.4	6072.8	7092.1	7776.6	8008.7
51°	2927.3	2912.7	2989.7	3388.5	3671.6	4309.7	5214.2	6110.0	7117.3	7774.4	7965.6
52°	2952.5	2928.6	3012.0	3210.1	3692.4	4331.2	5215.9	6145.0	7136.5	7766.2	7911.6
53°	2975.1	2935.8	3033.4	3141.2	3721.3	4348.8	5236.8	6174.4	7147.2	7749.1	7852.2
54°	2986.3	2724.4	3045.9	3165.3	3740.2	4365.0	5242.2	6198.3	7142.5	7730.8	7782.4
55°	2794.8	2594.2	2855.3	3193.5	3758.0	4386.2	5245.8	6210.0	7126.7	7703.4	7708.2
56°	2653.0	2585.0	2711.7	3222.7	3763.9	4418.6	5246.3	6203.7	7099.8	7672.7	7626.7
57°	2643.5	2589.6	2696.5	3243.7	3672.0	4431.2	5239.5	6182.5	7064.3	7633.2	7535.2
58°	2647.7	2567.9	2699.7	3093.3	3540.5	4437.5	5236.7	6155.2	7027.0	7578.2	7437.6
59°	2598.0	2263.2	2658.8	2958.7	3527.2	4388.5	5228.9	6128.0	6989.0	7516.2	7331.8
60°	2329.9	2179.9	2388.3	2959.4	3565.6	4280.0	5192.4	6095.9	6941.5	7444.0	7215.7
61°	2278.1	2051.9	2329.6	2968.0	3606.8	4227.4	5148.8	6055.0	6883.6	7358.1	7092.0
62°	2271.2	1923.8	2315.1	2869.4	3643.2	4226.1	5123.6	6003.9	6813.1	7257.6	6963.4
63°	2139.0	1797.1	2179.3	2689.3	3568.5	4224.9	5078.7	5936.0	6726.7	7140.0	6828.7
64°	2006.8	1760.8	2043.6	2653.7	3440.9	4213.1	5019.5	5847.2	6622.2	7013.1	6692.4
65°	1874.4	1608.7	1906.8	2631.4	3422.2	4164.7	4936.3	5737.2	6493.2	6873.9	6545.2
66°	1667.3	1345.3	1704.5	2397.8	3423.2	4023.9	4832.3	5606.0	6340.0	6723.2	6390.5
67°	1456.8	1282.7	1486.8	2347.3	3282.0	3931.7	4708.1	5447.5	6172.7	6550.0	6236.4
68°	1310.5	895.7	1344.7	2255.2	3202.8	3935.5	4538.7	5173.8	5959.2	6358.3	6083.8
69°	1067.8	739.6	1097.1	2058.2	3172.8	3927.5	4334.4	4769.9	5663.4	6147.3	5936.3
70°	855.2	509.6	879.7	1861.1	3011.9	3896.2	4051.6	4240.8	5291.4	5914.6	5779.1
71°	588.0	279.6	587.5	1664.6	2940.1	3738.1	3696.9	3751.8	4825.2	5639.2	5614.4
72°	324.9	51.2	303.8	1496.2	2816.6	3534.2	3318.9	3303.5	4330.4	5327.0	5449.3
73°	273.6	0.6	246.4	1320.1	2690.7	3323.9	2952.4	2856.9	3846.0	4949.9	5264.6
74°	222.3	0.4	189.5	1085.7	2504.4	3092.7	2612.2	2325.8	3366.1	4521.5	5048.7
75°	171.1	0.5	164.4	952.7	2296.1	2821.6	2098.7	1629.4	2794.1	4046.9	4747.6
76°	130.1	0.5	131.0	846.9	2002.0	2551.8	1585.3	944.0	2022.1	3545.9	4343.6
77°	91.6	0.6	103.7	746.6	1707.8	2162.6	1071.6	606.5	1204.5	3013.0	3779.6
78°	68.5	0.6	84.0	647.0	1413.9	1773.4	551.6	277.1	901.2	2360.4	3048.5
79°	67.5	0.7	83.4	537.9	1131.0	1381.4	360.2	211.4	602.6	1596.1	2209.9
80°	90.4	0.8	100.7	465.7	878.4	789.9	171.0	179.3	303.9	932.7	1375.1
81°	110.7	1.0	104.1	432.7	660.1	572.9	137.0	152.6	258.4	619.1	1007.8
82°	97.7	1.1	64.9	403.3	512.1	355.9	112.8	128.3	220.7	310.2	649.5
83°	60.9	1.2	46.1	305.8	384.4	140.1	92.0	106.7	182.1	236.9	291.3
84°	44.7	1.4	27.4	208.3	256.8	116.7	74.0	87.4	144.2	195.1	242.2
85°	28.4	1.5	9.1	111.7	130.5	92.1	58.8	68.1	112.5	153.2	205.8
86°	12.5	1.7	8.2	56.8	72.7	68.5	45.3	48.8	90.3	118.8	171.3
87°	9.2	1.8	8.0	40.0	41.4	49.3	33.3	32.7	68.4	91.7	133.1
88°	6.8	2.0	7.1	23.3	28.9	34.4	23.5	19.1	46.4	66.6	92.5
89°	5.2	2.2	4.5	6.7	16.4	19.5	13.8	8.2	28.3	41.6	66.0

REPORT NUMBER: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1445005
CATALOG NUMBER: XAS180-SFPM (4000K-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: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	3794.0	3794.0	3794.0
1°	3850.5	3858.4	3862.2
2°	3919.2	3934.8	3940.5
3°	3994.8	4018.1	4026.1
4°	4079.6	4112.3	4122.0
5°	4171.8	4216.8	4230.9
6°	4273.6	4331.3	4348.2
7°	4385.6	4453.4	4475.4
8°	4506.5	4587.3	4614.2
9°	4637.0	4733.5	4764.5
10°	4773.6	4891.7	4927.6
11°	4926.4	5060.4	5103.8
12°	5088.3	5245.3	5292.7
13°	5262.9	5440.0	5496.2
14°	5449.4	5650.2	5715.2
15°	5644.9	5872.5	5950.0
16°	5843.8	6099.5	6191.9
17°	6046.1	6333.0	6438.1
18°	6249.5	6564.3	6674.6
19°	6446.2	6787.2	6901.0
20°	6636.3	6993.9	7109.5
21°	6814.5	7182.2	7293.5
22°	6980.7	7354.1	7454.1
23°	7140.2	7504.1	7602.4
24°	7288.1	7638.1	7731.2
25°	7425.0	7755.7	7843.7
26°	7549.9	7859.3	7939.4
27°	7667.5	7948.9	8023.7
28°	7769.0	8026.8	8095.4
29°	7862.0	8091.3	8155.9
30°	7942.4	8144.7	8206.0
31°	8015.1	8190.0	8245.6
32°	8077.8	8226.2	8274.0
33°	8131.5	8251.8	8295.5
34°	8174.0	8269.5	8309.4
35°	8209.0	8278.6	8314.5
36°	8236.3	8277.6	8312.2
37°	8256.9	8272.4	8301.6
38°	8269.3	8262.4	8285.4
39°	8273.6	8244.4	8264.2
40°	8271.0	8222.8	8236.3
41°	8262.7	8197.1	8199.3
42°	8246.8	8164.7	8158.0
43°	8223.5	8127.2	8106.2
44°	8195.2	8083.1	8045.3

REPORT NUMBER: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	8159.7	8031.9	7976.9
46°	8119.7	7973.6	7897.3
47°	8072.2	7903.9	7807.8
48°	8020.9	7827.6	7714.0
49°	7959.5	7741.5	7608.8
50°	7887.1	7647.0	7491.2
51°	7804.4	7540.8	7363.8
52°	7708.2	7420.4	7222.9
53°	7604.2	7294.0	7077.1
54°	7490.4	7153.5	6922.5
55°	7372.5	7008.3	6760.8
56°	7244.0	6849.7	6595.6
57°	7109.4	6688.4	6428.8
58°	6966.6	6521.9	6257.2
59°	6818.5	6353.2	6081.4
60°	6668.9	6178.8	5895.3
61°	6519.5	6001.7	5704.1
62°	6369.7	5818.7	5504.4
63°	6225.3	5642.0	5309.8
64°	6089.6	5471.0	5123.4
65°	5957.8	5313.4	4975.0
66°	5830.0	5180.8	4864.1
67°	5708.6	5084.7	4801.7
68°	5596.7	5017.9	4732.1
69°	5497.3	4946.2	4576.1
70°	5419.0	4829.1	4275.1
71°	5339.0	4600.1	3811.5
72°	5240.4	4205.5	3336.7
73°	5094.9	3693.8	2830.2
74°	4828.9	3129.1	2255.6
75°	4404.9	2533.1	1534.3
76°	3865.0	1853.7	850.6
77°	3252.8	1105.7	657.4
78°	2520.0	829.9	468.6
79°	1656.4	562.3	279.8
80°	930.0	294.7	247.7
81°	700.2	256.9	221.5
82°	487.0	227.1	197.7
83°	273.8	199.8	175.4
84°	226.7	174.2	154.5
85°	183.8	150.7	134.4
86°	150.2	129.2	115.0
87°	120.4	108.7	95.9
88°	92.2	91.1	82.9
89°	71.2	73.5	70.0

REPORT NUMBER: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-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: P1445005

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)