

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: P1436735

Luminaire Tested: XAS180-SFPM (4000K-180W-T3)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436735
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 3/25/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: XAS180-SFPM (4000K-180W-T3)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 100% (180W)
OPTICS - TYPE 3
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

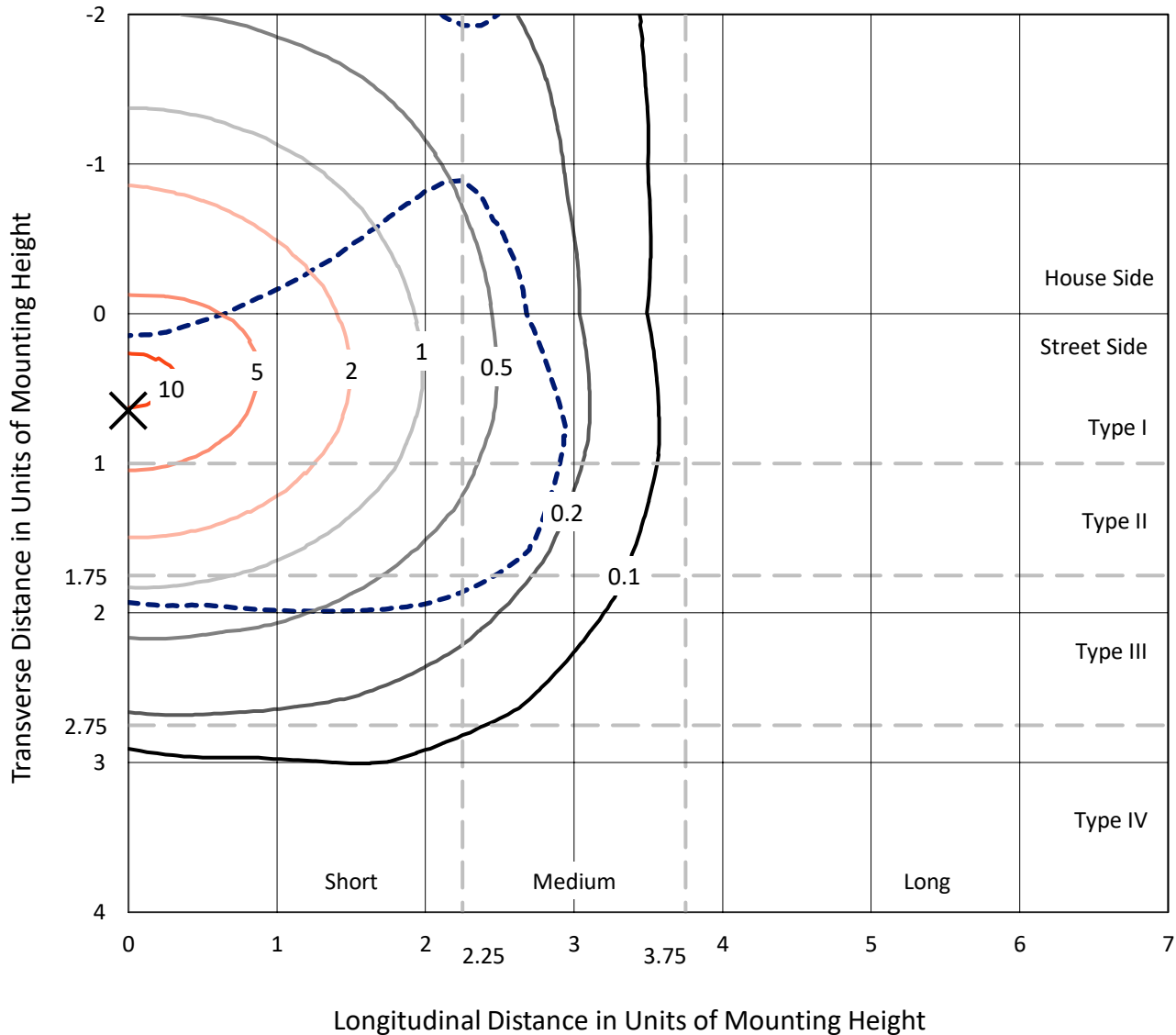
Lumens per Lamp: 27928 (1 lamp)
Luminaire Lumens: 27508.7 lumens
Efficiency: 98.5%
Efficacy: 158.0 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.35m x L: 0.35m x H: 0.35m)
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 174.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

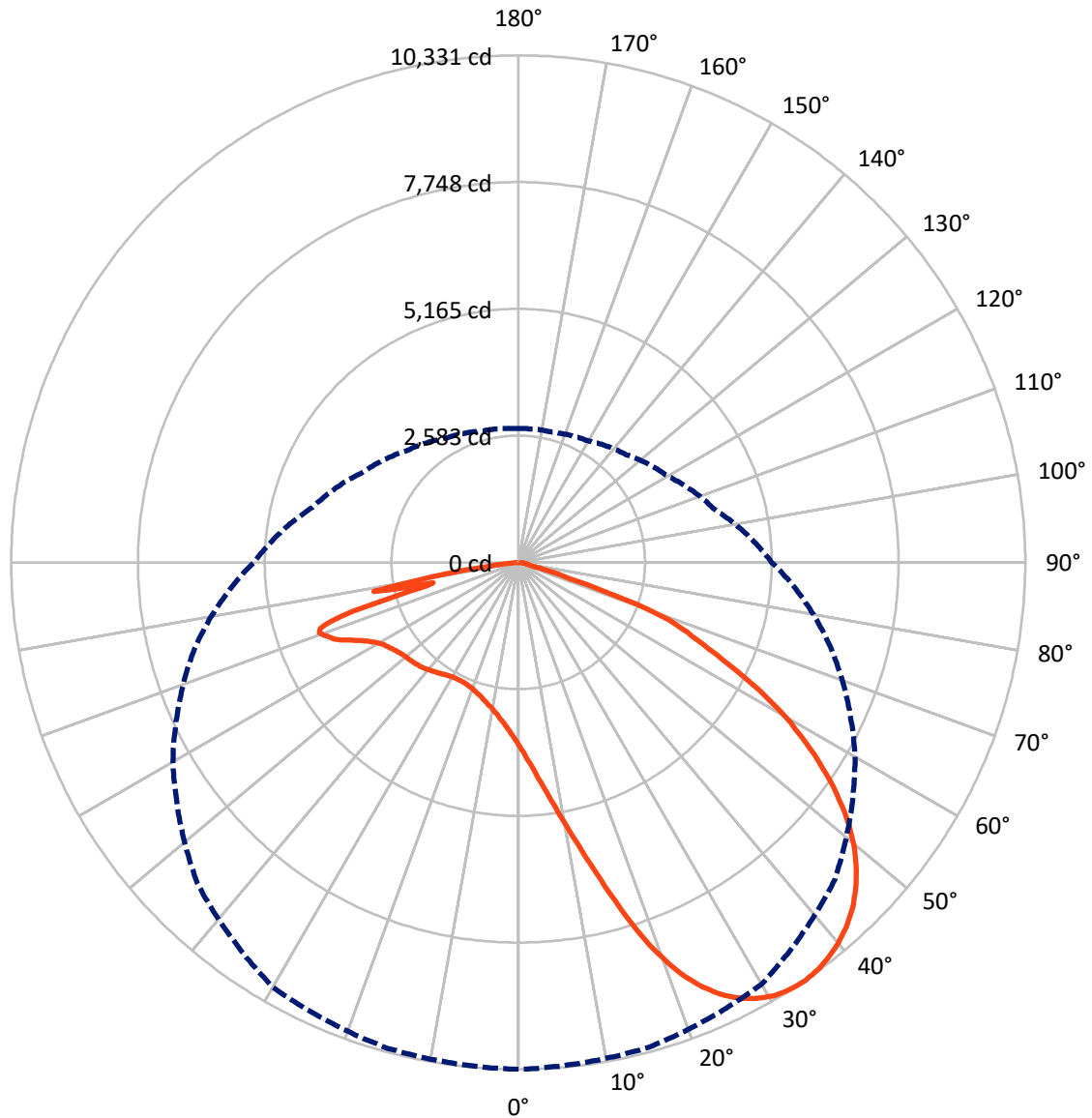
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.6 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 33-Deg Vertical

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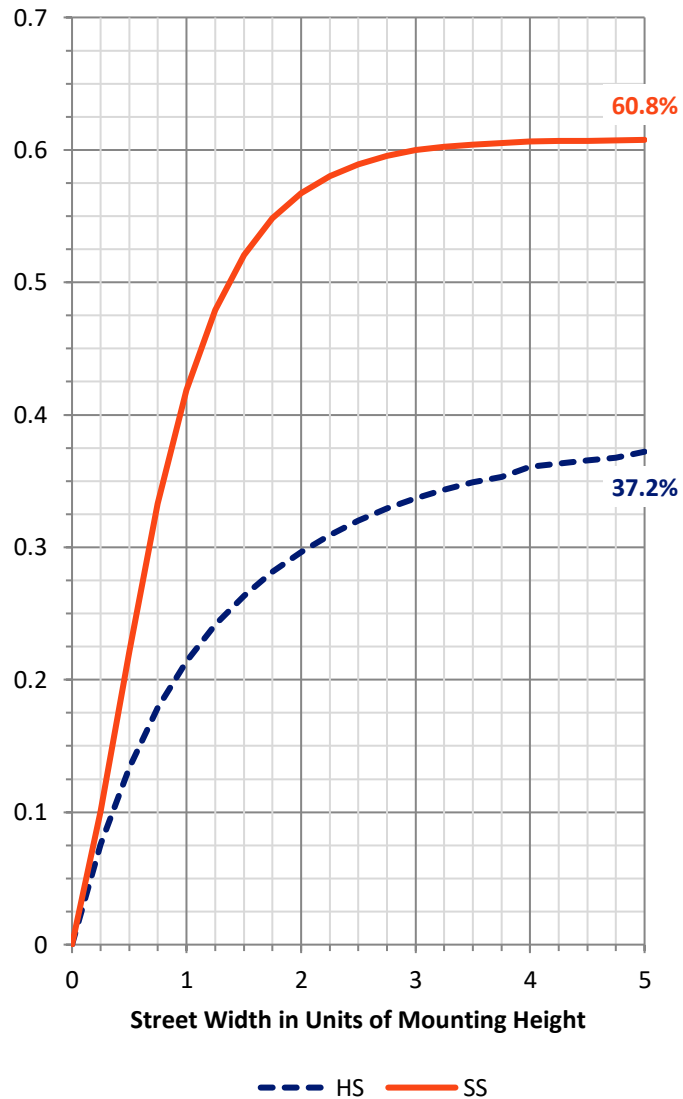
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10526.2	0.0	10526.2
	% Lamp	37.7	0.0	37.7
Street Side	Lumens	16982.5	0.0	16982.5
	% Lamp	60.8	0.0	60.8
Total	Lumens	27508.7	0.0	27508.7
	% Lamp	98.5	0.0	98.5

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	375.2	1.4	1.3
10°-20°	1307.6	4.8	4.7
20°-30°	2569.1	9.3	9.2
30°-40°	3845.9	14.0	13.8
40°-50°	4896.8	17.8	17.5
50°-60°	5474.9	19.9	19.6
60°-70°	5289.5	19.2	18.9
70°-80°	3298.7	12.0	11.8
80°-90°	451.0	1.6	1.6
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	27508.7	100.0	98.5
0°-180°	27508.7	100.0	98.5

Coefficient of Utilization



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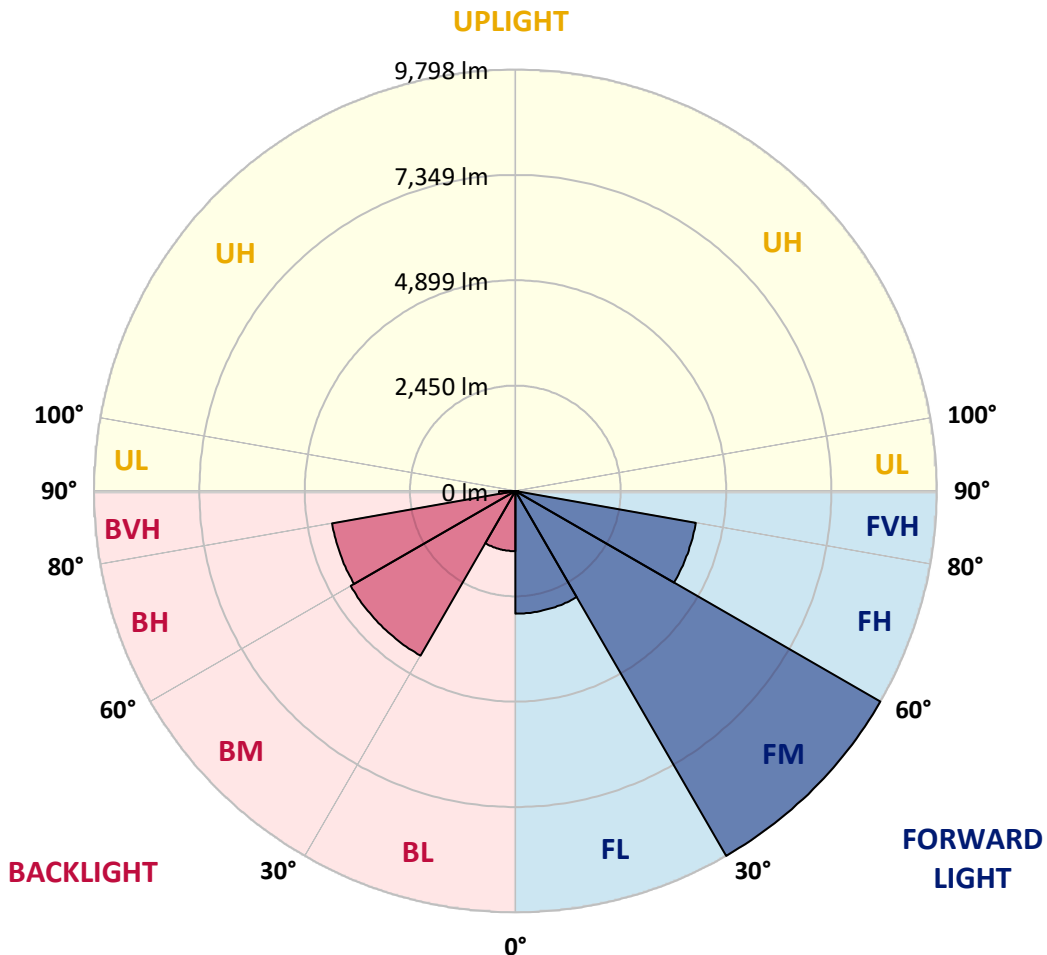
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2852.5	10.2			
FM (30°-60°)	9798.3	35.1			
FH (60°-80°)	4260.2	15.3			G2/5000
FVH (80°-90°)	71.5	0.3			G1/100
BL (0°-30°)	1399.4	5.0	B3/2500		
BM (30°-60°)	4419.3	15.8	B3/5000		
BH (60°-80°)	4328.0	15.5	B4/5000		G4/5000
BVH (80°-90°)	379.5	1.4			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	419.3	1.5			

BUG Rating: B4-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	3754.3	3754.3	3754.3	3754.3	3754.3	3754.3	3754.3	3754.3	3754.3	3754.3	3754.3
1°	3866.2	3863.3	3855.6	3839.3	3818.4	3792.9	3745.1	3717.5	3693.3	3673.7	3662.1
2°	3990.7	3983.9	3963.9	3925.2	3878.6	3823.1	3746.8	3692.9	3646.0	3607.0	3580.7
3°	4127.3	4115.9	4077.6	4018.3	3943.5	3858.8	3753.7	3673.2	3603.2	3547.5	3505.8
4°	4278.7	4260.9	4203.0	4119.0	4015.1	3898.5	3761.9	3656.2	3564.7	3491.5	3439.2
5°	4442.5	4419.1	4341.7	4228.3	4089.8	3940.4	3773.2	3642.1	3529.7	3442.5	3379.3
6°	4622.6	4587.8	4491.3	4348.3	4173.7	3988.0	3787.4	3631.1	3498.9	3397.2	3322.5
7°	4813.8	4772.6	4655.3	4476.8	4262.9	4040.4	3808.3	3626.3	3472.4	3355.6	3270.4
8°	5023.3	4969.8	4829.0	4613.7	4359.6	4097.8	3831.5	3624.3	3450.7	3317.3	3223.6
9°	5250.7	5185.9	5016.2	4761.1	4464.3	4159.1	3857.9	3624.7	3431.6	3283.1	3179.3
10°	5493.9	5415.4	5216.2	4918.6	4574.9	4225.7	3889.3	3628.1	3416.0	3253.7	3138.6
11°	5753.5	5665.1	5429.5	5087.9	4690.4	4296.0	3924.1	3635.3	3402.3	3226.6	3103.8
12°	6035.0	5929.9	5656.6	5264.1	4811.7	4371.3	3960.8	3644.7	3391.7	3202.9	3072.2
13°	6337.6	6216.0	5903.7	5451.9	4942.9	4450.1	3998.4	3655.9	3383.8	3181.6	3043.7
14°	6663.9	6527.1	6169.7	5653.5	5077.8	4532.2	4038.5	3667.2	3376.2	3163.2	3016.5
15°	7011.7	6851.3	6448.5	5864.2	5221.0	4616.9	4080.4	3680.1	3371.0	3147.3	2990.9
16°	7372.7	7194.6	6734.1	6090.9	5373.6	4705.8	4126.5	3695.6	3367.0	3131.8	2967.6
17°	7731.5	7531.7	7020.9	6322.4	5529.4	4798.5	4174.0	3712.9	3366.0	3117.7	2945.8
18°	8084.7	7864.8	7306.1	6555.0	5694.0	4893.7	4224.1	3731.8	3365.1	3105.4	2925.8
19°	8414.7	8181.9	7588.6	6780.3	5866.9	4992.7	4275.5	3753.1	3365.1	3094.7	2909.2
20°	8717.1	8481.5	7859.1	7005.0	6041.7	5095.7	4329.6	3776.1	3365.7	3085.0	2895.4
21°	8987.6	8753.9	8120.3	7227.3	6214.8	5202.2	4384.7	3800.8	3368.1	3076.1	2883.1
22°	9225.3	8997.9	8359.7	7437.4	6385.0	5314.4	4441.8	3824.6	3373.4	3069.3	2872.3
23°	9435.4	9216.1	8584.9	7640.3	6555.4	5427.6	4500.9	3849.9	3378.9	3064.2	2863.5
24°	9616.7	9410.1	8794.1	7831.9	6721.2	5544.9	4562.3	3877.6	3385.9	3061.0	2854.9
25°	9773.4	9581.4	8985.6	8012.0	6880.9	5663.6	4622.9	3905.4	3394.0	3060.1	2848.5
26°	9906.1	9727.1	9158.6	8182.8	7037.0	5783.3	4685.3	3933.9	3404.2	3061.4	2843.2
27°	10018.4	9852.0	9315.5	8347.4	7184.2	5903.5	4750.7	3961.7	3416.1	3063.1	2839.3
28°	10111.0	9960.3	9454.9	8501.6	7324.6	6021.3	4817.0	3989.8	3428.6	3066.4	2837.3
29°	10187.9	10045.0	9578.1	8645.2	7456.7	6136.3	4885.6	4018.3	3443.2	3071.6	2837.4
30°	10247.0	10115.0	9686.1	8781.4	7586.0	6249.0	4953.9	4048.8	3459.0	3078.0	2838.5
31°	10288.3	10170.1	9777.4	8906.3	7703.6	6359.6	5023.4	4079.4	3476.3	3086.4	2841.9
32°	10316.9	10207.6	9853.0	9019.6	7816.2	6467.7	5094.2	4111.6	3495.0	3095.8	2847.6
33°	10330.7	10231.2	9919.9	9126.3	7922.4	6573.7	5164.7	4145.4	3514.7	3105.9	2855.3
34°	10330.7	10241.0	9971.2	9221.7	8021.3	6673.8	5234.7	4178.0	3536.2	3117.7	2864.7
35°	10319.8	10239.1	10008.6	9307.2	8114.8	6768.9	5305.7	4213.1	3557.9	3131.8	2876.4
36°	10296.2	10226.3	10032.2	9383.0	8203.2	6862.0	5375.3	4249.2	3581.0	3147.3	2890.0
37°	10261.7	10203.6	10042.1	9448.0	8286.6	6951.4	5445.8	4285.4	3604.5	3165.0	2905.1
38°	10216.4	10171.1	10043.1	9501.4	8363.0	7036.1	5514.5	4323.4	3629.7	3184.0	2921.6
39°	10164.2	10130.7	10031.2	9547.2	8436.1	7118.0	5585.5	4361.9	3655.5	3205.1	2938.6
40°	10103.1	10080.5	10008.6	9583.1	8503.0	7195.9	5654.9	4403.0	3682.5	3227.8	2956.6
41°	10031.2	10019.4	9975.1	9609.2	8565.3	7269.8	5721.0	4446.1	3710.1	3251.1	2974.9
42°	9946.5	9953.4	9930.8	9627.3	8622.2	7340.8	5785.1	4488.4	3739.5	3276.2	2995.1
43°	9852.0	9873.6	9876.6	9633.4	8675.7	7409.5	5847.1	4532.1	3771.0	3303.3	3015.2
44°	9745.8	9782.3	9813.7	9628.7	8722.0	7474.7	5905.9	4578.0	3803.2	3330.7	3035.9



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CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	9624.0	9683.3	9737.6	9613.4	8763.5	7536.7	5962.3	4624.1	3837.7	3359.0	3056.6
46°	9487.0	9569.0	9653.1	9589.3	8803.1	7599.9	6019.4	4673.0	3874.6	3386.8	3077.9
47°	9342.5	9440.9	9560.0	9554.1	8835.4	7656.1	6074.1	4721.3	3912.7	3415.6	3100.5
48°	9185.0	9299.9	9454.6	9504.3	8861.5	7708.1	6125.1	4773.1	3951.6	3446.2	3125.1
49°	9012.8	9140.3	9336.3	9447.2	8882.0	7754.7	6171.5	4825.5	3993.8	3479.0	3150.5
50°	8820.0	8965.0	9202.2	9375.5	8893.9	7797.0	6216.8	4879.0	4037.2	3512.8	3178.8
51°	8608.9	8770.9	9055.5	9289.5	8897.5	7832.8	6261.3	4935.1	4082.6	3549.8	3208.6
52°	8381.6	8563.2	8892.0	9186.9	8891.5	7862.6	6301.5	4993.1	4130.3	3588.1	3239.3
53°	8139.4	8335.2	8717.3	9073.3	8875.2	7885.6	6338.0	5048.9	4180.3	3628.7	3271.8
54°	7884.2	8085.6	8521.8	8943.9	8844.6	7903.6	6369.1	5102.6	4234.7	3672.5	3306.3
55°	7614.7	7828.9	8311.5	8800.6	8799.3	7914.0	6396.8	5152.8	4291.2	3719.4	3344.6
56°	7333.5	7551.5	8081.7	8639.4	8739.8	7912.9	6418.1	5199.1	4348.8	3770.9	3384.8
57°	7044.9	7276.0	7842.8	8466.2	8663.3	7898.8	6436.1	5242.8	4408.4	3824.7	3429.6
58°	6745.0	6980.3	7588.8	8273.9	8566.0	7873.2	6446.1	5282.5	4469.6	3886.8	3479.8
59°	6438.0	6682.8	7330.0	8064.8	8452.2	7832.4	6445.7	5318.8	4532.8	3953.4	3535.9
60°	6106.8	6372.9	7057.9	7844.6	8320.5	7775.4	6435.7	5353.0	4597.6	4022.6	3597.1
61°	5755.2	6051.2	6777.5	7606.7	8166.2	7702.9	6414.5	5379.6	4660.7	4097.4	3664.2
62°	5381.0	5712.9	6491.9	7356.8	8001.4	7610.3	6380.4	5396.9	4725.2	4177.2	3735.1
63°	4999.4	5357.2	6200.9	7094.4	7820.1	7496.7	6328.9	5404.9	4788.5	4265.6	3812.4
64°	4622.0	5003.4	5905.4	6824.1	7620.7	7362.6	6258.0	5401.6	4850.4	4357.9	3901.5
65°	4276.4	4651.9	5600.8	6549.2	7405.6	7205.3	6172.4	5387.1	4909.4	4455.8	4002.4
66°	3977.4	4329.4	5296.0	6274.2	7168.1	7027.9	6063.1	5353.2	4963.3	4564.3	4111.4
67°	3727.8	4043.1	4996.0	6001.2	6919.2	6822.9	5922.5	5302.7	5009.3	4675.1	4239.8
68°	3470.8	3786.6	4706.7	5725.8	6642.5	6594.0	5704.5	5222.2	5047.2	4789.4	4387.7
69°	3095.6	3526.1	4435.4	5450.7	6352.4	6325.1	5383.3	5056.8	5066.2	4912.3	4554.4
70°	2540.8	3190.4	4179.2	5174.4	6040.9	5986.1	4956.9	4794.5	5071.2	5040.8	4730.5
71°	1800.2	2707.9	3928.7	4900.8	5690.4	5575.9	4436.3	4452.6	5038.5	5174.2	4862.3
72°	1122.1	2053.2	3650.1	4625.3	5292.9	5090.0	3949.4	4086.8	4951.9	5301.1	4991.7
73°	845.5	1350.7	3323.2	4335.0	4848.7	4558.4	3524.9	3776.9	4804.0	5414.5	5162.5
74°	571.8	1002.2	2880.4	4002.3	4360.5	4007.3	3009.8	3513.2	4624.9	5478.6	5321.3
75°	298.1	665.3	2251.6	3578.7	3839.8	3412.2	2278.5	3145.3	4439.7	5505.3	5444.7
76°	254.4	328.4	1567.3	3051.0	3300.4	2678.0	1547.1	2427.2	4298.1	5432.9	5478.6
77°	220.4	270.9	1004.6	2399.0	2737.3	1816.0	816.6	1709.3	4147.4	5251.2	5383.7
78°	192.9	231.2	771.2	1614.7	2123.7	1043.7	431.5	993.1	3841.8	4875.4	4918.0
79°	169.6	200.0	544.3	870.7	1487.2	791.2	289.8	506.1	3175.3	4347.8	4233.0
80°	148.1	173.5	317.5	581.7	911.9	552.0	251.0	308.4	2171.8	3716.8	3521.9
81°	128.6	149.7	254.3	296.4	586.1	312.7	212.3	255.7	1174.6	2861.0	3238.9
82°	110.6	128.4	214.0	244.8	269.4	265.5	173.8	203.1	560.1	2283.4	3121.1
83°	94.6	108.2	179.6	209.1	198.8	217.4	146.0	150.4	364.7	1705.7	2431.6
84°	78.3	91.0	145.6	177.9	158.7	164.7	119.8	119.9	297.8	1130.5	1742.0
85°	62.0	73.9	109.7	148.2	122.7	124.0	94.5	93.8	247.1	711.0	1053.6
86°	47.1	56.7	85.2	119.9	90.9	92.5	70.3	71.8	196.5	504.9	611.6
87°	32.6	41.5	60.6	89.4	66.2	67.7	48.4	52.4	145.8	298.9	489.8
88°	19.5	27.2	36.1	54.3	41.6	43.1	33.6	37.0	94.1	98.0	367.9
89°	9.0	12.8	16.2	19.0	19.8	21.0	18.8	21.5	63.7	66.1	246.0



REPORT NUMBER: P1436735

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

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: P1436735

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

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: P1436735

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

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: P1436735
 CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3754.3	3754.3	3754.3	3754.3	3754.3	3754.3	3754.3	3754.3	3754.3	3754.3	3754.3
1°	3653.8	3653.0	3660.2	3673.6	3692.6	3716.7	3742.7	3751.3	3778.8	3804.0	3828.1
2°	3565.8	3562.1	3573.0	3596.4	3630.9	3674.2	3725.2	3760.1	3815.6	3870.2	3918.4
3°	3483.6	3477.9	3492.0	3524.2	3574.3	3637.4	3711.0	3772.8	3856.3	3940.4	4016.0
4°	3409.4	3402.7	3420.2	3459.4	3522.2	3604.1	3701.1	3788.7	3903.1	4016.9	4122.0
5°	3342.8	3333.9	3352.6	3401.1	3475.8	3575.1	3693.4	3808.4	3951.8	4098.6	4236.2
6°	3280.0	3268.0	3290.1	3346.9	3434.3	3549.3	3689.8	3831.2	4006.9	4188.7	4359.1
7°	3221.5	3207.8	3233.0	3295.6	3395.2	3527.6	3689.9	3857.9	4066.0	4285.5	4492.7
8°	3168.6	3153.5	3179.4	3250.1	3361.1	3509.6	3692.8	3888.0	4128.4	4387.7	4636.9
9°	3118.6	3101.7	3131.0	3207.6	3329.2	3493.6	3697.3	3919.1	4196.6	4498.9	4790.8
10°	3073.9	3054.9	3087.1	3168.5	3300.5	3479.0	3705.1	3956.2	4270.2	4615.9	4951.7
11°	3033.7	3012.6	3047.4	3135.0	3276.2	3468.2	3715.9	3997.0	4348.6	4740.6	5127.2
12°	2996.5	2974.3	3010.4	3105.0	3254.3	3460.1	3729.8	4039.2	4428.9	4870.6	5309.9
13°	2962.8	2937.5	2975.9	3077.4	3236.8	3454.5	3746.8	4084.3	4514.5	5010.5	5511.3
14°	2929.8	2903.1	2944.0	3051.6	3221.3	3451.9	3764.7	4132.2	4604.8	5154.5	5721.4
15°	2899.8	2872.5	2914.6	3026.8	3208.9	3451.9	3783.0	4181.7	4698.1	5309.2	5945.6
16°	2872.2	2842.2	2887.1	3004.2	3196.1	3452.9	3803.4	4234.5	4795.1	5474.0	6180.8
17°	2847.1	2816.2	2862.3	2984.1	3184.8	3455.3	3826.2	4288.5	4896.8	5645.4	6422.5
18°	2824.4	2790.8	2839.3	2964.9	3175.6	3459.9	3850.4	4344.2	5002.4	5823.4	6667.9
19°	2803.6	2768.3	2818.0	2949.7	3166.3	3465.8	3877.1	4402.3	5112.2	6006.2	6909.5
20°	2784.6	2748.3	2798.9	2936.4	3158.3	3471.6	3905.0	4461.8	5225.3	6193.2	7147.2
21°	2769.1	2730.6	2783.4	2925.1	3151.8	3479.0	3934.4	4525.1	5342.3	6381.9	7373.8
22°	2754.9	2715.3	2769.5	2916.1	3148.6	3487.5	3964.8	4588.5	5464.8	6568.6	7586.1
23°	2742.6	2703.0	2758.2	2908.3	3146.3	3497.4	3995.8	4655.3	5593.6	6749.2	7789.9
24°	2732.4	2693.5	2749.0	2902.1	3146.3	3508.5	4027.0	4723.5	5724.6	6922.9	7979.3
25°	2725.4	2686.2	2743.2	2897.2	3148.0	3520.8	4058.6	4792.6	5854.6	7091.1	8158.6
26°	2720.1	2681.4	2739.6	2894.9	3150.7	3534.1	4093.0	4862.7	5985.8	7248.6	8327.6
27°	2716.5	2678.8	2737.0	2893.2	3155.5	3548.0	4125.7	4934.2	6117.6	7398.3	8487.9
28°	2715.3	2679.8	2737.4	2893.9	3161.9	3563.6	4160.3	5007.8	6247.8	7537.2	8637.6
29°	2716.7	2683.9	2740.7	2896.0	3170.1	3580.2	4194.5	5083.4	6374.3	7671.2	8779.8
30°	2720.3	2690.7	2747.1	2900.2	3178.9	3599.0	4230.5	5159.0	6496.4	7796.5	8909.3
31°	2726.3	2699.7	2754.4	2906.6	3189.2	3619.0	4265.2	5234.2	6614.6	7911.6	9031.4
32°	2733.6	2711.3	2763.1	2915.7	3202.2	3640.7	4301.1	5309.6	6725.9	8021.2	9141.8
33°	2742.6	2724.7	2772.8	2926.1	3216.1	3662.5	4336.6	5385.7	6832.9	8124.5	9245.9
34°	2752.9	2738.6	2783.0	2937.7	3230.9	3685.2	4374.0	5461.7	6934.8	8221.7	9338.7
35°	2763.6	2754.8	2794.1	2950.8	3247.7	3709.5	4412.0	5538.9	7031.4	8312.9	9422.7
36°	2774.3	2772.2	2805.8	2965.4	3264.5	3734.5	4452.7	5614.9	7125.0	8397.2	9496.5
37°	2785.6	2789.5	2818.1	2982.2	3282.8	3759.6	4493.2	5689.9	7210.9	8476.1	9560.0
38°	2796.3	2807.6	2831.8	2999.6	3303.0	3785.9	4535.8	5763.7	7294.5	8551.1	9616.3
39°	2807.7	2825.8	2845.4	3018.7	3324.7	3814.1	4579.0	5835.7	7371.1	8620.8	9660.2
40°	2820.1	2843.5	2859.7	3039.4	3347.7	3843.4	4623.9	5907.2	7444.6	8684.4	9694.8
41°	2832.5	2861.1	2873.9	3060.7	3371.5	3873.9	4668.8	5973.1	7515.3	8742.6	9716.5
42°	2844.5	2878.9	2889.2	3082.3	3397.2	3906.5	4714.4	6038.8	7583.6	8796.0	9726.7
43°	2857.8	2895.9	2905.3	3105.3	3423.6	3940.8	4762.8	6103.0	7648.8	8842.0	9729.2
44°	2872.8	2912.7	2923.3	3128.3	3451.5	3976.2	4811.7	6168.5	7709.4	8883.2	9721.6



REPORT NUMBER: P1436735

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2888.7	2927.6	2941.7	3151.8	3480.7	4012.7	4861.3	6229.8	7766.1	8919.4	9699.8
46°	2905.8	2939.9	2960.9	3176.5	3511.5	4049.4	4912.2	6284.6	7816.3	8948.7	9667.0
47°	2924.2	2951.0	2981.6	3201.0	3542.8	4089.7	4963.5	6334.9	7862.5	8971.2	9622.1
48°	2944.7	2962.9	3003.3	3226.2	3577.1	4131.7	5014.0	6382.9	7901.3	8985.1	9566.6
49°	2967.5	2974.8	3026.5	3251.6	3610.7	4175.9	5066.1	6426.6	7933.4	8990.3	9498.7
50°	2993.1	2985.8	3052.3	3279.6	3646.9	4224.6	5119.3	6466.5	7958.8	8986.5	9420.0
51°	3022.6	2998.7	3080.1	3308.5	3684.6	4274.6	5172.3	6500.4	7977.5	8974.5	9326.4
52°	3053.9	3015.7	3110.0	3340.1	3725.5	4325.1	5225.6	6531.0	7988.9	8950.8	9217.2
53°	3085.4	3036.8	3141.9	3373.3	3769.6	4377.5	5273.2	6554.2	7992.8	8916.7	9096.1
54°	3119.1	3058.5	3177.6	3410.5	3818.3	4430.9	5319.3	6571.8	7987.7	8872.0	8962.2
55°	3157.9	3084.0	3216.5	3450.7	3870.7	4485.1	5360.5	6584.6	7971.6	8813.2	8813.6
56°	3199.2	3114.4	3256.8	3494.0	3926.8	4542.2	5397.7	6588.9	7940.5	8740.2	8648.7
57°	3242.2	3148.2	3300.5	3543.4	3986.9	4600.2	5430.9	6586.0	7896.4	8651.0	8469.8
58°	3285.7	3177.2	3345.9	3597.3	4049.9	4657.6	5459.2	6576.3	7840.2	8541.8	8271.5
59°	3327.9	3209.1	3389.1	3656.8	4120.2	4709.9	5480.3	6556.9	7772.7	8421.5	8061.8
60°	3375.4	3257.2	3437.6	3722.4	4191.9	4762.2	5498.5	6525.1	7689.5	8280.0	7835.9
61°	3437.5	3323.0	3501.5	3795.1	4269.4	4815.6	5509.5	6479.9	7590.3	8121.5	7593.9
62°	3509.9	3391.7	3577.0	3873.4	4349.1	4868.1	5511.4	6421.1	7473.8	7949.0	7341.0
63°	3591.6	3472.1	3659.7	3954.0	4434.7	4919.1	5502.2	6346.1	7339.2	7754.1	7081.2
64°	3685.6	3573.2	3758.7	4044.4	4523.0	4966.5	5485.2	6249.6	7187.9	7541.4	6810.3
65°	3795.2	3686.5	3870.7	4149.2	4618.4	5010.6	5452.8	6134.0	7012.1	7316.5	6534.7
66°	3922.2	3816.3	3996.3	4263.2	4715.7	5046.5	5401.2	5991.0	6812.4	7074.4	6257.7
67°	4060.2	3956.1	4130.3	4388.1	4811.6	5078.9	5326.2	5798.3	6592.8	6811.4	5980.8
68°	4207.5	4068.7	4270.5	4531.4	4913.0	5100.3	5189.6	5506.9	6330.9	6531.9	5700.1
69°	4298.3	4142.4	4353.0	4692.4	5026.1	5104.8	4956.3	5103.3	6012.4	6224.2	5422.7
70°	4375.7	4234.7	4426.3	4857.3	5138.7	5090.9	4617.0	4594.2	5615.0	5878.2	5139.3
71°	4485.4	4300.4	4528.3	4981.4	5254.9	5033.1	4219.3	4069.7	5126.2	5479.4	4842.7
72°	4555.6	4255.3	4592.2	5112.3	5361.2	4911.3	3855.9	3583.4	4578.8	5037.0	4541.8
73°	4534.3	4022.2	4572.7	5277.5	5445.5	4722.3	3536.3	3108.5	4008.0	4545.9	4209.2
74°	4390.4	3507.0	4434.6	5424.5	5470.1	4524.3	3186.2	2513.9	3442.7	4005.1	3828.4
75°	3973.2	2684.2	4038.6	5519.4	5429.2	4330.0	2501.8	1734.3	2808.7	3434.6	3367.8
76°	3243.7	1922.2	3323.8	5532.1	5255.1	4129.0	1817.4	985.3	2038.7	2872.2	2812.8
77°	2488.7	1782.4	2637.3	5414.2	4998.4	3855.4	1136.2	734.5	1238.4	2314.7	2139.1
78°	2389.7	2395.0	2611.8	4914.8	4595.5	3298.2	573.9	496.6	931.8	1722.0	1391.2
79°	2998.3	3000.5	3206.7	4160.4	4130.4	2406.7	330.4	258.7	637.9	1127.1	1018.8
80°	3497.4	2377.6	3566.5	3374.4	3484.2	1515.1	274.4	219.5	344.1	830.6	650.7
81°	2693.8	1754.7	2703.1	3122.5	2746.6	641.4	218.3	187.8	286.5	536.5	282.6
82°	1890.1	1133.4	1839.8	3124.0	2008.8	388.1	163.0	158.7	244.2	242.4	237.9
83°	1089.4	582.9	989.4	2349.7	1274.1	299.7	133.2	132.1	197.9	185.4	204.5
84°	606.1	409.6	584.1	1575.4	748.4	247.5	107.3	106.5	152.0	147.2	173.2
85°	436.1	236.4	382.2	818.8	535.8	195.3	83.8	84.3	113.6	111.3	143.3
86°	266.2	67.6	248.1	655.0	323.1	143.3	63.5	62.0	87.7	85.7	114.6
87°	97.2	45.6	115.0	491.2	116.2	100.2	45.5	39.8	61.9	60.3	81.3
88°	65.9	23.6	62.2	327.3	78.5	68.1	31.6	22.3	36.1	34.9	47.9
89°	34.5	1.7	9.4	163.5	40.8	36.0	17.6	8.2	15.2	14.5	14.5



REPORT NUMBER: P1436735

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

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: P1436735

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

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: P1436735

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

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: P1436735

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	3754.3	3754.3	3754.3
1°	3846.6	3859.5	3866.2
2°	3958.1	3982.0	3990.7
3°	4075.1	4115.3	4127.3
4°	4205.6	4261.4	4278.7
5°	4346.6	4418.4	4442.5
6°	4500.1	4591.6	4622.6
7°	4666.5	4777.9	4813.8
8°	4840.9	4976.9	5023.3
9°	5035.5	5195.3	5250.7
10°	5237.4	5429.6	5493.9
11°	5458.0	5683.3	5753.5
12°	5696.2	5950.7	6035.0
13°	5948.5	6243.7	6337.6
14°	6220.9	6557.0	6663.9
15°	6501.8	6880.2	7011.7
16°	6793.5	7215.6	7372.7
17°	7090.3	7558.8	7731.5
18°	7388.3	7900.5	8084.7
19°	7671.7	8222.9	8414.7
20°	7950.4	8522.5	8717.1
21°	8203.0	8801.3	8987.6
22°	8442.5	9046.5	9225.3
23°	8673.1	9265.2	9435.4
24°	8882.8	9455.0	9616.7
25°	9075.8	9622.5	9773.4
26°	9252.8	9765.2	9906.1
27°	9407.9	9885.5	10018.4
28°	9546.3	9986.9	10111.0
29°	9669.9	10072.6	10187.9
30°	9774.5	10138.6	10247.0
31°	9864.8	10189.8	10288.3
32°	9937.7	10228.2	10316.9
33°	9996.8	10251.9	10330.7
34°	10044.0	10261.7	10330.7
35°	10078.5	10257.8	10319.8
36°	10098.2	10242.0	10296.2
37°	10106.1	10216.4	10261.7
38°	10102.2	10181.9	10216.4
39°	10086.4	10139.6	10164.2
40°	10060.8	10088.4	10103.1
41°	10023.4	10028.3	10031.2
42°	9976.1	9959.3	9946.5
43°	9918.0	9880.5	9852.0
44°	9851.0	9795.2	9745.8



REPORT NUMBER: P1436735

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	9774.4	9695.9	9624.0
46°	9689.6	9583.8	9487.0
47°	9591.6	9459.3	9342.5
48°	9485.4	9321.5	9185.0
49°	9367.9	9163.6	9012.8
50°	9234.9	8994.9	8820.0
51°	9087.7	8804.9	8608.9
52°	8921.8	8598.7	8381.6
53°	8743.7	8374.6	8139.4
54°	8550.3	8131.5	7884.2
55°	8343.5	7873.4	7614.7
56°	8114.4	7599.8	7333.5
57°	7873.1	7315.0	7044.9
58°	7618.1	7018.0	6745.0
59°	7355.1	6714.6	6438.0
60°	7080.1	6408.1	6106.8
61°	6799.0	6081.9	5755.2
62°	6510.3	5741.2	5381.0
63°	6220.4	5396.2	4999.4
64°	5929.0	5044.5	4622.0
65°	5635.7	4700.9	4276.4
66°	5344.6	4380.3	3977.4
67°	5050.6	4095.6	3727.8
68°	4761.7	3842.9	3470.8
69°	4488.0	3579.2	3095.6
70°	4232.2	3257.3	2540.8
71°	3969.7	2799.0	1800.2
72°	3675.4	2162.7	1122.1
73°	3328.1	1459.3	845.5
74°	2844.5	850.6	571.8
75°	2215.9	597.7	298.1
76°	1566.7	347.2	254.4
77°	1019.8	280.2	220.4
78°	785.4	238.2	192.9
79°	551.0	205.5	169.6
80°	316.7	177.9	148.1
81°	254.9	153.4	128.6
82°	212.9	131.5	110.6
83°	177.7	111.3	94.6
84°	142.9	94.0	78.3
85°	106.7	76.1	62.0
86°	82.2	58.3	47.1
87°	57.8	42.3	32.6
88°	33.4	27.1	19.5
89°	14.2	12.4	9.0



REPORT NUMBER: P1436735
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

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: P1436735

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

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: P1436735
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T3)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)