

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: P1436739

Luminaire Tested: XAS180-SFPM (4000K-180W-T5)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436739
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-T5)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 100% (180W)
OPTICS - TYPE 5
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

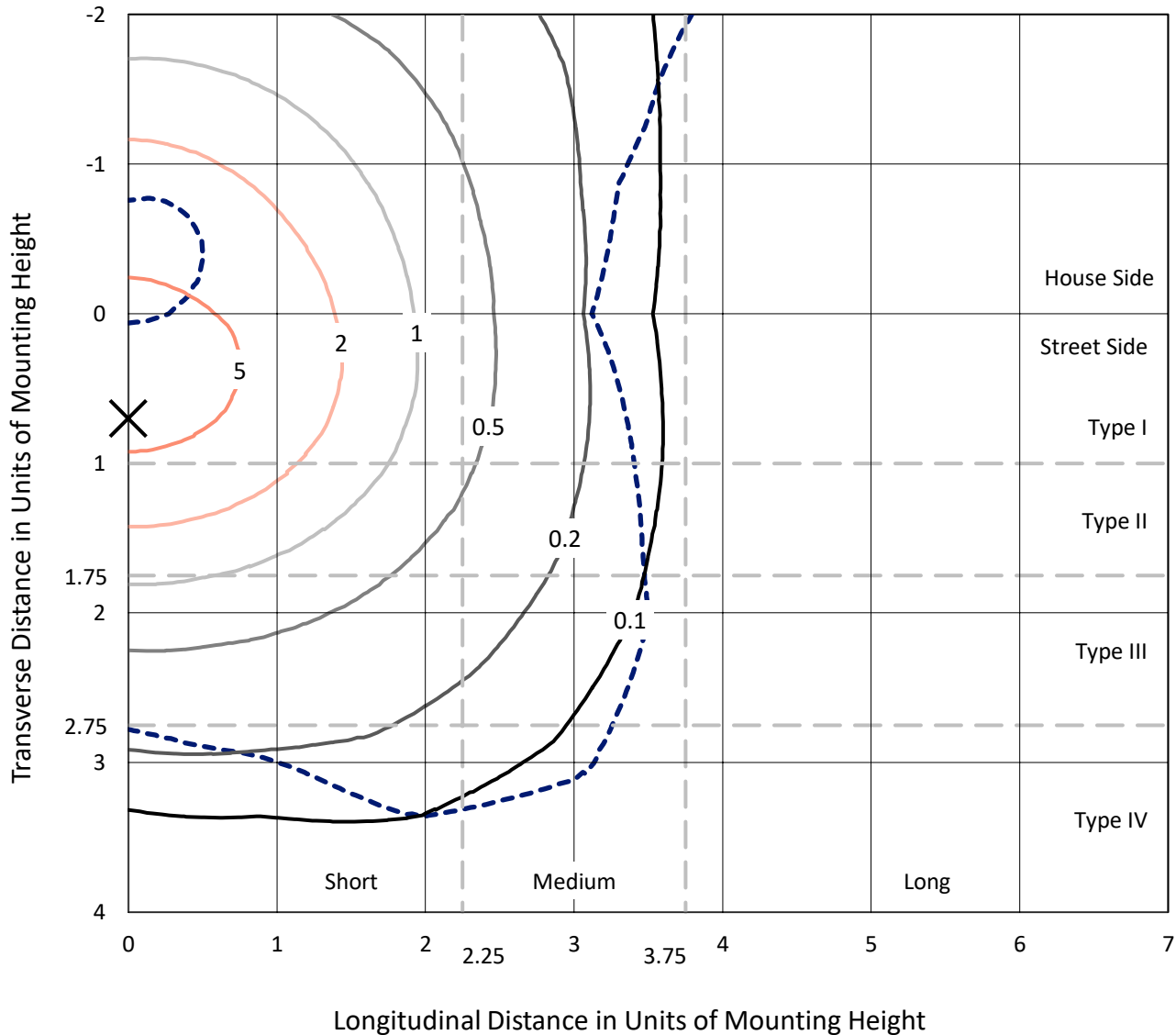
Lumens per Lamp: 28628 (1 lamp)
Luminaire Lumens: 27641.4 lumens
Efficiency: 96.6%
Efficacy: 158.9 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 174
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

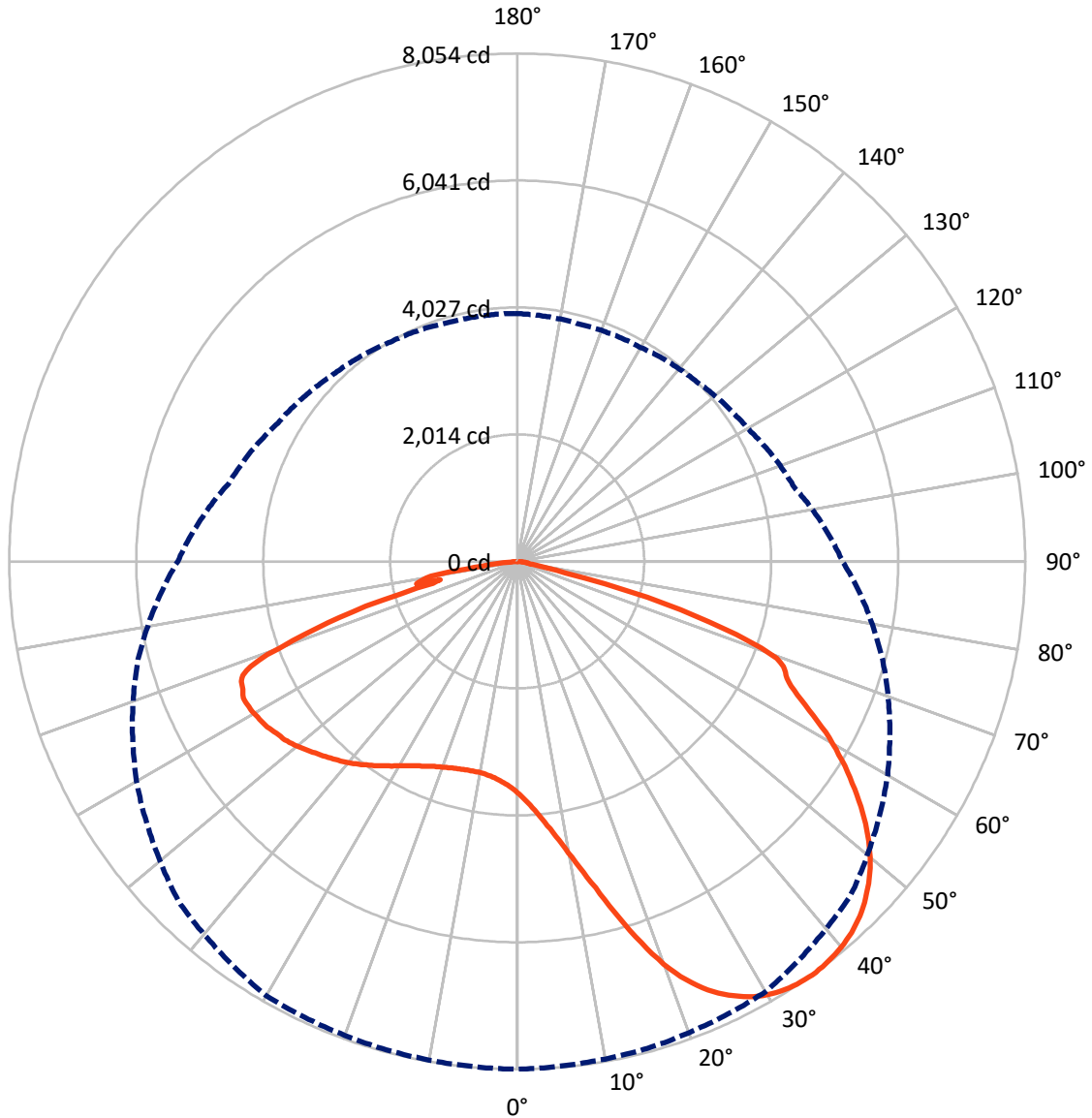
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 35-Deg Vertical

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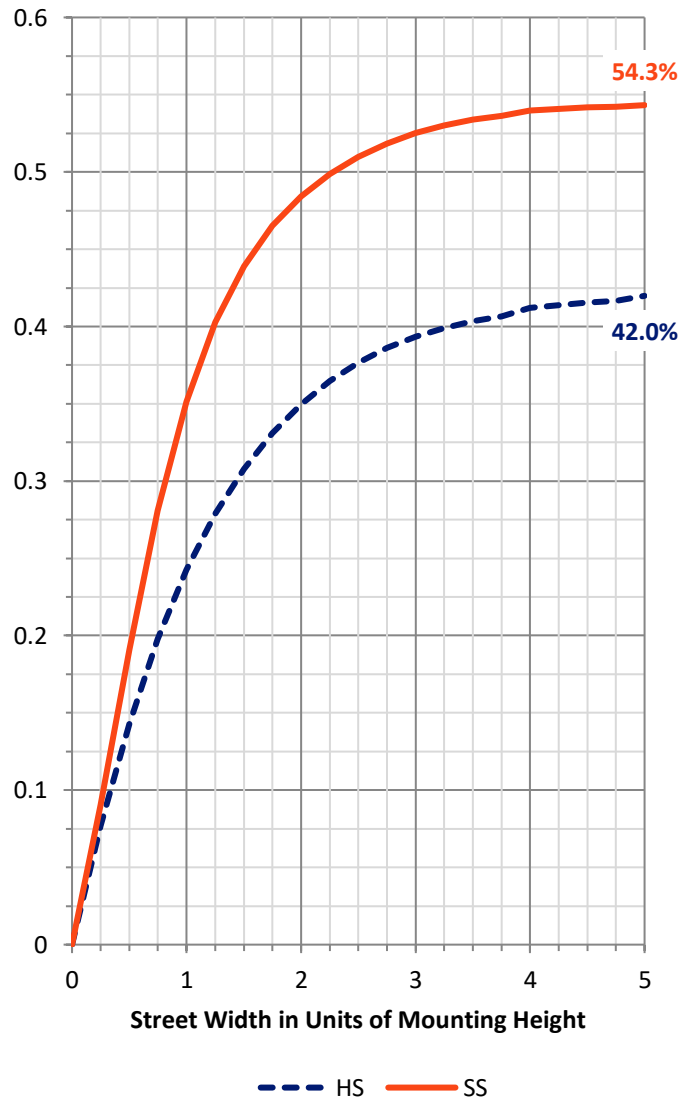
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12101.0	0.0	12101.0
	% Lamp	42.3	0.0	42.3
Street Side	Lumens	15540.4	0.0	15540.4
	% Lamp	54.3	0.0	54.3
Total	Lumens	27641.4	0.0	27641.4
	% Lamp	96.6	0.0	96.6

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	366.2	1.3	1.3
10°-20°	1242.8	4.5	4.3
20°-30°	2385.6	8.6	8.3
30°-40°	3593.6	13.0	12.6
40°-50°	4699.7	17.0	16.4
50°-60°	5526.9	20.0	19.3
60°-70°	5766.4	20.9	20.1
70°-80°	3691.8	13.4	12.9
80°-90°	368.5	1.3	1.3
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°	27641.4	100.0	96.6
0°-180°	27641.4	100.0	96.6

Coefficient of Utilization



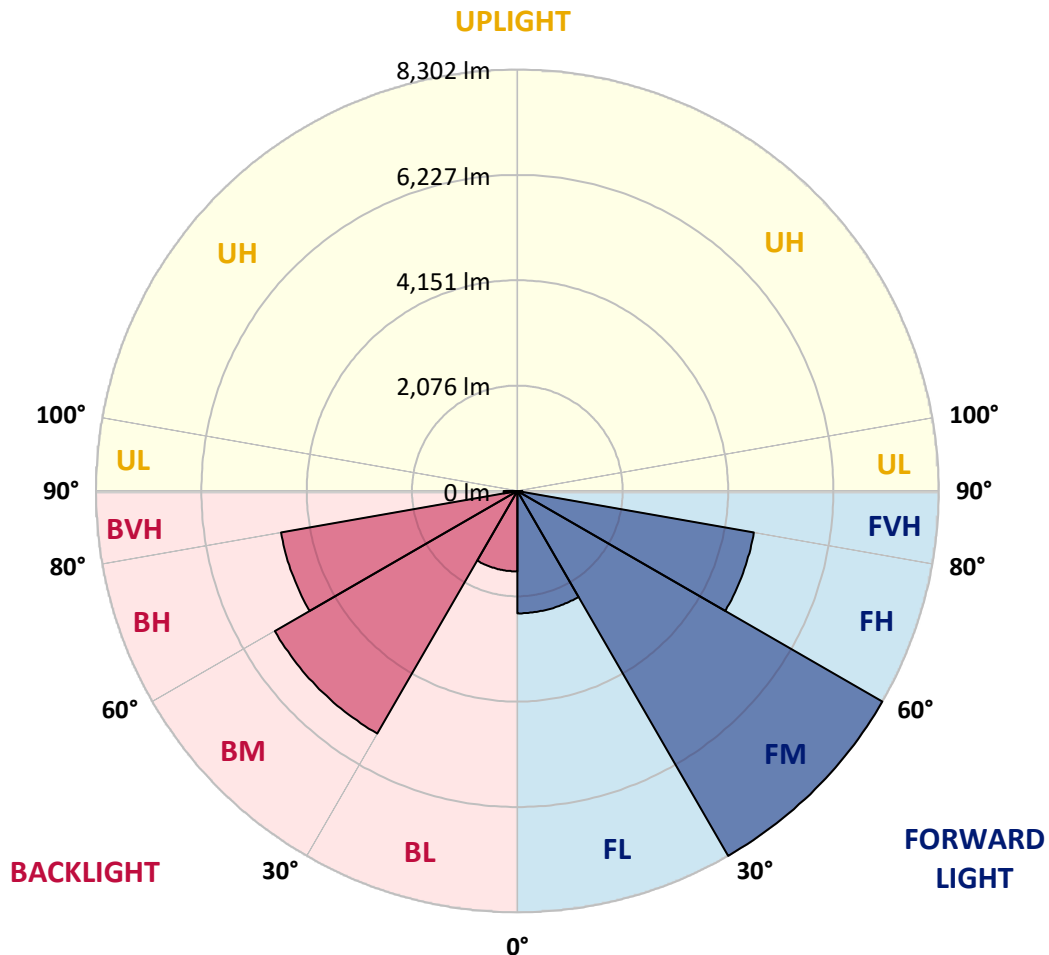
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2410.6	8.4			
FM (30°-60°)	8302.3	29.0			
FH (60°-80°)	4730.5	16.5			G2/5000
FVH (80°-90°)	97.1	0.3			G1/100
BL (0°-30°)	1584.0	5.5	B3/2500		
BM (30°-60°)	5517.9	19.3	B4/8500		
BH (60°-80°)	4727.7	16.5	B4/5000		G4/5000
BVH (80°-90°)	271.4	0.9			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	986.6	3.4			

BUG Rating: B4-U0-G4
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	3691.7	3691.7	3691.7	3691.7	3691.7	3691.7	3691.7	3691.7	3691.7	3691.7	3691.7
1°	3754.4	3753.3	3748.3	3739.3	3726.9	3713.6	3685.1	3670.1	3658.1	3647.8	3641.3
2°	3826.9	3823.5	3810.8	3789.0	3760.5	3730.4	3686.2	3657.8	3632.8	3612.3	3599.2
3°	3908.7	3902.1	3879.2	3844.4	3801.3	3753.5	3692.7	3649.6	3612.3	3582.9	3562.0
4°	3999.6	3988.4	3955.7	3906.6	3846.0	3779.9	3701.4	3644.8	3596.1	3558.6	3531.8
5°	4102.0	4086.5	4041.9	3974.7	3896.1	3810.9	3713.4	3642.3	3583.5	3538.0	3505.8
6°	4214.8	4193.1	4137.5	4051.3	3950.5	3844.1	3727.6	3643.3	3574.4	3522.0	3484.3
7°	4337.6	4310.9	4241.6	4136.7	4009.9	3881.7	3747.1	3648.2	3568.4	3509.5	3468.1
8°	4472.1	4438.4	4354.8	4226.5	4074.2	3924.7	3770.0	3657.0	3566.5	3499.2	3454.6
9°	4617.3	4580.2	4476.6	4323.8	4146.8	3969.5	3795.5	3667.4	3568.1	3493.3	3444.3
10°	4774.2	4726.2	4607.8	4430.0	4224.7	4018.7	3824.7	3682.1	3572.4	3492.0	3437.4
11°	4944.8	4890.7	4749.3	4544.5	4306.3	4071.9	3855.9	3699.9	3579.3	3493.6	3434.6
12°	5128.7	5062.0	4899.2	4662.5	4390.3	4130.2	3890.3	3718.9	3589.1	3497.2	3436.6
13°	5323.6	5249.6	5062.2	4789.4	4481.2	4191.7	3926.3	3740.1	3600.6	3504.1	3440.9
14°	5539.2	5452.5	5236.2	4925.0	4577.7	4253.3	3962.9	3761.2	3613.2	3512.9	3445.9
15°	5768.9	5670.3	5419.7	5067.5	4676.8	4317.4	4002.1	3784.0	3628.3	3523.4	3453.5
16°	6005.5	5891.9	5611.3	5220.6	4783.6	4385.7	4044.3	3810.1	3644.1	3535.3	3463.5
17°	6241.6	6116.3	5802.2	5377.6	4895.0	4456.6	4088.2	3836.1	3662.5	3547.8	3474.7
18°	6474.3	6335.5	5993.8	5535.7	5011.3	4529.0	4133.9	3865.9	3682.3	3563.5	3485.3
19°	6693.0	6546.0	6182.8	5689.0	5131.6	4604.5	4181.5	3896.8	3702.4	3579.9	3498.6
20°	6894.3	6744.8	6361.9	5841.9	5254.0	4683.5	4231.8	3929.7	3724.1	3597.3	3513.8
21°	7075.7	6929.1	6535.7	5990.4	5375.0	4765.5	4282.8	3964.0	3746.9	3614.0	3530.2
22°	7232.1	7086.8	6698.5	6135.0	5497.0	4849.6	4336.3	3999.6	3773.1	3633.6	3548.5
23°	7374.0	7238.6	6849.8	6273.4	5617.6	4937.6	4391.7	4036.1	3801.6	3654.5	3568.8
24°	7498.5	7369.5	6990.2	6403.5	5735.7	5028.0	4448.1	4074.6	3830.7	3678.3	3590.6
25°	7605.6	7486.4	7120.2	6530.8	5851.5	5119.6	4507.7	4114.4	3860.8	3703.9	3612.8
26°	7697.9	7589.8	7242.0	6649.9	5962.9	5210.4	4568.2	4155.6	3892.2	3730.0	3637.3
27°	7780.9	7677.8	7349.6	6764.2	6071.4	5303.1	4628.9	4197.4	3923.9	3757.8	3662.8
28°	7850.9	7752.7	7446.8	6873.9	6173.8	5394.8	4692.0	4237.9	3957.5	3788.2	3689.8
29°	7909.0	7818.2	7535.6	6978.0	6271.0	5486.3	4756.3	4280.5	3990.2	3820.9	3718.1
30°	7954.8	7870.5	7615.0	7078.5	6367.4	5574.9	4822.8	4323.8	4025.9	3853.3	3747.3
31°	7992.4	7912.5	7684.6	7171.0	6456.7	5662.8	4889.3	4366.2	4062.7	3886.4	3777.9
32°	8019.6	7946.8	7746.0	7257.3	6542.3	5749.3	4956.5	4410.7	4099.3	3920.7	3810.9
33°	8040.4	7971.6	7799.7	7339.4	6624.9	5833.3	5023.4	4456.9	4137.8	3954.8	3844.9
34°	8049.7	7986.4	7842.4	7412.9	6703.5	5915.2	5090.9	4500.7	4176.7	3990.2	3879.8
35°	8054.1	7993.4	7878.5	7480.8	6781.1	5994.4	5158.2	4545.5	4216.5	4026.6	3917.0
36°	8051.7	7995.5	7907.1	7543.4	6852.4	6071.2	5225.2	4590.3	4257.0	4063.8	3955.6
37°	8040.6	7989.2	7927.4	7600.3	6921.8	6145.1	5290.7	4636.7	4298.2	4102.6	3995.3
38°	8023.9	7977.8	7940.9	7651.3	6988.3	6217.7	5358.4	4684.1	4339.1	4143.2	4035.5
39°	8003.5	7963.7	7945.7	7694.5	7052.4	6288.9	5426.1	4731.3	4381.1	4183.7	4075.5
40°	7976.3	7943.4	7945.5	7733.8	7112.9	6357.8	5494.9	4781.6	4424.3	4225.5	4116.0
41°	7939.2	7915.9	7936.9	7766.8	7169.1	6424.1	5560.2	4834.3	4468.8	4267.6	4157.3
42°	7898.2	7881.7	7922.4	7795.3	7224.9	6489.2	5623.5	4887.3	4513.6	4311.7	4199.4
43°	7848.1	7844.3	7902.7	7816.3	7275.3	6553.9	5686.0	4938.8	4558.4	4357.7	4241.9
44°	7789.6	7801.0	7875.6	7828.4	7323.2	6615.7	5743.1	4992.7	4604.6	4403.5	4286.1



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CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	7721.7	7747.4	7838.9	7837.5	7369.9	6677.4	5801.8	5049.3	4653.9	4450.1	4330.6
46°	7642.0	7690.6	7801.3	7839.0	7414.1	6738.5	5858.8	5108.0	4704.6	4498.1	4376.5
47°	7556.2	7621.0	7755.1	7833.7	7457.0	6800.4	5914.2	5167.2	4756.2	4546.4	4424.2
48°	7464.5	7545.1	7701.7	7819.3	7495.1	6856.8	5966.0	5227.2	4809.9	4595.6	4472.3
49°	7360.1	7459.0	7643.3	7802.4	7528.5	6911.6	6015.7	5287.7	4865.2	4647.8	4521.8
50°	7247.5	7362.1	7572.8	7774.5	7558.2	6965.3	6063.7	5347.7	4920.8	4700.3	4573.7
51°	7120.5	7256.1	7495.4	7740.9	7583.7	7014.7	6112.1	5408.4	4979.2	4756.8	4625.7
52°	6985.7	7135.9	7407.0	7696.7	7604.0	7059.9	6157.3	5471.7	5039.1	4815.3	4682.1
53°	6842.1	7007.9	7312.8	7644.0	7619.0	7101.1	6200.0	5531.5	5099.8	4873.4	4735.8
54°	6693.5	6866.7	7207.9	7585.7	7624.6	7137.4	6240.7	5589.9	5164.2	4933.8	4793.6
55°	6536.8	6716.1	7091.6	7516.8	7621.5	7166.8	6276.2	5642.6	5229.1	4997.5	4852.8
56°	6370.0	6562.9	6965.1	7438.9	7611.5	7189.1	6308.5	5693.4	5294.3	5062.8	4913.4
57°	6208.0	6402.2	6836.5	7354.4	7588.3	7203.3	6337.2	5740.0	5359.9	5131.6	4975.8
58°	6036.4	6239.1	6698.6	7260.8	7553.3	7205.8	6356.5	5782.2	5425.7	5203.2	5034.5
59°	5867.0	6072.9	6560.3	7156.5	7506.8	7195.7	6367.9	5820.0	5491.6	5278.7	5092.4
60°	5684.9	5905.6	6414.6	7044.4	7447.6	7173.3	6373.5	5852.3	5557.7	5355.0	5149.7
61°	5496.0	5729.5	6269.1	6928.3	7374.7	7140.4	6367.1	5878.2	5623.9	5432.5	5207.4
62°	5298.4	5550.1	6124.7	6803.0	7292.5	7089.9	6349.1	5896.6	5687.7	5509.2	5264.0
63°	5103.8	5369.4	5982.0	6672.2	7200.7	7020.6	6316.0	5906.9	5750.3	5584.6	5318.8
64°	4920.6	5194.1	5840.4	6539.4	7092.7	6933.0	6267.1	5909.2	5811.7	5660.1	5371.2
65°	4772.7	5034.0	5702.5	6403.5	6976.0	6829.0	6205.8	5899.4	5870.5	5736.6	5420.7
66°	4664.0	4902.1	5570.0	6268.2	6844.2	6704.0	6122.0	5875.0	5921.6	5820.9	5465.7
67°	4602.4	4805.7	5450.0	6135.1	6694.3	6563.5	6014.5	5834.4	5964.6	5900.4	5507.4
68°	4538.4	4739.8	5345.4	6003.3	6528.3	6398.5	5825.9	5763.8	5996.5	5975.3	5505.7
69°	4392.0	4675.8	5260.4	5872.2	6343.3	6181.4	5523.6	5623.8	6008.4	6042.6	5483.2
70°	4103.3	4558.0	5193.2	5739.8	6149.4	5878.1	5104.9	5390.9	6000.7	6097.3	5487.0
71°	3665.7	4325.0	5132.5	5614.2	5917.9	5484.0	4594.6	5054.4	5943.9	6132.1	5455.3
72°	3193.2	3945.4	5060.2	5484.1	5634.7	5016.7	4112.0	4664.5	5805.7	6118.2	5390.8
73°	2705.3	3454.3	4945.4	5344.8	5305.6	4539.4	3706.3	4277.8	5587.6	6043.6	5302.8
74°	2142.6	2925.2	4722.0	5177.2	4936.2	4074.7	3222.6	3911.0	5307.1	5905.3	5129.3
75°	1437.0	2354.4	4328.4	4934.2	4516.8	3563.2	2450.7	3481.0	4992.1	5689.7	4869.3
76°	782.1	1670.8	3797.7	4580.3	4079.3	2864.5	1678.9	2694.9	4680.8	5340.0	4516.8
77°	511.5	932.5	3228.3	4074.2	3601.8	1941.5	913.4	1908.7	4329.0	4827.5	4099.7
78°	243.2	686.9	2543.8	3375.7	2996.9	1064.2	443.3	1127.0	3806.8	4130.3	3587.4
79°	193.7	445.5	1677.5	2557.7	2218.4	789.8	276.2	549.2	2885.4	3369.0	3011.3
80°	167.0	204.2	887.1	1687.3	1358.9	532.5	238.9	305.7	1964.1	2689.2	2475.6
81°	143.6	172.5	566.7	883.3	970.2	275.2	201.6	255.9	1046.1	2126.2	2245.7
82°	122.6	146.8	252.7	568.8	597.4	232.3	164.4	206.1	502.2	1567.0	1898.9
83°	103.3	122.9	202.8	258.1	224.6	191.1	138.5	156.4	330.4	1173.6	1552.0
84°	85.7	101.1	164.2	202.2	180.2	148.0	114.0	126.4	265.1	826.0	1201.5
85°	68.2	82.9	125.6	166.8	138.7	113.6	90.3	100.7	217.1	532.8	742.9
86°	50.6	64.7	94.1	133.8	102.0	89.4	68.2	78.2	169.2	382.7	524.9
87°	34.6	46.5	68.2	97.5	75.3	65.4	47.5	58.0	123.6	232.7	306.9
88°	20.0	30.4	42.2	78.3	48.6	41.3	33.0	44.3	81.7	86.0	91.4
89°	8.5	13.2	17.6	59.5	22.0	20.8	18.5	30.5	55.5	58.3	61.8



REPORT NUMBER: P1436739

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

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: P1436739

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

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: P1436739

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

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: P1436739

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3691.7	3691.7	3691.7	3691.7	3691.7	3691.7	3691.7	3691.7	3691.7	3691.7	3691.7
1°	3638.1	3637.6	3640.6	3650.3	3659.8	3673.5	3687.9	3691.1	3705.4	3720.9	3733.1
2°	3591.9	3590.1	3597.1	3610.7	3629.6	3652.5	3681.2	3698.6	3730.1	3760.5	3786.8
3°	3551.7	3549.2	3558.0	3576.3	3603.2	3637.6	3678.4	3710.9	3757.3	3805.1	3847.5
4°	3518.1	3515.1	3525.6	3548.2	3582.5	3626.2	3679.1	3726.1	3789.1	3854.3	3914.2
5°	3489.7	3485.4	3498.0	3525.2	3565.1	3618.9	3682.7	3744.4	3826.2	3909.5	3985.4
6°	3465.9	3460.8	3475.4	3505.7	3553.2	3614.9	3689.7	3766.8	3865.5	3969.1	4067.3
7°	3445.3	3440.8	3455.8	3490.3	3543.4	3614.6	3701.6	3793.6	3910.4	4036.0	4156.0
8°	3430.4	3424.8	3441.8	3479.6	3537.7	3617.2	3715.9	3822.0	3958.1	4108.6	4251.8
9°	3417.8	3412.3	3430.6	3472.5	3535.5	3622.8	3732.5	3853.5	4010.5	4186.2	4354.1
10°	3409.7	3403.6	3423.9	3468.8	3536.4	3630.3	3751.2	3888.4	4066.1	4268.3	4464.8
11°	3405.9	3399.1	3421.1	3469.5	3542.1	3641.2	3774.1	3927.4	4128.6	4356.8	4585.1
12°	3404.6	3398.2	3421.4	3473.6	3550.4	3655.9	3799.6	3968.1	4192.4	4451.1	4709.9
13°	3407.6	3399.4	3423.8	3479.9	3560.9	3672.3	3827.3	4012.0	4259.9	4550.6	4846.2
14°	3410.8	3404.0	3430.0	3488.9	3575.1	3691.0	3855.8	4056.9	4330.3	4655.2	4989.5
15°	3417.2	3409.5	3438.0	3499.9	3591.5	3712.9	3886.0	4103.5	4403.2	4766.0	5144.0
16°	3424.6	3416.9	3446.5	3511.1	3607.9	3736.1	3918.2	4153.6	4479.9	4883.6	5305.3
17°	3433.2	3425.5	3457.0	3524.9	3626.9	3761.3	3952.7	4205.4	4560.5	5005.7	5470.0
18°	3443.8	3435.7	3469.7	3539.0	3647.1	3786.2	3987.4	4258.3	4641.6	5133.5	5638.0
19°	3455.3	3448.3	3482.7	3555.4	3667.2	3814.2	4024.6	4312.7	4726.2	5263.8	5804.0
20°	3470.5	3462.6	3498.6	3573.6	3688.7	3842.0	4063.2	4369.4	4816.8	5395.0	5962.6
21°	3486.8	3480.0	3516.1	3593.5	3710.2	3871.6	4104.5	4428.5	4906.4	5531.8	6117.1
22°	3504.9	3497.6	3536.0	3615.2	3734.4	3902.9	4146.4	4489.4	5003.6	5663.3	6265.2
23°	3524.9	3518.9	3557.6	3638.4	3760.4	3935.6	4188.3	4552.3	5104.0	5793.8	6406.2
24°	3546.3	3542.5	3581.3	3663.7	3787.3	3968.0	4231.4	4616.7	5203.1	5917.8	6537.5
25°	3569.8	3566.7	3606.8	3690.3	3816.9	4002.5	4276.7	4680.6	5304.0	6039.5	6662.6
26°	3595.5	3594.0	3634.2	3717.4	3847.4	4037.1	4321.6	4747.5	5406.1	6152.6	6783.7
27°	3621.4	3623.2	3662.7	3745.9	3878.9	4071.1	4367.5	4815.3	5508.5	6261.8	6895.7
28°	3649.0	3656.2	3692.4	3776.6	3911.8	4108.1	4413.5	4886.4	5609.8	6366.8	7004.5
29°	3679.0	3690.4	3723.9	3807.7	3945.8	4145.0	4460.7	4955.3	5707.7	6466.2	7108.3
30°	3711.1	3727.5	3757.8	3839.5	3978.7	4183.3	4507.2	5025.7	5805.4	6560.2	7205.1
31°	3744.9	3765.1	3793.3	3872.4	4014.2	4221.6	4553.4	5096.3	5898.5	6648.5	7295.9
32°	3780.1	3805.6	3829.0	3908.3	4051.1	4261.7	4601.0	5167.8	5987.8	6732.7	7381.5
33°	3816.8	3846.5	3865.5	3943.6	4087.8	4301.4	4648.0	5239.8	6075.4	6816.4	7463.3
34°	3853.2	3887.7	3902.1	3980.7	4126.4	4342.0	4695.4	5311.6	6156.2	6894.3	7539.2
35°	3889.8	3930.0	3938.7	4019.2	4164.7	4384.2	4743.0	5384.1	6237.1	6971.7	7606.9
36°	3927.7	3973.1	3975.4	4058.7	4203.6	4426.2	4793.8	5458.0	6315.3	7041.5	7669.9
37°	3962.5	4015.2	4013.0	4097.9	4243.7	4469.9	4844.6	5528.9	6389.5	7110.5	7726.5
38°	4001.1	4059.4	4052.4	4140.2	4284.6	4512.4	4897.2	5601.3	6463.3	7175.5	7779.3
39°	4039.6	4102.3	4091.8	4181.6	4326.4	4558.5	4949.9	5670.7	6531.6	7237.4	7823.9
40°	4079.3	4143.8	4133.1	4224.1	4370.0	4602.7	5003.5	5738.4	6597.7	7296.3	7862.8
41°	4120.6	4183.4	4174.2	4267.5	4414.5	4648.5	5057.5	5805.6	6661.0	7351.6	7892.0
42°	4161.6	4223.1	4217.0	4309.8	4461.2	4696.7	5112.8	5869.4	6725.3	7406.7	7914.7
43°	4203.1	4261.6	4261.2	4356.7	4506.9	4746.3	5171.4	5931.9	6788.1	7455.5	7934.2
44°	4247.1	4301.8	4306.6	4402.7	4554.5	4798.9	5230.2	5993.6	6849.9	7500.2	7943.9

REPORT NUMBER: P1436739

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	4292.2	4341.9	4352.1	4450.5	4604.2	4849.0	5289.9	6054.1	6908.4	7543.5	7948.7
46°	4338.1	4379.4	4398.9	4497.4	4653.6	4903.0	5348.9	6109.6	6964.9	7582.1	7944.7
47°	4386.5	4416.1	4448.3	4545.2	4705.3	4955.3	5409.1	6160.7	7019.2	7618.1	7934.3
48°	4435.6	4455.4	4499.0	4594.6	4757.4	5010.3	5469.1	6211.5	7069.0	7647.9	7918.0
49°	4486.8	4496.2	4549.4	4643.1	4810.2	5066.4	5526.9	6259.4	7116.2	7674.2	7894.1
50°	4538.8	4535.3	4602.3	4694.0	4865.5	5125.3	5585.0	6304.8	7157.1	7698.0	7864.5
51°	4594.5	4576.2	4655.6	4745.9	4919.7	5182.9	5641.9	6345.8	7195.3	7713.5	7825.8
52°	4648.5	4615.7	4709.0	4800.0	4979.2	5240.6	5697.4	6383.6	7226.4	7723.5	7777.3
53°	4698.5	4647.1	4757.5	4854.1	5038.3	5300.0	5747.9	6417.6	7249.9	7725.2	7721.6
54°	4741.7	4669.3	4802.5	4910.8	5100.9	5358.4	5796.1	6443.7	7268.2	7723.4	7659.4
55°	4780.8	4693.0	4841.8	4968.5	5163.2	5417.7	5840.2	6465.5	7277.7	7709.2	7591.2
56°	4821.4	4721.8	4880.2	5028.0	5230.5	5477.9	5877.8	6482.3	7276.8	7686.9	7512.3
57°	4859.9	4752.4	4919.4	5086.4	5296.2	5538.7	5913.2	6491.2	7264.4	7651.6	7424.7
58°	4897.8	4774.5	4956.8	5149.7	5365.6	5596.9	5941.6	6495.0	7241.1	7606.8	7327.0
59°	4928.6	4790.9	4987.4	5208.5	5438.3	5652.5	5964.2	6491.9	7206.5	7550.3	7221.6
60°	4955.0	4810.6	5013.9	5267.9	5512.4	5707.5	5983.6	6479.3	7161.1	7481.9	7106.4
61°	4982.2	4829.2	5041.4	5323.8	5588.0	5763.2	5996.0	6452.3	7105.1	7400.0	6984.2
62°	5008.9	4841.4	5067.8	5382.6	5660.0	5819.7	6000.1	6412.0	7034.6	7305.6	6855.6
63°	5029.5	4850.8	5091.1	5438.5	5729.4	5871.4	5996.8	6360.3	6946.1	7198.0	6722.0
64°	5047.3	4854.9	5111.7	5491.5	5799.0	5919.6	5986.4	6293.8	6844.6	7082.1	6587.1
65°	5048.9	4818.1	5113.3	5540.8	5869.0	5962.4	5960.3	6207.0	6723.9	6950.1	6445.9
66°	5001.2	4786.6	5061.3	5581.7	5937.8	5995.8	5921.6	6098.1	6585.0	6803.1	6302.7
67°	4974.0	4770.7	5033.3	5613.3	5999.1	6022.5	5859.5	5938.5	6428.6	6642.9	6163.2
68°	4962.9	4710.9	5013.7	5600.8	6057.2	6036.8	5743.6	5667.2	6226.5	6469.1	6021.4
69°	4891.7	4541.2	4936.0	5569.2	6105.2	6026.6	5534.3	5269.2	5937.3	6271.3	5880.8
70°	4751.4	4232.8	4797.3	5565.5	6142.0	5983.8	5205.6	4756.1	5552.2	6044.2	5739.5
71°	4528.2	3777.9	4575.5	5526.0	6148.4	5875.9	4792.0	4228.1	5071.4	5769.4	5588.3
72°	4170.7	3354.4	4220.6	5460.7	6105.4	5683.3	4356.5	3762.3	4559.9	5435.8	5430.7
73°	3729.2	2952.6	3765.5	5359.3	5992.9	5405.1	3943.0	3303.7	4065.9	5049.7	5249.8
74°	3296.1	2503.8	3347.5	5177.4	5809.2	5091.5	3519.6	2722.3	3564.1	4610.8	5037.8
75°	2840.7	1906.7	2903.3	4897.6	5532.5	4745.4	2949.3	1892.7	2959.2	4128.5	4738.0
76°	2292.9	1377.3	2351.6	4528.3	5105.4	4376.3	2121.0	1071.7	2132.6	3623.9	4325.7
77°	1764.7	1254.6	1864.0	4103.8	4526.0	3931.0	1298.3	785.2	1247.4	3069.2	3757.2
78°	1660.3	1636.3	1809.8	3578.3	3815.3	3233.6	640.7	514.0	922.9	2382.7	3004.1
79°	2046.0	1556.3	2178.8	2969.9	3116.9	2248.2	341.1	242.9	612.9	1578.0	2169.5
80°	2391.0	1476.4	1862.1	2370.3	2530.0	1270.1	283.4	207.0	302.9	891.3	1335.0
81°	1866.2	1389.0	1545.5	2151.1	1943.0	610.0	225.8	177.4	251.3	579.1	964.2
82°	1341.2	797.3	1223.9	1778.4	1356.2	360.8	168.3	150.1	213.7	268.9	603.6
83°	764.2	566.9	693.3	1405.6	938.3	278.9	139.9	125.3	174.6	204.6	243.0
84°	431.1	336.4	418.7	1031.3	568.6	228.9	114.0	101.5	136.2	163.8	192.4
85°	286.0	109.0	336.4	578.3	414.7	178.8	90.8	80.5	104.0	123.9	158.6
86°	142.0	73.8	254.1	463.0	260.8	129.1	69.7	59.7	80.7	90.1	126.6
87°	98.6	38.6	171.8	347.7	108.7	91.1	51.0	38.9	57.6	64.7	88.8
88°	55.2	3.5	89.5	232.4	73.8	62.0	35.2	22.0	34.5	39.3	51.9
89°	12.2	2.3	8.1	117.0	38.9	32.9	19.3	8.2	14.9	15.7	15.1



REPORT NUMBER: P1436739

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

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: P1436739

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

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: P1436739

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

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: P1436739

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	3691.7	3691.7	3691.7
1°	3743.8	3751.2	3754.4
2°	3809.3	3824.1	3826.9
3°	3880.6	3902.1	3908.7
4°	3960.3	3992.2	3999.6
5°	4049.7	4091.1	4102.0
6°	4148.7	4200.0	4214.8
7°	4254.5	4320.2	4337.6
8°	4369.0	4448.9	4472.1
9°	4495.6	4586.9	4617.3
10°	4629.8	4739.7	4774.2
11°	4776.1	4908.0	4944.8
12°	4934.7	5083.5	5128.7
13°	5104.9	5274.4	5323.6
14°	5285.0	5480.3	5539.2
15°	5473.2	5693.4	5768.9
16°	5666.4	5915.8	6005.5
17°	5866.3	6142.7	6241.6
18°	6062.5	6367.9	6474.3
19°	6253.2	6581.0	6693.0
20°	6437.4	6783.6	6894.3
21°	6609.6	6967.1	7075.7
22°	6771.2	7131.1	7232.1
23°	6925.3	7277.1	7374.0
24°	7068.0	7408.2	7498.5
25°	7202.3	7521.3	7605.6
26°	7322.6	7621.9	7697.9
27°	7434.7	7707.2	7780.9
28°	7533.7	7781.4	7850.9
29°	7623.5	7844.0	7909.0
30°	7699.9	7897.6	7954.8
31°	7769.9	7938.1	7992.4
32°	7829.1	7972.8	8019.6
33°	7879.8	7996.7	8040.4
34°	7920.9	8012.6	8049.7
35°	7955.7	8018.8	8054.1
36°	7982.1	8018.4	8051.7
37°	7998.9	8013.0	8040.6
38°	8009.9	8000.8	8023.9
39°	8013.4	7984.4	8003.5
40°	8011.0	7962.2	7976.3
41°	8001.0	7935.2	7939.2
42°	7984.9	7903.0	7898.2
43°	7962.5	7867.0	7848.1
44°	7932.6	7822.4	7789.6



REPORT NUMBER: P1436739

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	7898.9	7772.6	7721.7
46°	7857.7	7713.8	7642.0
47°	7811.2	7646.6	7556.2
48°	7758.3	7572.8	7464.5
49°	7698.8	7486.9	7360.1
50°	7630.9	7395.4	7247.5
51°	7553.1	7292.7	7120.5
52°	7465.6	7175.2	6985.7
53°	7367.9	7049.9	6842.1
54°	7265.4	6915.5	6693.5
55°	7154.1	6768.4	6536.8
56°	7031.4	6616.1	6370.0
57°	6901.4	6458.2	6208.0
58°	6763.0	6292.3	6036.4
59°	6623.3	6126.5	5867.0
60°	6481.9	5956.3	5684.9
61°	6335.3	5780.9	5496.0
62°	6192.6	5603.4	5298.4
63°	6051.4	5424.3	5103.8
64°	5914.7	5258.6	4920.6
65°	5783.6	5101.0	4772.7
66°	5659.7	4972.4	4664.0
67°	5541.6	4877.6	4602.4
68°	5435.5	4812.5	4538.4
69°	5343.2	4745.1	4392.0
70°	5272.8	4632.4	4103.3
71°	5200.3	4416.0	3665.7
72°	5107.9	4034.7	3193.2
73°	4965.8	3535.4	2705.3
74°	4707.3	2981.8	2142.6
75°	4299.6	2399.9	1437.0
76°	3767.1	1736.4	782.1
77°	3171.6	997.7	511.5
78°	2426.3	736.6	243.2
79°	1556.0	475.7	193.7
80°	830.0	214.8	167.0
81°	544.2	177.9	143.6
82°	262.0	151.0	122.6
83°	202.3	126.9	103.3
84°	162.5	104.7	85.7
85°	123.4	85.7	68.2
86°	91.8	66.7	50.6
87°	65.6	47.7	34.6
88°	39.5	30.3	20.0
89°	15.5	12.8	8.5



REPORT NUMBER: P1436739

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

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: P1436739

CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

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: P1436739
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)