

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: P1445004

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

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1445004
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)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 100% (180W)
OPTICS - TYPE 4
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 28628 (1 lamp)
Luminaire Lumens: 28198.8 lumens
Efficiency: 98.5%
Efficacy: 165.3 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): 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

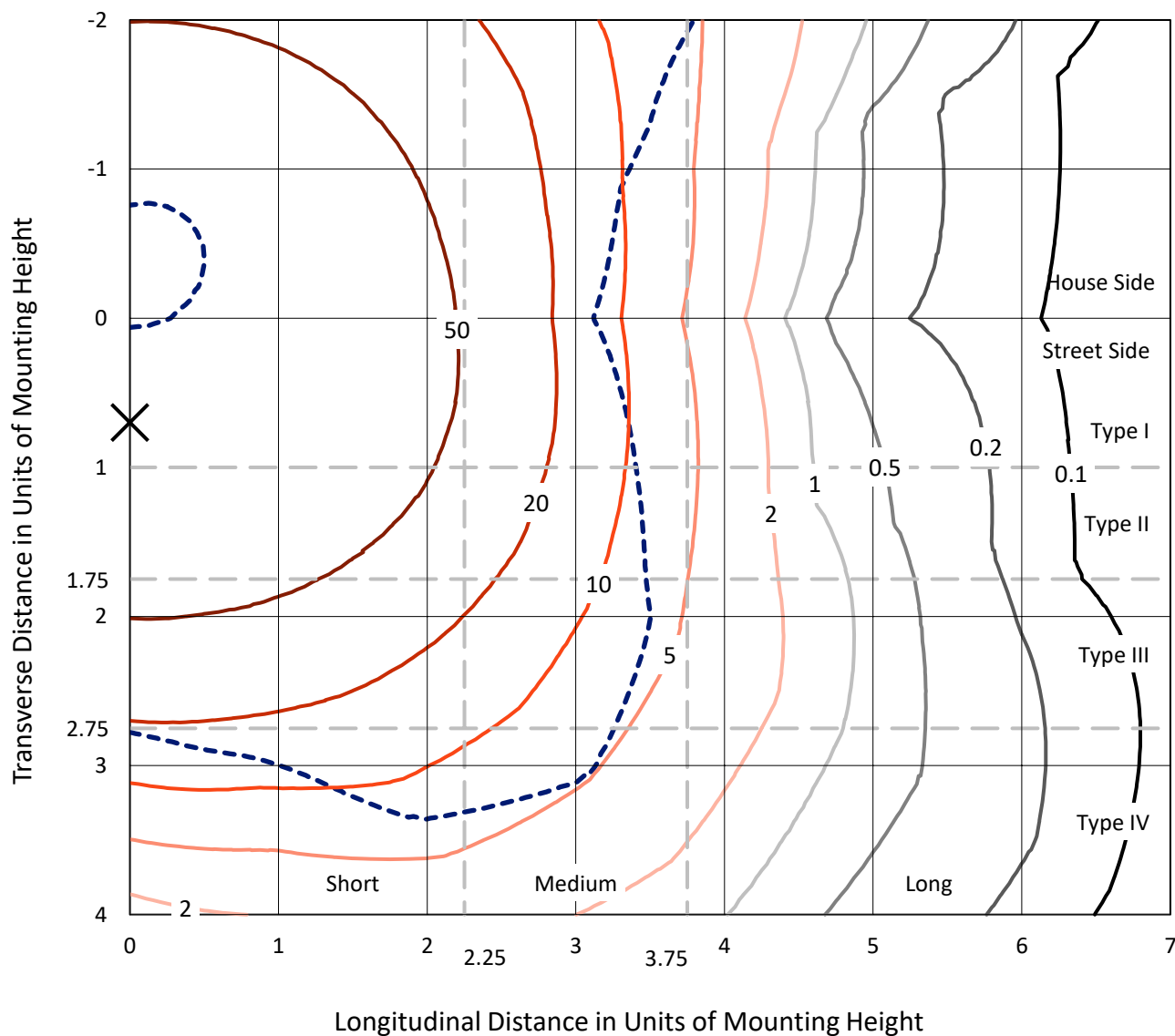
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

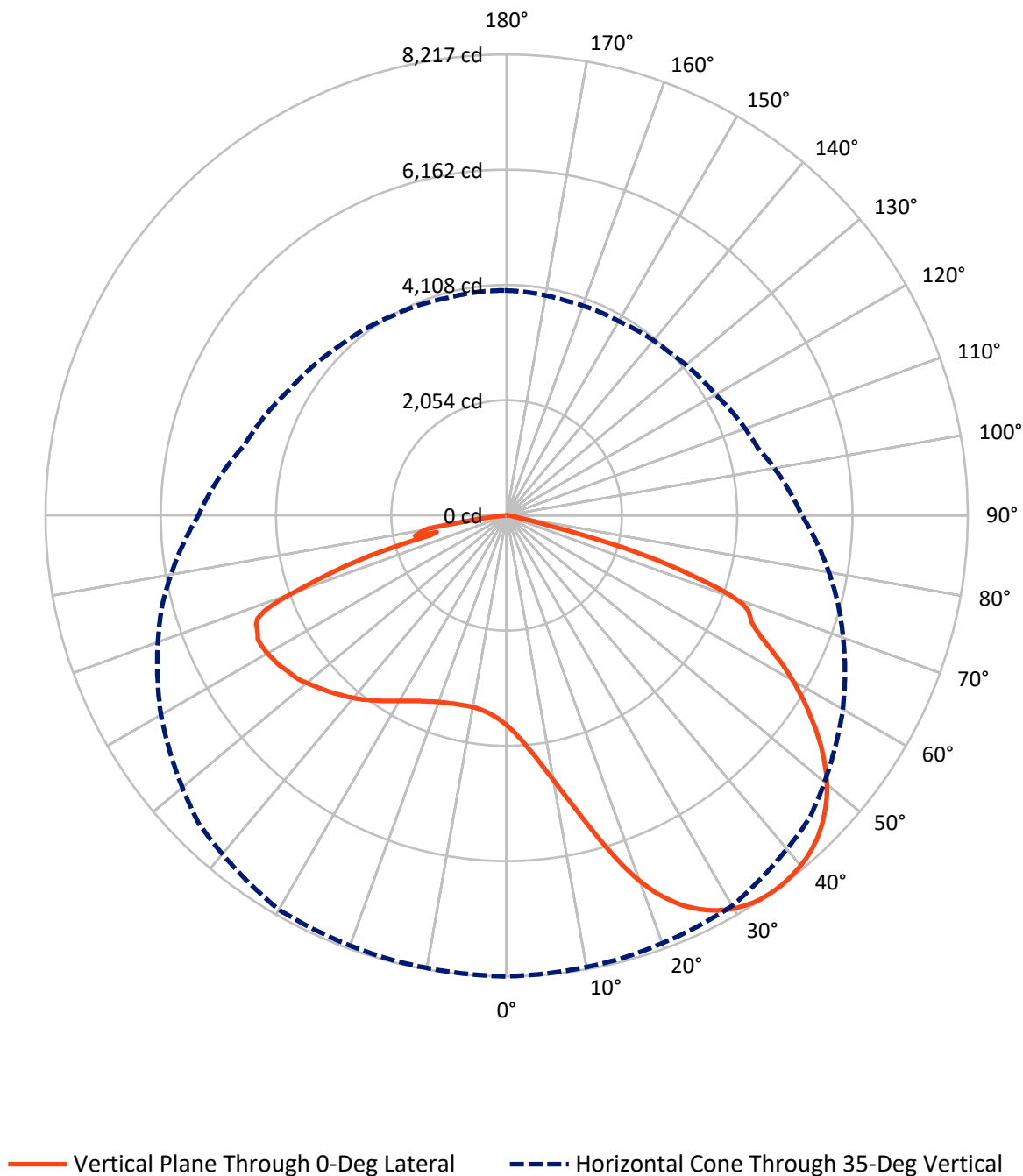


Based on 3 foot mounting height. Maximum calculated value = 650.9 fc
Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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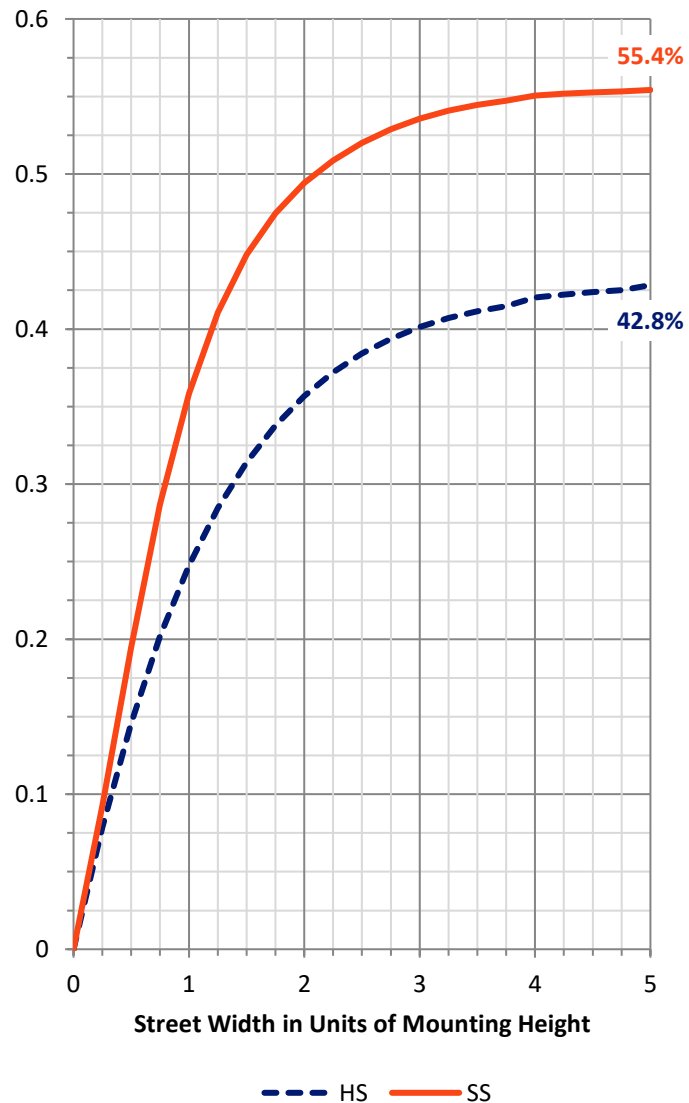
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12345.0	0.0	12345.0
	% Lamp	43.1	0.0	43.1
Street Side	Lumens	15853.8	0.0	15853.8
	% Lamp	55.4	0.0	55.4
Total	Lumens	28198.8	0.0	28198.8
	% Lamp	98.5	0.0	98.5

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	373.6	1.3	1.3
10°-20°	1267.8	4.5	4.4
20°-30°	2433.7	8.6	8.5
30°-40°	3666.1	13.0	12.8
40°-50°	4794.4	17.0	16.7
50°-60°	5638.4	20.0	19.7
60°-70°	5882.7	20.9	20.5
70°-80°	3766.2	13.4	13.2
80°-90°	375.9	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°	28198.8	100.0	98.5
0°-180°	28198.8	100.0	98.5

Coefficient of Utilization



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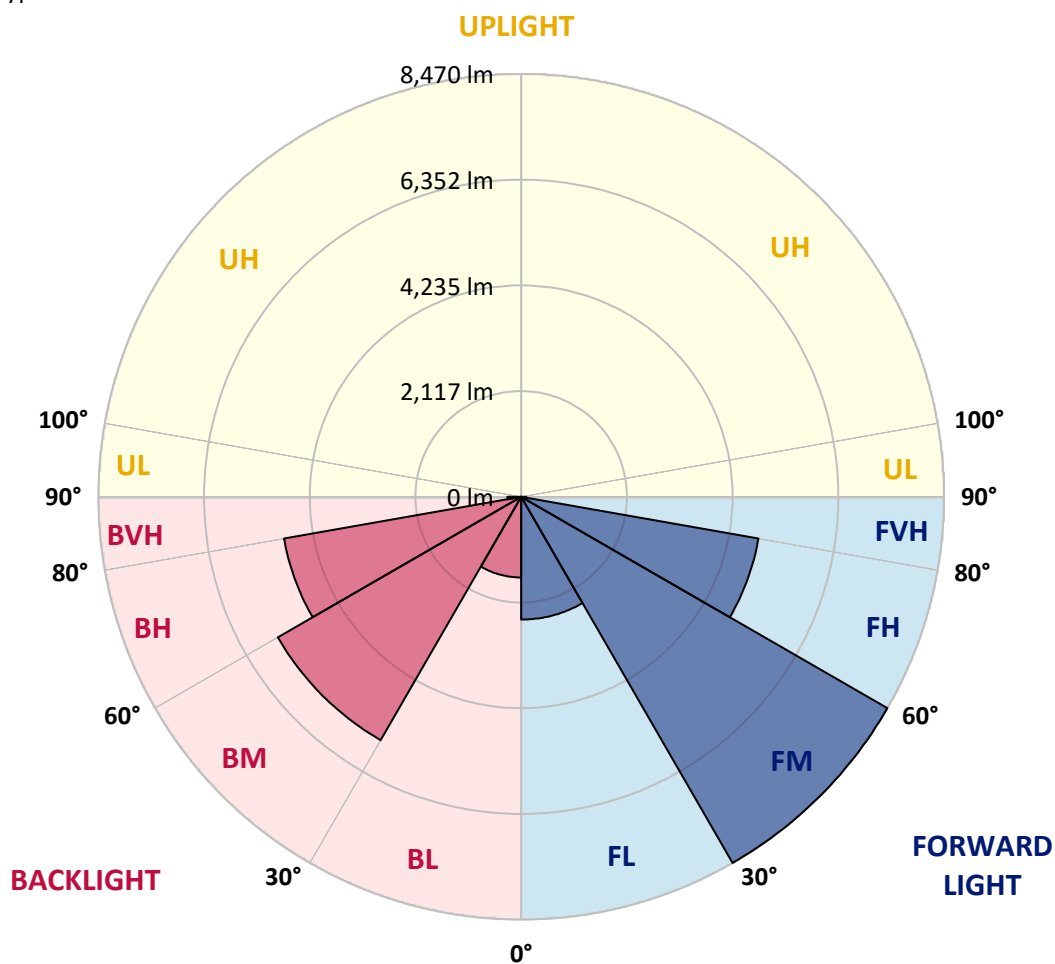
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2459.2	8.6			
FM	(30°-60°)	8469.7	29.6			
FH	(60°-80°)	4825.9	16.9			G2/5000
FVH	(80°-90°)	99.0	0.3			G1/100
BL	(0°-30°)	1615.9	5.6	B3/2500		
BM	(30°-60°)	5629.2	19.7	B4/8500		
BH	(60°-80°)	4823.1	16.8	B4/5000		G4/5000
BVH	(80°-90°)	276.9	1.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		429.2	1.5			

BUG Rating: B4-U0-G4

Type IV Short



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

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	3766.1	3766.1	3766.1	3766.1	3766.1	3766.1	3766.1	3766.1	3766.1	3766.1	3766.1
1°	3830.1	3829.0	3823.9	3814.7	3802.0	3788.5	3759.4	3744.1	3731.9	3721.3	3714.7
2°	3904.0	3900.6	3887.6	3865.4	3836.3	3805.6	3760.5	3731.6	3706.1	3685.2	3671.8
3°	3987.5	3980.8	3957.4	3921.9	3877.9	3829.2	3767.1	3723.2	3685.2	3655.1	3633.9
4°	4080.3	4068.8	4035.4	3985.4	3923.6	3856.1	3776.0	3718.3	3668.6	3630.3	3603.0
5°	4184.7	4168.9	4123.4	4054.9	3974.7	3887.7	3788.3	3715.7	3655.7	3609.3	3576.5
6°	4299.8	4277.7	4220.9	4133.0	4030.1	3921.6	3802.8	3716.8	3646.5	3593.0	3554.6
7°	4425.1	4397.8	4327.1	4220.1	4090.8	3960.0	3822.7	3721.7	3640.4	3580.3	3538.0
8°	4562.3	4527.8	4442.6	4311.7	4156.4	4003.8	3846.0	3730.8	3638.4	3569.7	3524.2
9°	4710.4	4672.5	4566.9	4411.0	4230.4	4049.5	3872.0	3741.3	3640.1	3563.7	3513.8
10°	4870.4	4821.5	4700.7	4519.4	4309.9	4099.8	3901.8	3756.3	3644.4	3562.4	3506.7
11°	5044.5	4989.3	4845.0	4636.1	4393.1	4154.0	3933.7	3774.5	3651.5	3564.0	3503.8
12°	5232.1	5164.1	4998.0	4756.6	4478.8	4213.4	3968.8	3793.9	3661.4	3567.8	3505.9
13°	5431.0	5355.4	5164.3	4886.0	4571.6	4276.2	4005.5	3815.5	3673.2	3574.8	3510.2
14°	5650.9	5562.5	5341.8	5024.3	4670.0	4339.0	4042.8	3837.1	3686.1	3583.7	3515.4
15°	5885.2	5784.6	5529.0	5169.7	4771.1	4404.4	4082.8	3860.3	3701.4	3594.5	3523.1
16°	6126.6	6010.7	5724.4	5325.9	4880.1	4474.2	4125.9	3886.9	3717.6	3606.6	3533.3
17°	6367.4	6239.6	5919.2	5486.1	4993.7	4546.5	4170.6	3913.5	3736.4	3619.4	3544.7
18°	6604.8	6463.3	6114.7	5647.3	5112.3	4620.3	4217.3	3943.8	3756.6	3635.3	3555.6
19°	6827.9	6678.0	6307.4	5803.7	5235.1	4697.4	4265.8	3975.4	3777.1	3652.1	3569.1
20°	7033.3	6880.8	6490.2	5959.7	5360.0	4777.9	4317.2	4009.0	3799.2	3669.8	3584.6
21°	7218.4	7068.9	6667.5	6111.2	5483.4	4861.6	4369.2	4043.9	3822.5	3686.9	3601.4
22°	7377.9	7229.7	6833.5	6258.7	5607.8	4947.4	4423.7	4080.3	3849.2	3706.9	3620.1
23°	7522.6	7384.5	6987.9	6399.9	5730.8	5037.2	4480.3	4117.5	3878.2	3728.2	3640.8
24°	7649.7	7518.1	7131.1	6532.6	5851.4	5129.4	4537.8	4156.8	3908.0	3752.5	3663.0
25°	7758.9	7637.4	7263.8	6662.5	5969.5	5222.9	4598.6	4197.4	3938.6	3778.6	3685.7
26°	7853.1	7742.9	7388.0	6784.0	6083.2	5315.5	4660.3	4239.4	3970.6	3805.3	3710.7
27°	7937.8	7832.6	7497.8	6900.6	6193.8	5410.0	4722.3	4282.0	4003.0	3833.6	3736.7
28°	8009.2	7909.1	7596.9	7012.5	6298.3	5503.6	4786.6	4323.4	4037.3	3864.5	3764.2
29°	8068.5	7975.8	7687.5	7118.7	6397.5	5597.0	4852.2	4366.8	4070.7	3897.9	3793.0
30°	8115.2	8029.2	7768.6	7221.2	6495.8	5687.3	4920.1	4411.0	4107.1	3931.0	3822.9
31°	8153.5	8072.1	7839.5	7315.6	6586.9	5777.0	4987.8	4454.3	4144.6	3964.7	3854.1
32°	8181.3	8107.0	7902.2	7403.7	6674.3	5865.2	5056.4	4499.7	4181.9	3999.8	3887.7
33°	8202.5	8132.4	7956.9	7487.4	6758.5	5950.9	5124.7	4546.8	4221.2	4034.6	3922.5
34°	8212.0	8147.4	8000.6	7562.3	6838.7	6034.5	5193.5	4591.5	4260.9	4070.6	3958.0
35°	8216.5	8154.6	8037.4	7631.7	6917.9	6115.3	5262.2	4637.2	4301.5	4107.8	3995.9
36°	8214.0	8156.7	8066.6	7695.5	6990.5	6193.6	5330.5	4682.9	4342.9	4145.8	4035.3
37°	8202.7	8150.3	8087.2	7753.5	7061.4	6269.0	5397.4	4730.2	4384.8	4185.4	4075.8
38°	8185.7	8138.7	8101.0	7805.6	7129.2	6343.1	5466.5	4778.5	4426.6	4226.7	4116.9
39°	8164.9	8124.3	8106.0	7849.7	7194.6	6415.7	5535.5	4826.7	4469.4	4268.1	4157.7
40°	8137.2	8103.6	8105.8	7889.8	7256.3	6486.0	5605.7	4878.0	4513.5	4310.7	4199.0
41°	8099.3	8075.5	8096.9	7923.4	7313.6	6553.6	5672.3	4931.8	4558.9	4353.7	4241.1
42°	8057.5	8040.7	8082.1	7952.5	7370.6	6620.1	5736.9	4985.9	4604.6	4398.6	4284.1
43°	8006.4	8002.4	8062.0	7973.9	7422.0	6686.1	5800.7	5038.4	4650.3	4445.6	4327.4
44°	7946.7	7958.3	8034.4	7986.3	7470.8	6749.1	5858.9	5093.3	4697.5	4492.3	4372.5

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

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	7877.4	7903.6	7996.9	7995.5	7518.5	6812.1	5918.8	5151.2	4747.7	4539.9	4417.9
46°	7796.1	7845.7	7958.6	7997.1	7563.6	6874.4	5977.0	5211.0	4799.5	4588.8	4464.7
47°	7708.6	7774.7	7911.5	7991.7	7607.4	6937.6	6033.4	5271.4	4852.1	4638.1	4513.4
48°	7615.0	7697.3	7857.0	7976.9	7646.3	6995.1	6086.3	5332.6	4906.9	4688.3	4562.5
49°	7508.6	7609.4	7797.5	7959.7	7680.3	7050.9	6137.0	5394.4	4963.3	4741.5	4613.0
50°	7393.6	7510.5	7725.5	7931.2	7710.6	7105.8	6186.0	5455.5	5020.1	4795.1	4665.9
51°	7264.1	7402.4	7646.6	7897.0	7736.6	7156.1	6235.3	5517.5	5079.6	4852.7	4718.9
52°	7126.6	7279.8	7556.3	7851.9	7757.4	7202.2	6281.4	5582.0	5140.7	4912.4	4776.6
53°	6980.1	7149.2	7460.3	7798.1	7772.6	7244.3	6325.0	5643.1	5202.7	4971.7	4831.3
54°	6828.5	7005.1	7353.2	7738.7	7778.3	7281.3	6366.5	5702.7	5268.4	5033.3	4890.2
55°	6668.6	6851.6	7234.6	7668.4	7775.2	7311.4	6402.8	5756.3	5334.6	5098.3	4950.6
56°	6498.4	6695.2	7105.6	7588.9	7765.0	7334.1	6435.7	5808.2	5401.1	5164.8	5012.5
57°	6333.2	6531.3	6974.4	7502.7	7741.3	7348.6	6464.9	5855.7	5467.9	5235.1	5076.1
58°	6158.1	6364.9	6833.6	7407.2	7705.7	7351.1	6484.6	5898.8	5535.1	5308.2	5136.0
59°	5985.3	6195.4	6692.6	7300.8	7658.2	7340.8	6496.3	5937.4	5602.4	5385.1	5195.1
60°	5799.5	6024.7	6543.9	7186.5	7597.8	7318.0	6502.0	5970.3	5669.8	5463.0	5253.5
61°	5606.8	5845.0	6395.5	7068.0	7523.4	7284.4	6495.5	5996.8	5737.3	5542.0	5312.4
62°	5405.3	5662.0	6248.2	6940.2	7439.5	7232.9	6477.2	6015.5	5802.3	5620.3	5370.1
63°	5206.7	5477.7	6102.7	6806.7	7345.9	7162.1	6443.4	6026.0	5866.3	5697.2	5426.1
64°	5019.9	5298.8	5958.2	6671.3	7235.7	7072.8	6393.4	6028.4	5928.9	5774.3	5479.5
65°	4869.0	5135.5	5817.5	6532.6	7116.6	6966.7	6330.9	6018.4	5988.9	5852.3	5530.0
66°	4758.0	5000.9	5682.3	6394.6	6982.2	6839.2	6245.5	5993.4	6041.0	5938.3	5575.9
67°	4695.2	4902.6	5559.9	6258.8	6829.3	6695.8	6135.8	5952.1	6084.8	6019.3	5618.4
68°	4629.9	4835.4	5453.2	6124.3	6660.0	6527.5	5943.4	5880.1	6117.4	6095.8	5616.8
69°	4480.6	4770.1	5366.5	5990.6	6471.3	6306.1	5635.0	5737.2	6129.6	6164.4	5593.8
70°	4186.1	4649.9	5297.9	5855.5	6273.4	5996.6	5207.8	5499.6	6121.7	6220.3	5597.7
71°	3739.7	4412.2	5236.0	5727.4	6037.3	5594.6	4687.2	5156.3	6063.8	6255.7	5565.3
72°	3257.6	4025.0	5162.3	5594.7	5748.4	5117.9	4194.9	4758.5	5922.8	6241.6	5499.6
73°	2759.9	3523.9	5045.2	5452.6	5412.6	4631.0	3781.0	4364.0	5700.3	6165.5	5409.7
74°	2185.8	2984.2	4817.2	5281.6	5035.7	4156.9	3287.5	3989.8	5414.2	6024.4	5232.7
75°	1466.0	2401.9	4415.7	5033.7	4607.8	3635.0	2500.1	3551.2	5092.7	5804.4	4967.5
76°	797.9	1704.4	3874.3	4672.6	4161.5	2922.3	1712.7	2749.2	4775.2	5447.6	4607.9
77°	521.8	951.3	3293.3	4156.4	3674.4	1980.6	931.8	1947.1	4416.2	4924.8	4182.4
78°	248.1	700.7	2595.1	3443.8	3057.3	1085.7	452.3	1149.7	3883.6	4213.5	3659.8
79°	197.6	454.5	1711.3	2609.3	2263.1	805.7	281.8	560.3	2943.6	3437.0	3072.0
80°	170.4	208.3	905.0	1721.3	1386.3	543.2	243.7	311.9	2003.7	2743.4	2525.5
81°	146.5	176.0	578.1	901.1	989.7	280.7	205.7	261.1	1067.1	2169.1	2291.0
82°	125.1	149.7	257.7	580.3	609.4	236.9	167.7	210.3	512.4	1598.6	1937.2
83°	105.4	125.4	206.9	263.3	229.1	195.0	141.3	159.6	337.1	1197.3	1583.3
84°	87.5	103.1	167.5	206.3	183.8	151.0	116.2	128.9	270.5	842.7	1225.7
85°	69.6	84.5	128.1	170.2	141.5	115.9	92.1	102.7	221.5	543.5	757.9
86°	51.7	66.0	96.0	136.5	104.1	91.2	69.6	79.8	172.6	390.5	535.5
87°	35.3	47.5	69.5	99.5	76.8	66.7	48.5	59.2	126.1	237.4	313.1
88°	20.4	31.0	43.1	79.9	49.6	42.1	33.7	45.2	83.3	87.7	93.2
89°	8.7	13.5	18.0	60.7	22.4	21.2	18.8	31.1	56.6	59.5	63.1



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

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445004

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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1445004
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445004

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3766.1	3766.1	3766.1	3766.1	3766.1	3766.1	3766.1	3766.1	3766.1	3766.1	3766.1
1°	3711.5	3711.0	3714.0	3723.9	3733.6	3747.5	3762.3	3765.6	3780.1	3795.9	3808.4
2°	3664.3	3662.5	3669.6	3683.5	3702.8	3726.2	3755.4	3773.1	3805.4	3836.4	3863.2
3°	3623.3	3620.8	3629.7	3648.4	3675.8	3711.0	3752.6	3785.7	3833.0	3881.8	3925.1
4°	3589.0	3586.0	3596.7	3619.8	3654.7	3699.4	3753.2	3801.2	3865.5	3932.0	3993.1
5°	3560.1	3555.7	3568.6	3596.3	3637.0	3691.9	3757.0	3819.9	3903.4	3988.4	4065.8
6°	3535.8	3530.6	3545.5	3576.4	3624.8	3687.7	3764.1	3842.8	3943.4	4049.1	4149.3
7°	3514.8	3510.1	3525.5	3560.7	3614.9	3687.4	3776.2	3870.1	3989.2	4117.4	4239.8
8°	3499.6	3493.9	3511.2	3549.7	3609.0	3690.1	3790.9	3899.0	4037.9	4191.5	4337.5
9°	3486.7	3481.1	3499.8	3542.6	3606.8	3695.8	3807.7	3931.2	4091.4	4270.6	4441.9
10°	3478.4	3472.2	3492.9	3538.7	3607.8	3703.5	3826.8	3966.8	4148.1	4354.4	4554.8
11°	3474.6	3467.6	3490.1	3539.5	3613.6	3714.6	3850.2	4006.6	4211.9	4444.6	4677.6
12°	3473.2	3466.7	3490.3	3543.6	3621.9	3729.6	3876.2	4048.2	4277.0	4540.8	4804.8
13°	3476.3	3468.0	3492.8	3550.0	3632.7	3746.3	3904.4	4092.9	4345.8	4642.4	4943.9
14°	3479.6	3472.6	3499.2	3559.3	3647.2	3765.5	3933.6	4138.7	4417.6	4749.1	5090.1
15°	3486.1	3478.2	3507.3	3570.4	3663.9	3787.7	3964.3	4186.2	4492.0	4862.1	5247.7
16°	3493.7	3485.8	3516.0	3581.9	3680.6	3811.5	3997.2	4237.4	4570.2	4982.0	5412.3
17°	3502.5	3494.6	3526.7	3595.9	3700.1	3837.2	4032.4	4290.2	4652.5	5106.6	5580.3
18°	3513.2	3505.0	3539.7	3610.3	3720.6	3862.6	4067.9	4344.1	4735.2	5237.0	5751.7
19°	3525.0	3517.8	3552.9	3627.1	3741.1	3891.1	4105.8	4399.7	4821.5	5369.9	5921.0
20°	3540.5	3532.4	3569.1	3645.7	3763.1	3919.5	4145.2	4457.5	4914.0	5503.8	6082.9
21°	3557.1	3550.1	3587.0	3666.0	3785.1	3949.7	4187.2	4517.8	5005.4	5643.4	6240.5
22°	3575.6	3568.2	3607.3	3688.1	3809.7	3981.6	4230.0	4580.0	5104.5	5777.5	6391.6
23°	3595.9	3589.8	3629.3	3711.8	3836.2	4015.0	4272.7	4644.1	5206.9	5910.6	6535.4
24°	3617.8	3614.0	3653.6	3737.6	3863.7	4048.1	4316.8	4709.8	5308.1	6037.2	6669.3
25°	3641.7	3638.6	3679.6	3764.7	3893.9	4083.2	4363.0	4775.0	5411.0	6161.3	6797.0
26°	3668.0	3666.5	3707.4	3792.3	3924.9	4118.5	4408.8	4843.2	5515.1	6276.6	6920.5
27°	3694.4	3696.2	3736.6	3821.4	3957.1	4153.2	4455.5	4912.4	5619.6	6388.0	7034.8
28°	3722.6	3729.9	3766.8	3852.7	3990.6	4191.0	4502.5	4984.9	5722.9	6495.2	7145.8
29°	3753.1	3764.8	3798.9	3884.4	4025.4	4228.6	4550.6	5055.2	5822.8	6596.5	7251.7
30°	3785.9	3802.7	3833.6	3917.0	4058.9	4267.6	4598.1	5127.0	5922.5	6692.5	7350.4
31°	3820.4	3841.0	3869.8	3950.4	4095.1	4306.7	4645.3	5199.0	6017.5	6782.6	7443.1
32°	3856.3	3882.4	3906.2	3987.1	4132.8	4347.6	4693.8	5272.0	6108.6	6868.5	7530.3
33°	3893.8	3924.0	3943.4	4023.1	4170.2	4388.2	4741.7	5345.5	6197.9	6953.8	7613.8
34°	3930.9	3966.1	3980.8	4061.0	4209.6	4429.5	4790.1	5418.7	6280.4	7033.3	7691.2
35°	3968.3	4009.2	4018.1	4100.3	4248.7	4472.6	4838.6	5492.7	6362.9	7112.3	7760.3
36°	4006.9	4053.2	4055.5	4140.5	4288.4	4515.4	4890.4	5568.1	6442.7	7183.5	7824.5
37°	4042.4	4096.1	4094.0	4180.5	4329.3	4560.1	4942.3	5640.4	6518.3	7253.8	7882.3
38°	4081.7	4141.2	4134.1	4223.7	4371.0	4603.4	4995.9	5714.3	6593.6	7320.2	7936.1
39°	4121.0	4185.0	4174.3	4265.9	4413.7	4650.4	5049.7	5785.0	6663.3	7383.4	7981.7
40°	4161.5	4227.3	4216.4	4309.3	4458.1	4695.5	5104.4	5854.2	6730.7	7443.4	8021.3
41°	4203.7	4267.7	4258.4	4353.5	4503.5	4742.2	5159.5	5922.7	6795.3	7499.8	8051.1
42°	4245.5	4308.3	4302.0	4396.7	4551.2	4791.4	5215.9	5987.7	6860.9	7556.0	8074.3
43°	4287.9	4347.5	4347.1	4444.5	4597.8	4842.0	5275.7	6051.5	6924.9	7605.9	8094.1
44°	4332.7	4388.6	4393.4	4491.5	4646.3	4895.6	5335.6	6114.5	6988.0	7651.5	8104.1

REPORT NUMBER: P1445004

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	4378.7	4429.4	4439.9	4540.3	4697.1	4946.8	5396.5	6176.1	7047.7	7695.6	8109.0
46°	4425.6	4467.7	4487.6	4588.1	4747.4	5001.8	5456.8	6232.8	7105.3	7735.0	8104.9
47°	4475.0	4505.2	4538.0	4636.9	4800.2	5055.2	5518.2	6284.9	7160.8	7771.7	8094.3
48°	4525.1	4545.3	4589.7	4687.2	4853.3	5111.4	5579.3	6336.8	7211.6	7802.1	8077.7
49°	4577.3	4586.8	4641.1	4736.8	4907.2	5168.6	5638.3	6385.7	7259.6	7829.0	8053.3
50°	4630.3	4626.7	4695.1	4788.7	4963.6	5228.7	5697.6	6432.0	7301.4	7853.2	8023.1
51°	4687.1	4668.5	4749.5	4841.6	5018.9	5287.4	5755.7	6473.7	7340.4	7869.1	7983.6
52°	4742.2	4708.8	4803.9	4896.8	5079.6	5346.3	5812.3	6512.3	7372.1	7879.2	7934.1
53°	4793.2	4740.8	4853.4	4952.0	5139.9	5406.9	5863.8	6547.0	7396.1	7881.0	7877.3
54°	4837.3	4763.5	4899.4	5009.8	5203.8	5466.5	5913.0	6573.6	7414.8	7879.1	7813.8
55°	4877.2	4787.6	4939.4	5068.7	5267.3	5526.9	5958.0	6595.9	7424.4	7864.6	7744.3
56°	4918.6	4817.0	4978.6	5129.4	5335.9	5588.4	5996.3	6613.0	7423.6	7841.9	7663.8
57°	4957.9	4848.3	5018.6	5189.0	5403.0	5650.4	6032.4	6622.1	7410.8	7805.9	7574.5
58°	4996.5	4870.7	5056.8	5253.5	5473.7	5709.7	6061.4	6626.0	7387.1	7760.2	7474.8
59°	5027.9	4887.5	5087.9	5313.5	5547.9	5766.5	6084.4	6622.8	7351.8	7702.5	7367.2
60°	5054.9	4907.6	5115.0	5374.2	5623.6	5822.6	6104.2	6609.9	7305.4	7632.8	7249.7
61°	5082.7	4926.6	5143.1	5431.2	5700.7	5879.4	6116.9	6582.4	7248.4	7549.2	7125.0
62°	5109.9	4939.0	5170.0	5491.2	5774.2	5937.1	6121.1	6541.3	7176.4	7452.9	6993.8
63°	5131.0	4948.6	5193.7	5548.2	5844.9	5989.8	6117.7	6488.6	7086.2	7343.2	6857.6
64°	5149.1	4952.8	5214.8	5602.2	5915.9	6038.9	6107.1	6420.7	6982.7	7224.9	6720.0
65°	5150.7	4915.2	5216.4	5652.5	5987.3	6082.7	6080.5	6332.2	6859.4	7090.2	6575.9
66°	5102.0	4883.1	5163.4	5694.3	6057.6	6116.7	6041.0	6221.1	6717.8	6940.3	6429.8
67°	5074.3	4866.9	5134.8	5726.5	6120.1	6143.9	5977.7	6058.2	6558.2	6776.8	6287.5
68°	5063.0	4805.9	5114.8	5713.7	6179.3	6158.5	5859.4	5781.5	6352.1	6599.5	6142.9
69°	4990.3	4632.8	5035.5	5681.5	6228.4	6148.1	5645.9	5375.4	6057.1	6397.8	5999.3
70°	4847.2	4318.1	4894.1	5677.7	6265.9	6104.4	5310.5	4852.0	5664.1	6166.1	5855.2
71°	4619.6	3854.1	4667.7	5637.5	6272.4	5994.4	4888.7	4313.3	5173.6	5885.8	5701.0
72°	4254.8	3422.1	4305.7	5570.8	6228.5	5797.9	4444.3	3838.2	4651.9	5545.5	5540.2
73°	3804.4	3012.1	3841.4	5467.3	6113.7	5514.1	4022.5	3370.3	4147.9	5151.6	5355.6
74°	3362.6	2554.3	3415.0	5281.8	5926.4	5194.2	3590.6	2777.2	3635.9	4703.8	5139.3
75°	2898.0	1945.2	2961.8	4996.3	5644.0	4841.1	3008.8	1930.9	3018.8	4211.8	4833.5
76°	2339.2	1405.1	2399.1	4619.6	5208.4	4464.5	2163.7	1093.4	2175.6	3697.0	4412.9
77°	1800.3	1279.9	1901.5	4186.5	4617.3	4010.2	1324.5	801.0	1272.5	3131.1	3832.9
78°	1693.8	1669.3	1846.3	3650.4	3892.2	3298.8	653.7	524.4	941.5	2430.8	3064.6
79°	2087.2	1587.7	2222.8	3029.8	3179.8	2293.6	347.9	247.8	625.2	1609.8	2213.3
80°	2439.3	1506.2	1899.7	2418.1	2581.0	1295.7	289.1	211.2	309.0	909.3	1362.0
81°	1903.8	1417.0	1576.7	2194.5	1982.2	622.3	230.4	180.9	256.3	590.8	983.6
82°	1368.3	813.4	1248.6	1814.3	1383.5	368.1	171.7	153.2	218.0	274.3	615.7
83°	779.7	578.3	707.3	1434.0	957.2	284.6	142.7	127.8	178.1	208.8	247.9
84°	439.8	343.2	427.2	1052.1	580.1	233.5	116.3	103.5	138.9	167.1	196.2
85°	291.8	111.2	343.2	590.0	423.0	182.4	92.6	82.2	106.1	126.4	161.8
86°	144.8	75.3	259.3	472.4	266.0	131.7	71.1	60.9	82.3	91.9	129.2
87°	100.6	39.4	175.3	354.7	110.9	92.9	52.1	39.7	58.7	66.0	90.6
88°	56.3	3.6	91.3	237.1	75.3	63.3	35.9	22.4	35.2	40.1	53.0
89°	12.5	2.3	8.2	119.4	39.6	33.6	19.7	8.4	15.2	16.0	15.4

REPORT NUMBER: P1445004

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

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445004

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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1445004
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445004

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	3766.1	3766.1	3766.1
1°	3819.3	3826.8	3830.1
2°	3886.1	3901.2	3904.0
3°	3958.8	3980.8	3987.5
4°	4040.2	4072.7	4080.3
5°	4131.4	4173.5	4184.7
6°	4232.3	4284.7	4299.8
7°	4340.3	4407.3	4425.1
8°	4457.1	4538.6	4562.3
9°	4586.3	4679.4	4710.4
10°	4723.2	4835.3	4870.4
11°	4872.4	5007.0	5044.5
12°	5034.2	5186.0	5232.1
13°	5207.8	5380.8	5431.0
14°	5391.6	5590.8	5650.9
15°	5583.6	5808.2	5885.2
16°	5780.7	6035.1	6126.6
17°	5984.6	6266.6	6367.4
18°	6184.7	6496.3	6604.8
19°	6379.3	6713.7	6827.9
20°	6567.2	6920.4	7033.3
21°	6742.9	7107.6	7218.4
22°	6907.7	7274.9	7377.9
23°	7064.9	7423.8	7522.6
24°	7210.5	7557.6	7649.7
25°	7347.5	7673.0	7758.9
26°	7470.2	7775.6	7853.1
27°	7584.6	7862.6	7937.8
28°	7685.7	7938.3	8009.2
29°	7777.3	8002.1	8068.5
30°	7855.2	8056.8	8115.2
31°	7926.6	8098.2	8153.5
32°	7987.0	8133.5	8181.3
33°	8038.7	8158.0	8202.5
34°	8080.6	8174.1	8212.0
35°	8116.1	8180.5	8216.5
36°	8143.1	8180.1	8214.0
37°	8160.2	8174.6	8202.7
38°	8171.5	8162.1	8185.7
39°	8175.0	8145.4	8164.9
40°	8172.5	8122.7	8137.2
41°	8162.3	8095.2	8099.3
42°	8146.0	8062.3	8057.5
43°	8123.1	8025.7	8006.4
44°	8092.6	7980.2	7946.7

REPORT NUMBER: P1445004

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	8058.2	7929.3	7877.4
46°	8016.1	7869.4	7796.1
47°	7968.7	7800.8	7708.6
48°	7914.8	7725.5	7615.0
49°	7854.0	7637.9	7508.6
50°	7784.8	7544.5	7393.6
51°	7705.4	7439.7	7264.1
52°	7616.1	7319.9	7126.6
53°	7516.4	7192.1	6980.1
54°	7411.9	7055.0	6828.5
55°	7298.4	6904.8	6668.6
56°	7173.2	6749.5	6498.4
57°	7040.6	6588.5	6333.2
58°	6899.3	6419.1	6158.1
59°	6756.8	6250.0	5985.3
60°	6612.6	6076.4	5799.5
61°	6463.1	5897.5	5606.8
62°	6317.5	5716.3	5405.3
63°	6173.4	5533.6	5206.7
64°	6034.0	5364.6	5019.9
65°	5900.2	5203.9	4869.0
66°	5773.8	5072.7	4758.0
67°	5653.3	4975.9	4695.2
68°	5545.1	4909.5	4629.9
69°	5450.9	4840.8	4480.6
70°	5379.1	4725.8	4186.1
71°	5305.1	4505.0	3739.7
72°	5210.9	4116.0	3257.6
73°	5066.0	3606.7	2759.9
74°	4802.2	3042.0	2185.8
75°	4386.3	2448.3	1466.0
76°	3843.1	1771.4	797.9
77°	3235.5	1017.8	521.8
78°	2475.2	751.4	248.1
79°	1587.3	485.3	197.6
80°	846.7	219.1	170.4
81°	555.2	181.5	146.5
82°	267.3	154.1	125.1
83°	206.4	129.4	105.4
84°	165.7	106.8	87.5
85°	125.9	87.4	69.6
86°	93.7	68.0	51.7
87°	66.9	48.6	35.3
88°	40.3	30.9	20.4
89°	15.8	13.1	8.7

REPORT NUMBER: P1445004

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

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445004

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

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445004

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)