

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: P1436715

Luminaire Tested: XAS180-SFPM (3000K-180W-T5)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436715
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 (3000K-180W-T5)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 100% (180W)
OPTICS - TYPE 5
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

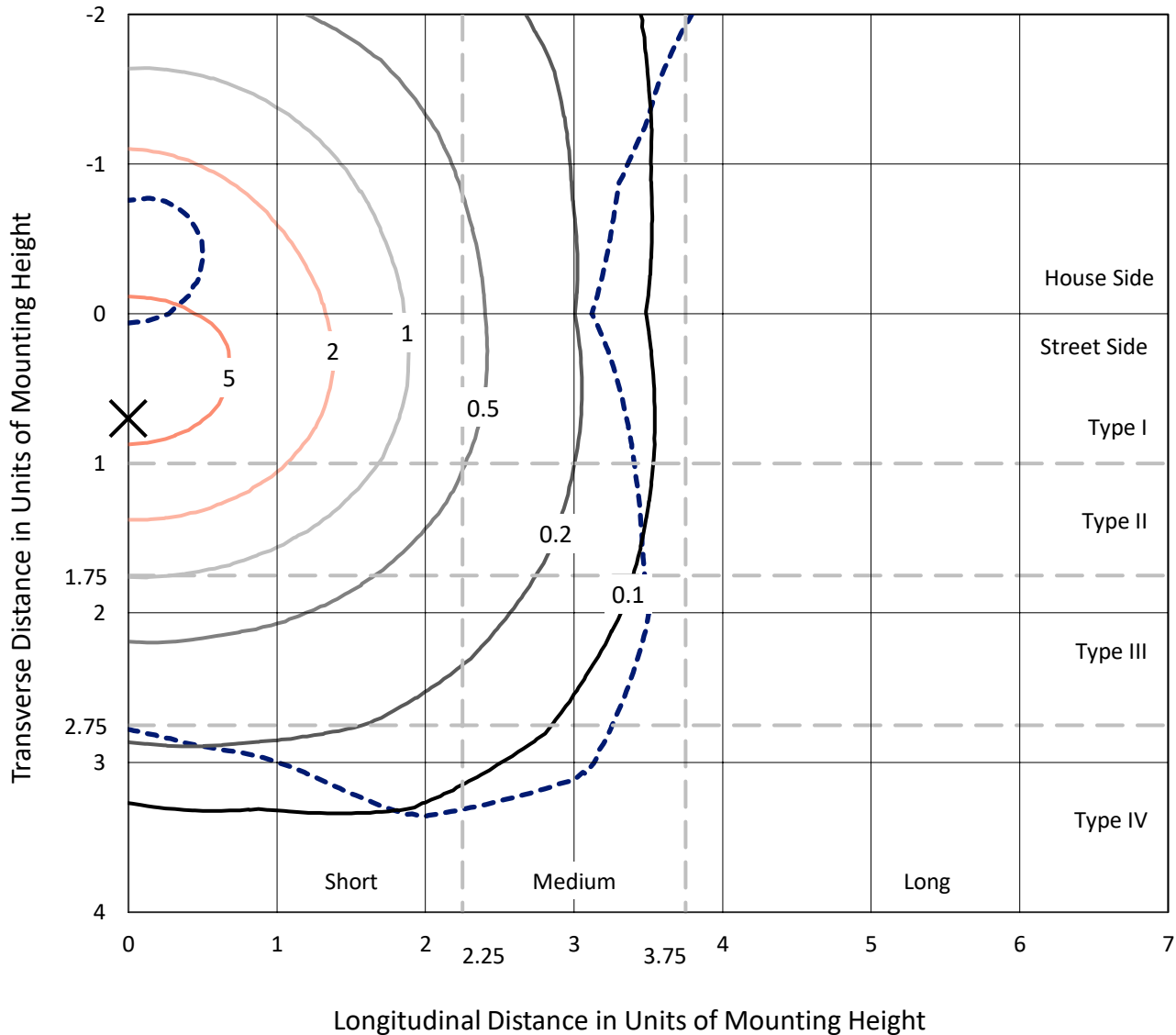
Lumens per Lamp: 28628 (1 lamp)
Luminaire Lumens: 25508.8 lumens
Efficiency: 89.1%
Efficacy: 141.2 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 180.6
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

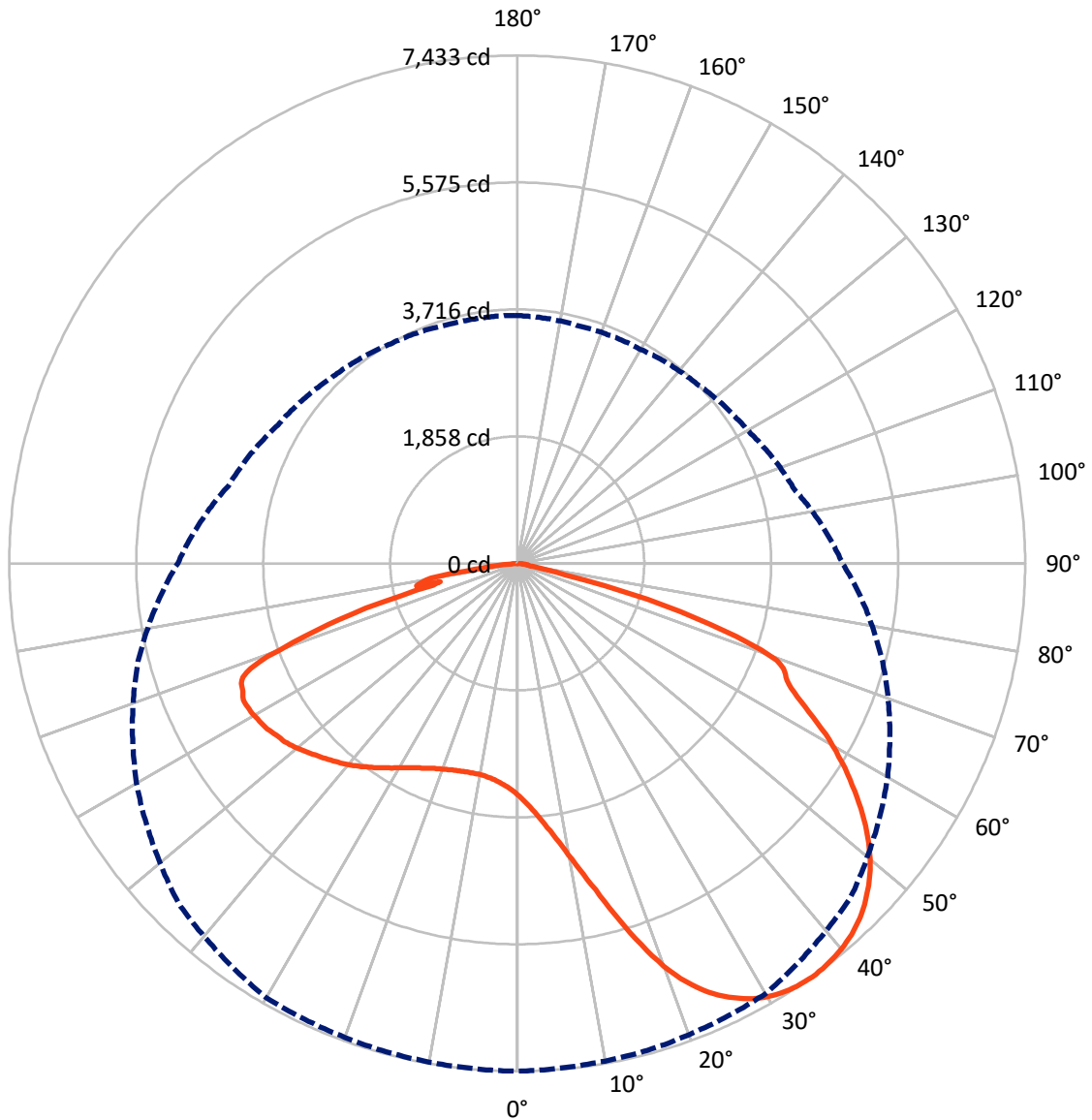
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 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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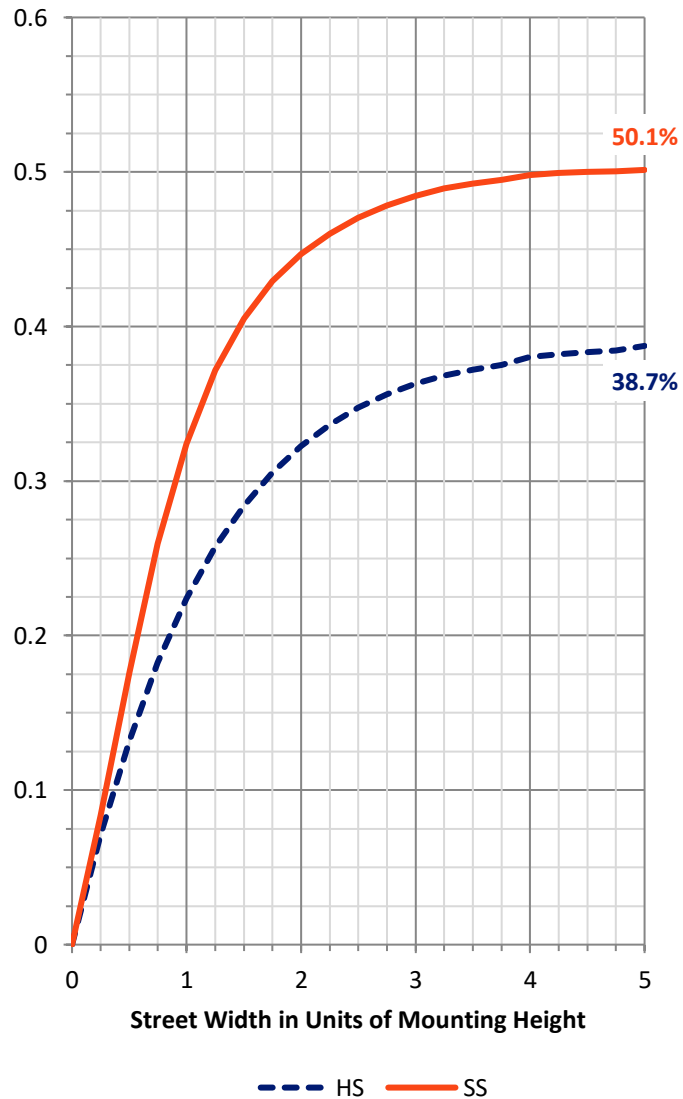
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11167.4	0.0	11167.4
	% Lamp	39.0	0.0	39.0
Street Side	Lumens	14341.4	0.0	14341.4
	% Lamp	50.1	0.0	50.1
Total	Lumens	25508.8	0.0	25508.8
	% Lamp	89.1	0.0	89.1

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	337.9	1.3	1.2
10°-20°	1146.9	4.5	4.0
20°-30°	2201.6	8.6	7.7
30°-40°	3316.4	13.0	11.6
40°-50°	4337.1	17.0	15.1
50°-60°	5100.5	20.0	17.8
60°-70°	5321.5	20.9	18.6
70°-80°	3406.9	13.4	11.9
80°-90°	340.0	1.3	1.2
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°	25508.8	100.0	89.1
0°-180°	25508.8	100.0	89.1

Coefficient of Utilization



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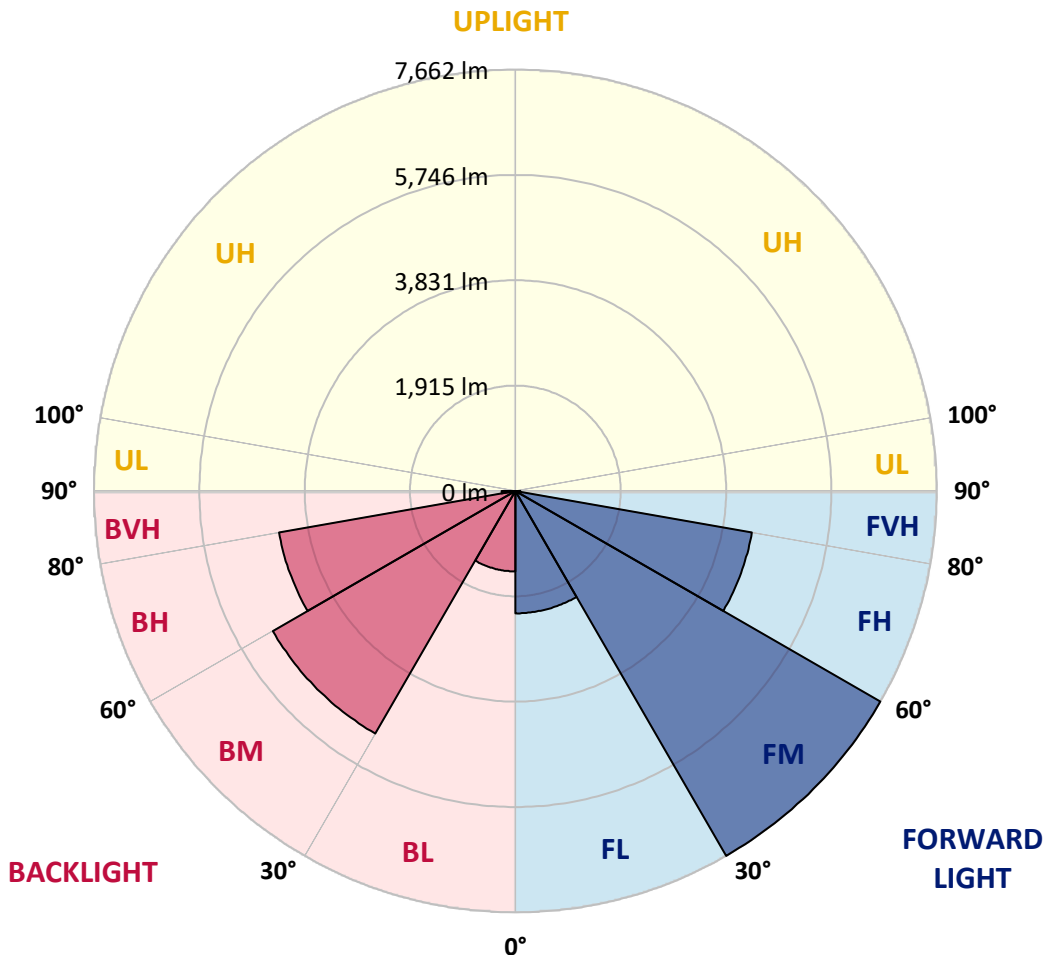
CATALOG NUMBER: XAS180-SFPM (3000K-180W-T5)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2224.6	7.8			
FM (30°-60°)	7661.7	26.8			
FH (60°-80°)	4365.5	15.2			G2/5000
FVH (80°-90°)	89.6	0.3			G1/100
BL (0°-30°)	1461.8	5.1	B3/2500		
BM (30°-60°)	5092.2	17.8	B4/8500		
BH (60°-80°)	4363.0	15.2	B4/5000		G4/5000
BVH (80°-90°)	250.4	0.9			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	3119.2	10.9			

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°	3406.9	3406.9	3406.9	3406.9	3406.9	3406.9	3406.9	3406.9	3406.9	3406.9	3406.9
1°	3464.7	3463.7	3459.1	3450.8	3439.3	3427.1	3400.8	3386.9	3375.9	3366.3	3360.4
2°	3531.6	3528.5	3516.7	3496.7	3470.3	3442.6	3401.8	3375.6	3352.5	3333.6	3321.5
3°	3607.1	3601.0	3579.9	3547.8	3508.0	3463.9	3407.8	3368.0	3333.6	3306.5	3287.2
4°	3691.0	3680.7	3650.5	3605.2	3549.3	3488.2	3415.8	3363.6	3318.7	3284.0	3259.3
5°	3785.5	3771.2	3730.1	3668.0	3595.5	3516.8	3426.9	3361.3	3307.0	3265.0	3235.4
6°	3889.6	3869.6	3818.3	3738.7	3645.7	3547.5	3440.0	3362.2	3298.6	3250.2	3215.5
7°	4003.0	3978.3	3914.3	3817.6	3700.6	3582.2	3458.0	3366.7	3293.1	3238.7	3200.5
8°	4127.1	4095.9	4018.8	3900.4	3759.9	3621.9	3479.1	3374.9	3291.3	3229.2	3188.0
9°	4261.0	4226.8	4131.2	3990.2	3826.8	3663.2	3502.7	3384.4	3292.8	3223.8	3178.6
10°	4405.8	4361.5	4252.3	4088.3	3898.7	3708.7	3529.6	3398.0	3296.7	3222.6	3172.2
11°	4563.3	4513.4	4382.8	4193.8	3974.0	3757.8	3558.4	3414.5	3303.2	3224.0	3169.6
12°	4733.0	4671.4	4521.2	4302.8	4051.5	3811.5	3590.2	3432.0	3312.2	3227.4	3171.5
13°	4912.9	4844.6	4671.6	4419.9	4135.5	3868.3	3623.4	3451.5	3322.8	3233.7	3175.4
14°	5111.9	5031.9	4832.2	4545.0	4224.5	3925.1	3657.2	3471.0	3334.4	3241.9	3180.0
15°	5323.8	5232.8	5001.6	4676.5	4316.0	3984.3	3693.3	3492.1	3348.3	3251.6	3187.1
16°	5542.2	5437.3	5178.3	4817.8	4414.6	4047.4	3732.3	3516.1	3363.0	3262.5	3196.2
17°	5760.0	5644.4	5354.5	4962.7	4517.3	4112.8	3772.7	3540.2	3380.0	3274.1	3206.6
18°	5974.8	5846.7	5531.4	5108.6	4624.7	4179.6	3815.0	3567.6	3398.2	3288.5	3216.4
19°	6176.6	6041.0	5705.8	5250.1	4735.7	4249.3	3858.9	3596.1	3416.8	3303.7	3228.7
20°	6362.4	6224.4	5871.0	5391.2	4848.7	4322.2	3905.3	3626.5	3436.8	3319.7	3242.7
21°	6529.8	6394.5	6031.4	5528.3	4960.3	4397.8	3952.4	3658.2	3457.8	3335.1	3257.8
22°	6674.1	6540.0	6181.7	5661.6	5072.8	4475.4	4001.7	3691.0	3482.0	3353.2	3274.7
23°	6805.0	6680.1	6321.3	5789.4	5184.1	4556.7	4052.9	3724.7	3508.3	3372.6	3293.4
24°	6920.0	6800.9	6450.8	5909.4	5293.2	4640.1	4104.9	3760.3	3535.2	3394.5	3313.6
25°	7018.8	6908.8	6570.9	6027.0	5400.0	4724.6	4159.9	3797.0	3562.9	3418.1	3334.1
26°	7104.0	7004.3	6683.2	6136.8	5502.9	4808.4	4215.8	3835.0	3591.9	3442.3	3356.7
27°	7180.6	7085.4	6782.6	6242.3	5602.9	4893.9	4271.8	3873.5	3621.2	3467.9	3380.2
28°	7245.2	7154.6	6872.2	6343.6	5697.5	4978.6	4330.0	3910.9	3652.2	3495.9	3405.1
29°	7298.8	7215.0	6954.2	6439.6	5787.2	5063.0	4389.3	3950.2	3682.4	3526.1	3431.2
30°	7341.1	7263.3	7027.5	6532.4	5876.1	5144.8	4450.7	3990.2	3715.3	3556.0	3458.2
31°	7375.7	7302.0	7091.7	6617.7	5958.5	5225.9	4512.0	4029.4	3749.2	3586.5	3486.4
32°	7400.9	7333.7	7148.3	6697.4	6037.6	5305.7	4574.0	4070.4	3783.0	3618.2	3516.8
33°	7420.0	7356.6	7197.9	6773.1	6113.8	5383.2	4635.8	4113.0	3818.5	3649.7	3548.3
34°	7428.7	7370.2	7237.4	6840.9	6186.3	5458.8	4698.1	4153.5	3854.4	3682.3	3580.5
35°	7432.7	7376.7	7270.7	6903.7	6257.9	5531.9	4760.2	4194.8	3891.2	3716.0	3614.8
36°	7430.4	7378.6	7297.1	6961.4	6323.7	5602.7	4822.0	4236.2	3928.6	3750.3	3650.4
37°	7420.2	7372.8	7315.8	7013.9	6387.8	5671.0	4882.5	4278.9	3966.5	3786.1	3687.0
38°	7404.9	7362.3	7328.2	7061.0	6449.1	5738.0	4945.0	4322.7	4004.3	3823.5	3724.2
39°	7386.0	7349.3	7332.7	7100.8	6508.3	5803.7	5007.4	4366.3	4043.1	3861.0	3761.1
40°	7360.9	7330.6	7332.5	7137.1	6564.1	5867.3	5071.0	4412.7	4082.9	3899.4	3798.4
41°	7326.6	7305.2	7324.5	7167.6	6615.9	5928.4	5131.2	4461.3	4124.0	3938.4	3836.5
42°	7288.9	7273.6	7311.1	7193.9	6667.4	5988.6	5189.7	4510.2	4165.3	3979.0	3875.4
43°	7242.6	7239.0	7293.0	7213.2	6714.0	6048.3	5247.3	4557.7	4206.7	4021.5	3914.6
44°	7188.6	7199.1	7268.0	7224.4	6758.2	6105.3	5300.0	4607.5	4249.4	4063.8	3955.4



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CATALOG NUMBER: XAS180-SFPM (3000K-180W-T5)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	7126.0	7149.7	7234.1	7232.8	6801.3	6162.2	5354.1	4659.8	4294.8	4106.8	3996.5
46°	7052.4	7097.3	7199.4	7234.2	6842.1	6218.6	5406.8	4713.9	4341.7	4151.1	4038.8
47°	6973.3	7033.0	7156.8	7229.3	6881.7	6275.7	5457.9	4768.6	4389.2	4195.6	4082.8
48°	6888.6	6963.0	7107.5	7216.0	6916.8	6327.8	5505.7	4823.9	4438.8	4241.1	4127.3
49°	6792.3	6883.5	7053.6	7200.4	6947.7	6378.3	5551.6	4879.8	4489.8	4289.2	4172.9
50°	6688.3	6794.1	6988.5	7174.6	6975.0	6427.9	5595.9	4935.1	4541.2	4337.7	4220.8
51°	6571.1	6696.2	6917.1	7143.7	6998.6	6473.5	5640.5	4991.1	4595.1	4389.8	4268.8
52°	6446.7	6585.4	6835.5	7102.9	7017.4	6515.2	5682.2	5049.5	4650.3	4443.8	4320.9
53°	6314.2	6467.2	6748.6	7054.2	7031.2	6553.2	5721.6	5104.7	4706.4	4497.4	4370.4
54°	6177.1	6336.9	6651.8	7000.4	7036.3	6586.7	5759.2	5158.7	4765.8	4553.1	4423.7
55°	6032.5	6198.0	6544.5	6936.9	7033.5	6613.9	5792.0	5207.2	4825.7	4611.9	4478.3
56°	5878.5	6056.6	6427.8	6865.0	7024.2	6634.5	5821.8	5254.2	4885.8	4672.2	4534.3
57°	5729.0	5908.3	6309.1	6787.0	7002.8	6647.6	5848.2	5297.1	4946.3	4735.7	4591.9
58°	5570.7	5757.7	6181.7	6700.6	6970.6	6649.8	5866.1	5336.1	5007.1	4801.8	4646.0
59°	5414.3	5604.4	6054.1	6604.4	6927.6	6640.5	5876.6	5371.0	5067.9	4871.4	4699.5
60°	5246.2	5449.9	5919.7	6500.9	6873.0	6619.9	5881.7	5400.8	5128.9	4941.9	4752.3
61°	5072.0	5287.4	5785.4	6393.7	6805.7	6589.5	5875.9	5424.7	5190.0	5013.3	4805.6
62°	4889.7	5121.9	5652.2	6278.2	6729.8	6542.9	5859.3	5441.6	5248.8	5084.2	4857.8
63°	4710.0	4955.1	5520.5	6157.4	6645.2	6478.9	5828.7	5451.2	5306.7	5153.8	4908.5
64°	4541.0	4793.3	5389.8	6034.9	6545.5	6398.1	5783.5	5453.3	5363.3	5223.4	4956.7
65°	4404.5	4645.6	5262.6	5909.4	6437.7	6302.1	5727.0	5444.2	5417.6	5294.0	5002.5
66°	4304.2	4523.9	5140.2	5784.6	6316.1	6186.7	5649.7	5421.7	5464.7	5371.8	5044.0
67°	4247.3	4435.0	5029.5	5661.7	6177.8	6057.1	5550.4	5384.3	5504.4	5445.1	5082.5
68°	4188.2	4374.1	4933.0	5540.1	6024.7	5904.8	5376.4	5319.1	5533.9	5514.3	5081.0
69°	4053.1	4315.0	4854.5	5419.1	5853.9	5704.5	5097.4	5189.9	5544.8	5576.4	5060.2
70°	3786.7	4206.3	4792.5	5296.9	5674.9	5424.5	4711.0	4975.0	5537.7	5626.9	5063.7
71°	3382.9	3991.3	4736.5	5181.0	5461.3	5060.9	4240.1	4664.4	5485.3	5659.0	5034.4
72°	2946.8	3641.0	4669.8	5061.0	5200.0	4629.6	3794.7	4304.6	5357.8	5646.1	4974.9
73°	2496.6	3187.8	4563.9	4932.4	4896.2	4189.2	3420.3	3947.7	5156.5	5577.4	4893.7
74°	1977.3	2699.5	4357.7	4777.7	4555.3	3760.4	2973.9	3609.2	4897.7	5449.7	4733.5
75°	1326.1	2172.8	3994.4	4553.6	4168.3	3288.3	2261.6	3212.5	4606.9	5250.7	4493.6
76°	721.8	1541.8	3504.7	4226.9	3764.5	2643.5	1549.3	2487.0	4319.7	4928.0	4168.4
77°	472.0	860.6	2979.2	3759.9	3323.9	1791.7	842.9	1761.4	3995.0	4455.0	3783.4
78°	224.4	633.9	2347.5	3115.2	2765.7	982.1	409.1	1040.0	3513.1	3811.6	3310.6
79°	178.8	411.2	1548.1	2360.4	2047.2	728.8	254.9	506.9	2662.8	3109.1	2779.0
80°	154.1	188.4	818.6	1557.1	1254.0	491.4	220.5	282.2	1812.5	2481.7	2284.6
81°	132.5	159.2	522.9	815.1	895.3	254.0	186.1	236.2	965.3	1962.2	2072.5
82°	113.2	135.4	233.2	524.9	551.3	214.3	151.7	190.2	463.5	1446.1	1752.4
83°	95.3	113.4	187.2	238.2	207.2	176.4	127.8	144.3	304.9	1083.1	1432.3
84°	79.1	93.3	151.5	186.6	166.3	136.6	105.2	116.6	244.7	762.3	1108.8
85°	62.9	76.5	115.9	154.0	128.0	104.9	83.3	92.9	200.4	491.7	685.6
86°	46.7	59.7	86.8	123.4	94.1	82.5	62.9	72.2	156.1	353.2	484.4
87°	31.9	42.9	62.9	90.0	69.5	60.3	43.8	53.6	114.1	214.8	283.2
88°	18.5	28.0	39.0	72.3	44.9	38.1	30.4	40.9	75.4	79.4	84.3
89°	7.8	12.2	16.3	54.9	20.3	19.2	17.0	28.2	51.2	53.8	57.1



REPORT NUMBER: P1436715

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436715

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436715

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436715

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3406.9	3406.9	3406.9	3406.9	3406.9	3406.9	3406.9	3406.9	3406.9	3406.9	3406.9
1°	3357.4	3357.0	3359.7	3368.7	3377.5	3390.0	3403.4	3406.3	3419.5	3433.8	3445.1
2°	3314.7	3313.1	3319.6	3332.1	3349.6	3370.7	3397.2	3413.2	3442.3	3470.4	3494.6
3°	3277.7	3275.4	3283.5	3300.4	3325.2	3357.0	3394.6	3424.6	3467.4	3511.5	3550.7
4°	3246.7	3243.9	3253.6	3274.5	3306.1	3346.5	3395.2	3438.6	3496.8	3556.9	3612.2
5°	3220.5	3216.5	3228.1	3253.3	3290.1	3339.7	3398.6	3455.5	3531.0	3607.9	3677.9
6°	3198.5	3193.8	3207.3	3235.3	3279.0	3336.0	3405.0	3476.2	3567.3	3662.9	3753.5
7°	3179.5	3175.3	3189.2	3221.0	3270.0	3335.7	3416.0	3500.9	3608.7	3724.6	3835.4
8°	3165.8	3160.6	3176.3	3211.1	3264.8	3338.1	3429.2	3527.1	3652.7	3791.6	3923.8
9°	3154.1	3149.0	3165.9	3204.6	3262.7	3343.3	3444.5	3556.2	3701.1	3863.2	4018.1
10°	3146.6	3141.0	3159.7	3201.1	3263.6	3350.2	3461.8	3588.4	3752.4	3939.0	4120.3
11°	3143.1	3136.8	3157.1	3201.9	3268.9	3360.3	3482.9	3624.4	3810.1	4020.6	4231.4
12°	3141.9	3136.0	3157.4	3205.6	3276.4	3373.8	3506.4	3662.0	3869.0	4107.7	4346.5
13°	3144.6	3137.2	3159.6	3211.4	3286.1	3389.0	3532.0	3702.4	3931.3	4199.5	4472.3
14°	3147.7	3141.3	3165.4	3219.8	3299.2	3406.3	3558.4	3743.9	3996.2	4296.0	4604.5
15°	3153.6	3146.4	3172.7	3229.8	3314.4	3426.4	3586.2	3786.9	4063.5	4398.2	4747.1
16°	3160.4	3153.3	3180.6	3240.2	3329.5	3447.9	3615.9	3833.2	4134.2	4506.8	4896.0
17°	3168.3	3161.2	3190.3	3252.9	3347.1	3471.1	3647.7	3880.9	4208.6	4619.5	5048.0
18°	3178.1	3170.7	3202.0	3265.9	3365.7	3494.1	3679.8	3929.7	4283.5	4737.5	5203.0
19°	3188.8	3182.2	3214.0	3281.1	3384.2	3520.0	3714.1	3980.0	4361.5	4857.7	5356.2
20°	3202.7	3195.4	3228.7	3297.9	3404.1	3545.6	3749.7	4032.3	4445.2	4978.8	5502.6
21°	3217.8	3211.5	3244.8	3316.3	3424.0	3572.9	3787.8	4086.8	4527.9	5105.0	5645.2
22°	3234.5	3227.8	3263.2	3336.3	3446.3	3601.7	3826.5	4143.1	4617.5	5226.4	5781.8
23°	3252.9	3247.4	3283.1	3357.7	3470.2	3632.0	3865.1	4201.1	4710.2	5346.8	5911.9
24°	3272.7	3269.2	3305.0	3381.0	3495.1	3661.9	3905.0	4260.5	4801.7	5461.3	6033.1
25°	3294.3	3291.5	3328.6	3405.5	3522.4	3693.7	3946.8	4319.5	4894.8	5573.5	6148.6
26°	3318.1	3316.7	3353.8	3430.6	3550.5	3725.6	3988.2	4381.2	4989.0	5677.9	6260.3
27°	3342.0	3343.6	3380.1	3456.9	3579.7	3757.0	4030.5	4443.8	5083.5	5778.6	6363.7
28°	3367.5	3374.1	3407.5	3485.2	3609.9	3791.2	4073.0	4509.4	5177.0	5875.6	6464.1
29°	3395.1	3405.6	3436.5	3513.9	3641.4	3825.2	4116.5	4573.0	5267.4	5967.3	6559.9
30°	3424.8	3439.9	3467.9	3543.3	3671.7	3860.5	4159.4	4637.9	5357.5	6054.1	6649.2
31°	3456.0	3474.6	3500.6	3573.6	3704.5	3895.9	4202.1	4703.1	5443.4	6135.6	6733.0
32°	3488.4	3512.0	3533.6	3606.7	3738.5	3932.9	4246.1	4769.1	5525.9	6213.3	6812.0
33°	3522.4	3549.7	3567.3	3639.3	3772.4	3969.6	4289.4	4835.6	5606.7	6290.5	6887.4
34°	3555.9	3587.8	3601.0	3673.6	3808.0	4007.0	4333.1	4901.8	5681.2	6362.4	6957.5
35°	3589.7	3626.8	3634.8	3709.1	3843.4	4045.9	4377.0	4968.7	5755.9	6433.8	7020.0
36°	3624.6	3666.5	3668.7	3745.6	3879.3	4084.7	4423.9	5036.9	5828.1	6498.2	7078.1
37°	3656.8	3705.4	3703.4	3781.7	3916.3	4125.1	4470.9	5102.3	5896.5	6561.9	7130.3
38°	3692.4	3746.2	3739.8	3820.8	3954.1	4164.3	4519.3	5169.2	5964.6	6621.9	7179.1
39°	3727.9	3785.7	3776.1	3859.0	3992.6	4206.8	4568.0	5233.1	6027.7	6679.0	7220.2
40°	3764.5	3824.1	3814.2	3898.2	4032.8	4247.6	4617.4	5295.7	6088.6	6733.4	7256.2
41°	3802.7	3860.6	3852.1	3938.2	4073.9	4289.8	4667.3	5357.7	6147.1	6784.4	7283.1
42°	3840.5	3897.3	3891.6	3977.3	4117.0	4334.4	4718.3	5416.5	6206.4	6835.2	7304.1
43°	3878.9	3932.8	3932.4	4020.5	4159.2	4380.1	4772.4	5474.3	6264.3	6880.3	7322.0
44°	3919.4	3969.9	3974.3	4063.0	4203.1	4428.6	4826.7	5531.2	6321.4	6921.6	7331.0



REPORT NUMBER: P1436715

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	3961.0	4006.9	4016.3	4107.1	4249.0	4474.9	4881.7	5587.0	6375.4	6961.5	7335.5
46°	4003.4	4041.5	4059.5	4150.4	4294.5	4524.7	4936.3	5638.2	6427.5	6997.1	7331.7
47°	4048.1	4075.4	4105.1	4194.6	4342.3	4573.0	4991.8	5685.3	6477.7	7030.4	7322.2
48°	4093.4	4111.7	4151.9	4240.1	4390.3	4623.8	5047.1	5732.3	6523.6	7057.8	7307.1
49°	4140.6	4149.3	4198.4	4284.9	4439.1	4675.5	5100.5	5776.5	6567.1	7082.1	7285.0
50°	4188.6	4185.4	4247.2	4331.9	4490.1	4729.9	5154.1	5818.4	6604.9	7104.1	7257.8
51°	4240.0	4223.2	4296.4	4379.7	4540.1	4783.0	5206.6	5856.2	6640.2	7118.4	7222.0
52°	4289.8	4259.6	4345.7	4429.7	4595.1	4836.3	5257.8	5891.1	6668.9	7127.6	7177.2
53°	4336.0	4288.6	4390.4	4479.6	4649.6	4891.1	5304.4	5922.5	6690.5	7129.2	7125.9
54°	4375.9	4309.1	4432.0	4531.9	4707.3	4945.0	5348.9	5946.5	6707.5	7127.5	7068.4
55°	4412.0	4330.9	4468.2	4585.2	4764.8	4999.7	5389.6	5966.6	6716.2	7114.4	7005.5
56°	4449.4	4357.5	4503.7	4640.1	4826.9	5055.3	5424.3	5982.2	6715.4	7093.8	6932.7
57°	4484.9	4385.8	4539.8	4694.0	4887.6	5111.3	5457.0	5990.3	6703.9	7061.3	6851.9
58°	4519.9	4406.1	4574.4	4752.3	4951.6	5165.1	5483.2	5993.9	6682.4	7019.9	6761.7
59°	4548.3	4421.2	4602.6	4806.6	5018.7	5216.4	5504.0	5991.1	6650.5	6967.7	6664.4
60°	4572.7	4439.4	4627.1	4861.5	5087.1	5267.2	5521.9	5979.4	6608.6	6904.6	6558.1
61°	4597.8	4456.6	4652.5	4913.1	5156.9	5318.5	5533.4	5954.4	6557.0	6829.1	6445.3
62°	4622.4	4467.8	4676.8	4967.4	5223.3	5370.7	5537.2	5917.3	6491.8	6741.9	6326.6
63°	4641.5	4476.6	4698.3	5018.9	5287.3	5418.4	5534.1	5869.6	6410.2	6642.7	6203.4
64°	4657.9	4480.3	4717.3	5067.8	5351.6	5462.9	5524.5	5808.2	6316.6	6535.7	6078.9
65°	4659.3	4446.4	4718.8	5113.3	5416.2	5502.4	5500.5	5728.1	6205.1	6413.9	5948.6
66°	4615.3	4417.3	4670.8	5151.1	5479.7	5533.2	5464.7	5627.6	6077.0	6278.2	5816.4
67°	4590.3	4402.6	4645.0	5180.2	5536.3	5557.8	5407.4	5480.3	5932.6	6130.3	5687.7
68°	4580.0	4347.5	4626.9	5168.6	5589.8	5571.0	5300.4	5229.9	5746.1	5969.9	5556.9
69°	4514.3	4190.8	4555.2	5139.5	5634.2	5561.6	5107.3	4862.7	5479.3	5787.5	5427.0
70°	4384.8	3906.2	4427.2	5136.1	5668.2	5522.1	4803.9	4389.2	5123.8	5577.9	5296.7
71°	4178.9	3486.4	4222.4	5099.7	5674.0	5422.6	4422.3	3901.8	4680.1	5324.3	5157.1
72°	3848.9	3095.6	3895.0	5039.3	5634.4	5244.8	4020.4	3472.0	4208.1	5016.4	5011.7
73°	3441.5	2724.8	3475.0	4945.8	5530.5	4988.1	3638.8	3048.8	3752.2	4660.1	4844.7
74°	3041.8	2310.6	3089.2	4777.9	5361.0	4698.7	3248.1	2512.3	3289.1	4255.1	4649.1
75°	2621.5	1759.6	2679.3	4519.7	5105.6	4379.3	2721.8	1746.7	2730.8	3810.0	4372.4
76°	2116.0	1271.1	2170.2	4179.0	4711.5	4038.6	1957.3	989.1	1968.0	3344.3	3991.9
77°	1628.5	1157.8	1720.1	3787.2	4176.8	3627.7	1198.2	724.6	1151.1	2832.4	3467.3
78°	1532.2	1510.0	1670.2	3302.2	3520.9	2984.1	591.3	474.4	851.7	2198.9	2772.3
79°	1888.1	1436.3	2010.7	2740.7	2876.4	2074.8	314.7	224.2	565.6	1456.2	2002.2
80°	2206.6	1362.5	1718.5	2187.4	2334.8	1172.1	261.6	191.0	279.5	822.5	1232.0
81°	1722.2	1281.8	1426.3	1985.1	1793.1	562.9	208.4	163.7	231.9	534.4	889.8
82°	1237.7	735.8	1129.5	1641.2	1251.5	333.0	155.3	138.6	197.2	248.1	557.0
83°	705.3	523.1	639.8	1297.2	865.9	257.4	129.1	115.6	161.1	188.8	224.2
84°	397.8	310.5	386.4	951.7	524.7	211.2	105.2	93.6	125.7	151.2	177.5
85°	264.0	100.6	310.5	533.7	382.7	165.0	83.8	74.3	96.0	114.4	146.4
86°	131.0	68.1	234.5	427.3	240.6	119.1	64.3	55.1	74.4	83.1	116.9
87°	91.0	35.6	158.6	320.9	100.3	84.1	47.1	35.9	53.1	59.7	81.9
88°	51.0	3.3	82.6	214.4	68.1	57.2	32.4	20.3	31.8	36.3	47.9
89°	11.3	2.1	7.5	108.0	35.9	30.4	17.8	7.6	13.7	14.5	13.9



REPORT NUMBER: P1436715

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436715

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436715

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436715

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	3406.9	3406.9	3406.9
1°	3455.0	3461.8	3464.7
2°	3515.4	3529.0	3531.6
3°	3581.2	3601.0	3607.1
4°	3654.8	3684.2	3691.0
5°	3737.3	3775.4	3785.5
6°	3828.6	3875.9	3889.6
7°	3926.3	3986.9	4003.0
8°	4031.9	4105.6	4127.1
9°	4148.8	4233.0	4261.0
10°	4272.6	4374.0	4405.8
11°	4407.6	4529.3	4563.3
12°	4554.0	4691.3	4733.0
13°	4711.0	4867.5	4912.9
14°	4877.3	5057.4	5111.9
15°	5050.9	5254.2	5323.8
16°	5229.2	5459.4	5542.2
17°	5413.7	5668.8	5760.0
18°	5594.7	5876.6	5974.8
19°	5770.7	6073.2	6176.6
20°	5940.7	6260.2	6362.4
21°	6099.7	6429.5	6529.8
22°	6248.8	6580.9	6674.1
23°	6391.0	6715.7	6805.0
24°	6522.7	6836.7	6920.0
25°	6646.6	6941.0	7018.8
26°	6757.6	7033.8	7104.0
27°	6861.1	7112.5	7180.6
28°	6952.5	7181.0	7245.2
29°	7035.4	7238.8	7298.8
30°	7105.8	7288.2	7341.1
31°	7170.4	7325.7	7375.7
32°	7225.1	7357.6	7400.9
33°	7271.8	7379.7	7420.0
34°	7309.8	7394.4	7428.7
35°	7341.9	7400.1	7432.7
36°	7366.3	7399.8	7430.4
37°	7381.8	7394.8	7420.2
38°	7392.0	7383.5	7404.9
39°	7395.2	7368.3	7386.0
40°	7392.9	7347.8	7360.9
41°	7383.7	7323.0	7326.6
42°	7368.9	7293.2	7288.9
43°	7348.2	7260.1	7242.6
44°	7320.6	7218.9	7188.6



REPORT NUMBER: P1436715

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	7289.5	7172.9	7126.0
46°	7251.4	7118.7	7052.4
47°	7208.6	7056.7	6973.3
48°	7159.7	6988.5	6888.6
49°	7104.8	6909.3	6792.3
50°	7042.1	6824.8	6688.3
51°	6970.3	6730.0	6571.1
52°	6889.6	6621.6	6446.7
53°	6799.4	6506.0	6314.2
54°	6704.9	6382.0	6177.1
55°	6602.1	6246.2	6032.5
56°	6488.9	6105.6	5878.5
57°	6369.0	5960.0	5729.0
58°	6241.2	5806.8	5570.7
59°	6112.2	5653.8	5414.3
60°	5981.8	5496.7	5246.2
61°	5846.5	5334.9	5072.0
62°	5714.8	5171.0	4889.7
63°	5584.5	5005.8	4710.0
64°	5458.4	4852.9	4541.0
65°	5337.4	4707.4	4404.5
66°	5223.0	4588.7	4304.2
67°	5114.0	4501.2	4247.3
68°	5016.1	4441.2	4188.2
69°	4930.9	4379.0	4053.1
70°	4866.0	4275.0	3786.7
71°	4799.0	4075.2	3382.9
72°	4713.9	3723.4	2946.8
73°	4582.7	3262.6	2496.6
74°	4344.1	2751.8	1977.3
75°	3967.9	2214.8	1326.1
76°	3476.5	1602.4	721.8
77°	2926.9	920.7	472.0
78°	2239.1	679.8	224.4
79°	1435.9	439.0	178.8
80°	765.9	198.2	154.1
81°	502.2	164.2	132.5
82°	241.8	139.4	113.2
83°	186.7	117.1	95.3
84°	149.9	96.6	79.1
85°	113.9	79.1	62.9
86°	84.7	61.5	46.7
87°	60.5	44.0	31.9
88°	36.4	27.9	18.5
89°	14.3	11.8	7.8



REPORT NUMBER: P1436715

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436715

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436715
CATALOG NUMBER: XAS180-SFPM (3000K-180W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)