

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: P1436764

Luminaire Tested: XAS180-SFPM (5000K-180W-T5-HSS)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436764
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 (5000K-180W-T5-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 100% (180W)
OPTICS - TYPE 5 WITH HOUSE SIDE SHIELD
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 23809 (1 lamp)
Luminaire Lumens: 22889.7 lumens
Efficiency: 96.1%
Efficacy: 126.8 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

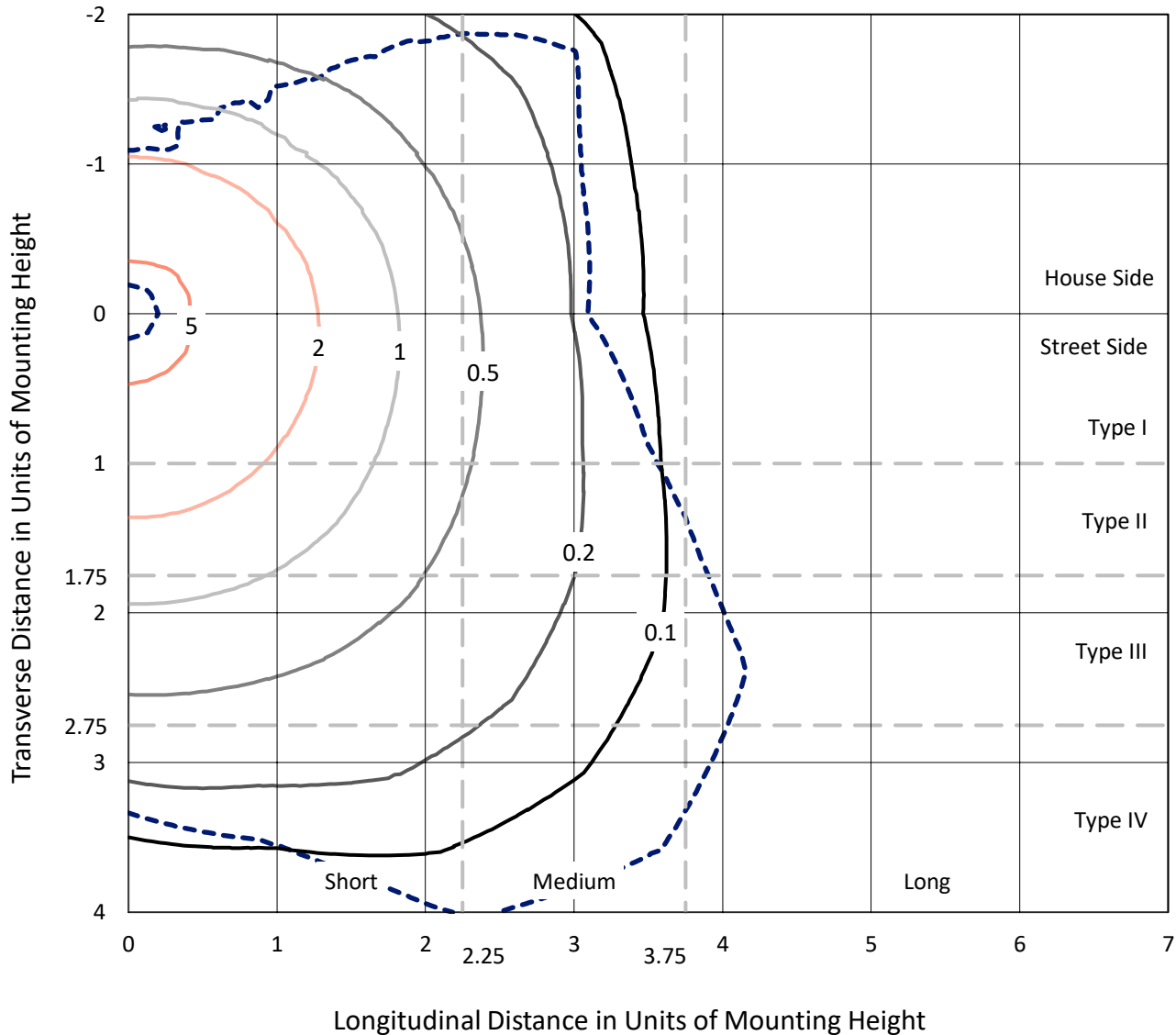
Input Watts (W): 180.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

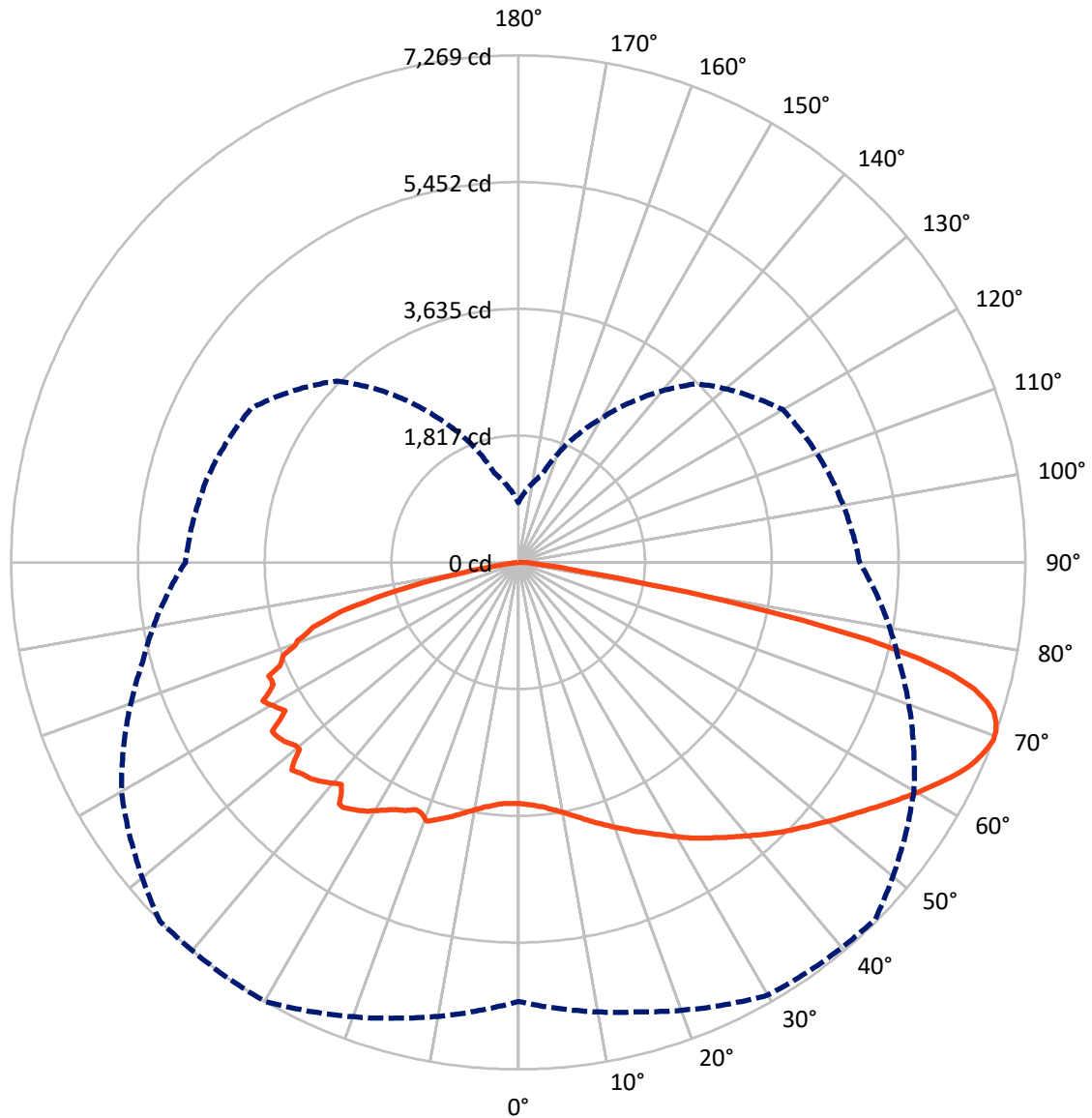
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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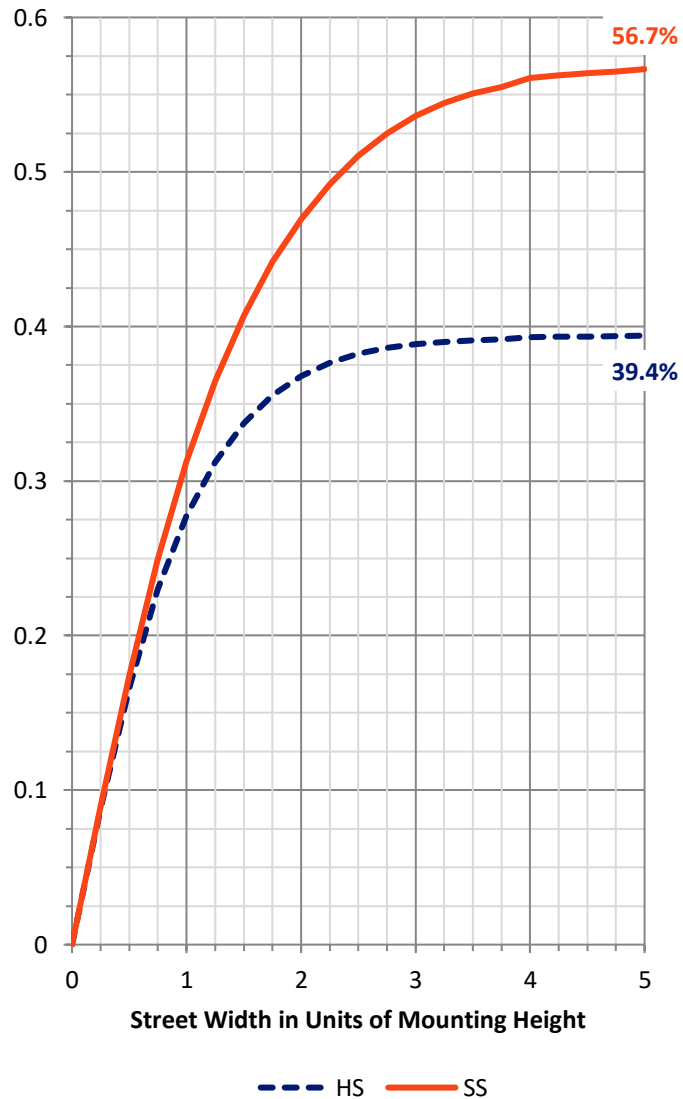
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9400.6	0.0	9400.6
	% Lamp	39.5	0.0	39.5
Street Side	Lumens	13489.1	0.0	13489.1
	% Lamp	56.7	0.0	56.7
Total	Lumens	22889.7	0.0	22889.7
	% Lamp	96.1	0.0	96.1

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	338.0	1.5	1.4
10°-20°	1075.7	4.7	4.5
20°-30°	1917.5	8.4	8.1
30°-40°	2838.9	12.4	11.9
40°-50°	3787.8	16.5	15.9
50°-60°	4645.4	20.3	19.5
60°-70°	5060.2	22.1	21.3
70°-80°	3052.6	13.3	12.8
80°-90°	173.5	0.8	0.7
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°	22889.7	100.0	96.1
0°-180°	22889.7	100.0	96.1

Coefficient of Utilization



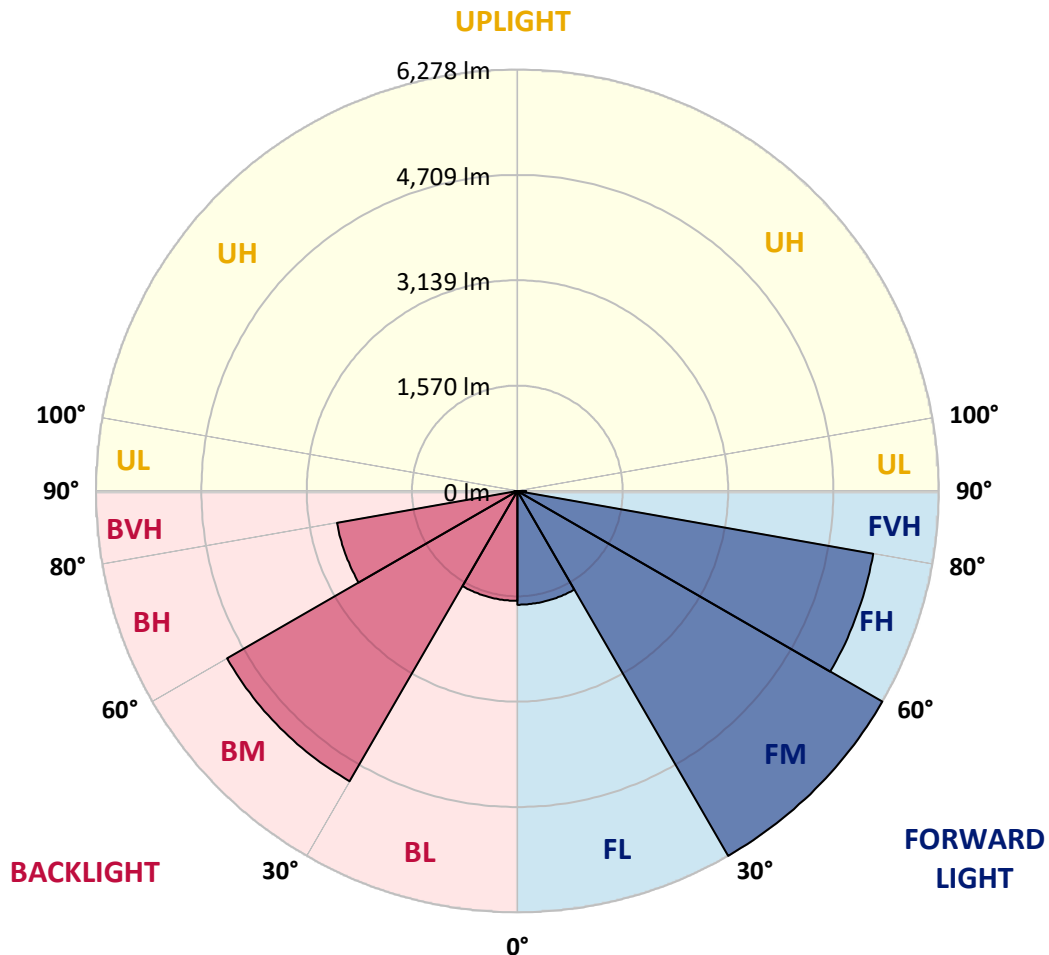
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1695.1	7.1			
FM (30°-60°)	6278.1	26.4			
FH (60°-80°)	5383.9	22.6			G3/7500
FVH (80°-90°)	132.0	0.6			G2/225
BL (0°-30°)	1636.1	6.9	B3/2500		
BM (30°-60°)	4994.0	21.0	B3/5000		
BH (60°-80°)	2728.8	11.5	B4/5000		G4/5000
BVH (80°-90°)	41.5	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	919.3	3.9			

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°	3461.1	3461.1	3461.1	3461.1	3461.1	3461.1	3461.1	3461.1	3461.1	3461.1	3461.1
1°	3466.1	3466.1	3465.8	3464.8	3463.9	3462.0	3459.8	3458.8	3457.8	3457.6	3457.6
2°	3475.2	3474.1	3473.3	3470.9	3468.6	3464.9	3461.5	3459.5	3457.8	3456.9	3457.6
3°	3487.2	3485.3	3483.1	3479.4	3476.7	3472.1	3467.5	3464.7	3461.5	3459.9	3460.1
4°	3502.6	3499.9	3496.6	3492.0	3488.1	3482.4	3476.9	3473.0	3468.8	3466.9	3466.7
5°	3520.4	3516.7	3513.2	3507.2	3501.7	3495.0	3488.4	3483.7	3479.9	3477.4	3479.7
6°	3540.1	3535.4	3532.1	3526.1	3518.6	3509.6	3502.3	3496.4	3492.2	3494.4	3497.3
7°	3560.3	3556.7	3553.5	3547.0	3538.9	3528.2	3519.5	3512.3	3507.3	3513.5	3517.9
8°	3583.1	3579.3	3576.2	3570.2	3560.9	3549.5	3540.3	3532.6	3528.7	3535.2	3541.4
9°	3609.0	3604.9	3600.7	3595.2	3586.1	3573.0	3562.3	3554.6	3554.5	3559.5	3566.4
10°	3636.7	3632.6	3629.3	3623.2	3614.6	3598.9	3587.4	3578.5	3581.7	3588.4	3593.5
11°	3666.5	3661.3	3659.7	3654.1	3644.5	3628.2	3614.7	3606.0	3611.4	3620.3	3623.9
12°	3696.2	3690.5	3690.8	3686.5	3675.3	3658.8	3643.2	3635.2	3642.4	3652.5	3655.4
13°	3726.5	3720.4	3723.3	3721.7	3708.7	3691.0	3673.2	3665.4	3676.4	3686.2	3688.8
14°	3757.9	3750.9	3755.5	3756.4	3744.5	3724.0	3704.1	3696.0	3710.1	3722.8	3722.6
15°	3790.8	3784.5	3790.2	3793.1	3780.1	3758.0	3737.5	3728.7	3745.2	3758.3	3756.0
16°	3823.6	3819.5	3825.3	3830.0	3817.0	3794.1	3772.1	3763.0	3782.4	3794.2	3790.2
17°	3859.6	3855.2	3861.8	3867.6	3855.8	3830.8	3807.2	3798.5	3820.6	3829.6	3780.5
18°	3897.2	3891.6	3899.8	3905.2	3895.0	3868.0	3839.6	3826.8	3858.8	3866.2	3718.6
19°	3935.9	3929.9	3939.0	3944.3	3935.2	3908.1	3862.3	3854.1	3886.0	3902.9	3687.5
20°	3976.7	3970.4	3978.6	3983.9	3976.0	3941.9	3893.4	3883.8	3913.8	3934.6	3718.5
21°	4020.7	4012.8	4019.4	4024.5	4018.8	3971.4	3930.5	3927.2	3944.1	3879.6	3752.0
22°	4066.0	4057.5	4062.8	4067.8	4063.4	4008.5	3973.5	3969.9	3985.2	3843.5	3787.2
23°	4114.0	4104.7	4106.5	4111.1	4110.1	4047.3	4018.5	4006.0	4023.5	3837.3	3824.2
24°	4164.1	4153.5	4152.1	4155.8	4147.1	4093.6	4057.6	4041.2	4052.0	3873.8	3862.5
25°	4215.0	4203.3	4198.8	4203.7	4184.5	4141.7	4094.4	4080.8	4086.5	3909.4	3900.5
26°	4268.9	4254.7	4246.8	4252.6	4229.6	4190.2	4138.7	4125.3	4124.0	3934.7	3941.0
27°	4324.5	4306.7	4296.9	4301.4	4269.0	4232.3	4180.8	4174.4	4167.3	3964.1	3980.7
28°	4381.7	4361.0	4348.0	4353.1	4314.3	4271.5	4232.3	4223.0	4190.1	3998.8	4020.1
29°	4441.1	4414.6	4400.6	4406.7	4363.5	4315.4	4285.8	4273.3	4163.7	4043.6	4060.1
30°	4502.0	4470.1	4455.7	4461.5	4414.2	4360.1	4342.3	4323.9	4166.1	4089.5	4093.5
31°	4563.1	4524.9	4510.9	4515.3	4466.2	4402.8	4399.9	4372.6	4154.0	4136.4	4111.6
32°	4623.7	4580.0	4567.2	4562.7	4518.0	4455.3	4456.4	4406.0	4188.4	4181.4	3964.7
33°	4685.2	4636.8	4624.1	4610.6	4564.4	4507.6	4513.8	4431.2	4222.4	4218.7	3855.7
34°	4747.3	4693.2	4682.7	4659.9	4608.6	4558.9	4561.9	4458.8	4258.6	4250.8	3871.9
35°	4811.5	4751.2	4742.4	4714.8	4655.7	4610.3	4595.6	4500.1	4298.3	4282.8	3912.3
36°	4875.9	4810.1	4802.4	4767.2	4707.7	4663.1	4633.5	4542.4	4342.4	4318.4	3946.6
37°	4940.0	4868.0	4864.0	4821.2	4758.7	4714.4	4674.6	4585.5	4382.8	4311.7	3974.7
38°	5004.6	4928.1	4925.9	4878.6	4809.3	4769.2	4724.1	4630.3	4410.0	4171.7	3999.3
39°	5068.1	4989.6	4985.8	4938.9	4861.9	4821.7	4777.9	4667.5	4442.6	4070.8	4035.0
40°	5132.5	5052.7	5047.6	4999.8	4919.3	4860.5	4832.0	4702.3	4491.0	4110.3	4076.0
41°	5194.3	5119.2	5111.4	5060.7	4979.3	4904.1	4883.0	4738.7	4540.3	4153.7	4116.6
42°	5259.2	5184.0	5175.3	5125.2	5039.2	4946.3	4932.8	4765.7	4590.7	4199.0	4152.8
43°	5320.6	5251.9	5240.9	5188.9	5102.6	4993.8	4973.4	4801.3	4640.5	4245.8	4033.6
44°	5381.6	5322.7	5306.2	5252.6	5163.7	5048.5	5006.7	4858.2	4691.0	4285.6	3880.6



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CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	5444.8	5394.0	5375.9	5312.1	5228.5	5109.6	5046.1	4916.6	4727.2	4311.7	3878.1
46°	5508.0	5468.8	5446.6	5373.7	5295.1	5174.0	5072.7	4977.2	4735.4	4335.4	3913.0
47°	5570.8	5546.1	5519.7	5436.8	5363.8	5239.5	5101.1	5028.1	4742.9	4370.9	3940.5
48°	5637.0	5624.9	5593.6	5501.3	5430.7	5303.1	5134.7	5047.8	4639.8	4403.0	3963.2
49°	5703.7	5704.3	5669.0	5570.6	5492.8	5370.2	5180.0	5059.1	4559.9	4287.8	3993.5
50°	5772.8	5785.9	5744.6	5642.8	5546.9	5436.6	5229.5	5064.0	4550.1	4125.7	4031.9
51°	5842.2	5868.4	5822.8	5716.4	5606.9	5494.6	5278.6	5054.7	4594.8	4130.8	3923.3
52°	5912.7	5951.6	5899.1	5791.1	5670.6	5548.7	5330.5	5091.8	4630.5	4175.2	3686.2
53°	5984.9	6032.8	5976.5	5864.9	5727.2	5605.1	5380.4	5139.0	4648.8	4217.8	3685.6
54°	6054.8	6112.4	6058.0	5944.9	5790.6	5652.0	5427.4	5185.4	4672.1	4246.4	3728.2
55°	6124.5	6187.7	6140.2	6027.6	5857.6	5682.9	5462.2	5214.9	4720.8	4272.6	3772.7
56°	6188.1	6261.1	6227.9	6114.1	5928.3	5722.8	5482.0	5225.5	4761.4	4277.3	3817.1
57°	6248.8	6330.8	6316.4	6207.4	6000.1	5762.7	5497.8	5244.5	4778.8	4098.4	3854.8
58°	6306.9	6395.6	6404.9	6300.0	6070.7	5804.5	5508.7	5262.3	4805.2	3961.8	3622.9
59°	6358.4	6456.6	6491.2	6392.2	6141.6	5841.0	5526.5	5255.4	4686.2	4009.9	3497.8
60°	6403.6	6510.8	6575.8	6490.0	6208.2	5872.2	5540.0	5221.4	4569.3	4062.5	3514.6
61°	6440.7	6559.4	6660.1	6586.9	6271.5	5900.4	5545.8	5216.1	4587.8	4118.1	3532.1
62°	6469.6	6600.3	6742.1	6686.6	6331.5	5918.1	5544.3	5210.4	4599.7	4167.2	3359.0
63°	6494.6	6636.5	6825.5	6786.7	6389.4	5924.7	5525.6	5166.3	4608.7	4026.9	3164.5
64°	6516.9	6666.0	6902.9	6886.4	6439.4	5922.7	5485.2	5130.9	4598.2	3923.5	3141.3
65°	6537.7	6691.1	6974.1	6979.2	6487.7	5911.1	5441.5	5064.2	4533.5	3918.0	3082.1
66°	6549.8	6714.4	7037.8	7061.3	6529.8	5879.3	5397.4	4990.9	4351.2	3931.2	2792.3
67°	6548.1	6728.6	7092.3	7134.2	6556.4	5836.3	5339.7	4868.0	4341.4	3723.3	2781.5
68°	6486.9	6722.3	7138.6	7194.2	6556.2	5782.4	5184.0	4762.2	4366.7	3663.6	2616.1
69°	6293.8	6670.5	7164.0	7238.1	6550.2	5664.0	4893.8	4646.9	4379.3	3619.9	2386.7
70°	5893.3	6517.4	7169.6	7262.6	6543.4	5448.9	4475.2	4456.8	4363.9	3414.4	2154.6
71°	5264.0	6188.3	7142.9	7257.9	6484.2	5128.2	4046.0	4168.2	4205.9	3355.9	1922.5
72°	4597.3	5651.7	7076.7	7214.2	6368.7	4718.5	3649.6	3807.3	4045.2	3189.0	1691.5
73°	3893.9	4951.8	6928.5	7123.8	6175.1	4301.9	3299.4	3434.9	3866.1	3086.6	1508.4
74°	3077.5	4189.0	6610.4	6953.8	5896.0	3917.4	2894.8	3097.5	3643.4	2832.0	1255.7
75°	2054.2	3360.4	6041.2	6662.8	5534.2	3487.2	2201.9	2749.3	3333.3	2623.8	1081.7
76°	1119.9	2373.2	5295.4	6203.8	5108.5	2838.1	1509.0	2159.6	3040.2	2275.1	928.7
77°	834.7	1319.7	4498.5	5537.3	4585.5	1870.5	826.2	1570.1	2702.5	1926.3	758.6
78°	559.0	968.1	3520.5	4572.9	3865.7	975.2	601.0	990.3	2155.5	1577.1	554.3
79°	283.2	630.7	2289.2	3448.7	2857.6	704.0	375.8	702.6	1608.5	1172.0	392.4
80°	251.3	293.3	1184.3	2240.7	1742.5	452.3	155.2	414.8	1068.6	782.9	230.5
81°	223.7	255.8	880.2	1138.7	874.1	200.6	132.6	131.7	750.3	545.7	71.2
82°	198.8	225.1	582.5	842.5	573.5	170.5	112.5	110.5	432.0	308.5	36.5
83°	176.1	197.2	284.8	559.2	278.7	144.1	94.3	91.7	118.0	78.7	29.6
84°	154.4	171.5	234.1	275.9	225.0	121.0	77.5	75.0	91.3	59.9	24.6
85°	133.6	147.8	189.6	228.9	177.9	100.6	62.1	60.8	71.1	49.8	19.6
86°	113.9	126.7	154.9	191.2	135.8	83.2	47.9	47.8	52.6	40.8	14.6
87°	95.1	106.9	124.1	149.4	105.2	65.7	35.4	35.8	38.8	31.8	11.4
88°	82.1	89.5	95.8	102.6	79.4	48.3	22.9	25.4	27.7	22.8	8.7
89°	69.1	72.2	78.7	80.4	53.7	31.4	10.6	14.9	16.6	13.8	6.3



REPORT NUMBER: P1436764

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436764

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436764

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436764

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3461.1	3461.1	3461.1	3461.1	3461.1	3461.1	3461.1	3461.1	3461.1	3461.1	3461.1
1°	3458.1	3457.8	3459.5	3460.1	3461.7	3463.0	3464.0	3463.6	3464.9	3465.4	3466.0
2°	3458.5	3457.6	3460.4	3462.4	3465.0	3467.3	3469.6	3470.5	3473.0	3474.4	3475.7
3°	3461.5	3461.1	3464.5	3467.5	3471.2	3474.4	3478.4	3480.2	3483.8	3486.1	3487.9
4°	3468.7	3470.4	3473.8	3476.5	3481.1	3485.8	3491.4	3494.4	3498.6	3500.9	3502.7
5°	3483.7	3485.5	3489.2	3491.8	3495.1	3500.7	3506.5	3510.5	3515.4	3519.0	3521.2
6°	3501.6	3503.8	3509.1	3511.9	3515.1	3517.9	3525.1	3529.7	3536.0	3540.2	3542.6
7°	3523.5	3525.4	3531.1	3534.6	3538.1	3539.9	3547.9	3553.5	3559.6	3564.7	3567.3
8°	3546.5	3548.7	3555.5	3561.4	3564.8	3566.4	3573.6	3578.7	3586.3	3592.0	3593.7
9°	3571.7	3574.3	3581.4	3589.3	3594.7	3596.6	3599.9	3605.4	3614.6	3622.0	3623.8
10°	3597.9	3601.9	3611.0	3621.0	3627.8	3628.7	3630.2	3635.5	3645.3	3654.1	3655.2
11°	3627.5	3630.9	3642.0	3656.0	3662.7	3663.7	3663.0	3669.7	3681.0	3690.2	3689.1
12°	3656.4	3660.7	3672.8	3691.6	3700.7	3700.9	3698.4	3705.4	3717.5	3727.2	3725.7
13°	3688.0	3691.2	3705.3	3727.9	3741.1	3740.9	3735.2	3743.1	3756.9	3766.0	3764.5
14°	3718.4	3720.0	3738.8	3764.0	3783.8	3781.9	3773.3	3781.8	3797.8	3808.6	3805.9
15°	3738.4	3681.3	3759.9	3802.5	3825.1	3825.4	3815.3	3821.3	3839.8	3853.2	3845.9
16°	3663.0	3612.1	3687.8	3839.2	3865.8	3870.5	3857.5	3863.5	3882.1	3897.2	3888.6
17°	3615.7	3616.7	3644.0	3836.6	3908.4	3916.2	3901.9	3907.2	3925.9	3941.7	3931.0
18°	3646.0	3648.5	3673.3	3775.8	3951.4	3960.7	3941.8	3951.3	3971.6	3986.1	3974.2
19°	3676.7	3681.0	3706.2	3750.2	3993.3	3994.8	3972.2	3984.2	4018.7	4033.2	4017.5
20°	3710.3	3715.9	3740.8	3783.8	4029.9	4029.3	4007.7	4019.8	4066.7	4080.9	4062.5
21°	3745.1	3750.9	3777.2	3821.9	3997.2	4066.3	4056.2	4059.9	4104.0	4130.5	4107.5
22°	3782.5	3788.6	3816.0	3860.7	3953.8	4114.2	4106.4	4108.6	4147.3	4178.9	4153.9
23°	3819.5	3827.5	3857.3	3901.2	3950.0	4163.8	4155.5	4161.3	4190.5	4228.8	4202.4
24°	3859.1	3868.0	3899.0	3943.1	3992.0	4204.0	4195.5	4212.9	4241.3	4278.4	4249.9
25°	3897.2	3905.7	3939.8	3985.8	4036.1	4240.1	4238.6	4257.7	4294.9	4320.8	4299.3
26°	3935.7	3946.0	3980.1	4031.4	4069.9	4277.9	4281.5	4302.4	4348.8	4362.8	4350.2
27°	3974.1	3985.0	4021.0	4075.9	4102.6	4322.1	4331.6	4351.8	4401.8	4410.4	4401.8
28°	4008.7	3956.2	4058.2	4120.8	4138.1	4352.7	4384.8	4403.3	4448.3	4456.6	4456.9
29°	3924.4	3800.0	3991.0	4164.9	4185.8	4346.1	4438.3	4461.2	4492.7	4509.4	4513.6
30°	3780.7	3752.3	3843.5	4200.0	4234.3	4338.9	4493.3	4520.3	4542.8	4563.0	4572.0
31°	3758.0	3793.7	3815.4	4224.5	4283.0	4342.3	4545.4	4579.4	4587.8	4616.9	4629.6
32°	3796.1	3837.6	3854.1	4102.5	4331.2	4364.8	4586.5	4640.0	4637.0	4671.7	4687.1
33°	3834.6	3883.0	3894.0	3996.3	4376.3	4402.6	4614.6	4699.2	4691.7	4724.7	4741.3
34°	3873.7	3926.9	3933.1	3994.9	4412.1	4443.2	4646.1	4758.7	4745.3	4775.1	4794.0
35°	3912.0	3974.9	3973.0	4037.5	4448.3	4483.3	4690.6	4800.1	4801.0	4825.7	4849.8
36°	3952.8	4019.9	4016.2	4078.9	4482.2	4525.3	4735.9	4842.7	4858.4	4879.3	4909.7
37°	3989.4	4064.6	4057.4	4109.2	4495.1	4570.3	4783.5	4884.5	4915.3	4936.0	4966.3
38°	4028.9	4102.6	4098.2	4136.2	4360.2	4600.5	4834.1	4938.4	4973.7	4989.4	5023.8
39°	4061.8	3914.6	4134.9	4169.0	4259.0	4633.0	4884.0	4990.2	5032.1	5047.2	5085.4
40°	3867.8	3761.7	3961.5	4212.2	4287.5	4680.7	4922.0	5041.8	5079.0	5110.0	5149.8
41°	3724.3	3786.4	3810.9	4255.4	4333.2	4732.3	4959.2	5092.7	5122.0	5175.0	5214.9
42°	3749.7	3820.0	3825.6	4294.8	4380.4	4787.5	4984.9	5144.3	5169.7	5238.3	5281.1
43°	3789.3	3854.5	3866.4	4206.3	4428.3	4842.9	5024.9	5193.7	5219.2	5303.0	5346.3
44°	3831.6	3887.6	3909.9	4041.9	4472.2	4897.7	5083.4	5234.3	5278.8	5367.4	5413.7



REPORT NUMBER: P1436764

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	3873.7	3919.3	3951.1	4017.5	4502.9	4940.0	5146.7	5274.9	5342.5	5434.0	5476.2
46°	3916.1	3942.8	3994.2	4054.6	4526.9	4952.4	5209.3	5306.6	5410.4	5503.7	5540.2
47°	3952.0	3738.8	4031.9	4081.0	4562.3	4973.5	5272.8	5329.8	5476.6	5572.6	5604.9
48°	3771.0	3518.3	3877.3	4103.6	4597.8	4911.2	5315.4	5364.2	5541.7	5641.2	5672.9
49°	3543.3	3534.5	3641.9	4134.3	4518.9	4829.0	5314.8	5411.7	5607.5	5704.9	5743.2
50°	3570.2	3564.9	3650.7	4171.5	4350.5	4773.0	5314.2	5463.0	5670.0	5762.0	5817.3
51°	3613.3	3596.2	3691.0	4092.6	4324.3	4812.3	5303.5	5510.6	5724.4	5816.8	5890.3
52°	3656.3	3626.9	3730.1	3851.5	4371.2	4843.0	5305.0	5558.8	5772.4	5876.7	5962.6
53°	3694.7	3648.6	3766.7	3827.2	4413.9	4860.5	5337.5	5602.9	5821.9	5930.3	6038.3
54°	3721.4	3346.2	3796.5	3867.6	4440.4	4880.3	5373.5	5643.7	5861.1	5991.5	6119.4
55°	3443.7	3199.5	3514.5	3910.8	4463.3	4918.1	5399.5	5669.7	5882.6	6058.2	6204.4
56°	3284.5	3221.2	3350.4	3953.2	4468.1	4955.4	5399.3	5674.9	5911.7	6125.0	6291.7
57°	3292.8	3234.1	3355.8	3989.5	4326.6	4964.0	5400.2	5672.6	5935.6	6188.5	6378.2
58°	3305.9	3189.2	3369.1	3766.7	4161.8	4976.4	5402.1	5671.4	5961.6	6247.8	6466.9
59°	3204.7	2766.8	3285.7	3620.6	4199.4	4886.7	5389.3	5676.8	5985.5	6306.2	6554.9
60°	2852.7	2723.0	2915.8	3634.4	4246.1	4739.0	5349.2	5679.1	6004.4	6363.3	6644.2
61°	2843.8	2721.3	2901.6	3654.3	4295.4	4728.9	5328.1	5670.5	6021.4	6421.0	6734.6
62°	2829.7	2422.7	2885.3	3496.2	4339.8	4732.6	5317.7	5661.4	6032.4	6472.4	6825.2
63°	2535.9	2196.0	2573.5	3274.7	4205.6	4730.5	5269.4	5638.9	6031.2	6514.6	6916.9
64°	2336.5	2008.2	2372.1	3251.2	4063.7	4713.5	5227.7	5591.1	6022.2	6549.2	7004.3
65°	2317.1	1820.4	2353.4	3209.0	4039.9	4650.4	5146.9	5536.2	5989.4	6578.7	7081.8
66°	2064.2	1634.4	2090.3	2886.5	4032.8	4465.3	5063.5	5476.1	5940.1	6603.6	7145.9
67°	1811.3	1576.0	1829.0	2860.6	3814.4	4414.1	4941.4	5376.0	5881.5	6606.8	7198.3
68°	1591.4	1046.0	1622.1	2700.2	3739.2	4426.1	4794.0	5151.4	5776.7	6593.2	7238.8
69°	1295.2	853.9	1322.9	2439.8	3675.6	4419.7	4620.5	4773.2	5580.9	6570.9	7269.3
70°	992.9	582.0	1010.6	2221.4	3455.9	4379.4	4353.9	4270.0	5273.1	6515.2	7265.2
71°	700.3	310.1	692.6	1984.3	3375.4	4176.7	3986.1	3825.8	4839.8	6402.7	7222.4
72°	343.2	41.6	295.2	1747.0	3196.7	3955.2	3568.5	3429.2	4379.0	6220.0	7148.3
73°	285.4	0.6	247.6	1507.8	3042.6	3718.3	3171.4	3035.0	3931.7	5941.3	7007.0
74°	231.6	0.5	200.0	1201.5	2760.4	3446.7	2805.1	2537.3	3493.4	5573.2	6784.1
75°	177.8	0.5	152.4	1002.4	2499.1	3093.7	2266.1	1831.6	2946.4	5119.1	6428.3
76°	125.8	0.6	108.3	845.6	2120.0	2738.4	1727.1	1071.8	2152.6	4590.3	5911.3
77°	70.7	0.7	63.3	678.6	1741.0	2262.1	1192.2	504.2	1245.9	3979.0	5155.2
78°	50.3	0.8	45.3	494.2	1361.8	1785.8	843.7	386.3	909.9	3173.5	4163.9
79°	29.9	0.9	27.2	351.7	977.1	1308.7	495.2	271.0	575.8	2155.6	3046.8
80°	9.7	1.0	9.4	209.1	591.8	714.4	152.1	155.7	241.6	1229.0	1885.8
81°	8.2	1.2	7.9	69.6	348.8	511.1	124.6	130.5	193.4	898.1	943.3
82°	7.1	1.4	6.9	39.4	112.1	307.9	105.0	109.9	163.9	580.3	710.3
83°	6.3	1.5	6.1	30.6	74.4	108.3	87.2	91.8	138.7	262.5	490.7
84°	5.5	1.7	5.4	25.2	61.0	87.1	71.4	75.7	116.6	215.0	271.0
85°	4.9	1.9	4.9	19.9	51.0	67.0	57.8	59.7	96.5	168.7	227.4
86°	4.5	2.1	4.4	14.6	41.9	49.3	45.4	45.2	79.8	129.6	189.9
87°	4.1	2.4	4.1	11.1	31.4	37.1	33.7	31.3	63.1	100.6	146.7
88°	3.8	2.6	3.8	8.3	20.9	26.4	23.8	18.9	46.4	76.5	102.3
89°	3.6	2.8	3.5	5.8	10.5	15.6	13.9	8.6	30.1	52.5	80.0



REPORT NUMBER: P1436764

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436764

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436764

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1436764

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	3461.1	3461.1	3461.1
1°	3467.1	3467.4	3466.1
2°	3476.5	3477.3	3475.2
3°	3489.3	3490.0	3487.2
4°	3505.3	3505.6	3502.6
5°	3522.8	3523.2	3520.4
6°	3543.2	3543.5	3540.1
7°	3566.4	3564.7	3560.3
8°	3591.5	3588.6	3583.1
9°	3619.9	3615.1	3609.0
10°	3650.9	3644.3	3636.7
11°	3683.3	3675.4	3666.5
12°	3717.9	3707.4	3696.2
13°	3754.1	3738.9	3726.5
14°	3792.0	3772.2	3757.9
15°	3828.6	3807.1	3790.8
16°	3866.1	3842.9	3823.6
17°	3905.2	3879.5	3859.6
18°	3944.8	3918.1	3897.2
19°	3986.3	3957.1	3935.9
20°	4028.0	3997.8	3976.7
21°	4071.1	4040.7	4020.7
22°	4116.9	4085.3	4066.0
23°	4163.7	4132.0	4114.0
24°	4209.9	4179.0	4164.1
25°	4259.2	4229.2	4215.0
26°	4310.3	4280.9	4268.9
27°	4363.5	4333.8	4324.5
28°	4417.7	4386.5	4381.7
29°	4474.5	4441.1	4441.1
30°	4531.0	4497.4	4502.0
31°	4589.7	4554.5	4563.1
32°	4647.6	4611.5	4623.7
33°	4706.9	4670.4	4685.2
34°	4767.5	4728.2	4747.3
35°	4828.8	4786.1	4811.5
36°	4891.4	4844.3	4875.9
37°	4954.1	4904.7	4940.0
38°	5017.8	4966.2	5004.6
39°	5081.8	5028.9	5068.1
40°	5148.5	5093.9	5132.5
41°	5213.6	5161.1	5194.3
42°	5279.4	5229.7	5259.2
43°	5347.2	5298.1	5320.6
44°	5416.3	5369.5	5381.6



REPORT NUMBER: P1436764

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	5486.7	5445.4	5444.8
46°	5557.5	5520.5	5508.0
47°	5630.6	5598.6	5570.8
48°	5706.1	5678.3	5637.0
49°	5783.8	5762.8	5703.7
50°	5862.2	5845.5	5772.8
51°	5940.2	5930.6	5842.2
52°	6018.4	6015.1	5912.7
53°	6098.2	6100.5	5984.9
54°	6177.7	6183.2	6054.8
55°	6261.5	6264.1	6124.5
56°	6348.8	6340.7	6188.1
57°	6437.9	6411.7	6248.8
58°	6522.8	6476.5	6306.9
59°	6604.9	6536.5	6358.4
60°	6689.9	6588.8	6403.6
61°	6774.0	6634.4	6440.7
62°	6856.2	6674.7	6469.6
63°	6940.1	6710.5	6494.6
64°	7022.8	6744.0	6516.9
65°	7098.4	6773.2	6537.7
66°	7165.2	6800.6	6549.8
67°	7218.3	6817.8	6548.1
68°	7254.9	6813.2	6486.9
69°	7267.7	6766.2	6293.8
70°	7260.1	6632.4	5893.3
71°	7220.1	6333.9	5264.0
72°	7133.1	5809.1	4597.3
73°	6960.4	5107.6	3893.9
74°	6617.2	4314.8	3077.5
75°	6052.9	3474.9	2054.2
76°	5306.2	2534.5	1119.9
77°	4476.3	1466.8	834.7
78°	3449.1	1079.4	559.0
79°	2240.2	697.9	283.2
80°	1209.7	316.4	251.3
81°	884.3	266.4	223.7
82°	584.7	234.0	198.8
83°	285.1	204.3	176.1
84°	237.7	177.3	154.4
85°	193.4	152.8	133.6
86°	157.6	130.5	113.9
87°	126.6	109.8	95.1
88°	97.4	91.6	82.1
89°	80.1	73.5	69.1



REPORT NUMBER: P1436764

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436764

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436764

CATALOG NUMBER: XAS180-SFPM (5000K-180W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)