

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: P1436712

Luminaire Tested: XAS180-SFPM (3000K-180W-T3-HSS)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436712
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-T3-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 100% (180W)
OPTICS - TYPE 3 WITH HOUSE SIDE SHIELD
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

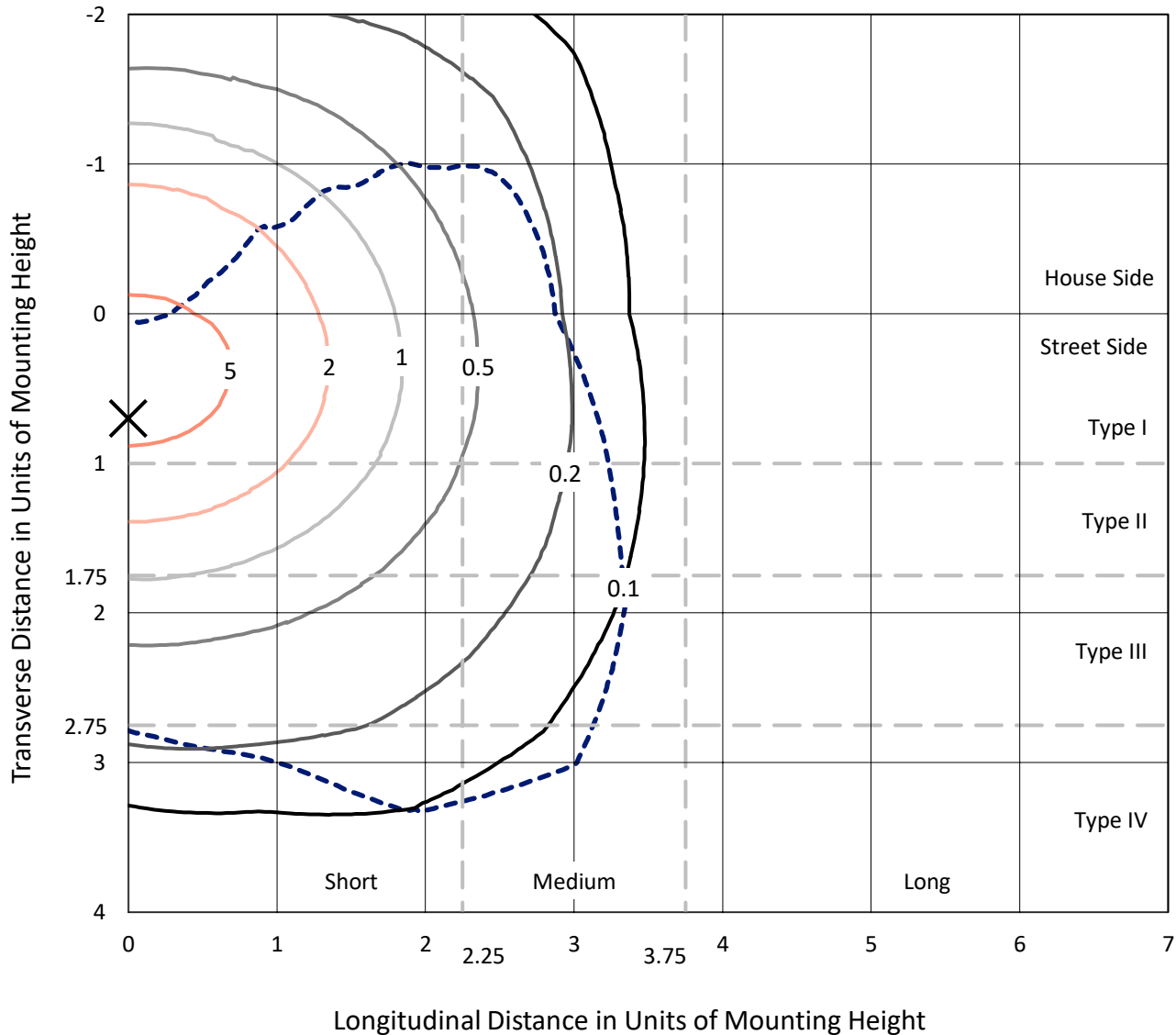
Lumens per Lamp: 24748 (1 lamp)
Luminaire Lumens: 22186.3 lumens
Efficiency: 89.6%
Efficacy: 122.7 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 180.8
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

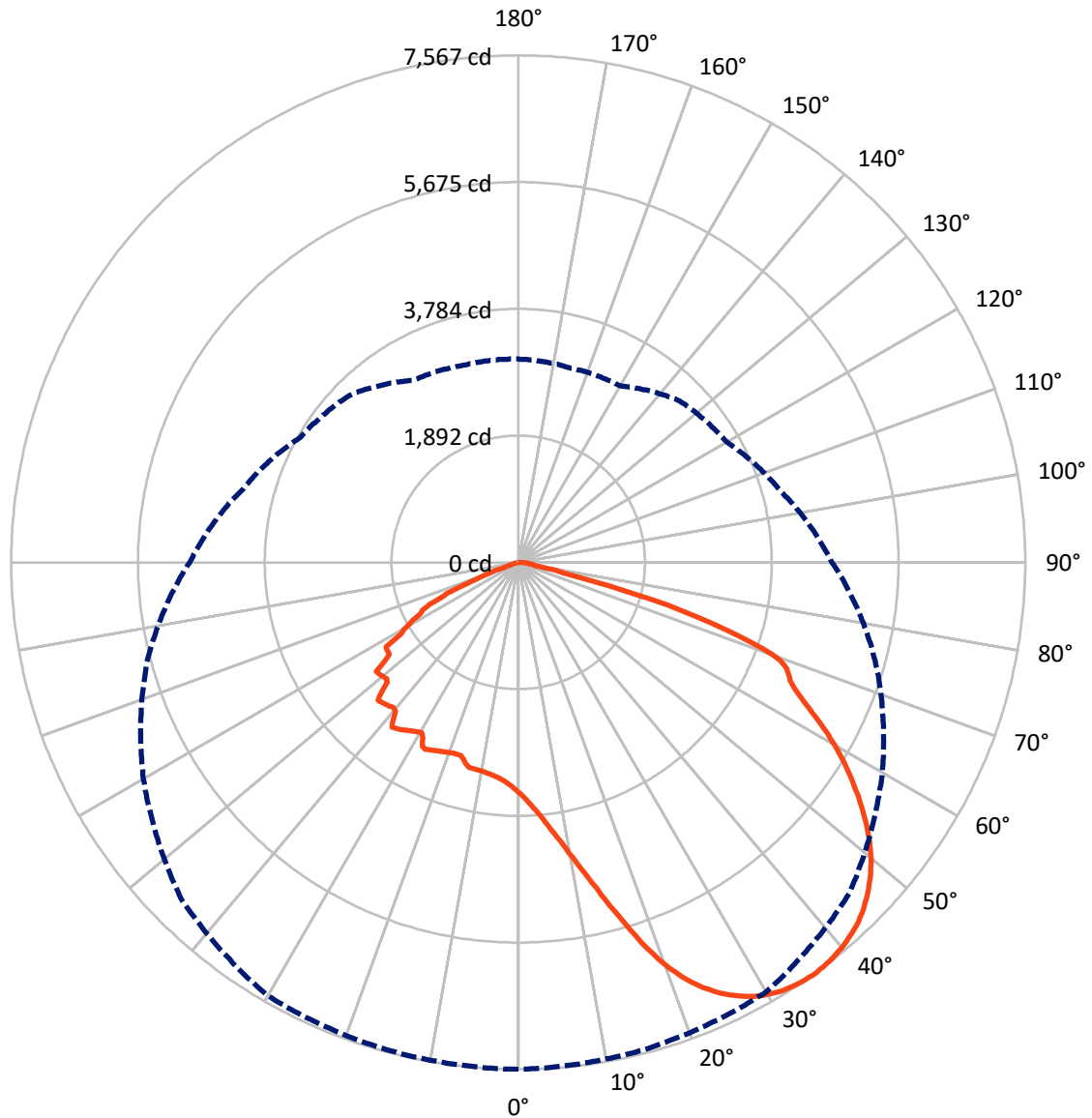
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 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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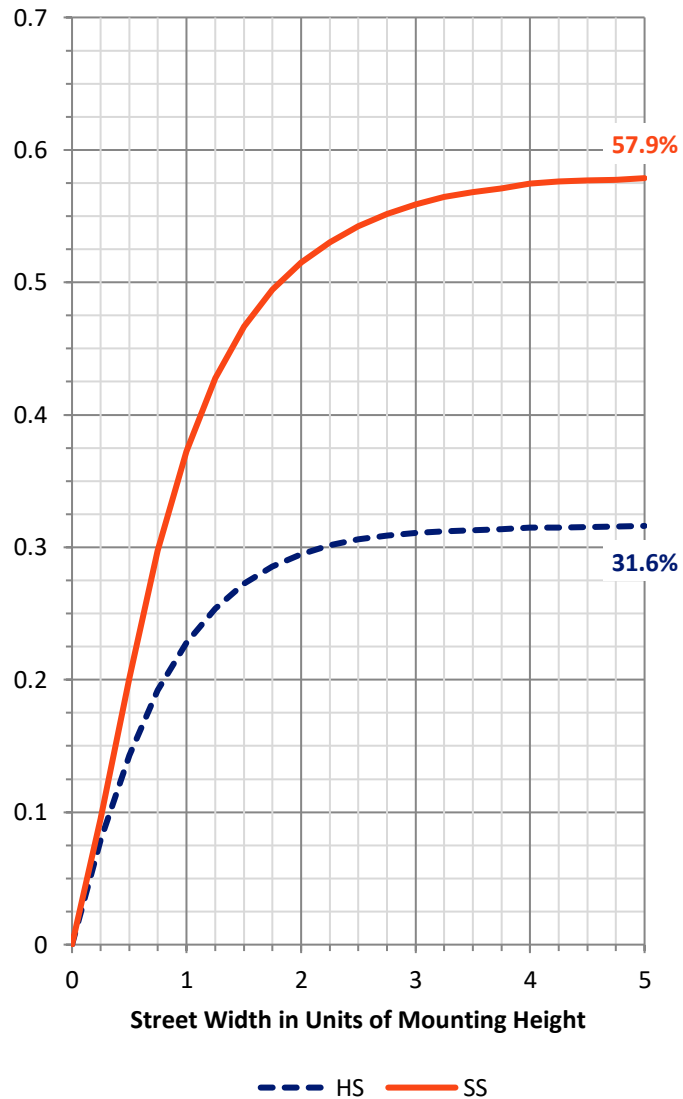
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7859.8	0.0	7859.8
	% Lamp	31.8	0.0	31.8
Street Side	Lumens	14326.5	0.0	14326.5
	% Lamp	57.9	0.0	57.9
Total	Lumens	22186.3	0.0	22186.3
	% Lamp	89.6	0.0	89.6

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	342.5	1.5	1.4
10°-20°	1157.3	5.2	4.7
20°-30°	2188.3	9.9	8.8
30°-40°	3217.2	14.5	13.0
40°-50°	4063.8	18.3	16.4
50°-60°	4499.9	20.3	18.2
60°-70°	4233.8	19.1	17.1
70°-80°	2307.4	10.4	9.3
80°-90°	176.1	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°	22186.3	100.0	89.6
0°-180°	22186.3	100.0	89.6

Coefficient of Utilization



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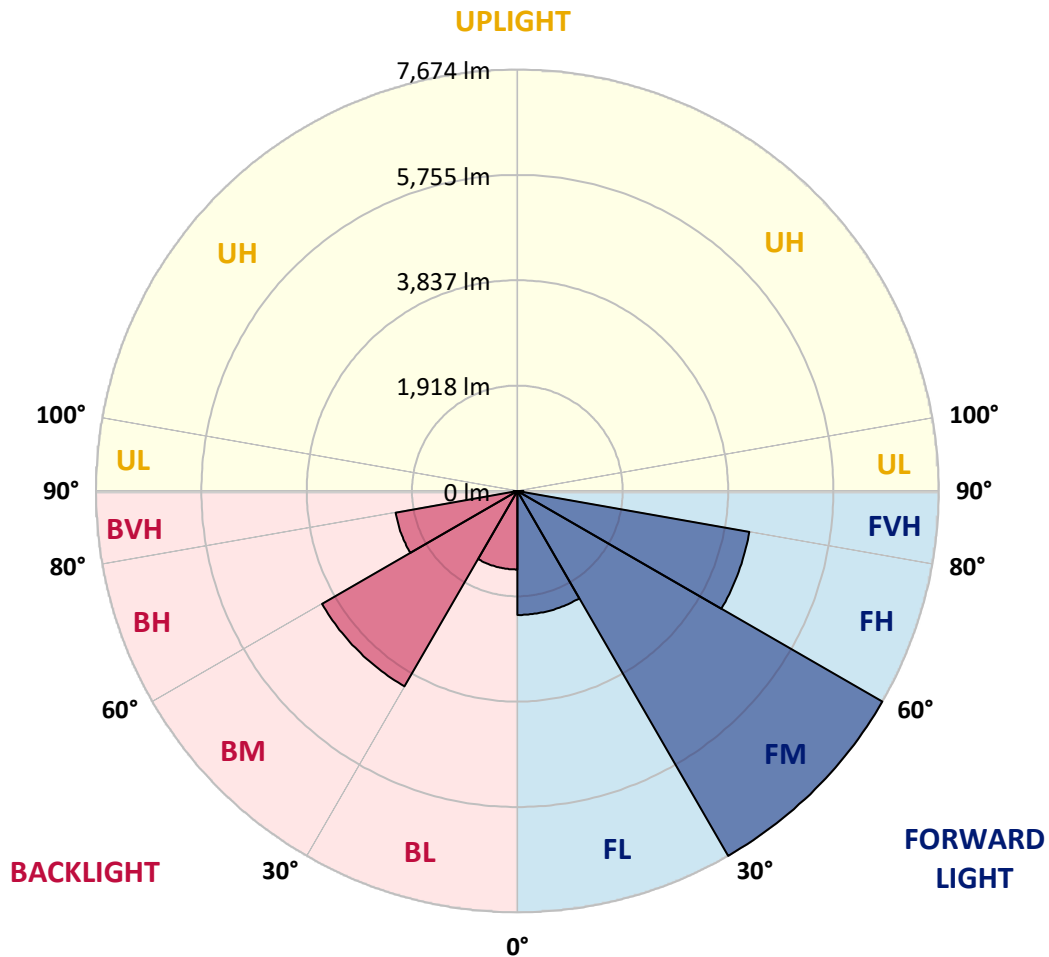
CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2257.4	9.1			
FM (30°-60°)	7673.7	31.0			
FH (60°-80°)	4289.0	17.3			G2/5000
FVH (80°-90°)	106.4	0.4			G2/225
BL (0°-30°)	1430.7	5.8	B3/2500		
BM (30°-60°)	4107.2	16.6	B3/5000		
BH (60°-80°)	2252.2	9.1	B3/2500		G3/2500
BVH (80°-90°)	69.6	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	2561.7	10.4			

BUG Rating: B3-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	3453.1	3453.1	3453.1	3453.1	3453.1	3453.1	3453.1	3453.1	3453.1	3453.1	3453.1
1°	3515.1	3513.7	3509.6	3500.8	3487.2	3473.2	3444.5	3431.2	3420.4	3410.2	3403.4
2°	3586.4	3582.3	3570.5	3549.4	3521.1	3490.5	3446.1	3418.6	3394.3	3374.9	3360.8
3°	3664.3	3658.5	3636.7	3602.3	3559.8	3513.1	3452.8	3410.1	3373.6	3345.0	3323.4
4°	3751.6	3741.2	3709.1	3662.1	3603.5	3540.2	3461.5	3405.7	3357.3	3319.3	3292.2
5°	3850.7	3835.2	3792.6	3727.8	3651.4	3569.3	3473.1	3403.0	3344.8	3298.6	3267.8
6°	3957.4	3937.5	3883.6	3801.9	3704.1	3601.4	3487.1	3403.2	3334.6	3283.4	3247.5
7°	4073.3	4048.2	3983.6	3883.7	3761.8	3638.6	3504.8	3407.4	3327.8	3271.5	3231.7
8°	4199.6	4169.2	4089.3	3969.9	3824.3	3678.6	3527.6	3415.4	3326.1	3262.2	3219.1
9°	4336.4	4298.8	4204.5	4062.4	3893.9	3722.4	3552.4	3425.1	3327.1	3256.3	3208.7
10°	4484.7	4440.4	4329.1	4162.5	3966.9	3769.3	3578.8	3437.5	3331.6	3254.8	3200.9
11°	4645.1	4593.0	4461.9	4269.0	4044.2	3821.6	3609.0	3453.0	3337.7	3255.8	3196.9
12°	4817.1	4756.0	4603.4	4381.4	4125.3	3875.3	3641.2	3470.1	3346.8	3258.7	3196.1
13°	5002.3	4931.3	4754.7	4503.7	4211.4	3933.4	3674.9	3488.8	3357.1	3263.6	3197.9
14°	5201.6	5122.9	4919.1	4630.5	4301.3	3992.8	3709.3	3507.8	3367.6	3270.2	3199.5
15°	5415.3	5321.5	5093.3	4767.3	4395.8	4051.8	3745.3	3529.4	3381.1	3278.0	3203.8
16°	5635.5	5534.0	5271.5	4909.0	4496.3	4116.0	3784.7	3551.5	3395.8	3285.8	3208.3
17°	5859.5	5744.0	5451.1	5055.3	4600.7	4182.1	3824.7	3575.8	3411.5	3295.3	3191.2
18°	6074.7	5947.0	5629.0	5201.9	4711.0	4250.8	3864.5	3595.5	3428.1	3306.9	3135.4
19°	6280.8	6144.0	5806.3	5347.0	4823.3	4319.9	3892.0	3609.9	3436.9	3319.0	3096.0
20°	6470.6	6330.8	5975.5	5490.1	4935.4	4385.6	3926.9	3627.8	3442.5	3328.0	3073.8
21°	6638.1	6498.1	6138.1	5629.9	5050.7	4446.1	3965.6	3658.5	3451.7	3285.2	3082.9
22°	6784.2	6654.1	6289.7	5764.6	5164.0	4515.6	4014.4	3688.3	3473.0	3250.3	3093.9
23°	6919.2	6792.0	6431.9	5892.3	5276.6	4587.7	4063.7	3714.8	3493.0	3229.6	3106.9
24°	7036.4	6915.6	6565.3	6016.0	5374.1	4667.9	4109.1	3736.6	3506.5	3215.7	3122.3
25°	7138.8	7026.1	6687.0	6133.8	5467.1	4753.1	4150.0	3763.1	3521.2	3230.3	3137.9
26°	7225.9	7121.7	6798.5	6246.7	5562.5	4836.7	4194.1	3792.2	3538.3	3238.0	3156.1
27°	7302.7	7206.1	6900.4	6356.6	5653.8	4917.4	4241.5	3827.4	3563.5	3247.4	3173.5
28°	7367.9	7277.6	6994.9	6459.2	5742.4	4987.7	4293.3	3864.2	3578.3	3261.0	3190.5
29°	7423.0	7338.8	7077.6	6554.6	5829.5	5059.8	4350.5	3900.3	3558.9	3284.6	3209.3
30°	7468.6	7389.5	7153.9	6648.6	5917.2	5133.1	4409.0	3937.8	3560.0	3308.2	3224.6
31°	7504.6	7431.7	7219.5	6733.8	6000.0	5205.5	4468.8	3974.6	3549.7	3333.0	3229.3
32°	7530.4	7462.5	7275.0	6804.7	6078.5	5279.8	4528.9	4002.3	3558.0	3356.8	3134.1
33°	7550.0	7485.7	7326.0	6871.5	6149.9	5355.5	4588.4	4017.2	3550.9	3376.2	3054.9
34°	7562.6	7500.9	7366.3	6930.8	6213.4	5429.9	4643.6	4035.0	3570.5	3392.6	3024.1
35°	7567.3	7508.4	7402.1	6986.2	6273.2	5503.3	4683.2	4064.1	3591.3	3407.6	3041.1
36°	7565.2	7511.8	7427.8	7039.3	6332.1	5572.6	4718.7	4095.0	3616.0	3424.9	3058.7
37°	7555.6	7506.6	7447.9	7087.0	6388.3	5639.9	4761.7	4127.0	3640.4	3421.0	3072.3
38°	7540.8	7497.9	7460.7	7128.6	6442.7	5706.2	4814.1	4162.5	3657.6	3327.2	3083.9
39°	7521.5	7483.2	7468.1	7165.2	6495.2	5768.4	4863.6	4193.1	3673.3	3253.2	3101.6
40°	7496.1	7465.2	7465.5	7196.5	6545.8	5817.8	4913.7	4220.9	3700.9	3233.6	3124.3
41°	7462.5	7440.2	7459.9	7225.7	6594.7	5858.9	4963.9	4246.8	3734.7	3258.0	3146.7
42°	7424.8	7410.7	7445.6	7251.4	6642.5	5896.4	5014.1	4266.4	3768.1	3284.2	3166.0
43°	7377.7	7375.9	7426.7	7271.0	6690.4	5940.2	5056.4	4287.0	3802.0	3311.6	3099.0
44°	7322.3	7334.3	7402.3	7282.1	6735.5	5986.0	5095.2	4325.1	3837.2	3337.1	2991.5

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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	7260.1	7287.4	7369.7	7285.4	6776.7	6034.3	5128.9	4370.9	3864.4	3353.7	2946.8
46°	7187.6	7232.5	7333.0	7280.8	6817.8	6081.6	5154.2	4417.5	3873.1	3364.9	2963.1
47°	7106.1	7168.2	7292.0	7268.5	6857.0	6127.5	5176.6	4460.4	3873.7	3383.3	2976.9
48°	7020.8	7096.2	7242.6	7249.8	6890.3	6170.1	5197.4	4484.2	3811.3	3405.2	2988.0
49°	6925.1	7015.2	7184.4	7227.2	6916.1	6215.2	5231.3	4499.6	3759.5	3337.1	3003.5
50°	6818.0	6924.6	7118.4	7197.1	6932.5	6254.0	5272.1	4509.4	3741.2	3231.4	3020.2
51°	6702.0	6824.0	7039.7	7160.1	6941.7	6286.3	5312.6	4503.4	3727.4	3186.0	2961.8
52°	6573.8	6714.0	6954.0	7113.9	6945.8	6313.7	5351.2	4534.2	3753.7	3210.3	2801.3
53°	6441.1	6592.5	6859.6	7060.5	6941.3	6338.2	5387.9	4552.1	3769.8	3235.8	2750.5
54°	6300.4	6460.5	6754.9	7002.3	6934.7	6350.2	5421.0	4562.5	3787.5	3254.1	2774.0
55°	6153.3	6322.4	6640.6	6933.8	6918.3	6350.9	5443.4	4584.1	3816.6	3270.8	2800.3
56°	6002.8	6178.1	6523.8	6857.4	6899.0	6347.0	5454.0	4596.8	3848.5	3275.7	2826.1
57°	5851.1	6031.2	6398.1	6777.1	6872.5	6331.6	5452.3	4603.1	3864.9	3162.9	2847.6
58°	5694.9	5876.7	6268.4	6688.5	6836.7	6321.2	5442.3	4615.0	3877.8	3060.4	2703.2
59°	5534.9	5726.3	6135.4	6592.5	6790.9	6309.0	5437.2	4614.9	3813.7	3057.1	2590.6
60°	5365.5	5569.5	5998.0	6491.1	6731.1	6287.6	5427.0	4595.0	3733.8	3093.5	2597.6
61°	5191.5	5407.2	5857.4	6382.8	6659.7	6255.9	5405.6	4569.5	3710.4	3133.0	2606.5
62°	5009.7	5241.8	5721.0	6267.3	6576.7	6210.7	5379.3	4556.2	3721.3	3171.4	2501.5
63°	4832.7	5074.4	5586.9	6148.9	6485.4	6148.6	5333.8	4520.6	3731.1	3094.3	2353.2
64°	4663.0	4913.2	5458.2	6026.2	6378.1	6067.3	5272.1	4478.6	3729.1	2997.7	2323.0
65°	4528.0	4764.9	5331.1	5898.5	6261.1	5970.2	5196.7	4416.4	3688.8	2996.6	2294.6
66°	4427.0	4646.4	5209.5	5771.1	6130.8	5849.5	5106.6	4333.9	3559.8	3015.1	2096.5
67°	4370.2	4557.7	5100.5	5641.8	5983.3	5712.4	5003.0	4227.3	3506.5	2891.8	2064.4
68°	4306.9	4497.7	5003.5	5511.8	5813.6	5555.5	4826.8	4113.1	3526.9	2823.6	1934.1
69°	4164.9	4432.6	4923.6	5384.5	5631.0	5342.5	4539.2	3980.1	3536.8	2814.3	1803.7
70°	3890.9	4315.4	4859.1	5256.8	5446.8	5057.2	4137.0	3786.1	3528.7	2677.6	1672.7
71°	3468.9	4089.5	4798.5	5129.4	5225.6	4697.6	3692.1	3521.1	3414.6	2634.4	1463.0
72°	3036.8	3724.8	4724.5	4994.8	4970.0	4287.5	3290.0	3209.1	3274.3	2534.2	1310.9
73°	2575.9	3262.7	4606.5	4861.7	4675.5	3866.6	2922.8	2903.7	3118.1	2454.5	1169.0
74°	2052.9	2766.6	4383.4	4701.7	4343.2	3461.9	2493.1	2633.1	2936.4	2313.7	987.8
75°	1396.4	2228.3	4000.9	4477.3	3969.7	2999.0	1897.9	2337.5	2703.9	2172.4	881.7
76°	774.2	1581.0	3506.8	4149.3	3578.5	2372.3	1302.8	1876.2	2495.5	1925.6	788.9
77°	598.3	903.5	2978.2	3679.4	3144.1	1566.0	708.1	1411.6	2289.9	1678.8	695.2
78°	426.5	688.5	2339.1	3035.2	2605.2	871.3	341.0	814.6	1893.9	1431.0	598.0
79°	254.7	475.0	1534.7	2281.2	1899.6	577.4	256.4	590.8	1498.0	1129.3	496.1
80°	225.4	261.5	836.1	1501.2	1170.8	294.8	172.4	367.1	1100.4	860.1	419.3
81°	201.6	226.8	634.1	784.2	852.2	244.3	146.2	144.0	592.3	632.5	377.2
82°	179.9	200.5	438.9	520.0	539.1	208.6	124.0	114.7	435.2	505.0	372.4
83°	159.7	176.6	243.6	272.2	226.1	171.0	103.4	90.8	278.1	400.3	306.1
84°	140.6	154.1	203.2	222.7	183.3	133.2	84.3	72.2	125.4	307.8	235.4
85°	122.3	133.6	165.2	188.9	145.4	104.3	65.9	56.9	107.5	215.4	164.7
86°	104.6	114.8	134.7	157.4	111.9	84.0	49.2	43.7	84.7	123.6	94.5
87°	87.3	96.7	108.4	122.6	86.3	63.8	34.1	32.1	62.5	69.9	58.9
88°	75.4	81.3	84.2	84.9	62.7	43.6	23.9	22.8	43.4	47.9	40.4
89°	63.7	66.0	64.8	60.4	39.2	26.5	13.8	13.5	24.3	26.0	22.0



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CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-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: P1436712

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-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: P1436712

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-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: P1436712

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3453.1	3453.1	3453.1	3453.1	3453.1	3453.1	3453.1	3453.1	3453.1	3453.1	3453.1
1°	3399.8	3400.2	3404.0	3411.5	3422.1	3432.7	3448.0	3450.4	3465.6	3480.9	3494.4
2°	3353.1	3352.8	3358.7	3372.4	3390.0	3413.6	3440.7	3457.8	3488.9	3518.7	3546.1
3°	3312.3	3310.8	3318.6	3335.9	3362.9	3396.1	3436.6	3468.9	3514.7	3561.9	3603.6
4°	3277.4	3275.7	3285.5	3307.0	3340.4	3384.2	3436.4	3482.7	3545.9	3609.7	3667.3
5°	3251.5	3248.6	3258.7	3284.1	3322.2	3374.8	3438.9	3500.4	3580.3	3661.9	3737.1
6°	3228.7	3224.5	3237.0	3266.3	3309.0	3368.3	3444.6	3521.4	3618.6	3719.4	3812.2
7°	3209.3	3204.7	3218.4	3251.0	3300.9	3367.2	3454.2	3546.4	3660.7	3782.5	3897.8
8°	3194.5	3189.1	3203.4	3240.4	3295.5	3369.3	3467.0	3572.9	3706.5	3852.0	3988.4
9°	3181.2	3176.1	3192.0	3232.8	3293.1	3373.9	3480.9	3601.4	3756.0	3925.3	4086.3
10°	3171.8	3165.0	3183.3	3228.7	3293.5	3380.4	3497.2	3634.2	3808.8	4003.4	4190.3
11°	3164.3	3157.4	3178.0	3227.0	3297.2	3390.9	3517.0	3671.2	3868.1	4086.3	4301.3
12°	3159.8	3152.9	3174.5	3228.1	3303.9	3403.3	3540.0	3708.4	3927.3	4175.0	4419.7
13°	3159.3	3151.1	3174.3	3230.9	3313.3	3418.5	3564.1	3748.5	3991.0	4268.6	4547.4
14°	3159.5	3150.1	3176.3	3236.9	3324.8	3435.0	3589.9	3790.1	4055.9	4366.4	4681.8
15°	3156.0	3111.5	3173.4	3243.8	3336.8	3454.1	3616.9	3835.2	4124.4	4471.9	4825.4
16°	3089.1	3047.9	3111.9	3251.1	3349.6	3475.1	3645.7	3879.5	4196.3	4579.0	4976.6
17°	3039.5	3010.6	3064.1	3238.8	3363.9	3496.5	3677.3	3926.9	4269.8	4693.9	5131.6
18°	3013.4	3003.8	3038.6	3184.4	3380.7	3519.0	3705.1	3974.2	4347.1	4813.7	5287.9
19°	3017.3	3008.4	3042.2	3149.1	3395.9	3535.5	3724.4	4014.0	4426.3	4935.0	5443.6
20°	3024.1	3014.9	3049.8	3131.1	3409.6	3546.8	3747.7	4053.5	4507.7	5058.8	5594.1
21°	3033.0	3025.2	3059.9	3139.0	3381.4	3561.1	3780.9	4098.7	4581.6	5185.3	5739.9
22°	3045.7	3036.7	3073.1	3152.8	3340.7	3587.3	3817.8	4151.1	4656.9	5307.7	5877.6
23°	3059.0	3051.8	3089.5	3168.3	3321.7	3614.6	3855.6	4208.1	4740.1	5429.5	6009.2
24°	3073.4	3066.4	3106.4	3185.9	3316.1	3637.4	3886.1	4265.2	4827.9	5545.5	6134.0
25°	3088.6	3080.4	3122.6	3204.8	3331.3	3655.0	3914.9	4317.1	4920.5	5648.1	6250.4
26°	3104.5	3097.0	3140.1	3226.7	3345.5	3673.2	3946.3	4366.0	5014.7	5741.9	6362.0
27°	3120.3	3114.1	3157.1	3246.9	3356.7	3695.9	3980.7	4418.3	5107.9	5835.2	6469.6
28°	3136.8	3096.8	3174.5	3267.6	3370.9	3715.0	4021.1	4474.9	5195.2	5924.8	6572.4
29°	3087.0	2986.7	3136.1	3287.9	3394.2	3709.1	4062.3	4534.7	5272.1	6011.7	6669.7
30°	2983.5	2927.6	3030.6	3305.0	3420.1	3704.4	4103.4	4597.6	5353.1	6098.9	6760.6
31°	2933.0	2934.9	2979.4	3311.8	3446.6	3704.1	4144.1	4662.7	5432.1	6181.0	6847.5
32°	2943.1	2957.9	2987.5	3235.1	3474.1	3705.2	4176.7	4727.6	5507.4	6259.4	6926.2
33°	2963.8	2982.1	3008.1	3157.1	3499.0	3704.5	4197.6	4791.2	5585.3	6335.1	6995.2
34°	2984.1	3007.0	3029.4	3122.8	3519.1	3724.3	4218.7	4854.6	5659.7	6401.1	7054.5
35°	3005.1	3034.4	3050.7	3136.2	3538.7	3746.3	4251.0	4905.5	5735.2	6459.1	7110.9
36°	3028.0	3059.5	3073.6	3157.5	3554.3	3771.0	4285.8	4947.4	5805.8	6516.5	7164.4
37°	3048.3	3083.2	3096.1	3173.4	3563.3	3798.5	4321.1	4994.8	5873.9	6571.5	7214.4
38°	3068.1	3102.1	3117.5	3186.8	3472.3	3819.8	4361.4	5048.4	5939.7	6627.1	7256.4
39°	3082.5	2988.7	3134.6	3201.5	3401.2	3838.6	4400.9	5101.4	6002.2	6679.4	7292.6
40°	2965.6	2879.9	3030.9	3224.6	3379.9	3865.6	4434.3	5153.8	6055.5	6728.5	7323.8
41°	2860.0	2856.9	2920.0	3249.2	3401.0	3901.6	4463.7	5206.8	6096.5	6777.6	7351.0
42°	2835.6	2873.1	2889.4	3271.6	3427.7	3939.2	4484.6	5259.0	6133.6	6826.4	7371.9
43°	2854.8	2891.1	2908.9	3227.8	3456.1	3976.4	4507.4	5308.0	6173.3	6872.5	7388.6
44°	2875.9	2907.9	2931.3	3112.5	3483.6	4014.8	4551.0	5352.5	6214.2	6914.4	7398.7



REPORT NUMBER: P1436712

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2897.5	2924.9	2952.9	3058.2	3503.3	4045.6	4599.8	5392.1	6258.1	6953.6	7398.7
46°	2919.6	2934.9	2975.2	3070.2	3516.4	4057.3	4648.8	5418.1	6304.0	6988.4	7389.7
47°	2940.6	2816.7	2993.4	3083.3	3533.4	4065.2	4696.9	5439.3	6346.6	7021.4	7371.9
48°	2828.2	2654.8	2899.1	3094.6	3556.3	4032.4	4734.1	5457.7	6386.6	7049.9	7350.6
49°	2670.2	2623.5	2737.9	3109.7	3513.2	3978.0	4744.6	5489.2	6422.6	7069.2	7322.9
50°	2642.5	2636.5	2699.3	3124.7	3403.3	3939.4	4752.2	5527.1	6454.8	7077.7	7289.0
51°	2664.3	2651.0	2721.0	3084.0	3341.6	3922.4	4745.6	5560.9	6477.7	7075.8	7249.8
52°	2687.2	2665.4	2741.4	2921.6	3360.6	3942.0	4747.1	5592.8	6495.2	7068.3	7200.6
53°	2707.7	2672.0	2760.8	2858.9	3386.9	3958.0	4766.1	5619.5	6504.9	7052.7	7146.6
54°	2718.0	2479.6	2772.2	2880.8	3404.1	3972.8	4771.1	5641.3	6500.7	7036.0	7083.0
55°	2543.7	2361.1	2598.7	2906.5	3420.3	3992.0	4774.4	5652.0	6486.2	7011.1	7015.5
56°	2414.6	2352.7	2468.0	2933.1	3425.6	4021.5	4774.8	5646.2	6461.8	6983.1	6941.3
57°	2406.0	2356.9	2454.2	2952.2	3342.0	4033.0	4768.7	5626.9	6429.5	6947.2	6858.1
58°	2409.7	2337.1	2457.1	2815.3	3222.3	4038.7	4766.1	5602.0	6395.5	6897.2	6769.2
59°	2364.6	2059.8	2419.9	2692.9	3210.2	3994.1	4759.0	5577.3	6360.9	6840.8	6673.0
60°	2120.5	1984.0	2173.7	2693.5	3245.2	3895.4	4725.8	5548.1	6317.7	6775.1	6567.3
61°	2073.4	1867.5	2120.3	2701.3	3282.6	3847.5	4686.1	5510.9	6265.0	6696.9	6454.7
62°	2067.1	1750.9	2107.1	2611.5	3315.8	3846.4	4663.1	5464.3	6200.9	6605.4	6337.6
63°	1946.8	1635.6	1983.5	2447.7	3247.8	3845.2	4622.3	5402.6	6122.2	6498.3	6215.0
64°	1826.5	1602.6	1859.9	2415.2	3131.7	3834.5	4568.4	5321.7	6027.0	6382.9	6091.0
65°	1705.9	1464.1	1735.4	2395.0	3114.6	3790.4	4492.7	5221.6	5909.7	6256.2	5957.0
66°	1517.5	1224.4	1551.4	2182.3	3115.5	3662.3	4398.1	5102.2	5770.2	6119.0	5816.2
67°	1325.9	1167.4	1353.1	2136.3	2987.1	3578.4	4285.0	4958.0	5618.0	5961.3	5676.0
68°	1192.8	815.2	1223.9	2052.5	2915.0	3581.8	4130.8	4708.9	5423.6	5786.9	5537.0
69°	971.9	673.1	998.5	1873.2	2887.7	3574.5	3944.9	4341.2	5154.4	5594.9	5402.8
70°	778.3	463.8	800.6	1693.8	2741.3	3546.0	3687.5	3859.7	4815.9	5383.1	5259.7
71°	535.2	254.4	534.7	1515.0	2675.9	3402.1	3364.7	3414.6	4391.6	5132.4	5109.9
72°	295.7	46.6	276.5	1361.8	2563.5	3216.6	3020.6	3006.6	3941.2	4848.3	4959.6
73°	249.0	0.6	224.2	1201.5	2448.9	3025.2	2687.1	2600.2	3500.4	4505.1	4791.5
74°	202.3	0.4	172.5	988.1	2279.3	2814.8	2377.5	2116.8	3063.6	4115.2	4595.0
75°	155.7	0.4	149.6	867.1	2089.8	2568.1	1910.1	1483.0	2543.0	3683.2	4321.0
76°	118.5	0.5	119.2	770.8	1822.1	2322.5	1442.8	859.1	1840.4	3227.2	3953.2
77°	83.4	0.5	94.4	679.5	1554.3	1968.2	975.3	552.0	1096.2	2742.2	3440.0
78°	62.3	0.6	76.4	588.8	1286.8	1614.0	502.1	252.2	820.3	2148.2	2774.5
79°	61.4	0.7	75.9	489.5	1029.3	1257.2	327.8	192.4	548.4	1452.7	2011.3
80°	82.3	0.8	91.6	423.9	799.5	718.9	155.6	163.2	276.6	848.9	1251.5
81°	100.7	0.9	94.7	393.9	600.8	521.4	124.7	138.9	235.2	563.5	917.2
82°	88.9	1.0	59.1	367.1	466.1	323.9	102.6	116.8	200.9	282.4	591.1
83°	55.5	1.1	42.0	278.3	349.9	127.5	83.7	97.1	165.8	215.6	265.1
84°	40.6	1.2	24.9	189.6	233.7	106.2	67.3	79.5	131.2	177.6	220.4
85°	25.8	1.4	8.3	101.7	118.8	83.8	53.5	62.0	102.4	139.4	187.3
86°	11.4	1.5	7.4	51.7	66.1	62.3	41.3	44.4	82.2	108.1	155.9
87°	8.4	1.7	7.3	36.4	37.7	44.8	30.3	29.8	62.2	83.4	121.1
88°	6.1	1.8	6.5	21.2	26.3	31.3	21.4	17.4	42.2	60.7	84.2
89°	4.7	2.0	4.1	6.1	15.0	17.8	12.5	7.4	25.8	37.9	60.1



REPORT NUMBER: P1436712

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-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: P1436712

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-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: P1436712

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-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: P1436712

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	3453.1	3453.1	3453.1
1°	3504.4	3511.7	3515.1
2°	3567.0	3581.2	3586.4
3°	3635.8	3657.0	3664.3
4°	3713.0	3742.7	3751.6
5°	3796.9	3837.8	3850.7
6°	3889.6	3942.1	3957.4
7°	3991.5	4053.2	4073.3
8°	4101.5	4175.1	4199.6
9°	4220.3	4308.1	4336.4
10°	4344.6	4452.1	4484.7
11°	4483.7	4605.7	4645.1
12°	4631.0	4773.9	4817.1
13°	4789.9	4951.1	5002.3
14°	4959.7	5142.4	5201.6
15°	5137.6	5344.7	5415.3
16°	5318.6	5551.4	5635.5
17°	5502.8	5763.8	5859.5
18°	5687.9	5974.4	6074.7
19°	5866.9	6177.3	6280.8
20°	6040.0	6365.4	6470.6
21°	6202.1	6536.8	6638.1
22°	6353.4	6693.2	6784.2
23°	6498.5	6829.8	6919.2
24°	6633.2	6951.7	7036.4
25°	6757.8	7058.7	7138.8
26°	6871.4	7153.0	7225.9
27°	6978.5	7234.5	7302.7
28°	7070.8	7305.4	7367.9
29°	7155.5	7364.2	7423.0
30°	7228.7	7412.7	7468.6
31°	7294.9	7454.0	7504.6
32°	7351.9	7487.0	7530.4
33°	7400.7	7510.3	7550.0
34°	7439.5	7526.3	7562.6
35°	7471.3	7534.7	7567.3
36°	7496.1	7533.8	7565.2
37°	7514.8	7529.0	7555.6
38°	7526.1	7519.9	7540.8
39°	7530.1	7503.5	7521.5
40°	7527.8	7483.8	7496.1
41°	7520.1	7460.4	7462.5
42°	7505.7	7430.9	7424.8
43°	7484.5	7396.9	7377.7
44°	7458.7	7356.7	7322.3

REPORT NUMBER: P1436712

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	7426.5	7310.1	7260.1
46°	7390.1	7257.0	7187.6
47°	7346.8	7193.6	7106.1
48°	7300.1	7124.2	7020.8
49°	7244.2	7045.8	6925.1
50°	7178.3	6959.8	6818.0
51°	7103.0	6863.1	6702.0
52°	7015.5	6753.6	6573.8
53°	6920.8	6638.5	6441.1
54°	6817.3	6510.6	6300.4
55°	6710.0	6378.5	6153.3
56°	6593.0	6234.1	6002.8
57°	6470.5	6087.4	5851.1
58°	6340.5	5935.8	5694.9
59°	6205.7	5782.2	5534.9
60°	6069.6	5623.5	5365.5
61°	5933.6	5462.4	5191.5
62°	5797.3	5295.8	5009.7
63°	5665.9	5135.0	4832.7
64°	5542.3	4979.3	4663.0
65°	5422.4	4835.9	4528.0
66°	5306.1	4715.2	4427.0
67°	5195.6	4627.7	4370.2
68°	5093.7	4566.9	4306.9
69°	5003.3	4501.7	4164.9
70°	4932.0	4395.1	3890.9
71°	4859.2	4186.8	3468.9
72°	4769.5	3827.5	3036.8
73°	4637.1	3361.8	2575.9
74°	4394.9	2847.9	2052.9
75°	4009.1	2305.5	1396.4
76°	3517.7	1687.1	774.2
77°	2960.5	1006.3	598.3
78°	2293.6	755.3	426.5
79°	1507.5	511.8	254.7
80°	846.4	268.3	225.4
81°	637.2	233.8	201.6
82°	443.2	206.6	179.9
83°	249.2	181.9	159.7
84°	206.3	158.6	140.6
85°	167.3	137.2	122.3
86°	136.7	117.6	104.6
87°	109.6	99.0	87.3
88°	83.9	82.9	75.4
89°	64.8	66.9	63.7



REPORT NUMBER: P1436712

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-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: P1436712

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-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: P1436712

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)