

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: P1436713

Luminaire Tested: XAS180-SFPM (3000K-180W-T4)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436713
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-T4)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 100% (180W)
OPTICS - TYPE 4
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

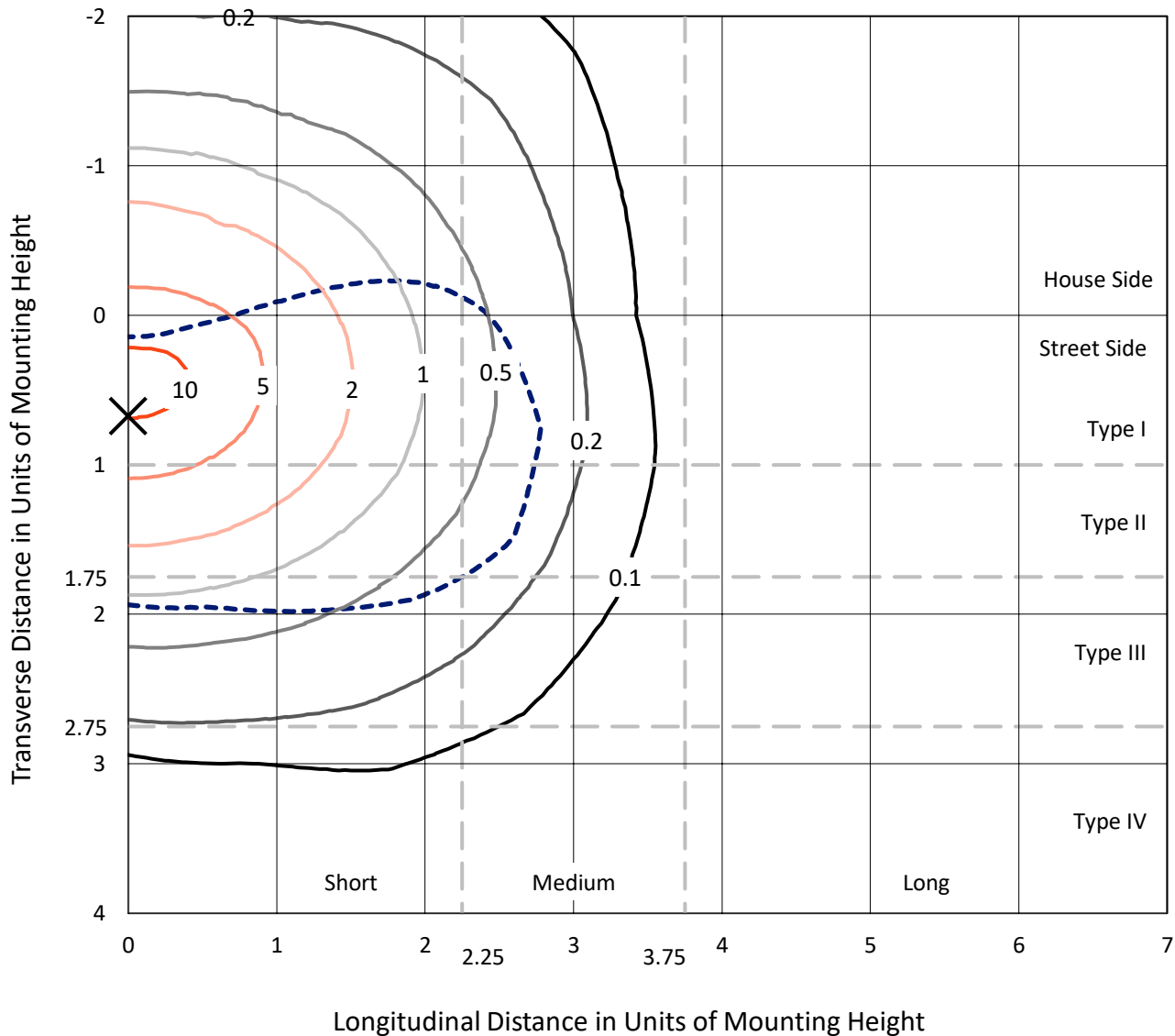
Lumens per Lamp: 24407 (1 lamp)
Luminaire Lumens: 26023.2 lumens
Efficiency: 106.6%
Efficacy: 146.9 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 177.1
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

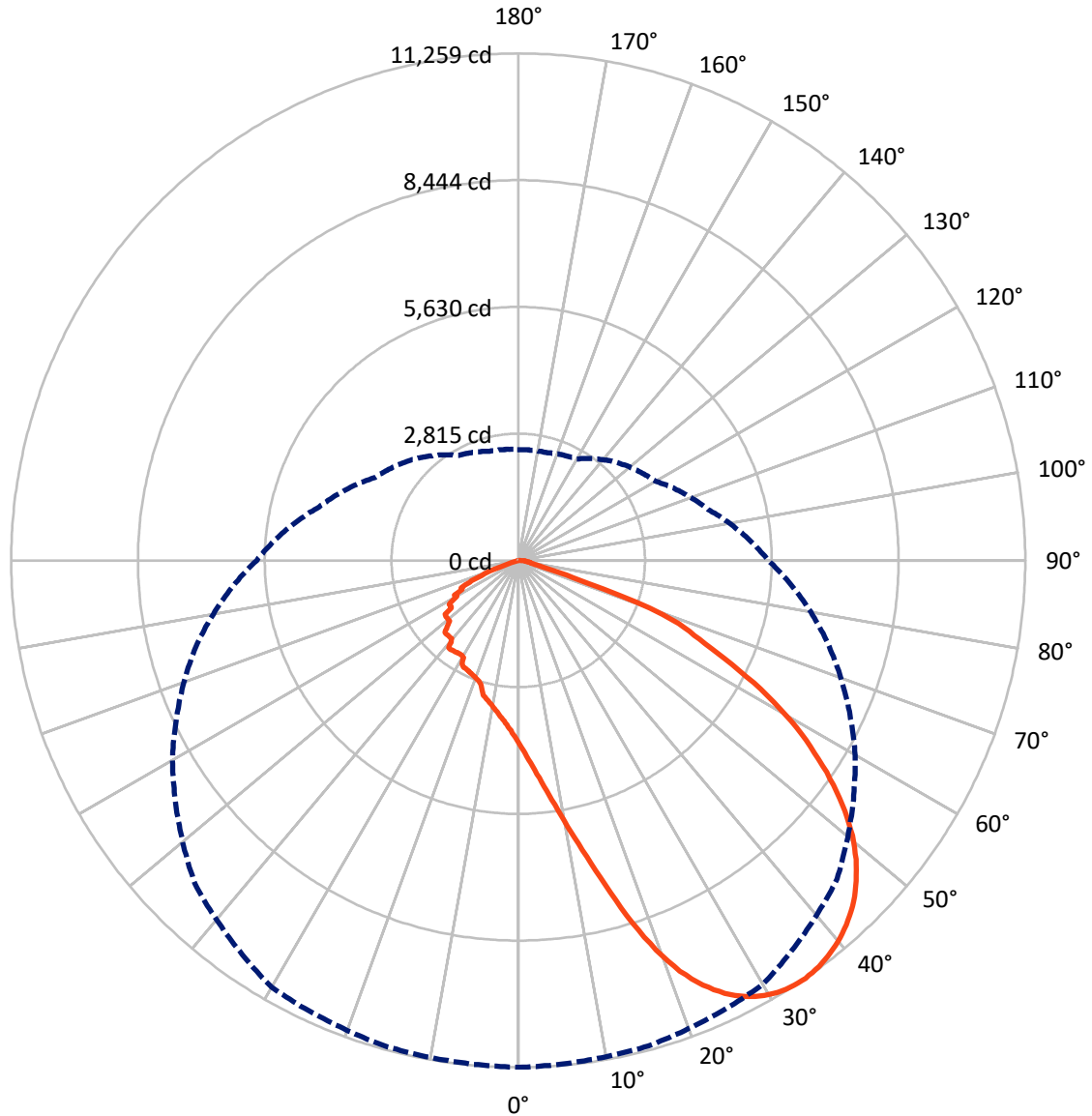
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.7 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 34-Deg Vertical

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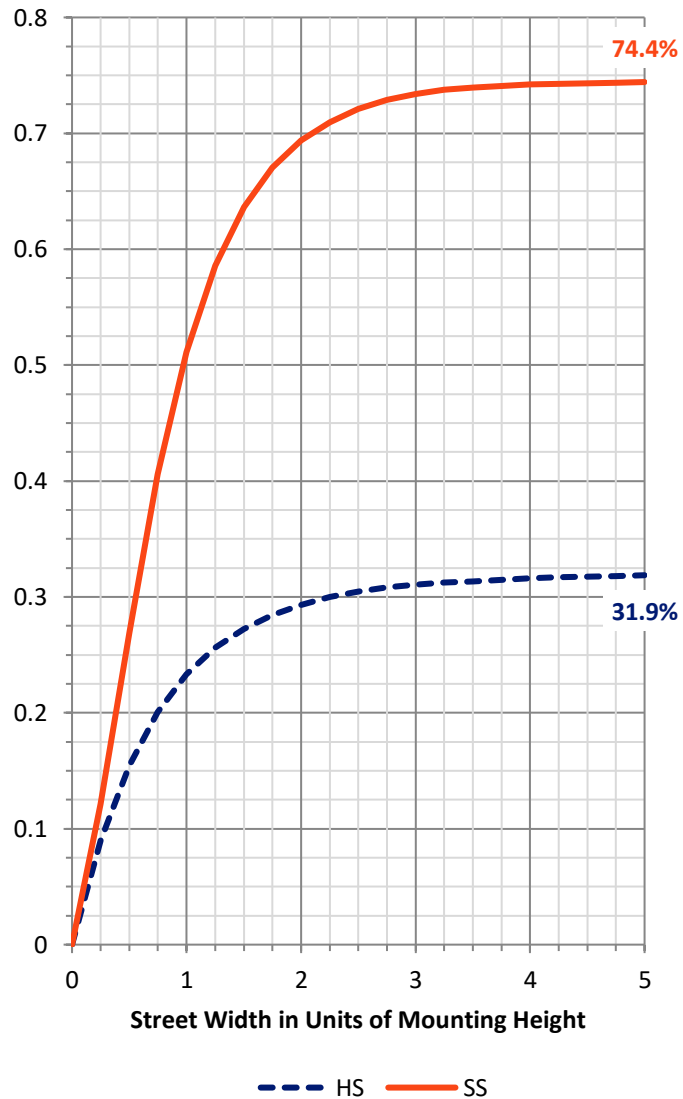
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7826.4	0.0	7826.4
	% Lamp	32.1	0.0	32.1
Street Side	Lumens	18196.8	0.0	18196.8
	% Lamp	74.6	0.0	74.6
Total	Lumens	26023.2	0.0	26023.2
	% Lamp	106.6	0.0	106.6

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	408.7	1.6	1.7
10°-20°	1419.8	5.5	5.8
20°-30°	2754.7	10.6	11.3
30°-40°	4049.8	15.6	16.6
40°-50°	5025.2	19.3	20.6
50°-60°	5354.4	20.6	21.9
60°-70°	4654.9	17.9	19.1
70°-80°	2153.4	8.3	8.8
80°-90°	202.3	0.8	0.8
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°	26023.2	100.0	106.6
0°-180°	26023.2	100.0	106.6

Coefficient of Utilization



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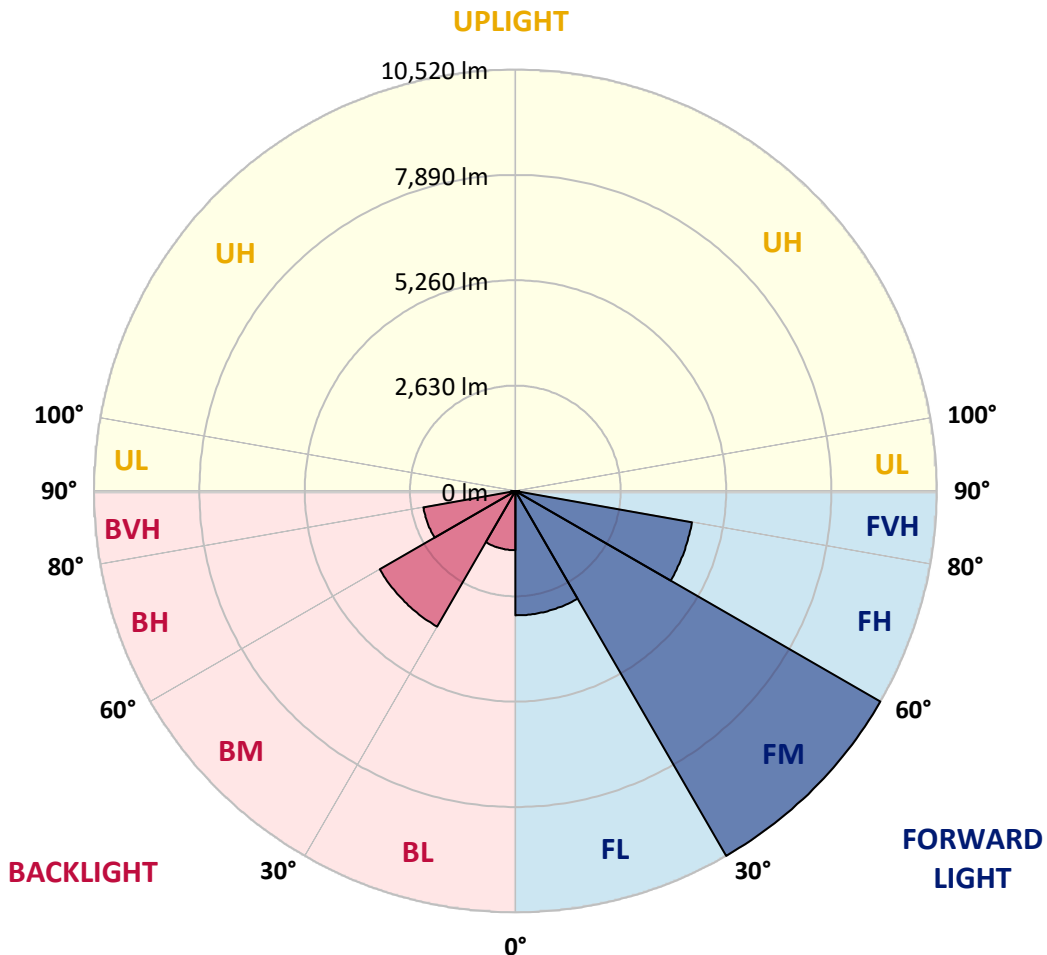
CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3105.8	12.7			
FM (30°-60°)	10520.1	43.1			
FH (60°-80°)	4476.0	18.3			G2/5000
FVH (80°-90°)	94.9	0.4			G1/100
BL (0°-30°)	1477.5	6.1	B3/2500		
BM (30°-60°)	3909.3	16.0	B3/5000		
BH (60°-80°)	2332.3	9.6	B3/2500		G3/2500
BVH (80°-90°)	107.3	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	-1616.2	-6.6			

BUG Rating: B3-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	4089.5	4089.5	4089.5	4089.5	4089.5	4089.5	4089.5	4089.5	4089.5	4089.5	4089.5
1°	4217.2	4214.7	4204.5	4185.3	4159.6	4129.7	4075.6	4047.5	4022.3	4002.1	3987.4
2°	4355.6	4349.8	4322.5	4280.8	4225.5	4163.2	4077.5	4019.5	3968.1	3927.4	3895.4
3°	4506.1	4491.1	4448.5	4381.9	4298.7	4203.9	4084.1	3997.7	3921.0	3858.5	3812.3
4°	4671.6	4649.4	4589.0	4494.7	4376.5	4247.6	4093.9	3979.1	3878.3	3796.0	3737.5
5°	4852.1	4823.7	4739.3	4616.4	4460.7	4295.9	4107.2	3963.0	3839.8	3740.8	3671.2
6°	5050.4	5009.5	4905.6	4748.8	4555.3	4348.7	4123.3	3951.4	3804.3	3691.6	3610.3
7°	5260.2	5210.4	5082.7	4890.4	4654.1	4407.5	4145.8	3945.3	3775.5	3646.5	3552.7
8°	5489.7	5431.9	5275.5	5041.9	4761.1	4470.5	4172.6	3943.2	3750.8	3605.4	3501.4
9°	5739.5	5670.2	5480.7	5205.4	4875.0	4538.3	4201.9	3942.8	3731.3	3567.9	3452.9
10°	6000.6	5917.1	5700.7	5375.5	4995.9	4612.1	4235.8	3946.8	3713.0	3535.8	3407.4
11°	6284.2	6188.5	5934.5	5559.1	5124.1	4690.4	4272.9	3953.7	3698.1	3506.3	3366.3
12°	6592.0	6479.4	6181.6	5756.2	5257.8	4772.6	4312.6	3963.2	3686.9	3479.6	3329.6
13°	6919.5	6787.4	6449.3	5961.7	5400.7	4860.1	4354.7	3974.3	3677.3	3454.6	3295.5
14°	7275.5	7128.5	6736.5	6179.8	5549.7	4950.2	4396.5	3985.7	3668.8	3432.2	3263.7
15°	7656.4	7485.0	7040.9	6412.0	5706.2	5042.9	4442.8	3999.2	3662.1	3411.5	3231.7
16°	8049.3	7855.5	7356.3	6658.7	5869.8	5139.1	4491.7	4015.6	3657.1	3392.0	3202.8
17°	8435.9	8223.1	7666.1	6912.2	6042.8	5239.2	4542.2	4032.5	3653.5	3374.0	3173.6
18°	8821.4	8584.0	7977.5	7161.9	6224.8	5343.2	4593.3	4047.4	3650.9	3357.4	3128.8
19°	9179.2	8931.7	8284.2	7408.3	6412.1	5450.8	4629.0	4051.1	3643.4	3342.5	3024.1
20°	9506.9	9253.3	8582.3	7654.3	6598.9	5552.9	4673.8	4061.3	3626.7	3327.5	2949.8
21°	9800.9	9547.7	8862.6	7891.5	6788.8	5645.9	4719.1	4084.1	3614.1	3311.0	2929.9
22°	10056.7	9811.7	9126.5	8120.4	6974.1	5755.8	4778.5	4107.9	3616.3	3251.9	2911.9
23°	10282.9	10050.9	9367.4	8341.3	7157.9	5862.3	4841.4	4129.5	3618.6	3176.6	2896.7
24°	10480.6	10260.9	9595.1	8547.9	7319.6	5985.6	4900.1	4142.4	3613.7	3116.3	2885.2
25°	10651.8	10445.1	9800.6	8747.1	7475.2	6114.3	4949.5	4160.4	3608.7	3106.5	2874.0
26°	10796.4	10604.0	9987.9	8930.0	7628.8	6240.4	5001.7	4178.1	3605.6	3094.7	2865.1
27°	10918.0	10742.0	10161.2	9109.7	7776.8	6364.0	5060.0	4206.0	3612.7	3078.9	2855.5
28°	11018.2	10856.1	10311.7	9278.2	7914.8	6473.7	5120.0	4233.8	3623.3	3067.6	2846.8
29°	11101.4	10948.9	10443.5	9432.7	8050.1	6577.3	5190.6	4261.7	3632.4	3067.3	2839.8
30°	11164.3	11025.7	10560.5	9579.4	8187.5	6685.5	5261.2	4291.7	3620.2	3069.8	2833.1
31°	11213.3	11084.3	10661.1	9712.8	8314.7	6794.7	5334.8	4322.4	3566.3	3073.7	2820.1
32°	11243.2	11126.9	10744.2	9823.2	8434.1	6899.1	5407.6	4349.3	3554.8	3077.3	2802.8
33°	11258.1	11152.5	10815.6	9921.1	8542.7	7008.4	5481.1	4357.4	3512.3	3080.8	2693.5
34°	11259.2	11163.2	10871.1	10009.3	8637.5	7115.2	5552.0	4366.0	3517.0	3081.0	2599.3
35°	11246.4	11162.1	10912.6	10093.4	8722.0	7217.1	5604.2	4387.6	3523.9	3078.6	2593.8
36°	11221.8	11149.3	10937.2	10167.1	8801.2	7314.6	5647.4	4412.5	3533.0	3077.3	2595.8
37°	11184.5	11124.8	10948.9	10228.7	8878.6	7408.0	5696.6	4438.7	3548.8	3081.6	2597.6
38°	11137.6	11088.6	10950.0	10275.9	8954.3	7500.7	5757.8	4468.6	3558.6	3082.6	2595.8
39°	11080.0	11044.8	10938.2	10315.1	9021.4	7584.8	5812.9	4500.7	3561.0	2935.5	2594.1
40°	11013.9	10990.5	10911.6	10345.8	9086.0	7654.8	5871.9	4524.1	3576.5	2868.0	2600.6
41°	10935.0	10924.4	10876.4	10369.8	9142.1	7704.6	5928.8	4545.3	3599.8	2877.8	2606.9
42°	10844.4	10850.8	10828.4	10390.5	9201.6	7753.0	5986.9	4563.9	3623.4	2891.6	2614.0
43°	10741.0	10764.4	10768.7	10396.8	9257.7	7802.7	6041.6	4574.4	3648.3	2907.1	2616.7
44°	10624.4	10668.5	10699.4	10389.8	9308.0	7857.1	6087.3	4605.9	3675.1	2924.0	2532.6



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	10492.5	10558.3	10616.8	10367.9	9352.7	7909.3	6123.4	4649.7	3703.0	2938.5	2417.9
46°	10341.6	10433.8	10525.4	10333.9	9394.4	7961.2	6156.3	4694.8	3714.8	2938.1	2420.9
47°	10182.5	10291.4	10422.5	10285.1	9430.2	8010.3	6177.2	4741.4	3713.4	2945.7	2428.0
48°	10015.0	10138.2	10307.3	10223.4	9457.0	8051.0	6192.5	4790.2	3726.1	2963.1	2431.4
49°	9825.0	9962.4	10177.5	10153.2	9472.4	8091.2	6224.7	4831.7	3661.6	2974.0	2428.3
50°	9614.0	9773.5	10029.7	10069.4	9473.1	8128.4	6269.3	4840.6	3604.2	2879.7	2428.7
51°	9385.8	9562.3	9862.3	9968.7	9455.4	8152.2	6313.9	4809.2	3551.1	2764.4	2432.6
52°	9140.2	9332.8	9679.9	9852.6	9430.8	8164.9	6354.2	4838.2	3577.7	2773.3	2323.5
53°	8878.6	9083.6	9477.2	9724.5	9391.4	8170.5	6389.7	4847.7	3601.4	2790.6	2205.8
54°	8597.5	8812.5	9259.9	9577.4	9339.4	8169.3	6421.2	4842.5	3614.2	2813.8	2217.1
55°	8310.8	8533.4	9024.5	9414.8	9270.5	8146.9	6446.9	4871.5	3634.5	2826.6	2232.9
56°	8000.8	8240.3	8769.8	9238.4	9192.8	8107.7	6452.4	4890.3	3667.2	2835.9	2250.8
57°	7692.4	7933.4	8507.9	9042.8	9103.4	8057.4	6446.0	4890.2	3693.6	2832.0	2268.1
58°	7371.5	7618.4	8233.3	8831.2	8997.0	8011.0	6420.4	4907.0	3705.4	2680.1	2277.2
59°	7036.8	7298.5	7944.4	8610.6	8872.3	7962.1	6396.2	4922.9	3730.1	2644.1	2097.0
60°	6679.0	6964.1	7648.3	8369.7	8725.0	7901.9	6373.4	4911.0	3629.2	2680.3	2112.1
61°	6296.8	6611.0	7338.4	8119.0	8557.5	7827.7	6333.1	4868.6	3571.9	2723.4	2118.2
62°	5897.5	6243.8	7025.6	7852.6	8379.9	7733.1	6288.0	4855.6	3595.3	2769.5	2056.8
63°	5478.9	5859.9	6708.2	7574.0	8180.3	7616.7	6225.5	4820.8	3612.8	2804.4	1995.7
64°	5073.8	5481.2	6390.7	7289.6	7957.5	7479.1	6139.3	4765.3	3626.1	2673.7	1982.4
65°	4706.3	5103.6	6061.4	6996.5	7718.2	7316.2	6034.1	4701.0	3608.6	2687.7	2004.7
66°	4383.4	4761.8	5739.9	6699.0	7462.6	7126.5	5896.0	4605.5	3509.8	2721.9	1887.4
67°	4118.0	4450.2	5420.5	6403.5	7189.0	6905.8	5750.5	4504.7	3400.9	2699.9	1860.1
68°	3833.0	4177.0	5109.5	6100.2	6880.7	6659.0	5532.4	4356.7	3427.3	2633.1	1907.3
69°	3414.6	3889.1	4817.1	5804.8	6554.8	6362.8	5202.5	4180.6	3443.1	2651.2	1744.8
70°	2801.0	3508.8	4544.4	5506.0	6220.8	5995.8	4724.9	3943.3	3450.1	2580.2	1737.0
71°	1994.1	2977.6	4271.0	5209.0	5842.4	5560.7	4177.0	3633.5	3379.9	2586.2	1503.4
72°	1269.2	2254.8	3963.5	4900.6	5422.3	5049.5	3707.4	3288.8	3251.8	2571.5	1449.7
73°	976.8	1492.6	3594.7	4583.3	4952.9	4494.8	3261.2	2987.0	3124.1	2533.3	1344.8
74°	693.5	907.4	3096.6	4225.4	4454.8	3931.5	2639.2	2764.0	2985.2	2554.8	1218.8
75°	410.2	668.6	2405.7	3767.3	3912.4	3324.9	2017.2	2338.3	2826.7	2501.7	1173.8
76°	361.8	436.9	1679.2	3202.0	3353.3	2569.3	1394.7	1912.6	2687.2	2433.4	1144.0
77°	323.7	375.2	1095.4	2501.9	2772.7	1690.7	761.7	1485.8	2571.4	2200.8	1079.6
78°	292.5	331.3	856.4	1669.9	2152.5	972.5	397.4	857.4	2235.5	1968.0	973.9
79°	265.0	295.9	628.1	910.6	1497.2	674.7	325.0	628.0	1899.8	1733.0	826.9
80°	240.0	265.2	399.9	628.5	935.9	379.2	252.7	398.7	1558.7	1413.9	708.3
81°	216.9	237.7	338.1	358.4	614.4	320.1	181.2	173.1	865.5	1058.0	640.1
82°	195.4	212.3	293.3	306.5	298.9	273.5	152.9	134.4	634.3	842.8	637.6
83°	174.8	188.3	253.9	267.6	232.0	222.0	127.4	103.8	403.2	667.7	523.7
84°	154.9	166.1	214.8	232.5	188.5	168.3	103.4	81.3	172.9	476.7	389.7
85°	135.9	145.1	173.6	199.1	150.2	128.5	80.0	62.7	151.8	352.8	275.3
86°	117.0	125.3	141.6	166.6	117.0	99.5	58.7	47.5	121.5	228.8	161.5
87°	100.7	106.6	114.6	131.3	91.5	75.0	45.1	36.9	90.1	106.3	99.1
88°	84.5	90.7	93.9	100.9	66.1	50.5	31.4	26.2	68.3	72.3	67.5
89°	68.3	74.9	73.3	70.6	40.8	29.5	17.8	15.5	46.6	38.4	36.0



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CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436713

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436713

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436713

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	4089.5	4089.5	4089.5	4089.5	4089.5	4089.5	4089.5	4089.5	4089.5	4089.5	4089.5
1°	3980.7	3980.9	3986.7	4001.5	4021.0	4046.4	4073.8	4082.2	4114.8	4145.3	4172.0
2°	3879.8	3877.1	3888.9	3914.0	3951.2	3997.4	4052.7	4091.5	4155.9	4218.1	4273.3
3°	3788.2	3782.1	3797.3	3832.8	3886.9	3955.2	4035.6	4105.8	4201.4	4294.5	4378.3
4°	3705.3	3698.8	3715.7	3759.3	3827.9	3917.7	4023.5	4122.8	4251.2	4377.3	4494.8
5°	3632.0	3622.8	3641.8	3694.1	3774.9	3884.7	4015.3	4143.9	4306.3	4469.2	4620.2
6°	3562.4	3551.1	3574.1	3634.4	3729.2	3854.9	4010.0	4168.8	4366.5	4569.6	4757.0
7°	3499.0	3485.1	3510.6	3578.4	3686.2	3830.7	4009.4	4199.6	4430.9	4674.8	4903.3
8°	3440.3	3423.7	3452.1	3528.2	3647.8	3809.1	4011.8	4230.4	4500.6	4787.0	5060.4
9°	3384.6	3365.4	3397.2	3481.2	3613.8	3791.3	4016.4	4265.9	4576.5	4907.5	5229.4
10°	3332.6	3312.0	3346.8	3438.3	3581.5	3775.9	4023.3	4305.2	4655.0	5034.7	5406.0
11°	3284.8	3261.5	3300.0	3399.6	3554.5	3763.3	4033.8	4349.8	4741.4	5170.6	5596.2
12°	3241.0	3216.2	3255.1	3362.9	3530.0	3753.5	4047.9	4396.0	4828.7	5314.7	5797.7
13°	3201.0	3172.8	3215.3	3329.4	3508.1	3747.1	4064.4	4445.6	4922.5	5465.7	6013.7
14°	3162.5	3131.0	3177.0	3298.3	3489.4	3742.8	4082.6	4496.1	5019.3	5622.8	6242.5
15°	3124.7	3090.2	3139.4	3268.5	3472.3	3741.9	4101.8	4550.3	5120.7	5794.0	6488.1
16°	3081.2	2998.9	3097.8	3240.1	3455.7	3742.2	4121.7	4606.9	5226.1	5969.7	6746.4
17°	2962.9	2896.7	2985.2	3212.2	3440.5	3742.9	4145.7	4663.6	5336.4	6158.1	7006.9
18°	2879.5	2843.3	2899.7	3168.6	3427.5	3745.4	4169.7	4722.9	5450.5	6352.7	7270.8
19°	2849.0	2812.2	2867.4	3072.4	3414.4	3745.7	4179.3	4773.7	5568.1	6550.4	7537.0
20°	2822.8	2784.2	2840.9	3000.4	3401.6	3733.9	4195.8	4820.6	5691.3	6750.9	7795.2
21°	2799.8	2760.9	2817.5	2973.5	3386.7	3726.0	4220.2	4873.8	5803.4	6954.0	8042.9
22°	2781.1	2739.7	2798.9	2957.4	3328.6	3731.6	4251.3	4938.9	5917.0	7157.3	8277.4
23°	2765.0	2721.9	2784.0	2943.5	3259.0	3739.5	4282.3	5009.1	6046.6	7352.1	8494.9
24°	2750.0	2705.5	2770.0	2932.5	3208.1	3747.5	4309.4	5081.1	6175.8	7544.2	8702.6
25°	2736.6	2689.7	2756.8	2923.4	3194.3	3745.4	4328.5	5149.2	6315.6	7710.3	8896.5
26°	2723.1	2676.8	2745.5	2916.3	3188.5	3745.1	4353.2	5206.9	6456.0	7862.5	9081.2
27°	2711.9	2666.1	2735.1	2910.0	3175.4	3747.2	4376.6	5271.5	6597.8	8013.6	9255.0
28°	2702.7	2656.8	2726.7	2903.8	3165.8	3760.0	4410.7	5338.9	6730.5	8158.2	9420.5
29°	2693.3	2617.3	2717.7	2898.9	3164.8	3772.2	4445.8	5414.1	6847.4	8287.5	9571.3
30°	2620.2	2474.9	2656.0	2895.1	3169.8	3762.6	4481.3	5492.6	6965.1	8419.5	9714.5
31°	2496.6	2447.5	2530.4	2883.2	3176.0	3732.6	4515.9	5571.4	7082.6	8546.0	9848.0
32°	2476.3	2448.2	2507.9	2869.7	3184.0	3703.4	4549.5	5651.4	7192.7	8665.5	9968.8
33°	2474.6	2451.5	2506.9	2787.8	3191.9	3674.9	4564.3	5730.5	7301.1	8772.5	10069.7
34°	2475.6	2457.6	2508.0	2689.4	3199.7	3676.1	4579.4	5810.7	7410.2	8867.9	10156.1
35°	2477.8	2465.7	2511.2	2676.0	3201.1	3684.8	4604.5	5878.6	7514.4	8950.1	10232.0
36°	2481.6	2472.9	2516.1	2679.6	3201.7	3695.7	4632.9	5931.2	7611.9	9026.4	10303.8
37°	2483.0	2478.9	2519.3	2684.7	3202.5	3709.8	4664.3	5987.4	7704.2	9101.4	10366.3
38°	2483.4	2484.5	2521.5	2684.1	3203.0	3725.9	4699.5	6050.1	7792.5	9174.4	10418.1
39°	2482.7	2484.8	2523.3	2683.0	3082.7	3732.7	4737.5	6110.8	7875.6	9239.0	10455.4
40°	2477.7	2348.3	2520.3	2688.5	3012.1	3744.4	4773.4	6174.8	7948.2	9298.6	10487.0
41°	2337.6	2278.2	2397.5	2697.2	3013.5	3770.4	4798.0	6236.0	8000.8	9354.9	10506.2
42°	2260.3	2279.2	2306.8	2706.1	3026.9	3797.7	4817.1	6295.1	8044.2	9411.8	10517.1
43°	2258.9	2283.1	2305.9	2712.5	3042.4	3826.6	4829.4	6356.2	8089.2	9460.2	10517.7
44°	2260.8	2285.9	2309.8	2655.2	3060.2	3856.6	4866.3	6414.0	8131.6	9504.7	10508.2

REPORT NUMBER: P1436713

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2263.6	2285.9	2314.4	2526.3	3077.3	3885.3	4912.9	6457.3	8176.5	9540.5	10481.4
46°	2266.0	2282.5	2318.0	2519.9	3081.6	3900.5	4961.1	6489.7	8221.4	9572.1	10436.9
47°	2267.5	2200.4	2320.8	2528.0	3085.9	3902.6	5009.8	6509.9	8259.3	9596.5	10375.7
48°	2192.3	2118.3	2320.6	2532.3	3106.3	3917.9	5057.8	6521.0	8293.6	9610.2	10305.7
49°	2117.3	2037.6	2184.8	2528.2	3118.2	3906.9	5104.3	6549.9	8318.2	9614.0	10222.2
50°	2042.5	2033.0	2086.8	2527.8	3054.8	3819.9	5133.3	6586.7	8336.6	9598.0	10130.6
51°	2050.2	2030.8	2093.5	2533.0	2916.1	3767.9	5110.3	6619.3	8346.4	9561.3	10024.9
52°	2061.2	2031.1	2103.8	2450.4	2917.6	3786.0	5095.6	6649.1	8344.7	9514.7	9904.0
53°	2072.9	2030.5	2114.9	2311.9	2939.3	3813.1	5114.3	6672.0	8329.1	9455.0	9768.3
54°	2082.3	2021.2	2065.1	2323.7	2966.9	3826.6	5106.9	6687.1	8303.4	9383.6	9612.7
55°	2086.6	1829.9	2015.2	2341.5	2983.1	3835.5	5103.2	6697.3	8256.1	9301.0	9447.9
56°	1905.7	1800.1	1965.6	2362.6	2996.8	3870.5	5109.6	6686.4	8185.4	9209.9	9265.6
57°	1872.4	1808.2	1924.8	2384.3	2994.7	3896.6	5098.8	6654.3	8108.4	9109.3	9073.2
58°	1880.7	1817.5	1933.6	2399.7	2865.4	3904.8	5099.1	6606.0	8029.4	8987.1	8863.9
59°	1892.9	1737.4	1944.4	2224.4	2822.1	3921.2	5101.6	6559.0	7953.2	8853.7	8641.2
60°	1755.5	1578.6	1821.5	2227.0	2861.7	3837.5	5071.7	6507.3	7865.8	8699.5	8398.4
61°	1673.5	1596.1	1733.7	2239.4	2905.3	3743.3	5008.4	6442.1	7759.8	8526.6	8139.0
62°	1693.7	1612.5	1756.0	2263.1	2950.3	3745.8	4978.8	6365.7	7639.2	8336.7	7875.6
63°	1714.7	1411.9	1774.5	2125.4	2986.2	3747.5	4939.7	6276.9	7501.0	8121.4	7597.2
64°	1492.5	1393.6	1545.9	2107.6	2856.7	3748.1	4867.1	6157.7	7342.2	7895.7	7314.8
65°	1506.7	1410.7	1552.7	2067.7	2859.6	3723.7	4792.1	6008.5	7158.3	7648.4	7018.1
66°	1517.1	1178.4	1572.5	2027.8	2877.6	3632.9	4682.0	5841.6	6939.5	7390.1	6711.8
67°	1256.2	1140.2	1303.9	1990.2	2857.9	3493.2	4557.4	5641.0	6702.8	7105.7	6408.2
68°	1277.5	880.2	1319.0	2033.4	2784.0	3502.0	4374.1	5341.1	6419.0	6794.4	6099.9
69°	1021.5	794.0	1061.3	1870.2	2779.5	3501.1	4136.8	4912.6	6081.0	6459.4	5803.6
70°	975.7	543.4	1001.7	1851.7	2712.6	3493.0	3828.3	4347.0	5661.5	6088.0	5488.0
71°	646.0	292.8	648.2	1613.5	2682.9	3409.8	3471.9	3811.9	5159.6	5674.0	5162.8
72°	400.8	44.7	379.3	1559.3	2663.9	3256.7	3122.1	3337.1	4592.7	5214.2	4832.2
73°	330.9	0.6	301.7	1414.9	2607.5	3099.5	2800.8	2837.7	4008.1	4709.2	4474.2
74°	298.7	0.4	278.2	1258.4	2602.3	2943.2	2404.3	2272.1	3430.5	4165.6	4080.7
75°	245.3	0.4	238.1	1183.6	2469.5	2775.2	2007.7	1571.1	2809.6	3573.2	3593.1
76°	191.8	0.4	198.1	1142.3	2265.7	2586.7	1609.4	913.1	2047.3	2983.9	3012.7
77°	138.9	0.4	158.2	1075.9	2061.8	2267.3	991.8	605.3	1256.5	2422.4	2306.3
78°	103.4	0.5	127.5	969.1	1857.5	1947.9	517.3	301.6	951.0	1832.5	1518.6
79°	102.0	0.5	127.5	820.3	1607.5	1621.3	347.3	235.7	655.1	1223.0	1124.1
80°	139.1	0.5	155.8	715.6	1326.7	982.1	181.3	199.3	359.3	910.2	739.7
81°	171.5	0.6	163.7	667.3	1003.6	709.0	143.5	169.8	307.6	600.6	355.3
82°	154.5	0.7	100.6	627.9	775.0	436.0	116.6	142.6	262.8	291.0	306.2
83°	95.9	0.8	70.9	522.9	552.0	166.6	94.1	117.6	214.4	227.6	268.8
84°	52.3	0.9	41.3	375.3	398.0	140.9	74.8	95.7	166.9	185.5	233.4
85°	38.9	1.0	11.8	227.8	244.1	111.9	58.6	73.8	127.3	146.9	199.3
86°	25.6	1.1	10.4	83.9	93.9	82.4	44.6	51.9	101.0	113.6	166.2
87°	12.6	1.3	10.4	58.2	48.2	59.0	33.8	34.2	74.9	88.9	129.7
88°	8.6	1.4	9.0	32.6	33.3	40.9	23.0	19.7	48.8	64.3	99.7
89°	6.1	1.6	5.0	7.4	18.5	22.8	12.2	13.7	28.4	39.7	69.8



REPORT NUMBER: P1436713

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436713

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436713

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1436713

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	4089.5	4089.5	4089.5
1°	4194.1	4209.9	4217.2
2°	4315.2	4344.8	4355.6
3°	4445.7	4489.7	4506.1
4°	4590.2	4651.8	4671.6
5°	4743.2	4825.2	4852.1
6°	4913.2	5016.3	5050.4
7°	5094.2	5216.7	5260.2
8°	5287.0	5436.7	5489.7
9°	5496.0	5675.8	5739.5
10°	5717.5	5928.8	6000.6
11°	5961.0	6204.4	6284.2
12°	6216.7	6498.7	6592.0
13°	6494.6	6818.0	6919.5
14°	6786.0	7154.7	7275.5
15°	7098.7	7512.5	7656.4
16°	7412.9	7876.4	8049.3
17°	7735.7	8251.6	8435.9
18°	8058.7	8621.6	8821.4
19°	8369.5	8970.1	9179.2
20°	8667.6	9297.6	9506.9
21°	8948.7	9597.5	9800.9
22°	9208.7	9862.0	10056.7
23°	9456.6	10103.3	10282.9
24°	9687.8	10309.9	10480.6
25°	9897.2	10491.2	10651.8
26°	10086.9	10643.6	10796.4
27°	10258.1	10776.2	10918.0
28°	10409.6	10887.0	11018.2
29°	10541.1	10977.7	11101.4
30°	10656.1	11051.2	11164.3
31°	10753.8	11108.8	11213.3
32°	10833.7	11151.5	11243.2
33°	10897.7	11176.0	11258.1
34°	10950.0	11186.6	11259.2
35°	10987.3	11183.5	11246.4
36°	11009.7	11167.5	11221.8
37°	11018.2	11140.8	11184.5
38°	11015.0	11103.5	11137.6
39°	10997.9	11056.6	11080.0
40°	10969.1	11001.1	11013.9
41°	10930.8	10937.2	10935.0
42°	10880.6	10863.6	10844.4
43°	10817.7	10780.4	10741.0
44°	10743.1	10683.4	10624.4



REPORT NUMBER: P1436713

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	10661.4	10576.1	10492.5
46°	10569.2	10455.7	10341.6
47°	10464.3	10315.7	10182.5
48°	10350.5	10169.2	10015.0
49°	10220.2	9998.6	9825.0
50°	10075.3	9815.5	9614.0
51°	9910.2	9610.5	9385.8
52°	9726.6	9384.1	9140.2
53°	9522.4	9139.2	8878.6
54°	9304.4	8875.6	8597.5
55°	9073.7	8598.9	8310.8
56°	8820.3	8299.7	8000.8
57°	8558.1	7984.3	7692.4
58°	8282.3	7670.9	7371.5
59°	7993.7	7346.1	7036.8
60°	7691.7	7011.7	6679.0
61°	7382.8	6655.9	6296.8
62°	7069.0	6294.7	5897.5
63°	6756.6	5917.7	5478.9
64°	6447.9	5542.8	5073.8
65°	6133.4	5169.4	4706.3
66°	5816.5	4830.0	4383.4
67°	5500.6	4519.5	4118.0
68°	5188.9	4250.3	3833.0
69°	4892.7	3961.5	3414.6
70°	4614.5	3600.8	2801.0
71°	4327.6	3104.3	1994.1
72°	4009.7	2405.8	1269.2
73°	3628.6	1631.0	976.8
74°	3111.3	995.8	693.5
75°	2438.1	725.7	410.2
76°	1735.5	457.1	361.8
77°	1163.0	388.4	323.7
78°	908.0	341.8	292.5
79°	660.2	304.1	265.0
80°	412.5	271.7	240.0
81°	344.4	243.2	216.9
82°	296.7	217.4	195.4
83°	255.5	193.0	174.8
84°	215.9	170.5	154.9
85°	174.8	148.4	135.9
86°	142.3	128.1	117.0
87°	114.8	108.3	100.7
88°	94.0	91.9	84.5
89°	73.4	75.5	68.3



REPORT NUMBER: P1436713

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436713

CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436713
CATALOG NUMBER: XAS180-SFPM (3000K-180W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)