

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: P1445023

Luminaire Tested: XAS180-SFPM (5000K-144W-T4-HSS)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1445023
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/5/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: XAS180-SFPM (5000K-144W-T4-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 80% (144W)
OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 24748 (1 lamp)
Luminaire Lumens: 19996.4 lumens
Efficiency: 80.8%
Efficacy: 139.6 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): 143.2
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

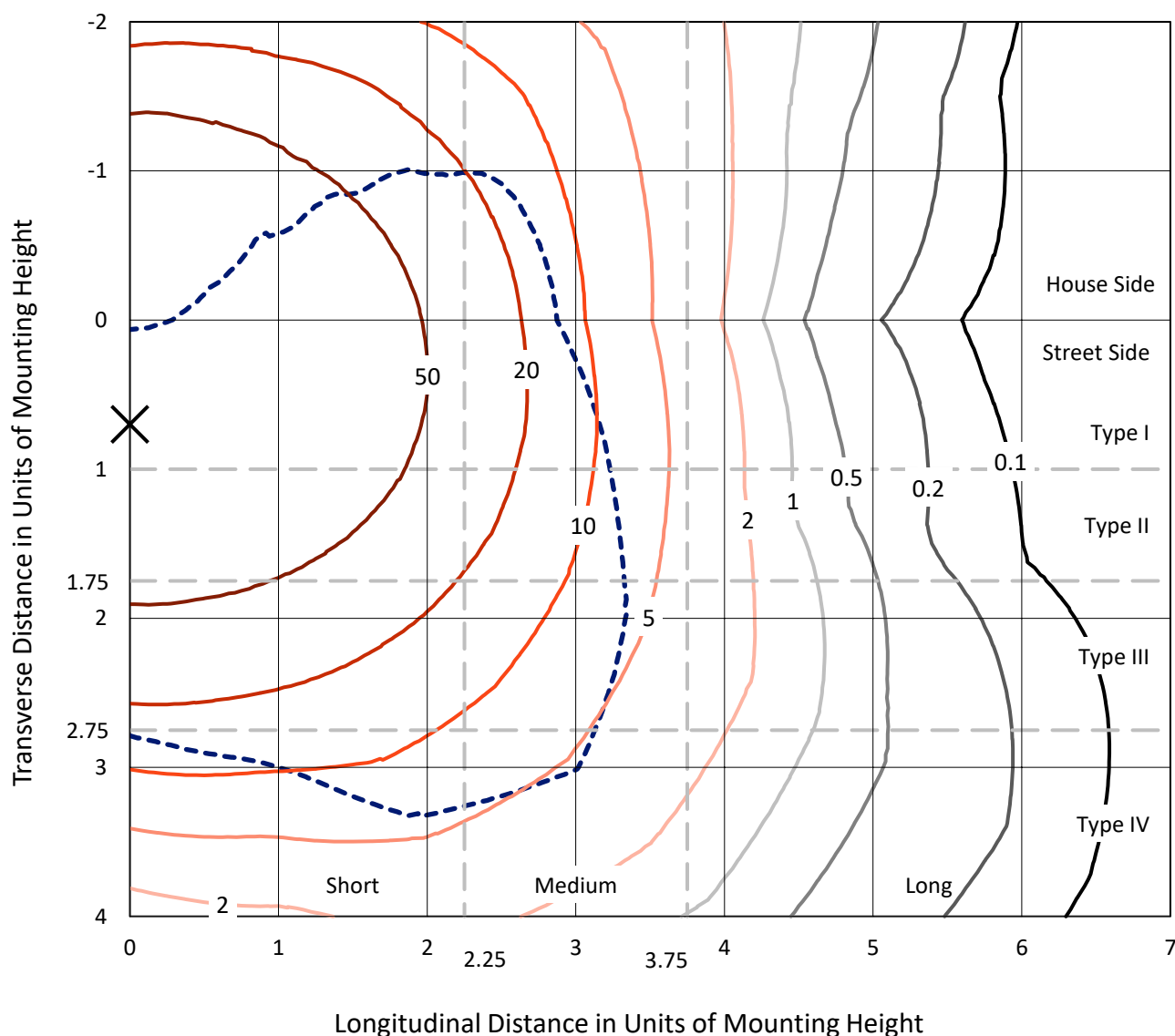
REPORT NUMBER: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

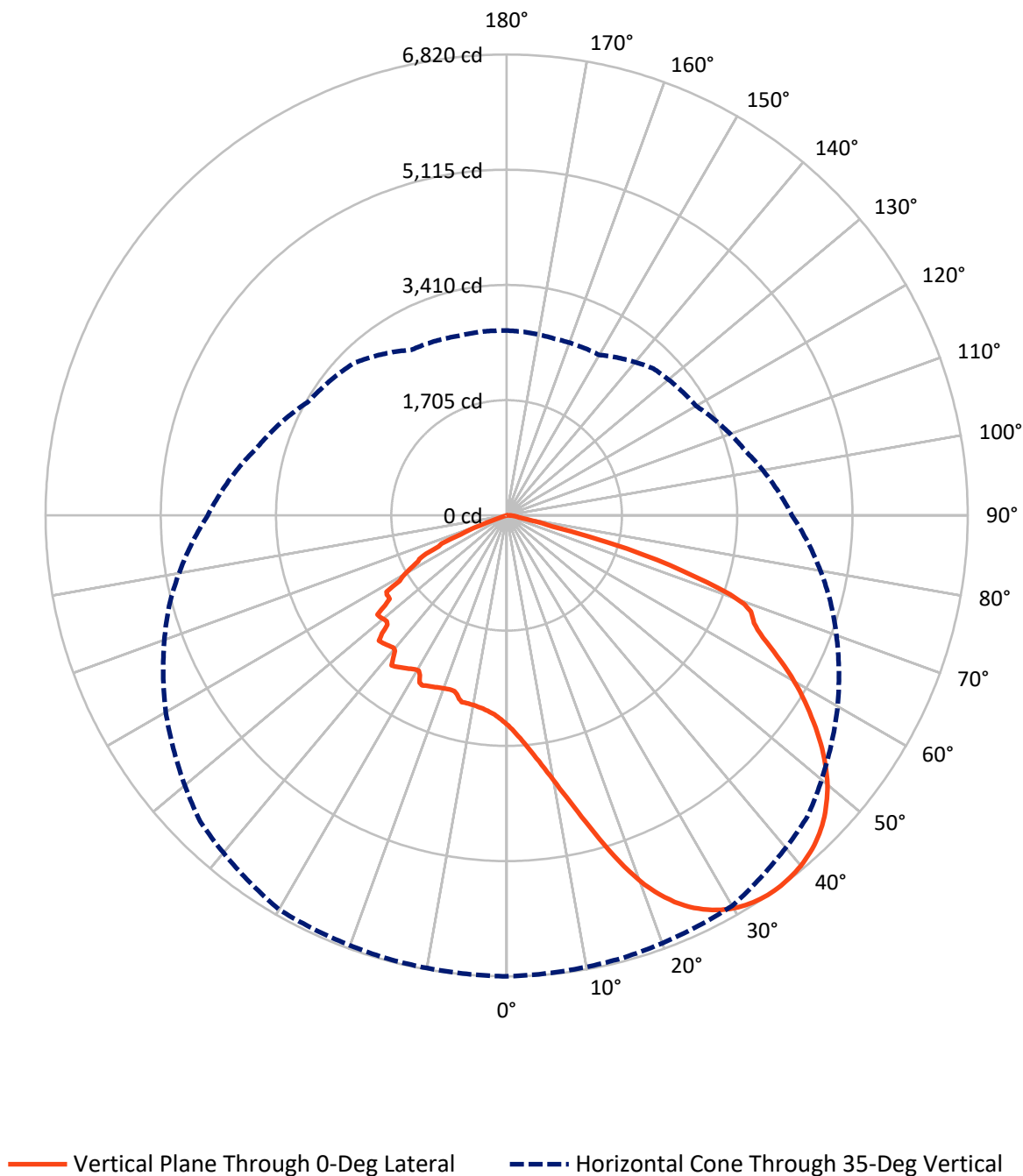


Based on 3 foot mounting height. Maximum calculated value = 539.6 fc
 Type IV - Short - Full Cutoff

REPORT NUMBER: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

Luminous Intensity Polar Plot



REPORT NUMBER: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

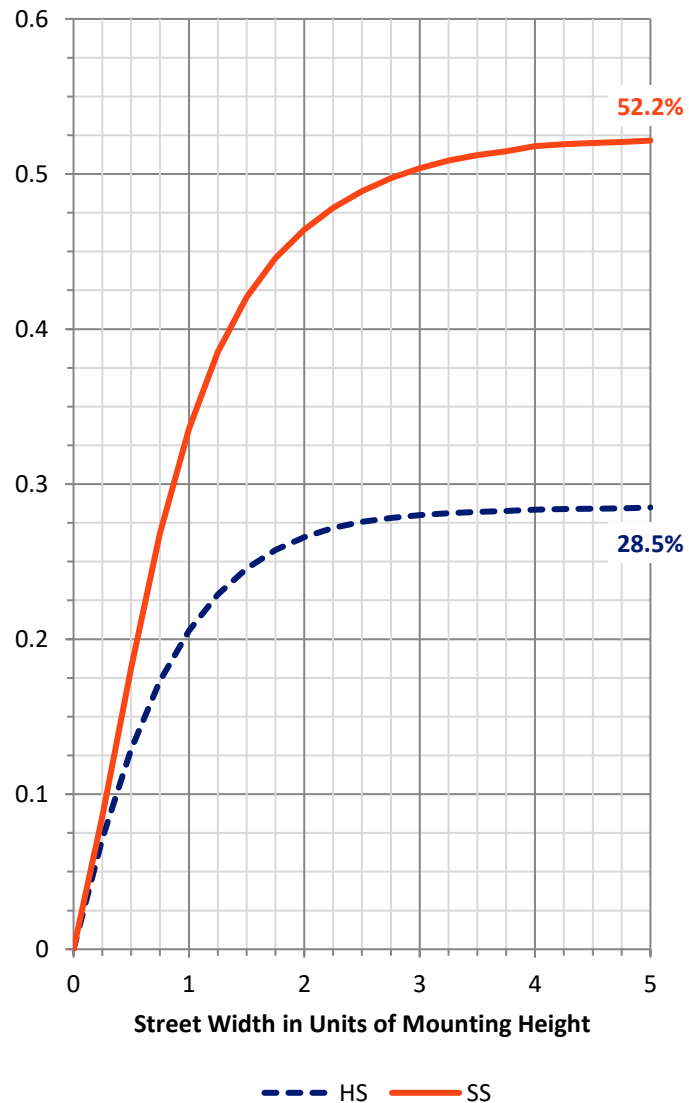
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7084.0	0.0	7084.0
	% Lamp	28.6	0.0	28.6
Street Side	Lumens	12912.4	0.0	12912.4
	% Lamp	52.2	0.0	52.2
Total	Lumens	19996.4	0.0	19996.4
	% Lamp	80.8	0.0	80.8

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	308.7	1.5	1.2
10°-20°	1043.1	5.2	4.2
20°-30°	1972.3	9.9	8.0
30°-40°	2899.6	14.5	11.7
40°-50°	3662.7	18.3	14.8
50°-60°	4055.7	20.3	16.4
60°-70°	3815.9	19.1	15.4
70°-80°	2079.7	10.4	8.4
80°-90°	158.7	0.8	0.6
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°	19996.4	100.0	80.8
0°-180°	19996.4	100.0	80.8

Coefficient of Utilization



REPORT NUMBER: P1445023

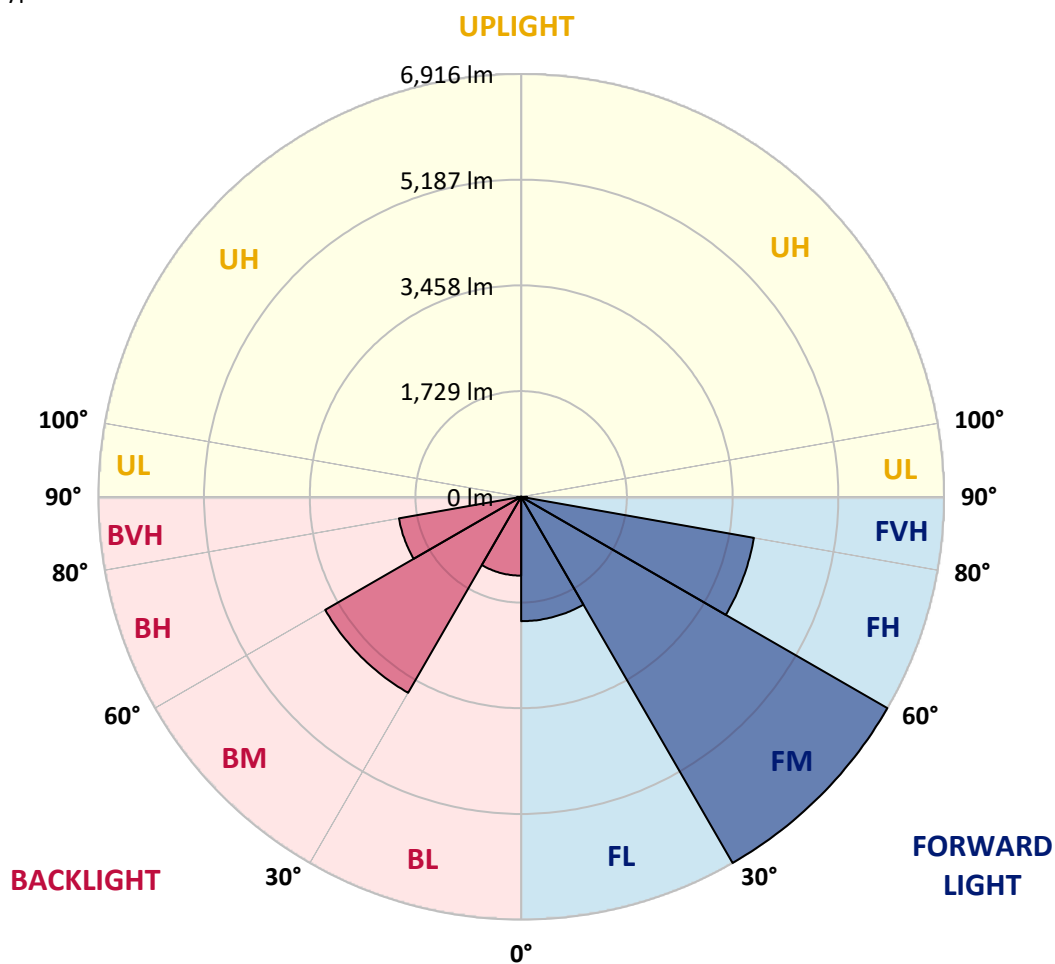
CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2034.6	8.2			
FM	(30°-60°)	6916.2	27.9			
FH	(60°-80°)	3865.7	15.6			G2/5000
FVH	(80°-90°)	95.9	0.4			G1/100
BL	(0°-30°)	1289.5	5.2	B3/2500		
BM	(30°-60°)	3701.8	15.0	B3/5000		
BH	(60°-80°)	2029.9	8.2	B3/2500		G3/2500
BVH	(80°-90°)	62.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		4751.6	19.2			

BUG Rating: B3-U0-G3

Type IV Short



REPORT NUMBER: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	3112.2	3112.2	3112.2	3112.2	3112.2	3112.2	3112.2	3112.2	3112.2	3112.2	3112.2
1°	3168.1	3166.9	3163.2	3155.2	3143.0	3130.3	3104.5	3092.5	3082.8	3073.6	3067.5
2°	3232.4	3228.7	3218.1	3199.0	3173.6	3145.9	3105.9	3081.1	3059.2	3041.8	3029.1
3°	3302.6	3297.4	3277.7	3246.8	3208.5	3166.4	3112.0	3073.5	3040.6	3014.8	2995.4
4°	3381.3	3371.9	3343.0	3300.7	3247.8	3190.8	3119.8	3069.6	3025.9	2991.7	2967.2
5°	3470.6	3456.7	3418.2	3359.8	3291.0	3216.9	3130.3	3067.1	3014.6	2973.0	2945.2
6°	3566.8	3548.9	3500.2	3426.6	3338.5	3246.0	3142.9	3067.3	3005.5	2959.3	2927.0
7°	3671.2	3648.6	3590.4	3500.4	3390.5	3279.5	3158.9	3071.1	2999.4	2948.6	2912.7
8°	3785.0	3757.7	3685.7	3578.0	3446.8	3315.5	3179.4	3078.3	2997.8	2940.2	2901.3
9°	3908.3	3874.5	3789.5	3661.4	3509.5	3355.0	3201.8	3087.0	2998.7	2934.9	2892.0
10°	4042.1	4002.1	3901.8	3751.7	3575.4	3397.2	3225.6	3098.2	3002.7	2933.5	2884.9
11°	4186.6	4139.7	4021.5	3847.7	3645.0	3444.4	3252.7	3112.2	3008.2	2934.4	2881.4
12°	4341.6	4286.6	4149.1	3948.9	3718.1	3492.8	3281.7	3127.6	3016.5	2937.1	2880.7
13°	4508.5	4444.5	4285.4	4059.2	3795.7	3545.2	3312.1	3144.5	3025.8	2941.4	2882.3
14°	4688.1	4617.3	4433.5	4173.5	3876.8	3598.7	3343.2	3161.6	3035.2	2947.4	2883.7
15°	4880.8	4796.3	4590.5	4296.8	3961.9	3651.9	3375.6	3181.0	3047.4	2954.4	2887.6
16°	5079.2	4987.7	4751.2	4424.5	4052.5	3709.7	3411.1	3201.0	3060.6	2961.5	2891.7
17°	5281.1	5177.1	4913.1	4556.3	4146.5	3769.3	3447.1	3222.8	3074.7	2970.0	2876.2
18°	5475.1	5360.0	5073.4	4688.5	4246.0	3831.3	3483.0	3240.6	3089.8	2980.4	2825.9
19°	5660.9	5537.6	5233.2	4819.2	4347.3	3893.5	3507.8	3253.6	3097.7	2991.4	2790.4
20°	5831.9	5705.9	5385.7	4948.2	4448.3	3952.7	3539.3	3269.7	3102.7	2999.5	2770.4
21°	5982.9	5856.7	5532.3	5074.2	4552.2	4007.2	3574.2	3297.3	3111.0	2961.0	2778.6
22°	6114.6	5997.3	5668.9	5195.6	4654.3	4069.9	3618.1	3324.3	3130.2	2929.5	2788.5
23°	6236.3	6121.6	5797.0	5310.7	4755.8	4134.8	3662.6	3348.2	3148.2	2910.8	2800.3
24°	6341.9	6233.0	5917.3	5422.2	4843.7	4207.1	3703.5	3367.8	3160.4	2898.3	2814.1
25°	6434.1	6332.6	6027.0	5528.4	4927.5	4284.0	3740.4	3391.6	3173.6	2911.4	2828.1
26°	6512.7	6418.8	6127.4	5630.1	5013.4	4359.3	3780.1	3417.9	3189.1	2918.4	2844.5
27°	6581.8	6494.8	6219.3	5729.2	5095.7	4432.0	3822.9	3449.7	3211.8	2926.9	2860.3
28°	6640.7	6559.3	6304.5	5821.6	5175.6	4495.4	3869.6	3482.8	3225.1	2939.1	2875.6
29°	6690.3	6614.4	6379.0	5907.7	5254.1	4560.4	3921.1	3515.3	3207.6	2960.4	2892.5
30°	6731.4	6660.1	6447.8	5992.3	5333.2	4626.4	3973.8	3549.1	3208.6	2981.7	2906.3
31°	6763.9	6698.1	6506.9	6069.2	5407.7	4691.7	4027.7	3582.2	3199.3	3004.0	2910.6
32°	6787.2	6725.9	6557.0	6133.1	5478.5	4758.7	4081.9	3607.3	3206.8	3025.5	2824.7
33°	6804.8	6746.8	6602.8	6193.3	5542.8	4826.9	4135.5	3620.7	3200.4	3042.9	2753.4
34°	6816.2	6760.5	6639.2	6246.7	5600.1	4893.9	4185.2	3636.7	3218.1	3057.8	2725.6
35°	6820.4	6767.3	6671.4	6296.6	5654.0	4960.1	4221.0	3663.0	3236.8	3071.3	2741.0
36°	6818.5	6770.3	6694.6	6344.5	5707.1	5022.6	4253.0	3690.8	3259.1	3086.9	2756.8
37°	6809.8	6765.7	6712.7	6387.5	5757.8	5083.3	4291.7	3719.7	3281.1	3083.3	2769.1
38°	6796.5	6757.8	6724.3	6424.9	5806.8	5143.0	4338.9	3751.6	3296.5	2998.8	2779.5
39°	6779.1	6744.6	6730.9	6458.0	5854.1	5199.0	4383.5	3779.2	3310.8	2932.0	2795.4
40°	6756.2	6728.3	6728.7	6486.2	5899.7	5243.6	4428.7	3804.3	3335.6	2914.4	2815.9
41°	6725.9	6705.8	6723.6	6512.5	5943.8	5280.6	4473.9	3827.6	3366.1	2936.4	2836.1
42°	6692.0	6679.2	6710.7	6535.6	5986.8	5314.4	4519.2	3845.3	3396.2	2960.0	2853.5
43°	6649.5	6647.9	6693.7	6553.3	6030.0	5353.9	4557.3	3863.8	3426.7	2984.7	2793.2
44°	6599.5	6610.4	6671.6	6563.3	6070.7	5395.1	4592.3	3898.2	3458.5	3007.7	2696.2

REPORT NUMBER: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	6543.5	6568.1	6642.3	6566.3	6107.8	5438.7	4622.6	3939.5	3482.9	3022.7	2656.0
46°	6478.2	6518.7	6609.2	6562.1	6144.9	5481.3	4645.5	3981.5	3490.8	3032.7	2670.7
47°	6404.7	6460.6	6572.2	6551.1	6180.2	5522.7	4665.7	4020.2	3491.3	3049.4	2683.0
48°	6327.8	6395.8	6527.7	6534.2	6210.2	5561.1	4684.3	4041.6	3435.1	3069.1	2693.0
49°	6241.5	6322.7	6475.3	6513.8	6233.4	5601.7	4715.0	4055.5	3388.4	3007.7	2707.0
50°	6145.0	6241.1	6415.8	6486.7	6248.2	5636.7	4751.7	4064.3	3371.9	2912.4	2722.1
51°	6040.5	6150.5	6344.9	6453.4	6256.5	5665.8	4788.3	4058.9	3359.5	2871.5	2669.5
52°	5924.9	6051.3	6267.6	6411.7	6260.2	5690.5	4823.0	4086.7	3383.2	2893.4	2524.8
53°	5805.4	5941.8	6182.5	6363.6	6256.1	5712.6	4856.1	4102.8	3397.7	2916.4	2479.0
54°	5678.5	5822.8	6088.2	6311.2	6250.2	5723.4	4885.9	4112.1	3413.6	2932.9	2500.2
55°	5545.9	5698.4	5985.1	6249.4	6235.5	5724.0	4906.1	4131.6	3439.9	2948.0	2523.9
56°	5410.3	5568.3	5879.9	6180.5	6218.0	5720.5	4915.7	4143.1	3468.6	2952.4	2547.1
57°	5273.5	5435.9	5766.6	6108.2	6194.2	5706.6	4914.1	4148.7	3483.4	2850.7	2566.5
58°	5132.8	5296.6	5649.7	6028.3	6161.8	5697.2	4905.1	4159.5	3495.1	2758.3	2436.3
59°	4988.6	5161.1	5529.8	5941.7	6120.6	5686.3	4900.5	4159.4	3437.3	2755.3	2334.9
60°	4835.9	5019.7	5406.0	5850.4	6066.7	5666.9	4891.4	4141.5	3365.2	2788.1	2341.2
61°	4679.1	4873.5	5279.3	5752.8	6002.3	5638.4	4872.0	4118.4	3344.2	2823.8	2349.2
62°	4515.2	4724.4	5156.3	5648.7	5927.5	5597.7	4848.3	4106.5	3354.0	2858.4	2254.5
63°	4355.7	4573.6	5035.4	5542.0	5845.3	5541.7	4807.3	4074.4	3362.8	2788.9	2120.9
64°	4202.7	4428.2	4919.5	5431.4	5748.6	5468.4	4751.7	4036.6	3361.0	2701.9	2093.7
65°	4081.0	4294.6	4804.9	5316.3	5643.1	5380.9	4683.8	3980.5	3324.7	2700.8	2068.1
66°	3990.0	4187.8	4695.3	5201.5	5525.6	5272.1	4602.6	3906.1	3208.4	2717.5	1889.6
67°	3938.8	4107.8	4597.1	5085.0	5392.7	5148.5	4509.2	3810.0	3160.4	2606.3	1860.6
68°	3881.8	4053.7	4509.7	4967.8	5239.8	5007.1	4350.4	3707.2	3178.8	2544.9	1743.2
69°	3753.8	3995.0	4437.6	4853.1	5075.2	4815.2	4091.2	3587.3	3187.7	2536.5	1625.7
70°	3506.9	3889.4	4379.5	4737.9	4909.1	4558.1	3728.7	3412.4	3180.4	2413.3	1507.6
71°	3126.5	3685.8	4324.9	4623.1	4709.8	4233.9	3327.6	3173.6	3077.6	2374.4	1318.6
72°	2737.1	3357.1	4258.2	4501.8	4479.4	3864.3	2965.3	2892.4	2951.1	2284.0	1181.5
73°	2321.6	2940.6	4151.8	4381.8	4214.0	3485.0	2634.3	2617.1	2810.3	2212.2	1053.6
74°	1850.2	2493.6	3950.8	4237.6	3914.5	3120.2	2247.0	2373.2	2646.6	2085.4	890.3
75°	1258.6	2008.4	3606.0	4035.4	3577.9	2703.0	1710.6	2106.8	2437.0	1957.9	794.7
76°	697.8	1425.0	3160.6	3739.7	3225.3	2138.1	1174.2	1691.1	2249.2	1735.5	711.1
77°	539.3	814.3	2684.2	3316.3	2833.8	1411.4	638.2	1272.3	2063.9	1513.1	626.6
78°	384.4	620.5	2108.2	2735.6	2348.0	785.3	307.3	734.2	1707.0	1289.7	539.0
79°	229.6	428.1	1383.2	2056.0	1712.1	520.4	231.1	532.5	1350.2	1017.8	447.1
80°	203.2	235.7	753.6	1353.1	1055.2	265.7	155.4	330.9	991.8	775.2	377.9
81°	181.7	204.4	571.5	706.8	768.1	220.2	131.7	129.8	533.8	570.1	339.9
82°	162.1	180.7	395.5	468.7	485.9	188.0	111.7	103.4	392.3	455.1	335.6
83°	143.9	159.2	219.6	245.4	203.8	154.1	93.2	81.9	250.7	360.8	275.9
84°	126.7	138.9	183.1	200.8	165.2	120.0	76.0	65.1	113.0	277.4	212.2
85°	110.2	120.4	148.9	170.3	131.1	94.0	59.4	51.2	96.9	194.1	148.5
86°	94.3	103.4	121.4	141.8	100.9	75.7	44.3	39.4	76.4	111.4	85.2
87°	78.7	87.2	97.7	110.5	77.8	57.5	30.7	29.0	56.4	63.0	53.1
88°	68.0	73.3	75.9	76.5	56.5	39.3	21.6	20.5	39.1	43.2	36.4
89°	57.4	59.4	58.4	54.4	35.4	23.9	12.4	12.1	21.9	23.4	19.8



REPORT NUMBER: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-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: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-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: P1445023
CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-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: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3112.2	3112.2	3112.2	3112.2	3112.2	3112.2	3112.2	3112.2	3112.2	3112.2	3112.2
1°	3064.2	3064.6	3068.0	3074.7	3084.3	3093.9	3107.6	3109.8	3123.5	3137.3	3149.5
2°	3022.1	3021.8	3027.2	3039.5	3055.4	3076.7	3101.1	3116.5	3144.6	3171.4	3196.1
3°	2985.4	2984.0	2991.0	3006.6	3030.9	3060.8	3097.4	3126.5	3167.7	3210.3	3247.9
4°	2953.9	2952.4	2961.2	2980.6	3010.7	3050.2	3097.2	3138.9	3195.9	3253.4	3305.3
5°	2930.5	2927.9	2937.1	2959.9	2994.3	3041.7	3099.5	3154.9	3226.9	3300.5	3368.2
6°	2910.0	2906.2	2917.5	2943.9	2982.4	3035.8	3104.6	3173.8	3261.5	3352.3	3435.9
7°	2892.5	2888.3	2900.7	2930.1	2975.1	3034.8	3113.3	3196.3	3299.4	3409.2	3513.1
8°	2879.2	2874.3	2887.2	2920.6	2970.2	3036.8	3124.8	3220.3	3340.7	3471.8	3594.7
9°	2867.2	2862.6	2876.9	2913.7	2968.1	3040.9	3137.3	3246.0	3385.3	3537.9	3682.9
10°	2858.7	2852.6	2869.1	2910.0	2968.4	3046.7	3152.0	3275.5	3432.8	3608.3	3776.7
11°	2852.0	2845.8	2864.3	2908.5	2971.7	3056.2	3169.8	3308.8	3486.3	3683.0	3876.8
12°	2847.9	2841.7	2861.2	2909.5	2977.8	3067.4	3190.6	3342.3	3539.7	3762.9	3983.4
13°	2847.5	2840.1	2860.9	2912.0	2986.3	3081.0	3212.3	3378.5	3597.1	3847.3	4098.6
14°	2847.6	2839.1	2862.8	2917.4	2996.6	3096.0	3235.5	3416.0	3655.5	3935.4	4219.7
15°	2844.5	2804.4	2860.1	2923.6	3007.4	3113.2	3259.9	3456.7	3717.3	4030.5	4349.1
16°	2784.2	2747.1	2804.7	2930.2	3019.0	3132.1	3285.9	3496.6	3782.1	4127.0	4485.3
17°	2739.5	2713.4	2761.6	2919.1	3031.8	3151.4	3314.3	3539.3	3848.3	4230.6	4625.1
18°	2716.0	2707.3	2738.7	2870.1	3047.0	3171.6	3339.4	3581.9	3918.0	4338.6	4766.0
19°	2719.5	2711.5	2741.9	2838.2	3060.7	3186.6	3356.8	3617.8	3989.4	4447.9	4906.3
20°	2725.6	2717.3	2748.8	2822.0	3073.0	3196.7	3377.8	3653.4	4062.8	4559.5	5042.0
21°	2733.6	2726.6	2757.8	2829.2	3047.7	3209.6	3407.7	3694.1	4129.3	4673.5	5173.3
22°	2745.1	2736.9	2769.7	2841.6	3010.9	3233.2	3441.0	3741.3	4197.2	4783.8	5297.5
23°	2757.0	2750.6	2784.5	2855.5	2993.9	3257.8	3475.0	3792.7	4272.3	4893.6	5416.1
24°	2770.0	2763.7	2799.8	2871.5	2988.8	3278.4	3502.5	3844.2	4351.4	4998.2	5528.5
25°	2783.8	2776.3	2814.4	2888.5	3002.5	3294.2	3528.5	3891.0	4434.8	5090.6	5633.4
26°	2798.1	2791.3	2830.2	2908.2	3015.3	3310.7	3556.8	3935.0	4519.8	5175.1	5734.0
27°	2812.3	2806.7	2845.4	2926.4	3025.4	3331.1	3587.8	3982.2	4603.7	5259.2	5831.0
28°	2827.2	2791.1	2861.2	2945.1	3038.1	3348.3	3624.2	4033.2	4682.4	5340.0	5923.6
29°	2782.3	2691.9	2826.5	2963.4	3059.1	3343.0	3661.3	4087.1	4751.7	5418.3	6011.4
30°	2689.0	2638.6	2731.5	2978.8	3082.5	3338.8	3698.4	4143.8	4824.7	5496.9	6093.3
31°	2643.5	2645.2	2685.3	2984.9	3106.4	3338.5	3735.0	4202.5	4896.0	5570.9	6171.6
32°	2652.6	2666.0	2692.6	2915.8	3131.2	3339.5	3764.4	4261.0	4963.8	5641.6	6242.6
33°	2671.2	2687.7	2711.2	2845.5	3153.6	3338.9	3783.3	4318.3	5034.0	5709.8	6304.8
34°	2689.6	2710.2	2730.4	2814.6	3171.7	3356.7	3802.3	4375.5	5101.0	5769.2	6358.2
35°	2708.5	2734.9	2749.6	2826.6	3189.4	3376.5	3831.4	4421.3	5169.1	5821.5	6409.0
36°	2729.2	2757.5	2770.2	2845.8	3203.5	3398.7	3862.8	4459.1	5232.7	5873.3	6457.2
37°	2747.4	2778.9	2790.5	2860.1	3211.6	3423.6	3894.6	4501.8	5294.1	5922.8	6502.3
38°	2765.3	2795.9	2809.8	2872.3	3129.6	3442.8	3930.9	4550.1	5353.4	5972.9	6540.1
39°	2778.2	2693.7	2825.2	2885.5	3065.4	3459.7	3966.5	4597.9	5409.8	6020.1	6572.8
40°	2672.8	2595.7	2731.7	2906.3	3046.3	3484.1	3996.6	4645.1	5457.8	6064.4	6600.9
41°	2577.7	2574.9	2631.8	2928.5	3065.3	3516.5	4023.1	4692.8	5494.8	6108.6	6625.4
42°	2555.7	2589.5	2604.2	2948.7	3089.4	3550.4	4041.9	4739.9	5528.2	6152.6	6644.2
43°	2573.1	2605.7	2621.8	2909.2	3115.0	3583.9	4062.5	4784.1	5563.9	6194.2	6659.3
44°	2592.0	2620.9	2642.0	2805.3	3139.8	3618.5	4101.8	4824.2	5600.9	6231.9	6668.4

REPORT NUMBER: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2611.5	2636.2	2661.5	2756.3	3157.5	3646.2	4145.7	4859.8	5640.4	6267.2	6668.4
46°	2631.4	2645.2	2681.6	2767.1	3169.3	3656.8	4189.9	4883.3	5681.7	6298.6	6660.3
47°	2650.3	2538.6	2697.9	2778.9	3184.6	3663.9	4233.3	4902.4	5720.2	6328.4	6644.2
48°	2549.1	2392.7	2613.0	2789.1	3205.2	3634.4	4266.9	4919.0	5756.2	6354.1	6625.1
49°	2406.6	2364.5	2467.7	2802.8	3166.4	3585.3	4276.3	4947.4	5788.6	6371.4	6600.1
50°	2381.6	2376.2	2432.9	2816.3	3067.4	3550.6	4283.1	4981.5	5817.6	6379.1	6569.6
51°	2401.3	2389.3	2452.4	2779.6	3011.8	3535.2	4277.2	5012.0	5838.3	6377.3	6534.2
52°	2422.0	2402.3	2470.8	2633.3	3028.8	3552.9	4278.6	5040.8	5854.1	6370.6	6489.9
53°	2440.5	2408.2	2488.3	2576.7	3052.6	3567.3	4295.7	5064.8	5862.8	6356.6	6441.2
54°	2449.7	2234.8	2498.6	2596.5	3068.1	3580.6	4300.1	5084.5	5859.0	6341.5	6383.9
55°	2292.6	2128.0	2342.2	2619.6	3082.7	3598.0	4303.1	5094.1	5846.0	6319.1	6323.0
56°	2176.3	2120.5	2224.4	2643.6	3087.5	3624.6	4303.5	5088.9	5823.9	6293.9	6256.1
57°	2168.5	2124.2	2212.0	2660.8	3012.1	3634.9	4298.0	5071.5	5794.9	6261.5	6181.2
58°	2171.9	2106.4	2214.6	2537.4	2904.3	3640.1	4295.6	5049.1	5764.2	6216.4	6101.1
59°	2131.2	1856.5	2181.0	2427.1	2893.3	3599.9	4289.2	5026.8	5733.0	6165.6	6014.3
60°	1911.2	1788.2	1959.1	2427.6	2924.9	3510.9	4259.3	5000.4	5694.1	6106.3	5919.0
61°	1868.7	1683.1	1911.0	2434.6	2958.6	3467.7	4223.5	4966.9	5646.6	6035.9	5817.6
62°	1863.1	1578.1	1899.1	2353.8	2988.5	3466.7	4202.9	4925.0	5588.8	5953.4	5712.0
63°	1754.6	1474.2	1787.7	2206.1	2927.2	3465.6	4166.0	4869.3	5517.9	5856.9	5601.6
64°	1646.2	1444.4	1676.3	2176.8	2822.6	3456.0	4117.5	4796.4	5432.1	5752.8	5489.8
65°	1537.5	1319.6	1564.1	2158.6	2807.2	3416.3	4049.3	4706.2	5326.4	5638.7	5369.0
66°	1367.7	1103.6	1398.2	1966.9	2808.0	3300.8	3963.9	4598.6	5200.7	5515.0	5242.1
67°	1195.0	1052.2	1219.6	1925.5	2692.2	3225.2	3862.1	4468.6	5063.5	5372.9	5115.7
68°	1075.0	734.7	1103.1	1849.9	2627.3	3228.3	3723.1	4244.1	4888.3	5215.7	4990.5
69°	875.9	606.7	899.9	1688.3	2602.6	3221.7	3555.5	3912.7	4645.6	5042.6	4869.5
70°	701.5	418.0	721.6	1526.6	2470.7	3196.0	3323.5	3478.7	4340.5	4851.8	4740.6
71°	482.4	229.3	481.9	1365.4	2411.8	3066.3	3032.6	3077.6	3958.1	4625.8	4605.5
72°	266.5	42.0	249.2	1227.3	2310.5	2899.1	2722.5	2709.9	3552.2	4369.7	4470.1
73°	224.4	0.5	202.1	1082.9	2207.2	2726.6	2421.9	2343.5	3154.9	4060.4	4318.6
74°	182.3	0.4	155.4	890.6	2054.3	2536.9	2142.8	1907.8	2761.2	3709.0	4141.5
75°	140.4	0.4	134.9	781.5	1883.5	2314.6	1721.6	1336.6	2292.0	3319.6	3894.5
76°	106.8	0.4	107.5	694.7	1642.2	2093.3	1300.4	774.3	1658.7	2908.7	3563.0
77°	75.2	0.5	85.1	612.4	1400.9	1774.0	879.0	497.5	988.0	2471.6	3100.4
78°	56.2	0.5	68.9	530.7	1159.8	1454.7	452.5	227.3	739.3	1936.2	2500.7
79°	55.4	0.6	68.4	441.2	927.7	1133.1	295.5	173.4	494.3	1309.3	1812.8
80°	74.2	0.7	82.6	382.0	720.6	648.0	140.2	147.1	249.3	765.1	1128.0
81°	90.8	0.8	85.4	355.0	541.5	469.9	112.4	125.2	212.0	507.9	826.7
82°	80.1	0.9	53.3	330.8	420.1	291.9	92.5	105.3	181.0	254.5	532.8
83°	50.0	1.0	37.9	250.8	315.3	114.9	75.5	87.5	149.4	194.3	238.9
84°	36.6	1.1	22.5	170.8	210.6	95.7	60.7	71.7	118.2	160.1	198.7
85°	23.3	1.2	7.5	91.6	107.1	75.5	48.2	55.9	92.3	125.7	168.8
86°	10.3	1.4	6.7	46.6	59.6	56.2	37.2	40.0	74.1	97.5	140.6
87°	7.6	1.5	6.6	32.8	34.0	40.4	27.3	26.8	56.1	75.2	109.1
88°	5.5	1.6	5.8	19.1	23.7	28.2	19.3	15.7	38.1	54.7	75.9
89°	4.3	1.8	3.7	5.5	13.5	16.0	11.3	6.7	23.3	34.1	54.1

REPORT NUMBER: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-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: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-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: P1445023
CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-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: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	3112.2	3112.2	3112.2
1°	3158.5	3165.1	3168.1
2°	3214.9	3227.7	3232.4
3°	3276.9	3296.1	3302.6
4°	3346.5	3373.3	3381.3
5°	3422.1	3459.0	3470.6
6°	3505.6	3553.0	3566.8
7°	3597.5	3653.1	3671.2
8°	3696.7	3763.0	3785.0
9°	3803.7	3882.9	3908.3
10°	3915.8	4012.7	4042.1
11°	4041.1	4151.1	4186.6
12°	4173.9	4302.7	4341.6
13°	4317.1	4462.4	4508.5
14°	4470.1	4634.8	4688.1
15°	4630.5	4817.2	4880.8
16°	4793.7	5003.4	5079.2
17°	4959.6	5194.9	5281.1
18°	5126.5	5384.7	5475.1
19°	5287.8	5567.6	5660.9
20°	5443.8	5737.1	5831.9
21°	5589.9	5891.6	5982.9
22°	5726.3	6032.6	6114.6
23°	5857.1	6155.6	6236.3
24°	5978.4	6265.5	6341.9
25°	6090.7	6362.0	6434.1
26°	6193.2	6447.0	6512.7
27°	6289.7	6520.4	6581.8
28°	6372.9	6584.3	6640.7
29°	6449.2	6637.3	6690.3
30°	6515.2	6681.1	6731.4
31°	6574.8	6718.2	6763.9
32°	6626.2	6748.0	6787.2
33°	6670.2	6769.0	6804.8
34°	6705.1	6783.4	6816.2
35°	6733.8	6790.9	6820.4
36°	6756.2	6790.1	6818.5
37°	6773.1	6785.9	6809.8
38°	6783.3	6777.6	6796.5
39°	6786.8	6762.8	6779.1
40°	6784.7	6745.1	6756.2
41°	6777.9	6724.0	6725.9
42°	6764.9	6697.5	6692.0
43°	6745.7	6666.8	6649.5
44°	6722.5	6630.6	6599.5

REPORT NUMBER: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	6693.4	6588.5	6543.5
46°	6660.6	6540.7	6478.2
47°	6621.6	6483.6	6404.7
48°	6579.5	6421.0	6327.8
49°	6529.2	6350.4	6241.5
50°	6469.8	6272.9	6145.0
51°	6401.9	6185.7	6040.5
52°	6323.0	6086.9	5924.9
53°	6237.7	5983.3	5805.4
54°	6144.4	5868.0	5678.5
55°	6047.7	5748.9	5545.9
56°	5942.2	5618.8	5410.3
57°	5831.9	5486.5	5273.5
58°	5714.7	5349.9	5132.8
59°	5593.2	5211.5	4988.6
60°	5470.5	5068.5	4835.9
61°	5348.0	4923.2	4679.1
62°	5225.1	4773.1	4515.2
63°	5106.6	4628.1	4355.7
64°	4995.3	4487.8	4202.7
65°	4887.2	4358.6	4081.0
66°	4782.4	4249.8	3990.0
67°	4682.7	4170.9	3938.8
68°	4590.9	4116.2	3881.8
69°	4509.4	4057.3	3753.8
70°	4445.2	3961.3	3506.9
71°	4379.6	3773.5	3126.5
72°	4298.7	3449.7	2737.1
73°	4179.4	3030.0	2321.6
74°	3961.1	2566.8	1850.2
75°	3613.4	2077.9	1258.6
76°	3170.5	1520.6	697.8
77°	2668.2	907.0	539.3
78°	2067.2	680.8	384.4
79°	1358.7	461.3	229.6
80°	762.9	241.8	203.2
81°	574.3	210.7	181.7
82°	399.5	186.3	162.1
83°	224.6	163.9	143.9
84°	185.9	142.9	126.7
85°	150.8	123.6	110.2
86°	123.2	106.0	94.3
87°	98.8	89.2	78.7
88°	75.6	74.7	68.0
89°	58.4	60.3	57.4

REPORT NUMBER: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-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: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-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: P1445023

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)