

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: P1444973

Luminaire Tested: XAS180-SFPM (3000K-144W-T3-HSS)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1444973
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 (3000K-144W-T3-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 80% (144W)
OPTICS - TYPE 3 WITH HOUSE SIDE SHIELD
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 24407 (1 lamp)
Luminaire Lumens: 18617.1 lumens
Efficiency: 76.3%
Efficacy: 127.4 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): 146.1
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

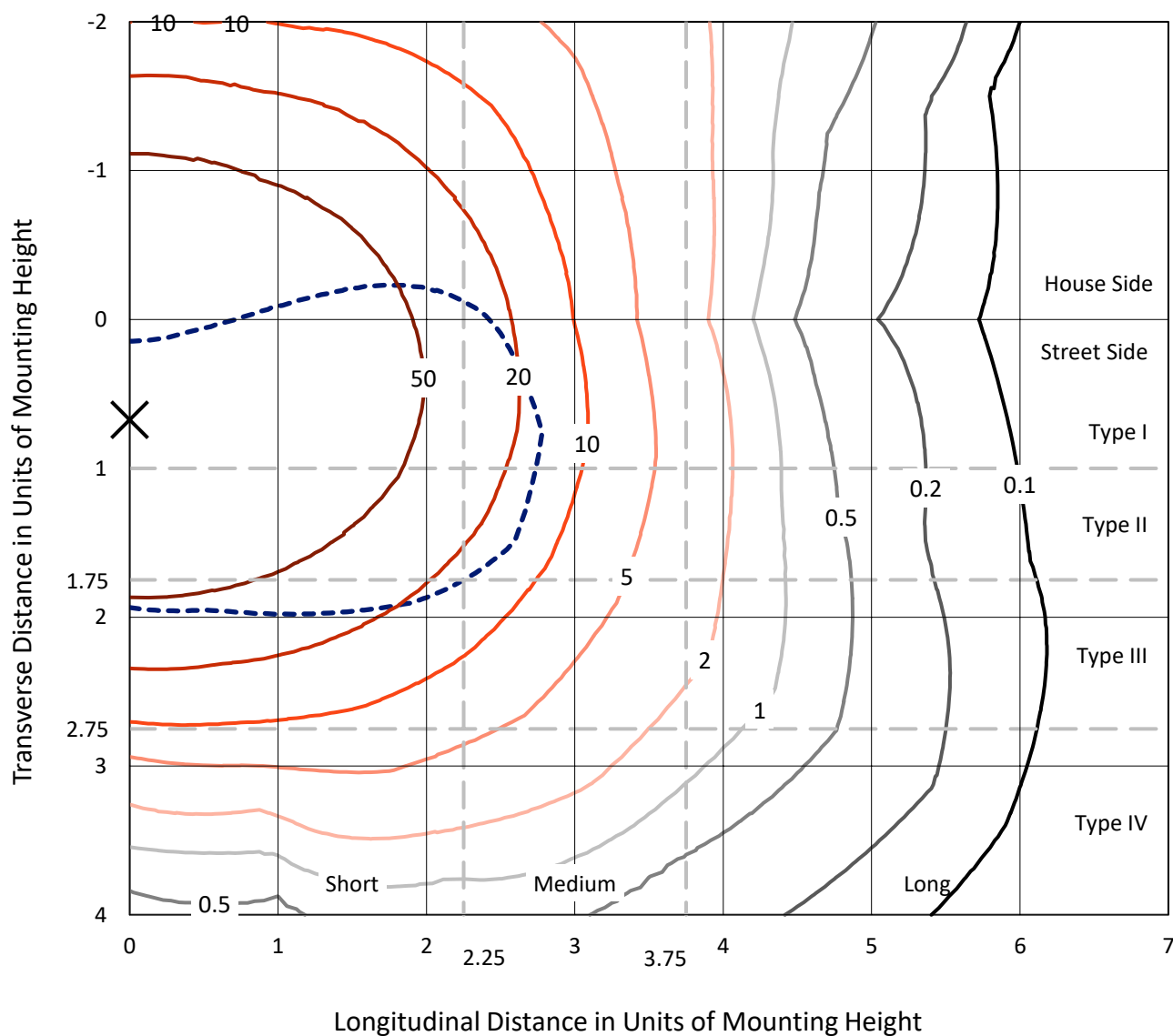
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

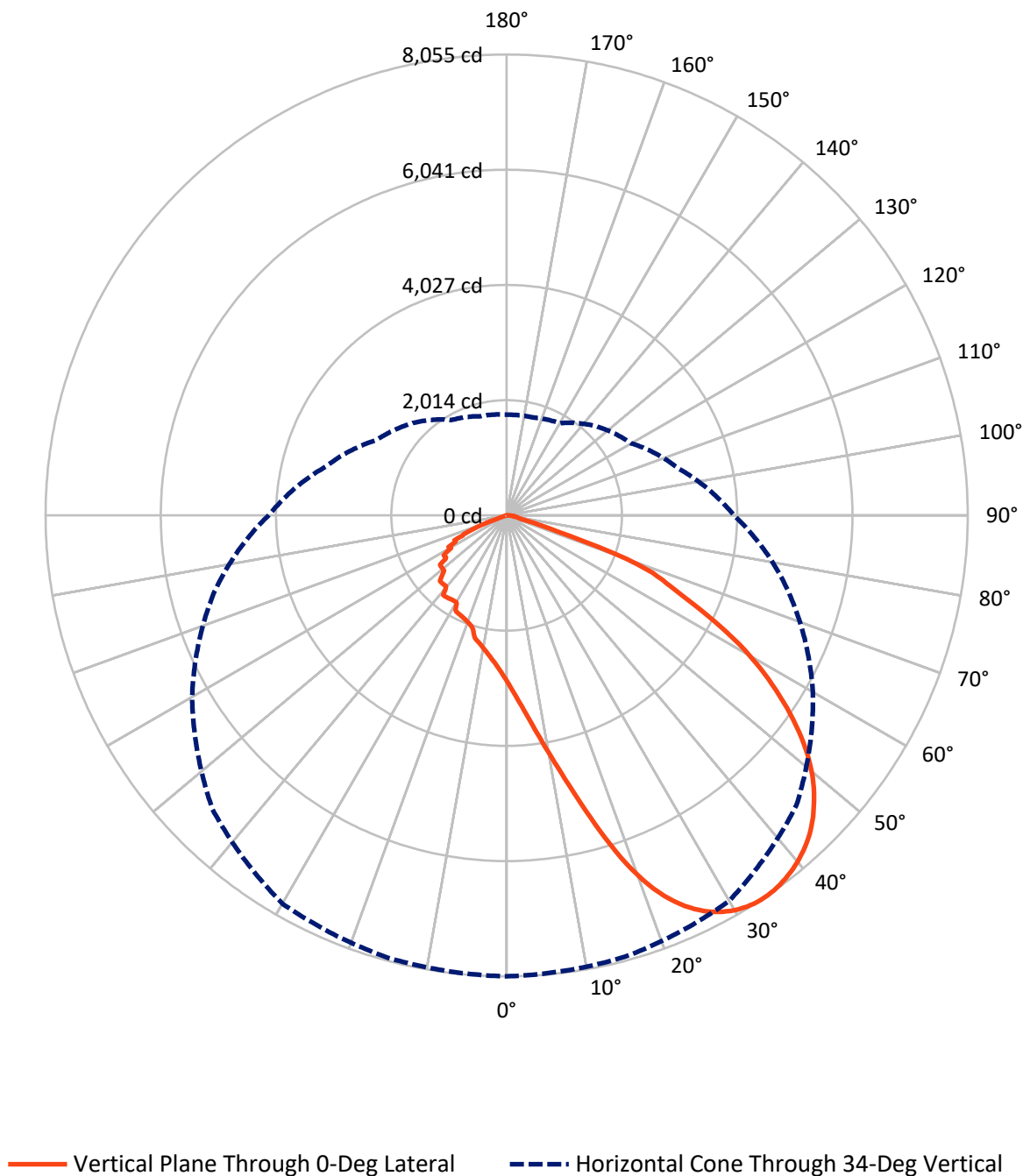


Based on 3 foot mounting height. Maximum calculated value = 631 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



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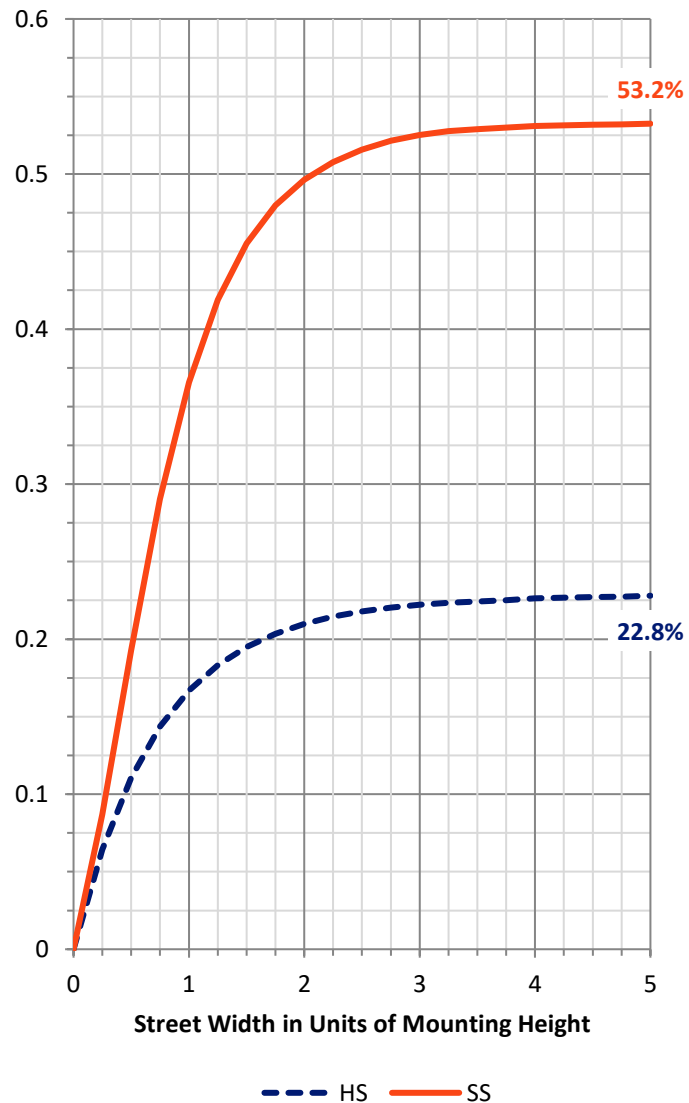
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5599.0	0.0	5599.0
	% Lamp	22.9	0.0	22.9
Street Side	Lumens	13018.1	0.0	13018.1
	% Lamp	53.3	0.0	53.3
Total	Lumens	18617.1	0.0	18617.1
	% Lamp	76.3	0.0	76.3

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	292.4	1.6	1.2
10°-20°	1015.7	5.5	4.2
20°-30°	1970.7	10.6	8.1
30°-40°	2897.3	15.6	11.9
40°-50°	3595.1	19.3	14.7
50°-60°	3830.6	20.6	15.7
60°-70°	3330.1	17.9	13.6
70°-80°	1540.5	8.3	6.3
80°-90°	144.7	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°	18617.1	100.0	76.3
0°-180°	18617.1	100.0	76.3

Coefficient of Utilization



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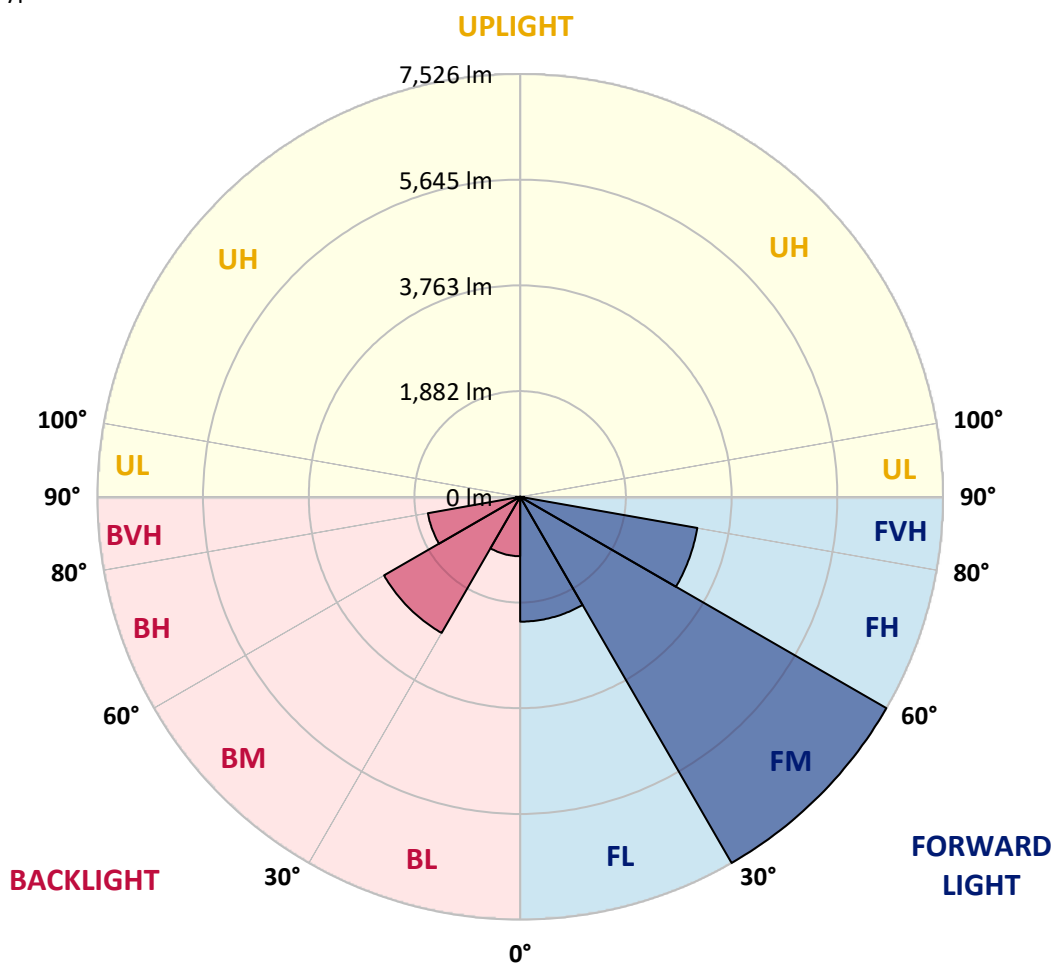
CATALOG NUMBER: XAS180-SFPM (3000K-144W-T3-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2221.9	9.1			
FM	(30°-60°)	7526.1	30.8			
FH	(60°-80°)	3202.1	13.1			G2/5000
FVH	(80°-90°)	67.9	0.3			G1/100
BL	(0°-30°)	1057.0	4.3	B3/2500		
BM	(30°-60°)	2796.8	11.5	B3/5000		
BH	(60°-80°)	1668.5	6.8	B3/2500		G3/2500
BVH	(80°-90°)	76.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		5789.9	23.7			

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°	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7
1°	3017.0	3015.2	3007.9	2994.2	2975.8	2954.4	2915.7	2895.6	2877.5	2863.1	2852.6
2°	3116.0	3111.9	3092.3	3062.5	3022.9	2978.4	2917.1	2875.6	2838.8	2809.7	2786.8
3°	3223.7	3212.9	3182.5	3134.8	3075.3	3007.5	2921.8	2860.0	2805.1	2760.4	2727.4
4°	3342.1	3326.2	3283.0	3215.5	3130.9	3038.7	2928.8	2846.7	2774.6	2715.7	2673.8
5°	3471.2	3450.9	3390.5	3302.6	3191.2	3073.3	2938.3	2835.1	2747.0	2676.2	2626.4
6°	3613.1	3583.8	3509.5	3397.3	3258.9	3111.1	2949.9	2826.8	2721.6	2641.0	2582.8
7°	3763.2	3727.6	3636.2	3498.6	3329.6	3153.1	2966.0	2822.5	2701.0	2608.7	2541.6
8°	3927.3	3886.0	3774.1	3607.0	3406.1	3198.2	2985.1	2821.0	2683.3	2579.3	2504.9
9°	4106.1	4056.5	3920.9	3724.0	3487.6	3246.7	3006.1	2820.7	2669.4	2552.5	2470.2
10°	4292.9	4233.1	4078.3	3845.7	3574.1	3299.5	3030.3	2823.5	2656.3	2529.5	2437.7
11°	4495.8	4427.3	4245.6	3977.0	3665.8	3355.5	3056.9	2828.5	2645.7	2508.4	2408.3
12°	4716.0	4635.4	4422.3	4118.0	3761.4	3414.3	3085.2	2835.3	2637.7	2489.3	2382.0
13°	4950.2	4855.7	4613.8	4265.0	3863.7	3476.9	3115.4	2843.2	2630.8	2471.4	2357.6
14°	5204.9	5099.7	4819.3	4421.1	3970.3	3541.4	3145.3	2851.4	2624.7	2455.4	2334.8
15°	5477.4	5354.8	5037.1	4587.1	4082.3	3607.7	3178.4	2861.1	2619.9	2440.6	2312.0
16°	5758.5	5619.9	5262.7	4763.6	4199.3	3676.5	3213.4	2872.7	2616.3	2426.7	2291.3
17°	6035.1	5882.9	5484.4	4945.0	4323.1	3748.2	3249.5	2884.9	2613.7	2413.8	2270.4
18°	6310.8	6141.1	5707.1	5123.7	4453.3	3822.5	3286.1	2895.5	2611.9	2401.9	2238.3
19°	6566.8	6389.8	5926.6	5300.0	4587.2	3899.5	3311.6	2898.1	2606.5	2391.2	2163.4
20°	6801.3	6619.8	6139.8	5475.9	4720.9	3972.6	3343.7	2905.5	2594.6	2380.5	2110.3
21°	7011.6	6830.4	6340.4	5645.6	4856.7	4039.1	3376.1	2921.8	2585.6	2368.7	2096.1
22°	7194.6	7019.3	6529.2	5809.4	4989.3	4117.7	3418.6	2938.8	2587.1	2326.4	2083.2
23°	7356.5	7190.5	6701.5	5967.4	5120.8	4193.9	3463.6	2954.3	2588.8	2272.5	2072.3
24°	7497.9	7340.7	6864.4	6115.2	5236.5	4282.1	3505.5	2963.5	2585.3	2229.4	2064.1
25°	7620.4	7472.5	7011.4	6257.7	5347.8	4374.2	3540.9	2976.4	2581.7	2222.4	2056.0
26°	7723.8	7586.1	7145.4	6388.6	5457.7	4464.4	3578.2	2989.1	2579.5	2213.9	2049.7
27°	7810.8	7684.9	7269.3	6517.1	5563.6	4552.8	3620.0	3009.0	2584.6	2202.6	2042.8
28°	7882.5	7766.5	7377.0	6637.7	5662.3	4631.3	3662.9	3028.9	2592.1	2194.6	2036.6
29°	7942.0	7832.9	7471.3	6748.2	5759.1	4705.4	3713.4	3048.9	2598.6	2194.3	2031.6
30°	7987.0	7887.8	7555.0	6853.2	5857.4	4782.9	3763.9	3070.3	2589.9	2196.2	2026.8
31°	8022.0	7929.8	7627.0	6948.6	5948.4	4861.0	3816.5	3092.3	2551.3	2198.9	2017.5
32°	8043.4	7960.3	7686.4	7027.5	6033.8	4935.7	3868.6	3111.5	2543.1	2201.5	2005.2
33°	8054.1	7978.6	7737.5	7097.6	6111.5	5013.8	3921.2	3117.3	2512.7	2204.0	1926.9
34°	8054.8	7986.2	7777.2	7160.7	6179.3	5090.3	3971.9	3123.5	2516.1	2204.2	1859.6
35°	8045.7	7985.4	7806.9	7220.8	6239.8	5163.1	4009.3	3138.9	2521.0	2202.4	1855.6
36°	8028.1	7976.3	7824.5	7273.6	6296.4	5232.9	4040.2	3156.7	2527.5	2201.5	1857.0
37°	8001.5	7958.7	7832.9	7317.6	6351.8	5299.7	4075.4	3175.5	2538.8	2204.6	1858.3
38°	7967.9	7932.8	7833.6	7351.4	6406.0	5366.0	4119.2	3196.8	2545.8	2205.3	1857.0
39°	7926.7	7901.5	7825.3	7379.5	6453.9	5426.2	4158.5	3219.8	2547.6	2100.1	1855.8
40°	7879.4	7862.6	7806.2	7401.5	6500.2	5476.3	4200.8	3236.6	2558.6	2051.8	1860.5
41°	7823.0	7815.3	7781.0	7418.6	6540.3	5511.9	4241.5	3251.8	2575.3	2058.8	1865.0
42°	7758.1	7762.7	7746.7	7433.4	6582.9	5546.6	4283.0	3265.0	2592.2	2068.6	1870.1
43°	7684.1	7700.9	7704.0	7437.9	6623.0	5582.1	4322.2	3272.5	2610.0	2079.8	1872.0
44°	7600.8	7632.3	7654.4	7432.9	6659.0	5621.0	4354.9	3295.1	2629.2	2091.8	1811.8

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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	7506.4	7553.5	7595.3	7417.2	6690.9	5658.4	4380.7	3326.4	2649.2	2102.2	1729.8
46°	7398.4	7464.4	7529.9	7392.9	6720.8	5695.4	4404.2	3358.7	2657.6	2102.0	1731.9
47°	7284.6	7362.5	7456.3	7358.0	6746.4	5730.6	4419.2	3392.0	2656.6	2107.4	1737.0
48°	7164.8	7252.9	7373.9	7313.9	6765.6	5759.7	4430.2	3426.9	2665.7	2119.8	1739.4
49°	7028.8	7127.2	7281.0	7263.6	6776.6	5788.5	4453.2	3456.6	2619.5	2127.6	1737.2
50°	6877.9	6992.0	7175.3	7203.7	6777.1	5815.1	4485.1	3463.0	2578.5	2060.2	1737.5
51°	6714.7	6840.9	7055.5	7131.7	6764.5	5832.1	4517.0	3440.5	2540.5	1977.6	1740.3
52°	6538.9	6676.7	6925.0	7048.6	6746.8	5841.2	4545.8	3461.3	2559.5	1984.0	1662.2
53°	6351.8	6498.4	6780.0	6956.9	6718.6	5845.2	4571.2	3468.1	2576.5	1996.4	1578.0
54°	6150.7	6304.5	6624.6	6851.7	6681.5	5844.3	4593.8	3464.3	2585.6	2013.0	1586.1
55°	5945.6	6104.8	6456.2	6735.4	6632.1	5828.3	4612.2	3485.1	2600.1	2022.2	1597.4
56°	5723.8	5895.1	6273.9	6609.2	6576.6	5800.3	4616.1	3498.5	2623.5	2028.8	1610.2
57°	5503.2	5675.6	6086.6	6469.3	6512.6	5764.3	4611.5	3498.4	2642.4	2026.0	1622.6
58°	5273.6	5450.2	5890.1	6317.9	6436.5	5731.1	4593.2	3510.5	2650.9	1917.4	1629.1
59°	5034.1	5221.4	5683.5	6160.0	6347.3	5696.1	4575.9	3521.9	2668.5	1891.6	1500.2
60°	4778.2	4982.2	5471.6	5987.7	6241.9	5653.0	4559.5	3513.3	2596.3	1917.5	1511.0
61°	4504.8	4729.6	5249.9	5808.3	6122.1	5599.9	4530.7	3483.0	2555.4	1948.3	1515.4
62°	4219.1	4466.9	5026.1	5617.8	5995.0	5532.3	4498.4	3473.7	2572.1	1981.3	1471.5
63°	3919.6	4192.2	4799.0	5418.5	5852.2	5449.0	4453.7	3448.8	2584.6	2006.3	1427.8
64°	3629.8	3921.2	4572.0	5215.0	5692.9	5350.6	4392.1	3409.1	2594.1	1912.8	1418.2
65°	3366.9	3651.1	4336.3	5005.3	5521.6	5234.0	4316.8	3363.1	2581.6	1922.8	1434.2
66°	3135.9	3406.6	4106.4	4792.5	5338.8	5098.4	4218.0	3294.8	2511.0	1947.3	1350.3
67°	2946.0	3183.7	3877.8	4581.1	5143.0	4940.5	4113.9	3222.7	2433.0	1931.5	1330.7
68°	2742.2	2988.2	3655.3	4364.1	4922.5	4763.9	3957.9	3116.8	2451.9	1883.7	1364.5
69°	2442.8	2782.3	3446.2	4152.7	4689.4	4552.0	3721.9	2990.8	2463.2	1896.7	1248.3
70°	2003.9	2510.2	3251.1	3939.0	4450.4	4289.4	3380.2	2821.0	2468.2	1845.9	1242.6
71°	1426.6	2130.2	3055.5	3726.5	4179.7	3978.1	2988.2	2599.4	2418.0	1850.2	1075.5
72°	908.0	1613.1	2835.5	3505.9	3879.1	3612.4	2652.3	2352.8	2326.4	1839.6	1037.1
73°	698.8	1067.8	2571.7	3278.9	3543.3	3215.6	2333.1	2136.9	2235.0	1812.3	962.1
74°	496.1	649.1	2215.3	3022.9	3187.0	2812.6	1888.1	1977.4	2135.6	1827.7	871.9
75°	293.5	478.3	1721.0	2695.2	2799.0	2378.6	1443.1	1672.8	2022.3	1789.8	839.7
76°	258.8	312.5	1201.3	2290.7	2399.0	1838.1	997.8	1368.3	1922.4	1740.9	818.5
77°	231.6	268.4	783.7	1789.8	1983.6	1209.5	544.9	1062.9	1839.6	1574.4	772.4
78°	209.3	237.0	612.7	1194.6	1539.9	695.7	284.3	613.4	1599.3	1407.9	696.7
79°	189.6	211.7	449.4	651.5	1071.1	482.6	232.5	449.3	1359.1	1239.8	591.6
80°	171.7	189.7	286.1	449.6	669.5	271.3	180.8	285.2	1115.1	1011.5	506.7
81°	155.2	170.0	241.9	256.4	439.5	229.0	129.7	123.8	619.1	756.9	458.0
82°	139.8	151.9	209.8	219.3	213.8	195.6	109.4	96.1	453.8	603.0	456.2
83°	125.0	134.7	181.6	191.4	166.0	158.8	91.2	74.2	288.4	477.7	374.7
84°	110.8	118.8	153.7	166.3	134.9	120.4	74.0	58.1	123.7	341.0	278.8
85°	97.2	103.8	124.2	142.4	107.4	91.9	57.2	44.9	108.6	252.4	196.9
86°	83.7	89.6	101.3	119.2	83.7	71.2	42.0	34.0	86.9	163.7	115.6
87°	72.0	76.2	82.0	94.0	65.4	53.7	32.2	26.4	64.4	76.1	70.9
88°	60.5	64.9	67.1	72.2	47.3	36.2	22.5	18.7	48.9	51.8	48.3
89°	48.9	53.6	52.4	50.5	29.2	21.1	12.7	11.1	33.3	27.4	25.7

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CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1444973

CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1444973
CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1444973

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7
1°	2847.8	2848.0	2852.1	2862.7	2876.6	2894.8	2914.4	2920.4	2943.8	2965.6	2984.6
2°	2775.6	2773.7	2782.1	2800.1	2826.7	2859.8	2899.3	2927.1	2973.1	3017.7	3057.1
3°	2710.1	2705.7	2716.6	2742.0	2780.7	2829.6	2887.1	2937.3	3005.7	3072.3	3132.2
4°	2650.8	2646.1	2658.3	2689.4	2738.5	2802.7	2878.5	2949.5	3041.3	3131.5	3215.6
5°	2598.4	2591.7	2605.4	2642.8	2700.6	2779.2	2872.6	2964.6	3080.7	3197.3	3305.3
6°	2548.6	2540.5	2557.0	2600.1	2667.9	2757.8	2868.8	2982.4	3123.8	3269.1	3403.2
7°	2503.2	2493.3	2511.5	2560.0	2637.1	2740.5	2868.3	3004.4	3169.9	3344.4	3507.8
8°	2461.2	2449.3	2469.6	2524.1	2609.7	2725.1	2870.1	3026.4	3219.7	3424.6	3620.3
9°	2421.3	2407.6	2430.3	2490.4	2585.3	2712.3	2873.4	3051.8	3274.0	3510.9	3741.2
10°	2384.2	2369.4	2394.3	2459.8	2562.2	2701.3	2878.3	3080.0	3330.2	3601.9	3867.5
11°	2349.9	2333.3	2360.8	2432.1	2542.9	2692.3	2885.8	3111.9	3392.0	3699.1	4003.5
12°	2318.6	2300.9	2328.7	2405.9	2525.4	2685.3	2895.9	3144.9	3454.5	3802.2	4147.7
13°	2290.0	2269.8	2300.2	2381.9	2509.7	2680.7	2907.7	3180.4	3521.6	3910.2	4302.2
14°	2262.5	2239.9	2272.8	2359.6	2496.3	2677.6	2920.7	3216.5	3590.8	4022.5	4465.9
15°	2235.4	2210.7	2246.0	2338.3	2484.1	2676.9	2934.5	3255.3	3663.4	4145.0	4641.6
16°	2204.3	2145.4	2216.2	2318.0	2472.2	2677.2	2948.7	3295.8	3738.8	4270.7	4826.4
17°	2119.7	2072.3	2135.6	2298.0	2461.4	2677.7	2965.9	3336.4	3817.7	4405.5	5012.8
18°	2060.0	2034.1	2074.4	2266.8	2452.1	2679.5	2983.0	3378.8	3899.3	4544.7	5201.6
19°	2038.2	2011.9	2051.3	2198.0	2442.7	2679.7	2989.9	3415.1	3983.4	4686.2	5392.0
20°	2019.4	1991.8	2032.4	2146.5	2433.5	2671.2	3001.7	3448.7	4071.6	4829.6	5576.7
21°	2003.0	1975.2	2015.6	2127.3	2422.9	2665.6	3019.1	3486.8	4151.8	4974.9	5754.0
22°	1989.6	1960.0	2002.3	2115.8	2381.3	2669.6	3041.4	3533.3	4233.1	5120.4	5921.7
23°	1978.1	1947.3	1991.7	2105.8	2331.5	2675.3	3063.6	3583.6	4325.7	5259.8	6077.3
24°	1967.3	1935.5	1981.7	2097.9	2295.1	2681.0	3083.0	3635.1	4418.2	5397.1	6225.9
25°	1957.8	1924.2	1972.2	2091.4	2285.2	2679.5	3096.6	3683.8	4518.2	5516.0	6364.6
26°	1948.1	1915.0	1964.1	2086.3	2281.1	2679.2	3114.3	3725.1	4618.6	5624.9	6496.7
27°	1940.1	1907.3	1956.7	2081.8	2271.7	2680.8	3131.0	3771.3	4720.1	5733.0	6621.1
28°	1933.5	1900.7	1950.7	2077.4	2264.8	2689.9	3155.4	3819.5	4815.1	5836.4	6739.4
29°	1926.8	1872.4	1944.2	2073.9	2264.1	2698.7	3180.5	3873.3	4898.7	5928.9	6847.4
30°	1874.5	1770.5	1900.1	2071.1	2267.7	2691.8	3205.9	3929.4	4982.9	6023.4	6949.8
31°	1786.1	1750.9	1810.3	2062.7	2272.1	2670.3	3230.7	3985.8	5066.9	6113.8	7045.3
32°	1771.5	1751.5	1794.2	2053.0	2277.9	2649.4	3254.7	4043.1	5145.7	6199.3	7131.7
33°	1770.3	1753.8	1793.4	1994.4	2283.5	2629.0	3265.3	4099.7	5223.2	6275.9	7203.9
34°	1771.1	1758.2	1794.3	1924.0	2289.1	2629.9	3276.1	4157.0	5301.3	6344.1	7265.7
35°	1772.6	1764.0	1796.6	1914.4	2290.1	2636.1	3294.1	4205.6	5375.8	6402.9	7320.0
36°	1775.3	1769.1	1800.1	1917.0	2290.5	2643.9	3314.4	4243.2	5445.6	6457.5	7371.4
37°	1776.3	1773.4	1802.3	1920.7	2291.1	2654.0	3336.9	4283.4	5511.6	6511.2	7416.1
38°	1776.6	1777.4	1803.9	1920.2	2291.4	2665.5	3362.1	4328.3	5574.8	6563.4	7453.2
39°	1776.1	1777.6	1805.2	1919.4	2205.4	2670.4	3389.2	4371.7	5634.3	6609.6	7479.9
40°	1772.5	1680.0	1803.0	1923.4	2154.9	2678.8	3414.9	4417.5	5686.1	6652.3	7502.4
41°	1672.3	1629.8	1715.2	1929.6	2155.9	2697.4	3432.5	4461.3	5723.8	6692.5	7516.2
42°	1617.0	1630.6	1650.3	1936.0	2165.4	2716.9	3446.2	4503.5	5754.9	6733.3	7524.0
43°	1616.0	1633.3	1649.6	1940.6	2176.6	2737.6	3455.0	4547.2	5787.1	6767.9	7524.4
44°	1617.4	1635.4	1652.5	1899.5	2189.3	2759.0	3481.4	4588.6	5817.4	6799.7	7517.6

REPORT NUMBER: P1444973

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1619.4	1635.4	1655.7	1807.3	2201.5	2779.5	3514.7	4619.6	5849.5	6825.3	7498.4
46°	1621.1	1632.9	1658.3	1802.7	2204.6	2790.4	3549.2	4642.7	5881.6	6847.9	7466.6
47°	1622.2	1574.2	1660.3	1808.5	2207.7	2792.0	3584.0	4657.2	5908.7	6865.4	7422.8
48°	1568.4	1515.5	1660.2	1811.7	2222.3	2802.9	3618.3	4665.2	5933.3	6875.1	7372.8
49°	1514.7	1457.7	1563.0	1808.7	2230.8	2795.0	3651.6	4685.8	5950.9	6877.9	7313.0
50°	1461.2	1454.4	1492.9	1808.4	2185.4	2732.8	3672.4	4712.2	5964.0	6866.5	7247.5
51°	1466.7	1452.8	1497.7	1812.1	2086.2	2695.6	3656.0	4735.5	5971.0	6840.2	7171.9
52°	1474.6	1453.1	1505.1	1753.0	2087.2	2708.5	3645.4	4756.8	5969.8	6806.9	7085.4
53°	1483.0	1452.6	1513.0	1653.9	2102.8	2727.9	3658.8	4773.2	5958.7	6764.2	6988.3
54°	1489.7	1446.0	1477.4	1662.4	2122.6	2737.6	3653.5	4784.0	5940.3	6713.1	6877.0
55°	1492.7	1309.1	1441.7	1675.1	2134.2	2743.9	3650.8	4791.3	5906.4	6653.9	6759.1
56°	1363.4	1287.8	1406.2	1690.2	2143.9	2769.0	3655.4	4783.5	5855.9	6588.8	6628.6
57°	1339.5	1293.6	1377.0	1705.7	2142.4	2787.6	3647.7	4760.5	5800.8	6516.8	6491.0
58°	1345.4	1300.2	1383.3	1716.8	2049.9	2793.5	3647.9	4726.0	5744.3	6429.4	6341.3
59°	1354.2	1242.9	1391.1	1591.4	2019.0	2805.2	3649.7	4692.3	5689.7	6334.0	6181.9
60°	1255.9	1129.4	1303.1	1593.2	2047.3	2745.4	3628.3	4655.3	5627.3	6223.7	6008.3
61°	1197.2	1141.9	1240.3	1602.0	2078.5	2678.0	3583.0	4608.7	5551.4	6099.9	5822.7
62°	1211.7	1153.6	1256.3	1619.1	2110.7	2679.8	3561.8	4554.0	5465.1	5964.1	5634.3
63°	1226.7	1010.1	1269.5	1520.5	2136.4	2681.0	3533.9	4490.5	5366.2	5810.1	5435.0
64°	1067.7	997.0	1105.9	1507.8	2043.7	2681.4	3482.0	4405.2	5252.7	5648.6	5233.1
65°	1077.9	1009.2	1110.8	1479.2	2045.7	2664.0	3428.3	4298.5	5121.1	5471.7	5020.8
66°	1085.3	843.0	1125.0	1450.7	2058.6	2599.0	3349.5	4179.1	4964.6	5286.9	4801.6
67°	898.7	815.7	932.8	1423.8	2044.5	2499.1	3260.4	4035.6	4795.2	5083.5	4584.5
68°	914.0	629.7	943.6	1454.7	1991.7	2505.3	3129.3	3821.0	4592.2	4860.7	4363.9
69°	730.8	568.0	759.3	1338.0	1988.5	2504.7	2959.5	3514.5	4350.4	4621.1	4151.9
70°	698.0	388.7	716.6	1324.7	1940.6	2498.9	2738.8	3109.9	4050.2	4355.4	3926.1
71°	462.2	209.5	463.7	1154.3	1919.4	2439.4	2483.8	2727.1	3691.2	4059.2	3693.5
72°	286.7	32.0	271.3	1115.6	1905.8	2329.9	2233.5	2387.4	3285.6	3730.2	3456.9
73°	236.7	0.4	215.8	1012.2	1865.4	2217.4	2003.7	2030.1	2867.4	3369.0	3200.9
74°	213.7	0.3	199.0	900.3	1861.7	2105.5	1720.0	1625.5	2454.2	2980.1	2919.3
75°	175.5	0.3	170.4	846.8	1766.7	1985.4	1436.3	1123.9	2010.0	2556.3	2570.5
76°	137.2	0.3	141.7	817.2	1620.9	1850.6	1151.4	653.3	1464.7	2134.7	2155.3
77°	99.4	0.3	113.1	769.7	1475.0	1622.0	709.6	433.0	898.9	1733.0	1649.9
78°	74.0	0.3	91.2	693.3	1328.9	1393.5	370.1	215.8	680.3	1311.0	1086.4
79°	73.0	0.4	91.2	586.8	1150.0	1159.9	248.4	168.6	468.7	875.0	804.2
80°	99.5	0.4	111.4	512.0	949.1	702.6	129.7	142.6	257.0	651.2	529.2
81°	122.7	0.4	117.1	477.4	718.0	507.2	102.6	121.5	220.0	429.7	254.2
82°	110.5	0.5	72.0	449.2	554.4	311.9	83.4	102.0	188.0	208.2	219.1
83°	68.6	0.6	50.7	374.1	394.9	119.2	67.3	84.1	153.4	162.8	192.3
84°	37.4	0.6	29.5	268.5	284.8	100.8	53.5	68.4	119.4	132.7	167.0
85°	27.9	0.7	8.4	163.0	174.6	80.1	42.0	52.8	91.1	105.1	142.6
86°	18.3	0.8	7.4	60.0	67.2	59.0	31.9	37.1	72.3	81.3	118.9
87°	9.0	0.9	7.4	41.7	34.5	42.2	24.2	24.5	53.6	63.6	92.8
88°	6.2	1.0	6.5	23.3	23.9	29.3	16.5	14.1	34.9	46.0	71.3
89°	4.4	1.1	3.6	5.3	13.2	16.3	8.8	9.8	20.3	28.4	50.0

REPORT NUMBER: P1444973

CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1444973

CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1444973
CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1444973

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2925.7	2925.7	2925.7
1°	3000.5	3011.8	3017.0
2°	3087.1	3108.3	3116.0
3°	3180.4	3211.9	3223.7
4°	3283.9	3327.9	3342.1
5°	3393.3	3452.0	3471.2
6°	3514.9	3588.7	3613.1
7°	3644.4	3732.1	3763.2
8°	3782.3	3889.4	3927.3
9°	3931.8	4060.5	4106.1
10°	4090.4	4241.5	4292.9
11°	4264.5	4438.6	4495.8
12°	4447.5	4649.2	4716.0
13°	4646.3	4877.6	4950.2
14°	4854.7	5118.5	5204.9
15°	5078.4	5374.5	5477.4
16°	5303.2	5634.8	5758.5
17°	5534.1	5903.2	6035.1
18°	5765.2	6167.9	6310.8
19°	5987.6	6417.3	6566.8
20°	6200.9	6651.6	6801.3
21°	6401.9	6866.1	7011.6
22°	6588.0	7055.3	7194.6
23°	6765.3	7227.9	7356.5
24°	6930.7	7375.8	7497.9
25°	7080.5	7505.4	7620.4
26°	7216.2	7614.5	7723.8
27°	7338.7	7709.3	7810.8
28°	7447.1	7788.6	7882.5
29°	7541.1	7853.5	7942.0
30°	7623.4	7906.1	7987.0
31°	7693.3	7947.3	8022.0
32°	7750.5	7977.8	8043.4
33°	7796.3	7995.3	8054.1
34°	7833.6	8003.0	8054.8
35°	7860.3	8000.7	8045.7
36°	7876.4	7989.2	8028.1
37°	7882.5	7970.2	8001.5
38°	7880.2	7943.5	7967.9
39°	7868.0	7909.9	7926.7
40°	7847.4	7870.3	7879.4
41°	7819.9	7824.5	7823.0
42°	7784.1	7771.9	7758.1
43°	7739.1	7712.4	7684.1
44°	7685.7	7642.9	7600.8

REPORT NUMBER: P1444973

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	7627.2	7566.2	7506.4
46°	7561.3	7480.0	7398.4
47°	7486.2	7379.9	7284.6
48°	7404.8	7275.1	7164.8
49°	7311.6	7153.0	7028.8
50°	7207.9	7022.1	6877.9
51°	7089.8	6875.4	6714.7
52°	6958.4	6713.4	6538.9
53°	6812.4	6538.2	6351.8
54°	6656.4	6349.7	6150.7
55°	6491.4	6151.7	5945.6
56°	6310.1	5937.6	5723.8
57°	6122.5	5712.0	5503.2
58°	5925.2	5487.8	5273.6
59°	5718.7	5255.4	5034.1
60°	5502.7	5016.2	4778.2
61°	5281.7	4761.7	4504.8
62°	5057.2	4503.2	4219.1
63°	4833.7	4233.5	3919.6
64°	4612.8	3965.3	3629.8
65°	4387.8	3698.2	3366.9
66°	4161.1	3455.4	3135.9
67°	3935.1	3233.3	2946.0
68°	3712.2	3040.7	2742.2
69°	3500.3	2834.1	2442.8
70°	3301.3	2576.0	2003.9
71°	3096.0	2220.8	1426.6
72°	2868.5	1721.1	908.0
73°	2595.9	1166.8	698.8
74°	2225.8	712.4	496.1
75°	1744.2	519.2	293.5
76°	1241.6	327.0	258.8
77°	832.0	277.9	231.6
78°	649.6	244.5	209.3
79°	472.3	217.5	189.6
80°	295.1	194.4	171.7
81°	246.4	174.0	155.2
82°	212.2	155.6	139.8
83°	182.8	138.1	125.0
84°	154.4	122.0	110.8
85°	125.0	106.2	97.2
86°	101.8	91.6	83.7
87°	82.1	77.5	72.0
88°	67.2	65.7	60.5
89°	52.5	54.0	48.9

REPORT NUMBER: P1444973

CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1444973

CATALOG NUMBER: XAS180-SFPM (3000K-144W-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: P1444973

CATALOG NUMBER: XAS180-SFPM (3000K-144W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)