

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: P1444991

Luminaire Tested: XAS180-SFPM (4000K-108W-T3-HSS)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1444991
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 (4000K-108W-T3-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 3 WITH HOUSE SIDE SHIELD
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 24407 (1 lamp)
Luminaire Lumens: 15407 lumens
Efficiency: 63.1%
Efficacy: 143.9 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

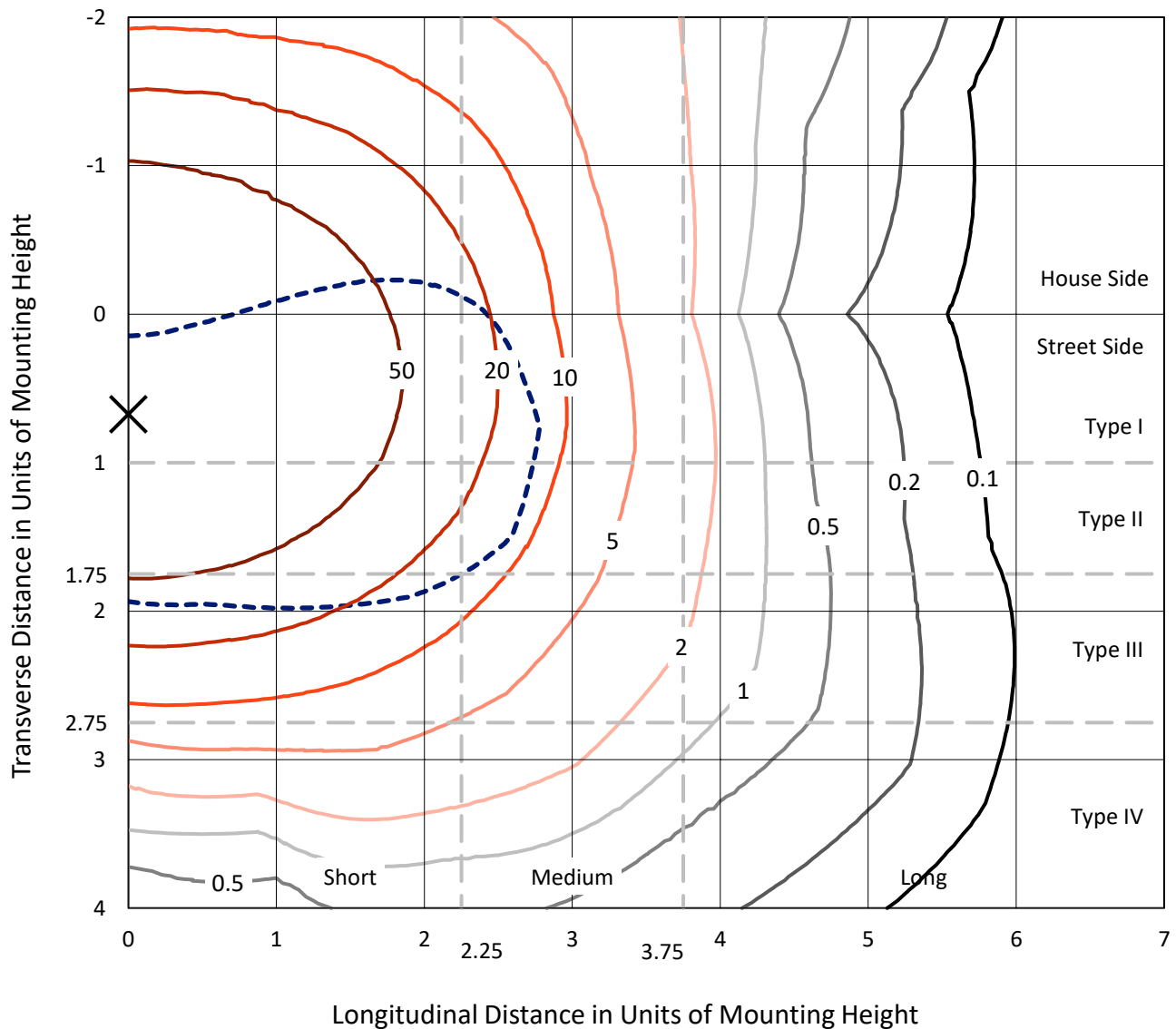
Input Watts (W): 107.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

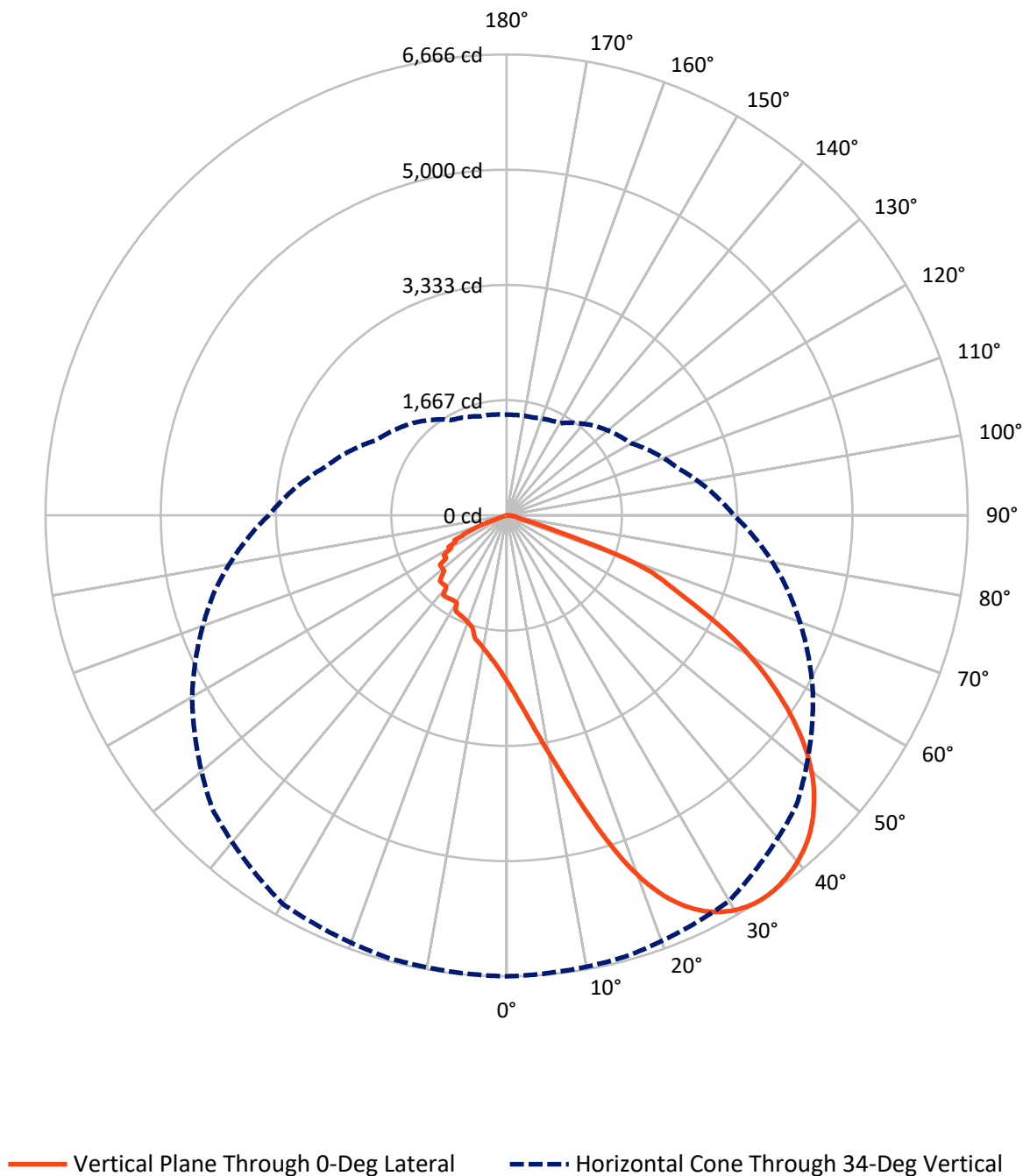


Based on 3 foot mounting height. Maximum calculated value = 522.2 fc
Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



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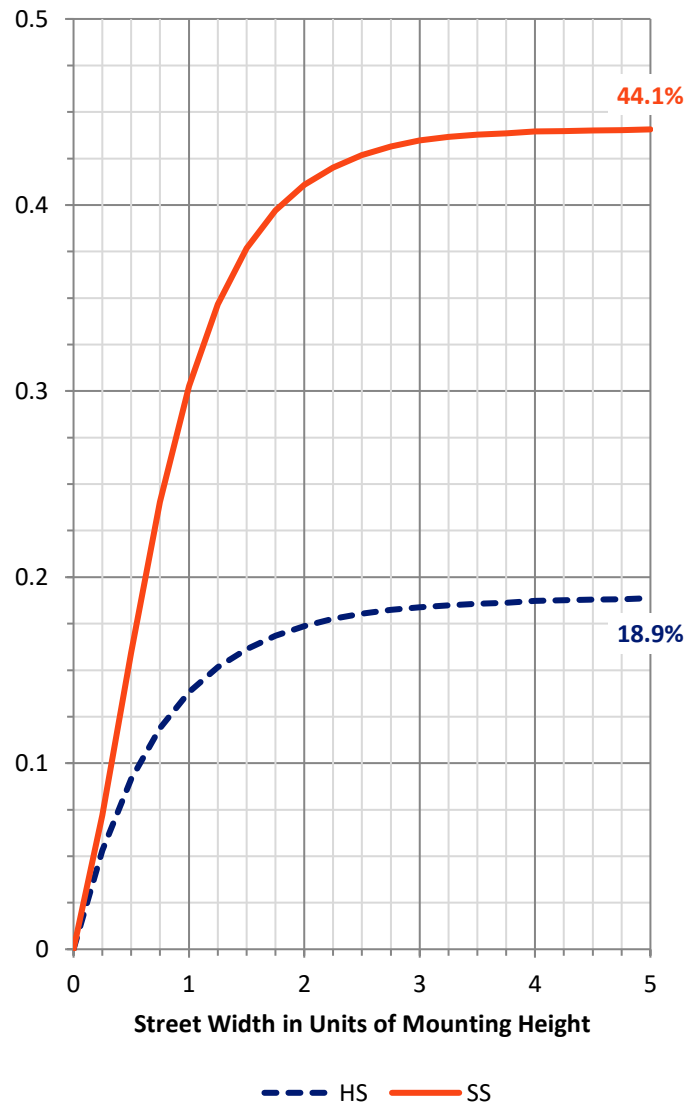
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4633.6	0.0	4633.6
	% Lamp	19.0	0.0	19.0
Street Side	Lumens	10773.4	0.0	10773.4
	% Lamp	44.1	0.0	44.1
Total	Lumens	15407.0	0.0	15407.0
	% Lamp	63.1	0.0	63.1

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	242.0	1.6	1.0
10°-20°	840.6	5.5	3.4
20°-30°	1630.9	10.6	6.7
30°-40°	2397.7	15.6	9.8
40°-50°	2975.2	19.3	12.2
50°-60°	3170.1	20.6	13.0
60°-70°	2755.9	17.9	11.3
70°-80°	1274.9	8.3	5.2
80°-90°	119.8	0.8	0.5
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°	15407.0	100.0	63.1
0°-180°	15407.0	100.0	63.1

Coefficient of Utilization



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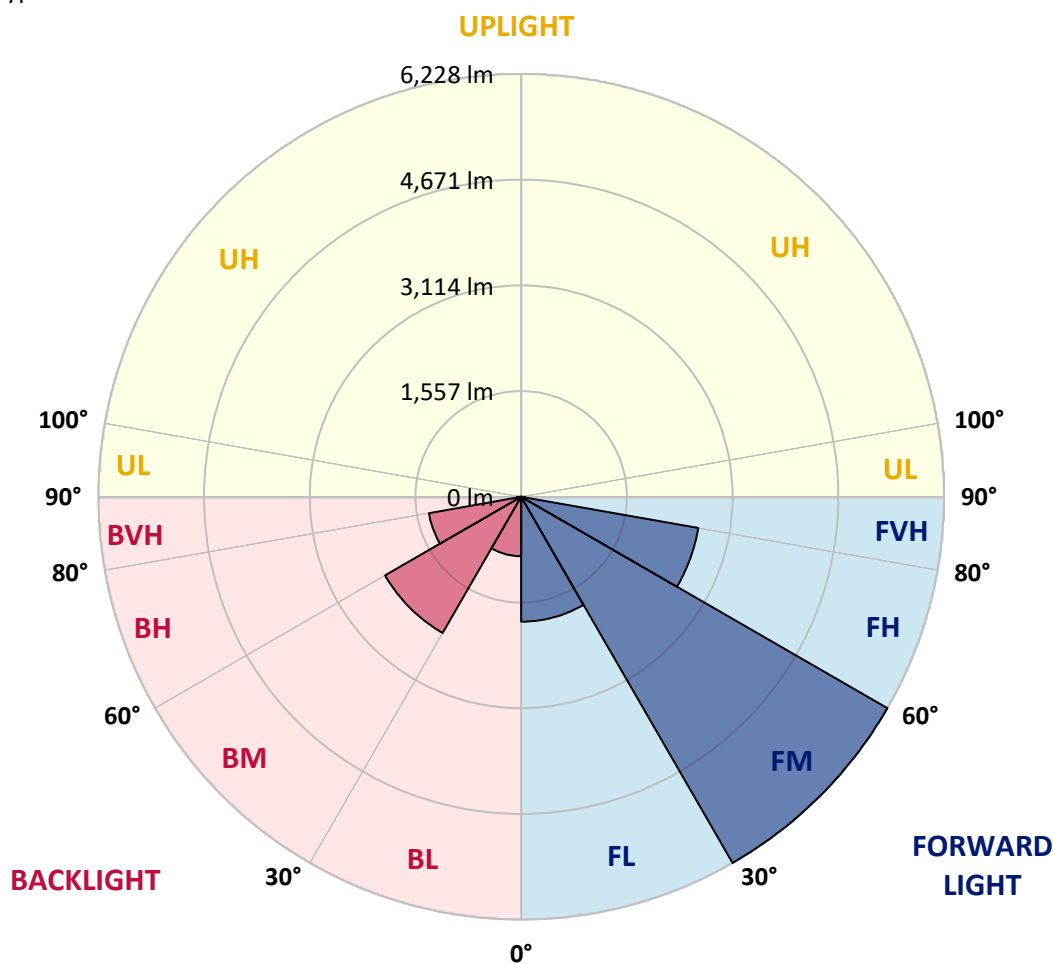
CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1838.8	7.5			
FM	(30°-60°)	6228.4	25.5			
FH	(60°-80°)	2650.0	10.9			G2/5000
FVH	(80°-90°)	56.2	0.2			G1/100
BL	(0°-30°)	874.7	3.6	B2/1000		
BM	(30°-60°)	2314.5	9.5	B2/2500		
BH	(60°-80°)	1380.8	5.7	B3/2500		G3/2500
BVH	(80°-90°)	63.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		9000.0	36.9			

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°	2421.2	2421.2	2421.2	2421.2	2421.2	2421.2	2421.2	2421.2	2421.2	2421.2	2421.2
1°	2496.8	2495.3	2489.3	2477.9	2462.7	2445.0	2412.9	2396.3	2381.4	2369.4	2360.7
2°	2578.7	2575.3	2559.1	2534.5	2501.7	2464.8	2414.1	2379.7	2349.3	2325.2	2306.3
3°	2667.8	2658.9	2633.7	2594.3	2545.1	2488.9	2418.0	2366.9	2321.4	2284.4	2257.1
4°	2765.8	2752.7	2716.9	2661.1	2591.1	2514.8	2423.8	2355.8	2296.2	2247.4	2212.8
5°	2872.7	2855.9	2805.9	2733.1	2640.9	2543.4	2431.7	2346.3	2273.4	2214.7	2173.5
6°	2990.1	2965.8	2904.4	2811.5	2696.9	2574.7	2441.2	2339.4	2252.3	2185.6	2137.5
7°	3114.3	3084.8	3009.2	2895.3	2755.5	2609.4	2454.5	2335.8	2235.3	2158.9	2103.4
8°	3250.2	3215.9	3123.3	2985.0	2818.8	2646.8	2470.4	2334.5	2220.7	2134.6	2073.0
9°	3398.1	3357.0	3244.9	3081.9	2886.2	2686.9	2487.7	2334.3	2209.1	2112.3	2044.3
10°	3552.7	3503.2	3375.1	3182.6	2957.8	2730.6	2507.8	2336.7	2198.3	2093.3	2017.3
11°	3720.6	3663.9	3513.5	3291.3	3033.7	2776.9	2529.8	2340.8	2189.5	2075.9	1993.0
12°	3902.8	3836.1	3659.8	3408.0	3112.9	2825.6	2553.3	2346.4	2182.8	2060.1	1971.3
13°	4096.7	4018.5	3818.3	3529.6	3197.5	2877.4	2578.2	2353.0	2177.2	2045.3	1951.1
14°	4307.4	4220.4	3988.3	3658.8	3285.7	2930.8	2602.9	2359.7	2172.1	2032.0	1932.2
15°	4533.0	4431.5	4168.6	3796.2	3378.4	2985.7	2630.3	2367.7	2168.1	2019.8	1913.3
16°	4765.6	4650.8	4355.3	3942.3	3475.2	3042.6	2659.3	2377.4	2165.2	2008.2	1896.2
17°	4994.5	4868.5	4538.7	4092.4	3577.7	3101.9	2689.2	2387.4	2163.0	1997.6	1878.9
18°	5222.7	5082.2	4723.0	4240.2	3685.4	3163.4	2719.5	2396.3	2161.5	1987.7	1852.4
19°	5434.5	5288.0	4904.7	4386.1	3796.3	3227.1	2740.6	2398.4	2157.1	1978.9	1790.4
20°	5628.6	5478.4	5081.2	4531.7	3906.8	3287.6	2767.1	2404.5	2147.2	1970.1	1746.4
21°	5802.6	5652.7	5247.1	4672.2	4019.3	3342.6	2794.0	2418.0	2139.7	1960.3	1734.7
22°	5954.0	5809.0	5403.3	4807.7	4129.0	3407.7	2829.1	2432.1	2141.0	1925.3	1724.0
23°	6088.0	5950.6	5545.9	4938.4	4237.8	3470.8	2866.4	2444.9	2142.4	1880.7	1715.0
24°	6205.0	6074.9	5680.8	5060.8	4333.6	3543.8	2901.1	2452.5	2139.5	1845.0	1708.2
25°	6306.4	6184.0	5802.4	5178.7	4425.7	3619.9	2930.4	2463.2	2136.5	1839.2	1701.5
26°	6392.0	6278.1	5913.3	5287.0	4516.6	3694.6	2961.2	2473.7	2134.7	1832.2	1696.3
27°	6464.0	6359.8	6015.9	5393.4	4604.2	3767.8	2995.8	2490.1	2138.9	1822.8	1690.6
28°	6523.3	6427.3	6105.0	5493.2	4685.9	3832.7	3031.3	2506.6	2145.2	1816.2	1685.4
29°	6572.5	6482.3	6183.1	5584.6	4766.0	3894.1	3073.1	2523.2	2150.5	1816.0	1681.3
30°	6609.8	6527.7	6252.3	5671.5	4847.4	3958.2	3114.9	2540.9	2143.3	1817.5	1677.3
31°	6638.8	6562.4	6311.9	5750.5	4922.7	4022.8	3158.4	2559.1	2111.4	1819.8	1669.6
32°	6656.5	6587.7	6361.1	5815.8	4993.4	4084.6	3201.6	2575.0	2104.6	1821.9	1659.4
33°	6665.3	6602.8	6403.4	5873.7	5057.7	4149.3	3245.0	2579.8	2079.5	1824.0	1594.7
34°	6666.0	6609.1	6436.2	5926.0	5113.8	4212.6	3287.0	2584.9	2082.2	1824.1	1538.9
35°	6658.4	6608.5	6460.8	5975.8	5163.8	4272.8	3318.0	2597.6	2086.3	1822.7	1535.6
36°	6643.9	6600.9	6475.3	6019.4	5210.7	4330.6	3343.5	2612.4	2091.7	1821.9	1536.8
37°	6621.8	6586.4	6482.3	6055.9	5256.6	4385.9	3372.7	2627.9	2101.0	1824.4	1537.9
38°	6594.0	6565.0	6482.9	6083.8	5301.4	4440.8	3408.9	2645.6	2106.8	1825.1	1536.8
39°	6559.9	6539.1	6476.0	6107.1	5341.1	4490.6	3441.5	2664.6	2108.3	1737.9	1535.8
40°	6520.8	6506.9	6460.2	6125.2	5379.4	4532.0	3476.5	2678.5	2117.5	1698.0	1539.7
41°	6474.1	6467.7	6439.3	6139.4	5412.6	4561.5	3510.1	2691.1	2131.3	1703.8	1543.4
42°	6420.4	6424.2	6410.9	6151.7	5447.8	4590.2	3544.5	2702.0	2145.2	1711.9	1547.6
43°	6359.2	6373.1	6375.6	6155.4	5481.0	4619.6	3576.9	2708.2	2160.0	1721.2	1549.2
44°	6290.2	6316.3	6334.6	6151.2	5510.8	4651.8	3604.0	2726.9	2175.8	1731.1	1499.4

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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	6212.1	6251.0	6285.6	6138.3	5537.2	4682.7	3625.4	2752.9	2192.4	1739.7	1431.5
46°	6122.7	6177.3	6231.5	6118.2	5561.9	4713.4	3644.8	2779.6	2199.3	1739.5	1433.3
47°	6028.5	6093.0	6170.6	6089.3	5583.1	4742.5	3657.2	2807.2	2198.5	1744.0	1437.5
48°	5929.4	6002.3	6102.4	6052.8	5599.0	4766.6	3666.3	2836.0	2206.0	1754.3	1439.5
49°	5816.9	5898.2	6025.6	6011.2	5608.1	4790.4	3685.3	2860.6	2167.8	1760.7	1437.7
50°	5691.9	5786.4	5938.1	5961.6	5608.6	4812.4	3711.7	2865.9	2133.9	1704.9	1437.9
51°	5556.9	5661.3	5839.0	5902.0	5598.1	4826.5	3738.1	2847.3	2102.4	1636.6	1440.2
52°	5411.4	5525.5	5731.0	5833.2	5583.5	4834.0	3762.0	2864.5	2118.1	1641.9	1375.6
53°	5256.6	5377.9	5611.0	5757.3	5560.1	4837.3	3783.0	2870.1	2132.2	1652.2	1305.9
54°	5090.1	5217.4	5482.3	5670.3	5529.4	4836.6	3801.7	2867.0	2139.8	1665.9	1312.6
55°	4920.4	5052.2	5342.9	5574.0	5488.6	4823.4	3816.9	2884.2	2151.8	1673.5	1322.0
56°	4736.9	4878.7	5192.1	5469.6	5442.6	4800.1	3820.1	2895.3	2171.2	1679.0	1332.6
57°	4554.3	4697.0	5037.1	5353.8	5389.6	4770.4	3816.3	2895.2	2186.8	1676.7	1342.9
58°	4364.3	4510.4	4874.5	5228.5	5326.6	4742.9	3801.2	2905.2	2193.8	1586.8	1348.2
59°	4166.1	4321.1	4703.5	5097.9	5252.9	4714.0	3786.8	2914.6	2208.4	1565.4	1241.5
60°	3954.3	4123.1	4528.2	4955.3	5165.6	4678.3	3773.3	2907.5	2148.6	1586.9	1250.4
61°	3728.0	3914.0	4344.7	4806.8	5066.4	4634.4	3749.5	2882.5	2114.7	1612.4	1254.1
62°	3491.6	3696.6	4159.5	4649.1	4961.3	4578.4	3722.8	2874.8	2128.6	1639.7	1217.7
63°	3243.8	3469.3	3971.5	4484.2	4843.1	4509.4	3685.8	2854.1	2139.0	1660.4	1181.6
64°	3003.9	3245.1	3783.6	4315.8	4711.2	4428.0	3634.8	2821.3	2146.8	1583.0	1173.7
65°	2786.4	3021.6	3588.6	4142.2	4569.5	4331.5	3572.5	2783.2	2136.5	1591.2	1186.9
66°	2595.2	2819.2	3398.3	3966.1	4418.2	4219.3	3490.7	2726.7	2078.0	1611.5	1117.4
67°	2438.1	2634.8	3209.2	3791.2	4256.2	4088.6	3404.6	2667.0	2013.5	1598.4	1101.3
68°	2269.3	2473.0	3025.1	3611.6	4073.7	3942.4	3275.5	2579.4	2029.1	1558.9	1129.2
69°	2021.6	2302.5	2852.0	3436.7	3880.8	3767.1	3080.1	2475.1	2038.5	1569.7	1033.0
70°	1658.3	2077.4	2690.5	3259.8	3683.0	3549.8	2797.4	2334.6	2042.6	1527.6	1028.4
71°	1180.6	1762.9	2528.6	3084.0	3459.0	3292.2	2473.0	2151.2	2001.1	1531.2	890.1
72°	751.4	1335.0	2346.6	2901.4	3210.3	2989.5	2195.0	1947.1	1925.2	1522.4	858.3
73°	578.3	883.7	2128.2	2713.5	2932.3	2661.1	1930.8	1768.4	1849.6	1499.8	796.2
74°	410.6	537.2	1833.3	2501.6	2637.5	2327.7	1562.5	1636.4	1767.4	1512.6	721.6
75°	242.9	395.8	1424.3	2230.4	2316.4	1968.5	1194.3	1384.4	1673.6	1481.2	694.9
76°	214.2	258.7	994.1	1895.8	1985.3	1521.2	825.7	1132.3	1590.9	1440.7	677.3
77°	191.6	222.2	648.5	1481.2	1641.6	1001.0	451.0	879.6	1522.4	1303.0	639.2
78°	173.2	196.1	507.0	988.7	1274.4	575.8	235.3	507.6	1323.5	1165.2	576.6
79°	156.9	175.2	371.9	539.1	886.4	399.4	192.4	371.8	1124.8	1026.0	489.6
80°	142.1	157.0	236.8	372.1	554.1	224.5	149.6	236.0	922.8	837.1	419.4
81°	128.4	140.7	200.2	212.2	363.7	189.5	107.3	102.5	512.4	626.4	379.0
82°	115.7	125.7	173.6	181.5	176.9	161.9	90.5	79.6	375.5	499.0	377.5
83°	103.5	111.5	150.3	158.4	137.3	131.4	75.4	61.4	238.7	395.3	310.1
84°	91.7	98.3	127.2	137.6	111.6	99.7	61.2	48.1	102.3	282.2	230.7
85°	80.5	85.9	102.8	117.9	88.9	76.1	47.4	37.1	89.9	208.9	163.0
86°	69.3	74.2	83.8	98.7	69.3	58.9	34.8	28.1	71.9	135.5	95.6
87°	59.6	63.1	67.8	77.8	54.1	44.4	26.7	21.8	53.3	62.9	58.7
88°	50.0	53.7	55.6	59.8	39.1	29.9	18.6	15.5	40.5	42.8	40.0
89°	40.5	44.4	43.4	41.8	24.1	17.5	10.5	9.2	27.6	22.7	21.3



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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: P1444991

CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1444991
CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1444991

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2421.2	2421.2	2421.2	2421.2	2421.2	2421.2	2421.2	2421.2	2421.2	2421.2	2421.2
1°	2356.8	2356.9	2360.3	2369.1	2380.6	2395.6	2411.9	2416.9	2436.2	2454.2	2470.0
2°	2297.0	2295.4	2302.4	2317.3	2339.3	2366.7	2399.4	2422.3	2460.5	2497.3	2530.0
3°	2242.8	2239.2	2248.2	2269.2	2301.2	2341.7	2389.3	2430.8	2487.4	2542.5	2592.1
4°	2193.7	2189.9	2199.9	2225.7	2266.3	2319.5	2382.1	2440.9	2516.9	2591.6	2661.1
5°	2150.3	2144.8	2156.1	2187.1	2234.9	2299.9	2377.3	2453.4	2549.5	2646.0	2735.4
6°	2109.1	2102.4	2116.1	2151.7	2207.8	2282.3	2374.1	2468.1	2585.2	2705.4	2816.4
7°	2071.6	2063.4	2078.4	2118.6	2182.4	2267.9	2373.7	2486.4	2623.3	2767.7	2903.0
8°	2036.8	2027.0	2043.8	2088.9	2159.7	2255.2	2375.2	2504.6	2664.6	2834.1	2996.0
9°	2003.8	1992.5	2011.3	2061.0	2139.5	2244.6	2377.9	2525.6	2709.5	2905.5	3096.1
10°	1973.1	1960.8	1981.5	2035.6	2120.4	2235.5	2382.0	2548.9	2756.0	2980.8	3200.6
11°	1944.7	1931.0	1953.8	2012.7	2104.4	2228.0	2388.2	2575.3	2807.2	3061.2	3313.2
12°	1918.8	1904.2	1927.2	1991.0	2089.9	2222.2	2396.5	2602.6	2858.9	3146.6	3432.5
13°	1895.1	1878.5	1903.6	1971.2	2077.0	2218.5	2406.3	2632.0	2914.3	3236.0	3560.4
14°	1872.3	1853.7	1880.9	1952.8	2065.9	2215.9	2417.1	2661.9	2971.7	3328.9	3695.9
15°	1850.0	1829.5	1858.7	1935.1	2055.8	2215.4	2428.5	2694.0	3031.7	3430.3	3841.3
16°	1824.2	1775.5	1834.0	1918.3	2045.9	2215.5	2440.3	2727.5	3094.1	3534.3	3994.2
17°	1754.2	1715.0	1767.4	1901.8	2037.0	2216.0	2454.5	2761.1	3159.4	3645.9	4148.4
18°	1704.8	1683.3	1716.7	1875.9	2029.3	2217.4	2468.7	2796.2	3226.9	3761.1	4304.7
19°	1686.8	1665.0	1697.6	1819.0	2021.5	2217.6	2474.4	2826.3	3296.6	3878.1	4462.3
20°	1671.2	1648.4	1682.0	1776.4	2013.9	2210.6	2484.1	2854.1	3369.5	3996.9	4615.1
21°	1657.6	1634.6	1668.1	1760.5	2005.1	2206.0	2498.5	2885.6	3435.9	4117.1	4761.8
22°	1646.5	1622.1	1657.1	1751.0	1970.7	2209.3	2517.0	2924.1	3503.2	4237.5	4900.6
23°	1637.0	1611.5	1648.2	1742.7	1929.5	2214.0	2535.3	2965.7	3579.9	4352.8	5029.4
24°	1628.1	1601.8	1640.0	1736.2	1899.4	2218.7	2551.4	3008.3	3656.4	4466.5	5152.4
25°	1620.2	1592.4	1632.2	1730.8	1891.2	2217.4	2562.7	3048.6	3739.1	4564.9	5267.2
26°	1612.2	1584.8	1625.5	1726.6	1887.7	2217.3	2577.3	3082.8	3822.3	4655.0	5376.5
27°	1605.6	1578.4	1619.3	1722.9	1880.0	2218.5	2591.1	3121.0	3906.2	4744.4	5479.4
28°	1600.1	1572.9	1614.3	1719.2	1874.3	2226.1	2611.3	3160.9	3984.8	4830.0	5577.4
29°	1594.6	1549.6	1609.0	1716.3	1873.7	2233.3	2632.1	3205.4	4054.0	4906.6	5666.7
30°	1551.3	1465.2	1572.5	1714.0	1876.7	2227.7	2653.1	3251.9	4123.7	4984.8	5751.5
31°	1478.1	1449.0	1498.1	1707.0	1880.4	2209.9	2673.6	3298.5	4193.2	5059.6	5830.5
32°	1466.1	1449.5	1484.8	1699.0	1885.1	2192.6	2693.5	3345.9	4258.5	5130.4	5902.0
33°	1465.1	1451.4	1484.2	1650.5	1889.8	2175.7	2702.3	3392.8	4322.6	5193.8	5961.7
34°	1465.7	1455.0	1484.9	1592.3	1894.4	2176.4	2711.2	3440.2	4387.2	5250.2	6012.9
35°	1467.0	1459.8	1486.8	1584.3	1895.2	2181.6	2726.1	3480.4	4448.9	5298.9	6057.8
36°	1469.2	1464.0	1489.7	1586.4	1895.6	2188.0	2742.9	3511.6	4506.6	5344.1	6100.4
37°	1470.0	1467.6	1491.6	1589.5	1896.0	2196.4	2761.5	3544.8	4561.3	5388.4	6137.4
38°	1470.3	1470.9	1492.8	1589.1	1896.3	2205.9	2782.3	3581.9	4613.5	5431.7	6168.0
39°	1469.9	1471.1	1493.9	1588.5	1825.1	2209.9	2804.8	3617.9	4662.8	5469.9	6190.1
40°	1466.9	1390.3	1492.1	1591.8	1783.3	2216.9	2826.1	3655.8	4705.7	5505.2	6208.8
41°	1383.9	1348.8	1419.4	1596.9	1784.2	2232.3	2840.7	3692.0	4736.9	5538.6	6220.2
42°	1338.2	1349.4	1365.8	1602.2	1792.0	2248.4	2852.0	3727.0	4762.6	5572.3	6226.6
43°	1337.4	1351.7	1365.2	1606.0	1801.3	2265.5	2859.2	3763.2	4789.2	5600.9	6227.0
44°	1338.5	1353.4	1367.5	1572.0	1811.8	2283.3	2881.1	3797.4	4814.3	5627.2	6221.4

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CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1340.1	1353.4	1370.2	1495.7	1821.9	2300.3	2908.7	3823.0	4840.9	5648.5	6205.5
46°	1341.6	1351.4	1372.4	1491.9	1824.4	2309.3	2937.2	3842.2	4867.5	5667.1	6179.1
47°	1342.5	1302.8	1374.0	1496.7	1827.0	2310.6	2966.0	3854.2	4889.9	5681.6	6142.9
48°	1298.0	1254.2	1373.9	1499.3	1839.1	2319.6	2994.4	3860.8	4910.2	5689.7	6101.5
49°	1253.5	1206.4	1293.5	1496.8	1846.1	2313.1	3022.0	3877.9	4924.8	5691.9	6052.0
50°	1209.3	1203.7	1235.5	1496.6	1808.6	2261.6	3039.1	3899.7	4935.7	5682.5	5997.8
51°	1213.8	1202.3	1239.5	1499.7	1726.5	2230.8	3025.6	3919.0	4941.5	5660.8	5935.2
52°	1220.3	1202.5	1245.6	1450.7	1727.3	2241.5	3016.9	3936.6	4940.4	5633.2	5863.6
53°	1227.3	1202.1	1252.1	1368.7	1740.2	2257.5	3027.9	3950.1	4931.2	5597.8	5783.3
54°	1232.8	1196.7	1222.7	1375.7	1756.6	2265.5	3023.5	3959.1	4916.0	5555.5	5691.2
55°	1235.3	1083.4	1193.1	1386.3	1766.2	2270.8	3021.3	3965.1	4888.0	5506.6	5593.6
56°	1128.3	1065.7	1163.7	1398.8	1774.2	2291.6	3025.1	3958.7	4846.1	5452.7	5485.7
57°	1108.5	1070.5	1139.6	1411.6	1773.0	2307.0	3018.7	3939.7	4800.6	5393.1	5371.8
58°	1113.5	1076.0	1144.8	1420.7	1696.5	2311.8	3018.9	3911.1	4753.8	5320.8	5247.9
59°	1120.7	1028.6	1151.2	1317.0	1670.8	2321.5	3020.4	3883.2	4708.7	5241.8	5116.0
60°	1039.3	934.6	1078.4	1318.5	1694.3	2272.0	3002.7	3852.6	4657.0	5150.5	4972.3
61°	990.8	945.0	1026.4	1325.8	1720.1	2216.2	2965.2	3814.1	4594.1	5048.1	4818.7
62°	1002.7	954.7	1039.7	1339.9	1746.7	2217.7	2947.7	3768.8	4522.8	4935.7	4662.8
63°	1015.2	835.9	1050.6	1258.3	1768.0	2218.7	2924.6	3716.2	4440.9	4808.3	4497.9
64°	883.6	825.1	915.2	1247.8	1691.3	2219.1	2881.6	3645.6	4347.0	4674.6	4330.7
65°	892.0	835.2	919.3	1224.2	1693.0	2204.6	2837.1	3557.3	4238.1	4528.2	4155.1
66°	898.2	697.7	931.0	1200.6	1703.7	2150.8	2772.0	3458.5	4108.5	4375.3	3973.7
67°	743.7	675.1	772.0	1178.3	1692.0	2068.2	2698.2	3339.7	3968.4	4206.9	3794.0
68°	756.4	521.1	780.9	1203.8	1648.2	2073.3	2589.7	3162.2	3800.4	4022.6	3611.4
69°	604.8	470.1	628.3	1107.3	1645.6	2072.8	2449.2	2908.5	3600.3	3824.3	3436.0
70°	577.6	321.7	593.0	1096.3	1606.0	2068.0	2266.6	2573.7	3351.9	3604.4	3249.2
71°	382.5	173.3	383.8	955.3	1588.4	2018.8	2055.5	2256.8	3054.7	3359.3	3056.6
72°	237.3	26.4	224.5	923.2	1577.2	1928.1	1848.4	1975.7	2719.1	3087.0	2860.9
73°	195.9	0.3	178.6	837.7	1543.8	1835.0	1658.2	1680.1	2373.0	2788.1	2649.0
74°	176.8	0.2	164.7	745.1	1540.7	1742.5	1423.5	1345.2	2031.0	2466.2	2416.0
75°	145.2	0.2	141.0	700.7	1462.1	1643.1	1188.6	930.1	1663.4	2115.5	2127.3
76°	113.6	0.2	117.3	676.3	1341.4	1531.5	952.9	540.6	1212.1	1766.6	1783.6
77°	82.3	0.3	93.6	637.0	1220.7	1342.3	587.2	358.4	743.9	1434.2	1365.4
78°	61.2	0.3	75.5	573.8	1099.8	1153.2	306.3	178.6	563.0	1084.9	899.1
79°	60.4	0.3	75.5	485.6	951.7	959.9	205.6	139.5	387.9	724.1	665.5
80°	82.4	0.3	92.2	423.7	785.5	581.4	107.3	118.0	212.7	538.9	437.9
81°	101.5	0.4	96.9	395.1	594.2	419.8	84.9	100.6	182.1	355.6	210.3
82°	91.5	0.4	59.6	371.7	458.8	258.1	69.1	84.4	155.6	172.3	181.3
83°	56.8	0.5	42.0	309.6	326.8	98.6	55.7	69.6	126.9	134.8	159.1
84°	30.9	0.5	24.4	222.2	235.7	83.4	44.3	56.6	98.8	109.8	138.2
85°	23.1	0.6	7.0	134.9	144.5	66.3	34.7	43.7	75.4	87.0	118.0
86°	15.2	0.7	6.2	49.7	55.6	48.8	26.4	30.7	59.8	67.3	98.4
87°	7.4	0.8	6.2	34.5	28.5	34.9	20.0	20.3	44.4	52.6	76.8
88°	5.1	0.8	5.3	19.3	19.7	24.2	13.6	11.7	28.9	38.1	59.0
89°	3.6	0.9	3.0	4.4	11.0	13.5	7.3	8.1	16.8	23.5	41.3

REPORT NUMBER: P1444991

CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1444991

CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1444991
CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1444991

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2421.2	2421.2	2421.2
1°	2483.1	2492.5	2496.8
2°	2554.8	2572.3	2578.7
3°	2632.0	2658.1	2667.8
4°	2717.6	2754.1	2765.8
5°	2808.2	2856.8	2872.7
6°	2908.8	2969.9	2990.1
7°	3016.0	3088.6	3114.3
8°	3130.2	3218.8	3250.2
9°	3253.9	3360.4	3398.1
10°	3385.1	3510.1	3552.7
11°	3529.2	3673.3	3720.6
12°	3680.6	3847.6	3902.8
13°	3845.1	4036.6	4096.7
14°	4017.6	4235.9	4307.4
15°	4202.8	4447.8	4533.0
16°	4388.8	4663.2	4765.6
17°	4579.9	4885.3	4994.5
18°	4771.1	5104.4	5222.7
19°	4955.2	5310.7	5434.5
20°	5131.7	5504.7	5628.6
21°	5298.1	5682.2	5802.6
22°	5452.0	5838.8	5954.0
23°	5598.8	5981.6	6088.0
24°	5735.6	6104.0	6205.0
25°	5859.6	6211.3	6306.4
26°	5971.9	6301.5	6392.0
27°	6073.3	6380.0	6464.0
28°	6163.0	6445.7	6523.3
29°	6240.8	6499.3	6572.5
30°	6308.9	6542.9	6609.8
31°	6366.8	6577.0	6638.8
32°	6414.1	6602.2	6656.5
33°	6452.0	6616.7	6665.3
34°	6482.9	6623.0	6666.0
35°	6505.0	6621.1	6658.4
36°	6518.2	6611.7	6643.9
37°	6523.3	6595.9	6621.8
38°	6521.4	6573.8	6594.0
39°	6511.3	6546.0	6559.9
40°	6494.3	6513.2	6520.8
41°	6471.5	6475.3	6474.1
42°	6441.9	6431.8	6420.4
43°	6404.6	6382.5	6359.2
44°	6360.4	6325.1	6290.2

REPORT NUMBER: P1444991

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	6312.1	6261.6	6212.1
46°	6257.5	6190.3	6122.7
47°	6195.4	6107.4	6028.5
48°	6128.0	6020.6	5929.4
49°	6050.9	5919.6	5816.9
50°	5965.1	5811.3	5691.9
51°	5867.3	5689.9	5556.9
52°	5758.6	5555.9	5411.4
53°	5637.7	5410.9	5256.6
54°	5508.6	5254.8	5090.1
55°	5372.1	5090.9	4920.4
56°	5222.0	4913.8	4736.9
57°	5066.8	4727.1	4554.3
58°	4903.5	4541.6	4364.3
59°	4732.6	4349.2	4166.1
60°	4553.9	4151.3	3954.3
61°	4371.0	3940.6	3728.0
62°	4185.2	3726.8	3491.6
63°	4000.2	3503.5	3243.8
64°	3817.5	3281.6	3003.9
65°	3631.2	3060.5	2786.4
66°	3443.6	2859.6	2595.2
67°	3256.6	2675.8	2438.1
68°	3072.1	2516.4	2269.3
69°	2896.7	2345.4	2021.6
70°	2732.0	2131.8	1658.3
71°	2562.2	1837.9	1180.6
72°	2373.9	1424.3	751.4
73°	2148.3	965.6	578.3
74°	1842.0	589.6	410.6
75°	1443.5	429.7	242.9
76°	1027.5	270.6	214.2
77°	688.6	229.9	191.6
78°	537.6	202.4	173.2
79°	390.9	180.0	156.9
80°	244.2	160.9	142.1
81°	203.9	144.0	128.4
82°	175.7	128.7	115.7
83°	151.2	114.3	103.5
84°	127.8	101.0	91.7
85°	103.5	87.9	80.5
86°	84.3	75.8	69.3
87°	67.9	64.1	59.6
88°	55.6	54.4	50.0
89°	43.5	44.7	40.5

REPORT NUMBER: P1444991

CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1444991

CATALOG NUMBER: XAS180-SFPM (4000K-108W-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: P1444991

CATALOG NUMBER: XAS180-SFPM (4000K-108W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)