

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: P1436717

Luminaire Tested: XAS180-SFPM (3000K-72W-T3)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436717
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 3/25/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: XAS180-SFPM (3000K-72W-T3)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 40% (72W)
OPTICS - TYPE 3
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

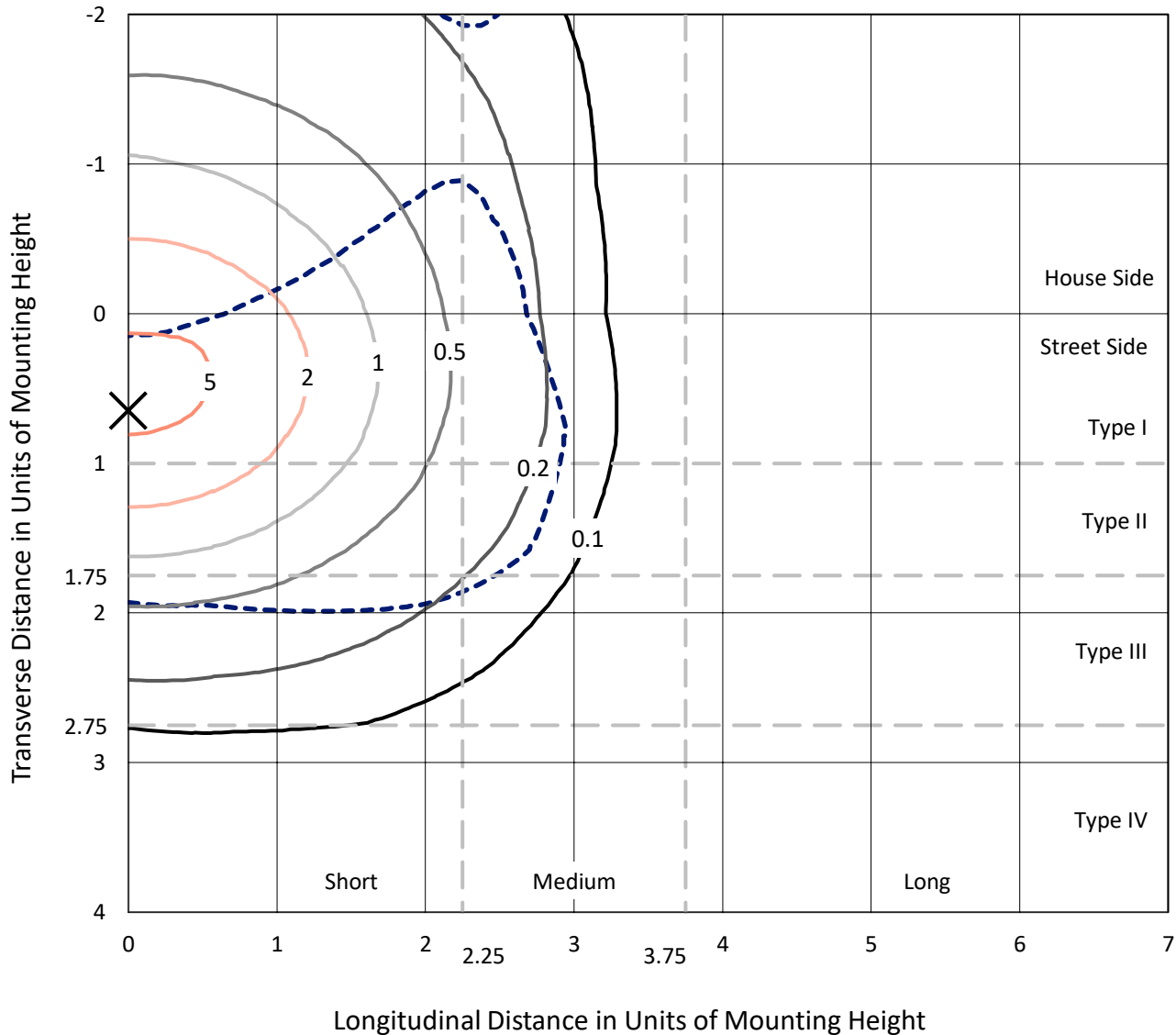
Lumens per Lamp: 27928 (1 lamp)
Luminaire Lumens: 11477.4 lumens
Efficiency: 41.1%
Efficacy: 156.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.35m x L: 0.35m x H: 0.35m)
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 73.2
Input Voltage (V): 120
Input Current (A_{in}): 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

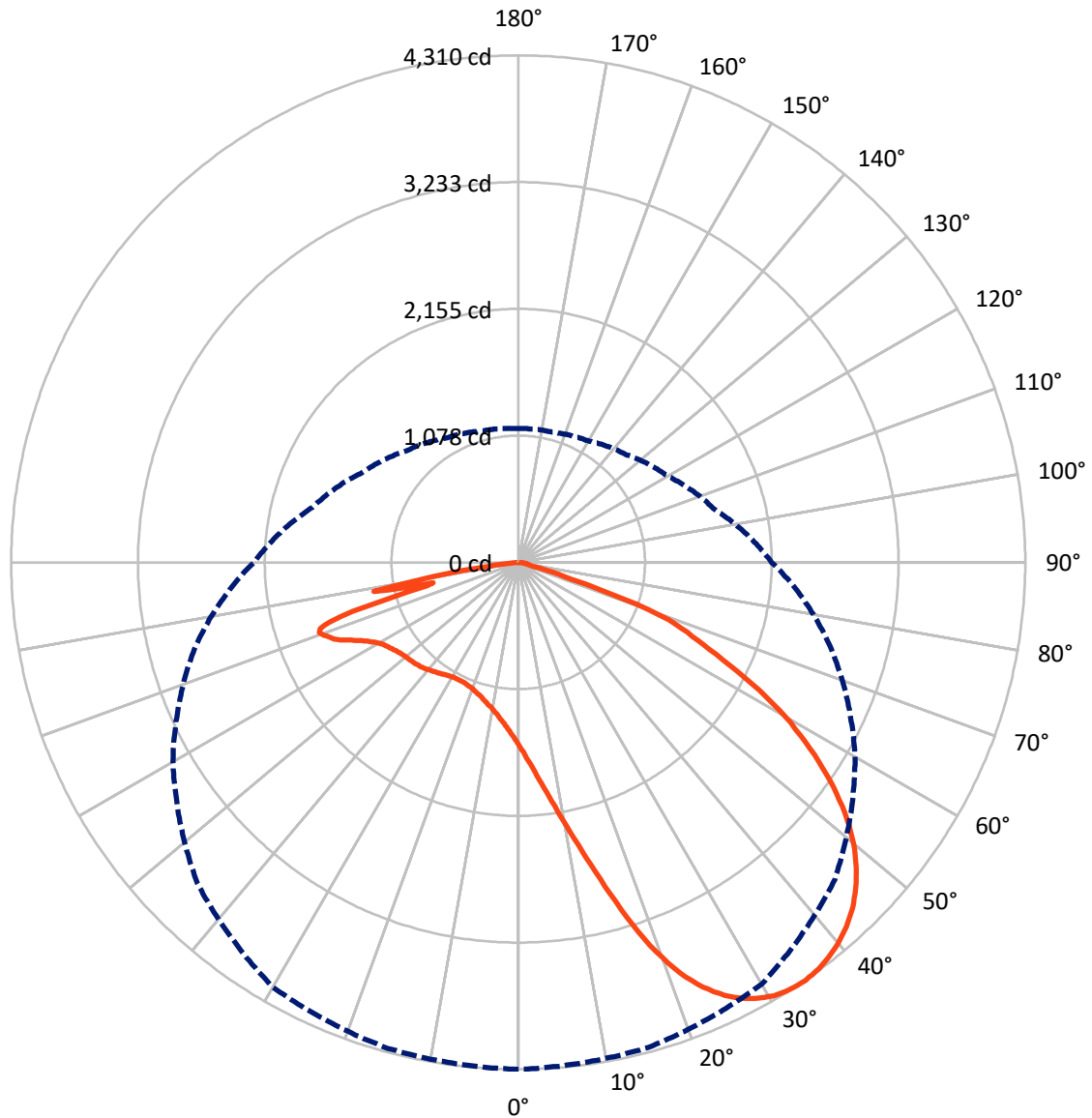
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.6 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 33-Deg Vertical

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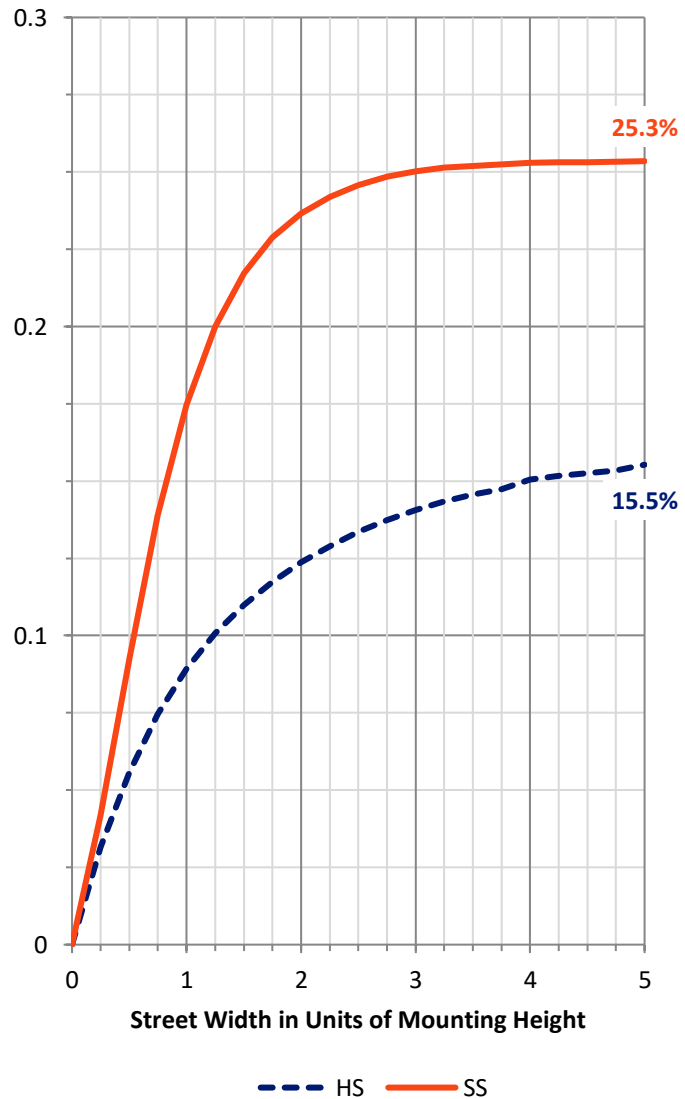
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4391.8	0.0	4391.8
	% Lamp	15.7	0.0	15.7
Street Side	Lumens	7085.6	0.0	7085.6
	% Lamp	25.4	0.0	25.4
Total	Lumens	11477.4	0.0	11477.4
	% Lamp	41.1	0.0	41.1

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	156.5	1.4	0.6
10°-20°	545.6	4.8	2.0
20°-30°	1071.9	9.3	3.8
30°-40°	1604.6	14.0	5.7
40°-50°	2043.1	17.8	7.3
50°-60°	2284.3	19.9	8.2
60°-70°	2206.9	19.2	7.9
70°-80°	1376.3	12.0	4.9
80°-90°	188.2	1.6	0.7
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	11477.4	100.0	41.1
0°-180°	11477.4	100.0	41.1

Coefficient of Utilization



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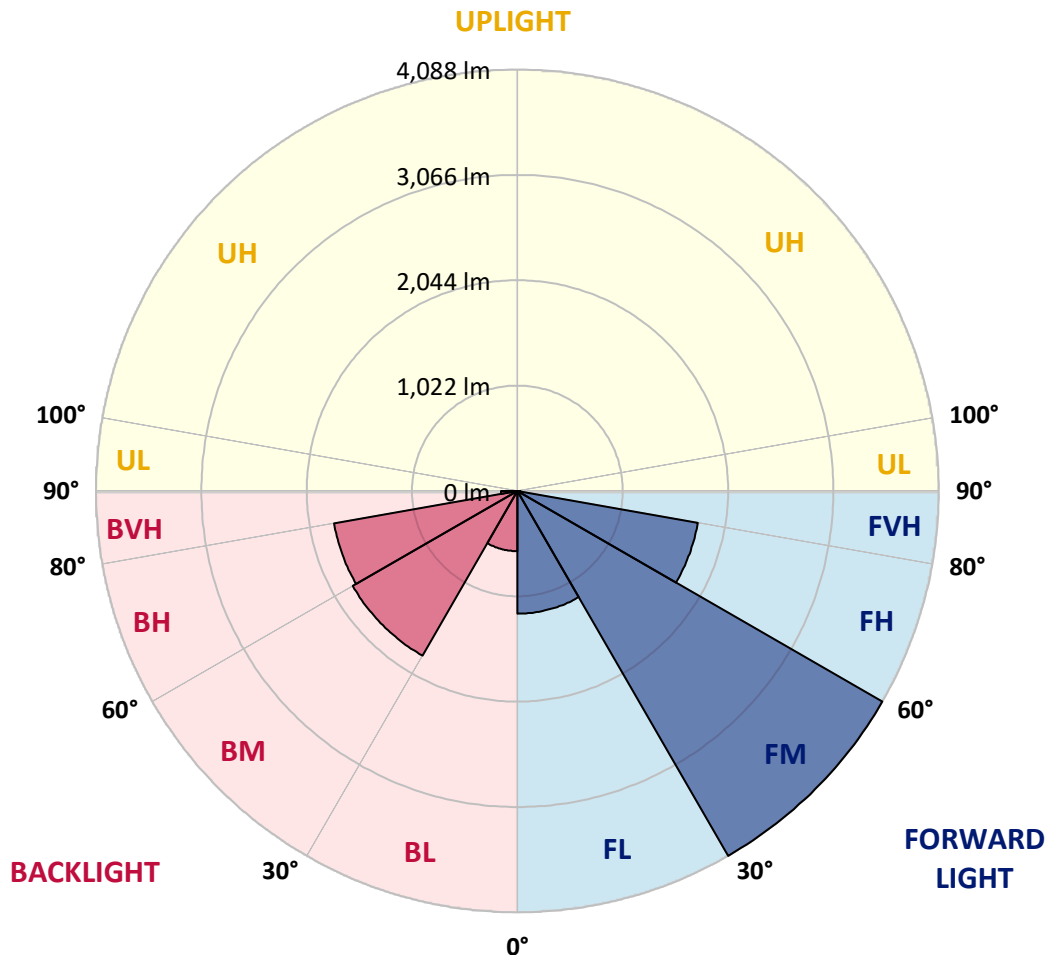
CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1190.2	4.3			
FM (30°-60°)	4088.1	14.6			
FH (60°-80°)	1777.5	6.4			G1/1800
FVH (80°-90°)	29.8	0.1			G1/100
BL (0°-30°)	583.9	2.1	B2/1000		
BM (30°-60°)	1843.9	6.6	B2/2500		
BH (60°-80°)	1805.8	6.5	B3/2500		G3/2500
BVH (80°-90°)	158.3	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	16450.6	58.9			

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°	1566.4	1566.4	1566.4	1566.4	1566.4	1566.4	1566.4	1566.4	1566.4	1566.4	1566.4
1°	1613.1	1611.9	1608.7	1601.9	1593.1	1582.5	1562.6	1551.0	1540.9	1532.8	1527.9
2°	1665.0	1662.2	1653.9	1637.7	1618.3	1595.1	1563.3	1540.8	1521.2	1504.9	1494.0
3°	1722.0	1717.3	1701.3	1676.6	1645.4	1610.0	1566.2	1532.5	1503.4	1480.1	1462.7
4°	1785.2	1777.8	1753.6	1718.6	1675.2	1626.6	1569.6	1525.5	1487.3	1456.8	1434.9
5°	1853.6	1843.8	1811.5	1764.2	1706.4	1644.0	1574.3	1519.6	1472.7	1436.3	1410.0
6°	1928.7	1914.2	1873.9	1814.2	1741.4	1663.9	1580.2	1515.0	1459.8	1417.4	1386.2
7°	2008.5	1991.3	1942.3	1867.9	1778.6	1685.8	1588.9	1513.0	1448.8	1400.1	1364.5
8°	2095.9	2073.6	2014.8	1925.0	1819.0	1709.7	1598.6	1512.2	1439.7	1384.1	1345.0
9°	2190.8	2163.7	2092.9	1986.5	1862.6	1735.3	1609.6	1512.3	1431.8	1369.8	1326.5
10°	2292.2	2259.5	2176.3	2052.2	1908.8	1763.1	1622.7	1513.8	1425.2	1357.5	1309.5
11°	2400.5	2363.7	2265.4	2122.8	1957.0	1792.4	1637.3	1516.8	1419.5	1346.2	1295.0
12°	2518.0	2474.1	2360.1	2196.3	2007.6	1823.8	1652.6	1520.7	1415.1	1336.4	1281.8
13°	2644.2	2593.5	2463.2	2274.7	2062.3	1856.7	1668.3	1525.4	1411.8	1327.5	1269.9
14°	2780.4	2723.3	2574.2	2358.8	2118.6	1891.0	1685.0	1530.0	1408.6	1319.8	1258.6
15°	2925.5	2858.5	2690.5	2446.7	2178.3	1926.3	1702.4	1535.4	1406.5	1313.1	1247.9
16°	3076.1	3001.8	2809.7	2541.3	2242.0	1963.4	1721.7	1541.9	1404.8	1306.7	1238.2
17°	3225.8	3142.4	2929.3	2637.9	2307.0	2002.1	1741.5	1549.1	1404.4	1300.8	1229.1
18°	3373.2	3281.4	3048.3	2734.9	2375.7	2041.8	1762.4	1557.0	1404.0	1295.7	1220.7
19°	3510.8	3413.7	3166.2	2829.0	2447.8	2083.1	1783.9	1565.9	1404.0	1291.2	1213.8
20°	3637.0	3538.7	3279.1	2922.7	2520.8	2126.1	1806.4	1575.5	1404.3	1287.2	1208.0
21°	3749.9	3652.4	3388.0	3015.5	2593.0	2170.5	1829.4	1585.8	1405.3	1283.4	1202.9
22°	3849.1	3754.2	3487.9	3103.1	2664.0	2217.3	1853.2	1595.7	1407.5	1280.6	1198.4
23°	3936.7	3845.2	3581.9	3187.8	2735.1	2264.6	1877.9	1606.3	1409.8	1278.5	1194.7
24°	4012.3	3926.2	3669.1	3267.7	2804.3	2313.5	1903.5	1617.9	1412.7	1277.1	1191.2
25°	4077.7	3997.6	3749.0	3342.8	2870.9	2363.0	1928.8	1629.5	1416.1	1276.8	1188.5
26°	4133.1	4058.4	3821.2	3414.1	2936.1	2413.0	1954.8	1641.3	1420.3	1277.3	1186.3
27°	4180.0	4110.5	3886.7	3482.8	2997.5	2463.1	1982.1	1652.9	1425.3	1278.0	1184.6
28°	4218.6	4155.7	3944.9	3547.1	3056.0	2512.3	2009.8	1664.7	1430.5	1279.4	1183.8
29°	4250.7	4191.1	3996.3	3607.0	3111.2	2560.2	2038.4	1676.6	1436.6	1281.6	1183.8
30°	4275.3	4220.3	4041.3	3663.8	3165.1	2607.3	2066.9	1689.3	1443.2	1284.2	1184.3
31°	4292.6	4243.3	4079.4	3716.0	3214.2	2653.4	2095.9	1702.0	1450.4	1287.7	1185.7
32°	4304.5	4258.9	4110.9	3763.3	3261.1	2698.5	2125.5	1715.5	1458.2	1291.6	1188.1
33°	4310.3	4268.8	4138.9	3807.8	3305.4	2742.7	2154.8	1729.6	1466.4	1295.9	1191.3
34°	4310.3	4272.9	4160.3	3847.5	3346.7	2784.5	2184.1	1743.2	1475.4	1300.8	1195.2
35°	4305.7	4272.0	4175.9	3883.2	3385.7	2824.2	2213.7	1757.8	1484.5	1306.7	1200.1
36°	4295.9	4266.7	4185.7	3914.9	3422.6	2863.0	2242.7	1772.9	1494.1	1313.1	1205.8
37°	4281.5	4257.2	4189.8	3942.0	3457.4	2900.3	2272.1	1788.0	1503.9	1320.5	1212.1
38°	4262.6	4243.7	4190.3	3964.3	3489.3	2935.6	2300.8	1803.8	1514.4	1328.5	1219.0
39°	4240.8	4226.8	4185.3	3983.4	3519.8	2969.8	2330.4	1819.9	1525.2	1337.3	1226.1
40°	4215.3	4205.9	4175.9	3998.3	3547.7	3002.3	2359.4	1837.1	1536.5	1346.8	1233.6
41°	4185.3	4180.4	4161.9	4009.2	3573.7	3033.2	2387.0	1855.0	1548.0	1356.4	1241.2
42°	4150.0	4152.9	4143.4	4016.8	3597.4	3062.8	2413.7	1872.7	1560.2	1366.9	1249.6
43°	4110.5	4119.6	4120.8	4019.3	3619.7	3091.4	2439.6	1890.9	1573.4	1378.2	1258.0
44°	4066.2	4081.5	4094.5	4017.4	3639.1	3118.6	2464.1	1910.1	1586.8	1389.7	1266.7



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	4015.4	4040.2	4062.8	4011.0	3656.4	3144.5	2487.6	1929.3	1601.2	1401.5	1275.3
46°	3958.3	3992.5	4027.6	4000.9	3672.9	3170.9	2511.5	1949.7	1616.6	1413.1	1284.2
47°	3898.0	3939.0	3988.7	3986.2	3686.4	3194.4	2534.3	1969.9	1632.5	1425.1	1293.6
48°	3832.3	3880.2	3944.7	3965.5	3697.3	3216.0	2555.6	1991.5	1648.7	1437.9	1303.9
49°	3760.4	3813.6	3895.4	3941.7	3705.8	3235.5	2574.9	2013.3	1666.3	1451.5	1314.5
50°	3680.0	3740.4	3839.4	3911.7	3710.8	3253.1	2593.8	2035.7	1684.4	1465.6	1326.3
51°	3591.9	3659.5	3778.2	3875.9	3712.3	3268.1	2612.4	2059.1	1703.4	1481.1	1338.7
52°	3497.0	3572.8	3710.0	3833.0	3709.8	3280.5	2629.2	2083.3	1723.3	1497.0	1351.5
53°	3396.0	3477.7	3637.1	3785.7	3703.0	3290.1	2644.4	2106.6	1744.2	1514.0	1365.1
54°	3289.5	3373.5	3555.6	3731.7	3690.2	3297.6	2657.4	2129.0	1766.8	1532.3	1379.5
55°	3177.1	3266.4	3467.8	3671.9	3671.3	3301.9	2668.9	2149.9	1790.4	1551.8	1395.5
56°	3059.8	3150.7	3371.9	3604.6	3646.5	3301.5	2677.8	2169.2	1814.4	1573.3	1412.2
57°	2939.3	3035.8	3272.2	3532.3	3614.6	3295.6	2685.3	2187.4	1839.3	1595.8	1430.9
58°	2814.2	2912.4	3166.3	3452.1	3574.0	3284.9	2689.5	2204.0	1864.9	1621.7	1451.9
59°	2686.1	2788.3	3058.3	3364.9	3526.5	3267.9	2689.3	2219.2	1891.2	1649.5	1475.3
60°	2547.9	2658.9	2944.8	3273.0	3471.5	3244.1	2685.2	2233.4	1918.2	1678.4	1500.8
61°	2401.2	2524.8	2827.8	3173.7	3407.2	3213.9	2676.3	2244.5	1944.6	1709.6	1528.8
62°	2245.1	2383.6	2708.6	3069.5	3338.4	3175.2	2662.1	2251.7	1971.5	1742.8	1558.4
63°	2085.9	2235.2	2587.2	2960.0	3262.8	3127.9	2640.6	2255.1	1997.9	1779.7	1590.7
64°	1928.4	2087.6	2463.9	2847.2	3179.6	3071.9	2611.0	2253.7	2023.7	1818.3	1627.8
65°	1784.2	1940.9	2336.8	2732.5	3089.8	3006.2	2575.3	2247.6	2048.4	1859.1	1669.9
66°	1659.5	1806.3	2209.7	2617.8	2990.8	2932.2	2529.7	2233.5	2070.8	1904.4	1715.4
67°	1555.4	1686.9	2084.5	2503.9	2886.9	2846.7	2471.0	2212.5	2090.0	1950.6	1769.0
68°	1448.1	1579.9	1963.8	2389.0	2771.5	2751.2	2380.1	2178.8	2105.9	1998.3	1830.7
69°	1291.6	1471.2	1850.6	2274.2	2650.4	2639.0	2246.1	2109.8	2113.7	2049.6	1900.2
70°	1060.1	1331.1	1743.7	2158.9	2520.4	2497.6	2068.2	2000.4	2115.8	2103.2	1973.7
71°	751.1	1129.8	1639.2	2044.7	2374.2	2326.4	1851.0	1857.8	2102.2	2158.8	2028.7
72°	468.2	856.7	1522.9	1929.8	2208.3	2123.7	1647.8	1705.1	2066.1	2211.8	2082.7
73°	352.8	563.6	1386.5	1808.7	2023.0	1901.9	1470.7	1575.8	2004.4	2259.1	2153.9
74°	238.6	418.2	1201.8	1669.9	1819.3	1672.0	1255.8	1465.8	1929.6	2285.8	2220.2
75°	124.4	277.6	939.4	1493.1	1602.1	1423.7	950.7	1312.3	1852.4	2297.0	2271.7
76°	106.1	137.0	653.9	1273.0	1377.0	1117.3	645.5	1012.7	1793.3	2266.7	2285.8
77°	92.0	113.0	419.1	1000.9	1142.1	757.7	340.7	713.2	1730.4	2191.0	2246.2
78°	80.5	96.5	321.8	673.7	886.1	435.5	180.1	414.3	1602.9	2034.1	2051.9
79°	70.8	83.4	227.1	363.3	620.5	330.1	120.9	211.2	1324.8	1814.0	1766.1
80°	61.8	72.4	132.5	242.7	380.5	230.3	104.7	128.7	906.1	1550.8	1469.4
81°	53.7	62.5	106.1	123.7	244.5	130.5	88.6	106.7	490.1	1193.7	1351.4
82°	46.2	53.6	89.3	102.1	112.4	110.8	72.5	84.7	233.7	952.7	1302.2
83°	39.5	45.2	74.9	87.3	82.9	90.7	60.9	62.8	152.2	711.7	1014.5
84°	32.7	38.0	60.8	74.2	66.2	68.7	50.0	50.0	124.2	471.7	726.8
85°	25.9	30.8	45.8	61.8	51.2	51.7	39.4	39.1	103.1	296.6	439.6
86°	19.7	23.7	35.5	50.0	37.9	38.6	29.3	30.0	82.0	210.7	255.2
87°	13.6	17.3	25.3	37.3	27.6	28.3	20.2	21.9	60.8	124.7	204.3
88°	8.1	11.3	15.1	22.7	17.4	18.0	14.0	15.4	39.2	40.9	153.5
89°	3.8	5.4	6.8	7.9	8.3	8.8	7.9	9.0	26.6	27.6	102.6



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CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

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: P1436717

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

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: P1436717

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

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: P1436717

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1566.4	1566.4	1566.4	1566.4	1566.4	1566.4	1566.4	1566.4	1566.4	1566.4	1566.4
1°	1524.5	1524.1	1527.1	1532.7	1540.6	1550.7	1561.6	1565.1	1576.6	1587.1	1597.2
2°	1487.8	1486.2	1490.8	1500.5	1514.9	1533.0	1554.2	1568.8	1592.0	1614.7	1634.9
3°	1453.5	1451.1	1457.0	1470.4	1491.3	1517.6	1548.3	1574.1	1608.9	1644.0	1675.6
4°	1422.5	1419.7	1427.0	1443.4	1469.5	1503.7	1544.2	1580.8	1628.5	1676.0	1719.8
5°	1394.7	1391.0	1398.8	1419.0	1450.2	1491.6	1541.0	1589.0	1648.8	1710.0	1767.5
6°	1368.5	1363.5	1372.7	1396.4	1432.9	1480.8	1539.5	1598.5	1671.8	1747.7	1818.7
7°	1344.1	1338.4	1348.9	1375.0	1416.6	1471.8	1539.5	1609.6	1696.4	1788.1	1874.5
8°	1322.1	1315.7	1326.5	1356.0	1402.4	1464.3	1540.7	1622.2	1722.5	1830.7	1934.6
9°	1301.2	1294.1	1306.4	1338.3	1389.0	1457.6	1542.6	1635.2	1750.9	1877.1	1998.9
10°	1282.5	1274.6	1288.0	1322.0	1377.1	1451.5	1545.9	1650.6	1781.6	1925.9	2066.0
11°	1265.7	1257.0	1271.5	1308.0	1366.9	1447.0	1550.4	1667.7	1814.4	1977.9	2139.2
12°	1250.2	1241.0	1256.0	1295.5	1357.8	1443.7	1556.2	1685.3	1847.8	2032.2	2215.5
13°	1236.2	1225.6	1241.6	1284.0	1350.5	1441.3	1563.3	1704.1	1883.6	2090.5	2299.5
14°	1222.4	1211.3	1228.3	1273.2	1344.0	1440.2	1570.7	1724.1	1921.2	2150.6	2387.1
15°	1209.9	1198.5	1216.1	1262.9	1338.9	1440.2	1578.4	1744.7	1960.2	2215.2	2480.7
16°	1198.3	1185.9	1204.6	1253.4	1333.5	1440.7	1586.9	1766.8	2000.6	2283.9	2578.8
17°	1187.9	1175.0	1194.2	1245.0	1328.8	1441.6	1596.4	1789.3	2043.1	2355.4	2679.7
18°	1178.4	1164.4	1184.6	1237.1	1325.0	1443.6	1606.5	1812.5	2087.2	2429.7	2782.0
19°	1169.7	1155.0	1175.7	1230.7	1321.1	1446.0	1617.6	1836.8	2132.9	2506.0	2882.8
20°	1161.8	1146.7	1167.8	1225.1	1317.7	1448.5	1629.3	1861.6	2180.2	2584.0	2982.0
21°	1155.4	1139.3	1161.3	1220.4	1315.0	1451.5	1641.5	1888.0	2229.0	2662.7	3076.6
22°	1149.4	1132.9	1155.5	1216.7	1313.7	1455.1	1654.2	1914.5	2280.1	2740.6	3165.1
23°	1144.3	1127.8	1150.8	1213.4	1312.7	1459.2	1667.2	1942.3	2333.8	2816.0	3250.2
24°	1140.0	1123.8	1147.0	1210.8	1312.7	1463.8	1680.2	1970.8	2388.5	2888.4	3329.2
25°	1137.1	1120.8	1144.6	1208.8	1313.4	1469.0	1693.4	1999.6	2442.7	2958.6	3404.0
26°	1134.9	1118.7	1143.0	1207.8	1314.6	1474.5	1707.7	2028.9	2497.5	3024.3	3474.5
27°	1133.4	1117.7	1142.0	1207.1	1316.6	1480.3	1721.3	2058.7	2552.5	3086.8	3541.4
28°	1132.9	1118.1	1142.1	1207.4	1319.3	1486.9	1735.8	2089.4	2606.7	3144.7	3603.8
29°	1133.5	1119.8	1143.5	1208.3	1322.7	1493.8	1750.1	2120.9	2659.6	3200.6	3663.2
30°	1135.0	1122.6	1146.2	1210.1	1326.3	1501.6	1765.1	2152.5	2710.5	3252.9	3717.2
31°	1137.5	1126.4	1149.2	1212.7	1330.6	1509.9	1779.6	2183.9	2759.8	3301.0	3768.1
32°	1140.5	1131.2	1152.9	1216.5	1336.1	1519.0	1794.5	2215.3	2806.2	3346.7	3814.2
33°	1144.3	1136.8	1156.9	1220.9	1341.9	1528.1	1809.3	2247.1	2850.9	3389.8	3857.7
34°	1148.6	1142.6	1161.2	1225.7	1348.0	1537.6	1825.0	2278.8	2893.4	3430.3	3896.4
35°	1153.1	1149.4	1165.8	1231.1	1355.1	1547.7	1840.8	2311.0	2933.7	3468.4	3931.4
36°	1157.5	1156.6	1170.6	1237.3	1362.0	1558.2	1857.8	2342.7	2972.8	3503.6	3962.2
37°	1162.2	1163.9	1175.8	1244.3	1369.7	1568.6	1874.7	2374.0	3008.6	3536.5	3988.7
38°	1166.7	1171.4	1181.5	1251.5	1378.1	1579.6	1892.5	2404.8	3043.5	3567.8	4012.2
39°	1171.5	1179.0	1187.2	1259.5	1387.1	1591.4	1910.5	2434.8	3075.5	3596.9	4030.5
40°	1176.6	1186.4	1193.1	1268.1	1396.8	1603.6	1929.2	2464.7	3106.1	3623.4	4044.9
41°	1181.8	1193.7	1199.1	1277.0	1406.7	1616.3	1948.0	2492.2	3135.6	3647.7	4054.0
42°	1186.8	1201.1	1205.5	1286.0	1417.4	1629.9	1967.0	2519.6	3164.1	3669.9	4058.3
43°	1192.3	1208.3	1212.2	1295.6	1428.4	1644.2	1987.2	2546.3	3191.3	3689.2	4059.3
44°	1198.6	1215.3	1219.7	1305.2	1440.1	1659.0	2007.6	2573.7	3216.6	3706.3	4056.1



REPORT NUMBER: P1436717

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1205.3	1221.5	1227.4	1315.0	1452.2	1674.2	2028.3	2599.3	3240.3	3721.4	4047.0
46°	1212.4	1226.6	1235.4	1325.3	1465.1	1689.5	2049.5	2622.1	3261.2	3733.7	4033.3
47°	1220.0	1231.2	1244.0	1335.5	1478.2	1706.3	2070.9	2643.1	3280.4	3743.0	4014.6
48°	1228.6	1236.2	1253.0	1346.1	1492.5	1723.9	2092.0	2663.1	3296.6	3748.8	3991.5
49°	1238.1	1241.2	1262.7	1356.7	1506.5	1742.3	2113.7	2681.4	3310.0	3751.0	3963.1
50°	1248.8	1245.8	1273.5	1368.3	1521.6	1762.6	2135.9	2698.0	3320.6	3749.4	3930.3
51°	1261.1	1251.2	1285.1	1380.4	1537.3	1783.5	2158.0	2712.2	3328.4	3744.4	3891.2
52°	1274.2	1258.2	1297.6	1393.6	1554.4	1804.6	2180.3	2724.9	3333.2	3734.5	3845.7
53°	1287.3	1267.0	1310.9	1407.5	1572.8	1826.4	2200.1	2734.6	3334.8	3720.3	3795.1
54°	1301.4	1276.1	1325.8	1422.9	1593.1	1848.7	2219.4	2742.0	3332.7	3701.7	3739.3
55°	1317.6	1286.7	1342.0	1439.7	1614.9	1871.3	2236.5	2747.3	3326.0	3677.1	3677.3
56°	1334.8	1299.4	1358.8	1457.8	1638.4	1895.1	2252.1	2749.1	3313.0	3646.7	3608.5
57°	1352.8	1313.5	1377.1	1478.4	1663.4	1919.4	2265.9	2747.9	3294.6	3609.4	3533.9
58°	1370.9	1325.6	1396.0	1500.9	1689.7	1943.3	2277.7	2743.8	3271.2	3563.9	3451.1
59°	1388.5	1338.9	1414.0	1525.7	1719.0	1965.1	2286.6	2735.7	3243.0	3513.7	3363.6
60°	1408.3	1359.0	1434.3	1553.1	1749.0	1986.9	2294.1	2722.5	3208.3	3454.7	3269.4
61°	1434.2	1386.4	1460.9	1583.4	1781.3	2009.2	2298.7	2703.6	3166.9	3388.5	3168.4
62°	1464.5	1415.1	1492.4	1616.1	1814.6	2031.1	2299.5	2679.1	3118.3	3316.5	3062.9
63°	1498.5	1448.7	1526.9	1649.7	1850.3	2052.4	2295.7	2647.8	3062.1	3235.2	2954.5
64°	1537.7	1490.8	1568.2	1687.4	1887.1	2072.2	2288.6	2607.5	2999.0	3146.5	2841.4
65°	1583.5	1538.1	1614.9	1731.2	1926.9	2090.6	2275.1	2559.3	2925.7	3052.6	2726.5
66°	1636.4	1592.3	1667.4	1778.7	1967.5	2105.6	2253.6	2499.6	2842.3	2951.6	2610.9
67°	1694.0	1650.6	1723.3	1830.8	2007.5	2119.0	2222.2	2419.2	2750.7	2841.9	2495.4
68°	1755.5	1697.6	1781.8	1890.6	2049.8	2128.0	2165.2	2297.7	2641.4	2725.3	2378.2
69°	1793.4	1728.3	1816.2	1957.8	2097.0	2129.9	2067.9	2129.2	2508.6	2596.9	2262.5
70°	1825.7	1766.8	1846.8	2026.6	2144.0	2124.1	1926.3	1916.8	2342.7	2452.5	2144.3
71°	1871.4	1794.3	1889.4	2078.4	2192.5	2099.9	1760.4	1698.0	2138.8	2286.1	2020.5
72°	1900.7	1775.4	1916.0	2133.0	2236.8	2049.1	1608.8	1495.1	1910.4	2101.6	1895.0
73°	1891.9	1678.2	1907.8	2201.9	2272.0	1970.3	1475.5	1296.9	1672.2	1896.7	1756.2
74°	1831.8	1463.2	1850.2	2263.3	2282.3	1887.7	1329.4	1048.9	1436.4	1671.0	1597.3
75°	1657.7	1119.9	1685.0	2302.9	2265.2	1806.6	1043.8	723.6	1171.9	1433.0	1405.1
76°	1353.4	802.0	1386.8	2308.1	2192.6	1722.7	758.3	411.1	850.6	1198.3	1173.6
77°	1038.4	743.7	1100.4	2258.9	2085.5	1608.6	474.1	306.4	516.7	965.7	892.5
78°	997.1	999.3	1089.7	2050.6	1917.4	1376.1	239.4	207.2	388.8	718.5	580.5
79°	1251.0	1251.9	1337.9	1735.9	1723.3	1004.1	137.8	107.9	266.2	470.3	425.1
80°	1459.2	992.0	1488.0	1407.9	1453.7	632.2	114.5	91.6	143.6	346.5	271.5
81°	1123.9	732.1	1127.8	1302.8	1146.0	267.6	91.1	78.4	119.6	223.8	117.9
82°	788.6	472.9	767.6	1303.4	838.1	161.9	68.0	66.2	101.9	101.1	99.2
83°	454.5	243.2	412.8	980.4	531.6	125.0	55.6	55.1	82.6	77.3	85.3
84°	252.9	170.9	243.7	657.3	312.2	103.3	44.8	44.4	63.4	61.4	72.3
85°	182.0	98.6	159.5	341.6	223.5	81.5	35.0	35.2	47.4	46.4	59.8
86°	111.1	28.2	103.5	273.3	134.8	59.8	26.5	25.9	36.6	35.8	47.8
87°	40.6	19.0	48.0	204.9	48.5	41.8	19.0	16.6	25.8	25.2	33.9
88°	27.5	9.8	25.9	136.6	32.7	28.4	13.2	9.3	15.1	14.6	20.0
89°	14.4	0.7	3.9	68.2	17.0	15.0	7.3	3.4	6.3	6.1	6.0



REPORT NUMBER: P1436717

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

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: P1436717

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

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: P1436717

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

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: P1436717

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1566.4	1566.4	1566.4
1°	1604.9	1610.3	1613.1
2°	1651.4	1661.4	1665.0
3°	1700.3	1717.0	1722.0
4°	1754.7	1778.0	1785.2
5°	1813.5	1843.5	1853.6
6°	1877.6	1915.7	1928.7
7°	1947.0	1993.5	2008.5
8°	2019.8	2076.5	2095.9
9°	2101.0	2167.6	2190.8
10°	2185.2	2265.4	2292.2
11°	2277.2	2371.2	2400.5
12°	2376.6	2482.8	2518.0
13°	2481.9	2605.1	2644.2
14°	2595.5	2735.8	2780.4
15°	2712.7	2870.6	2925.5
16°	2834.5	3010.6	3076.1
17°	2958.3	3153.7	3225.8
18°	3082.6	3296.3	3373.2
19°	3200.8	3430.8	3510.8
20°	3317.1	3555.8	3637.0
21°	3422.5	3672.1	3749.9
22°	3522.5	3774.5	3849.1
23°	3618.7	3865.7	3936.7
24°	3706.2	3944.9	4012.3
25°	3786.7	4014.8	4077.7
26°	3860.5	4074.3	4133.1
27°	3925.3	4124.5	4180.0
28°	3983.0	4166.8	4218.6
29°	4034.6	4202.6	4250.7
30°	4078.2	4230.1	4275.3
31°	4115.9	4251.5	4292.6
32°	4146.3	4267.5	4304.5
33°	4170.9	4277.4	4310.3
34°	4190.7	4281.5	4310.3
35°	4205.0	4279.8	4305.7
36°	4213.3	4273.3	4295.9
37°	4216.6	4262.6	4281.5
38°	4214.9	4248.2	4262.6
39°	4208.3	4230.5	4240.8
40°	4197.7	4209.2	4215.3
41°	4182.0	4184.1	4185.3
42°	4162.3	4155.3	4150.0
43°	4138.1	4122.4	4110.5
44°	4110.1	4086.9	4066.2



REPORT NUMBER: P1436717

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	4078.1	4045.4	4015.4
46°	4042.8	3998.6	3958.3
47°	4001.9	3946.7	3898.0
48°	3957.6	3889.2	3832.3
49°	3908.6	3823.3	3760.4
50°	3853.1	3752.9	3680.0
51°	3791.7	3673.7	3591.9
52°	3722.4	3587.6	3497.0
53°	3648.1	3494.1	3396.0
54°	3567.4	3392.7	3289.5
55°	3481.2	3285.0	3177.1
56°	3385.6	3170.8	3059.8
57°	3284.9	3052.0	2939.3
58°	3178.5	2928.1	2814.2
59°	3068.8	2801.5	2686.1
60°	2954.0	2673.7	2547.9
61°	2836.7	2537.5	2401.2
62°	2716.3	2395.4	2245.1
63°	2595.3	2251.5	2085.9
64°	2473.8	2104.7	1928.4
65°	2351.4	1961.4	1784.2
66°	2229.9	1827.6	1659.5
67°	2107.3	1708.8	1555.4
68°	1986.7	1603.4	1448.1
69°	1872.5	1493.3	1291.6
70°	1765.8	1359.0	1060.1
71°	1656.3	1167.8	751.1
72°	1533.5	902.3	468.2
73°	1388.6	608.9	352.8
74°	1186.8	354.9	238.6
75°	924.5	249.4	124.4
76°	653.7	144.9	106.1
77°	425.5	116.9	92.0
78°	327.7	99.4	80.5
79°	229.9	85.7	70.8
80°	132.1	74.2	61.8
81°	106.4	64.0	53.7
82°	88.8	54.9	46.2
83°	74.1	46.4	39.5
84°	59.6	39.2	32.7
85°	44.5	31.8	25.9
86°	34.3	24.3	19.7
87°	24.1	17.6	13.6
88°	14.0	11.3	8.1
89°	5.9	5.2	3.8



REPORT NUMBER: P1436717

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

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: P1436717

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

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: P1436717

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)