

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: P1436718

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

Issue Date: 3/25/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1436718  
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-HSS)  
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.  
LUMEN OUTPUT - 40% (72W)  
OPTICS - TYPE 3 WITH HOUSE SIDE SHIELD  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

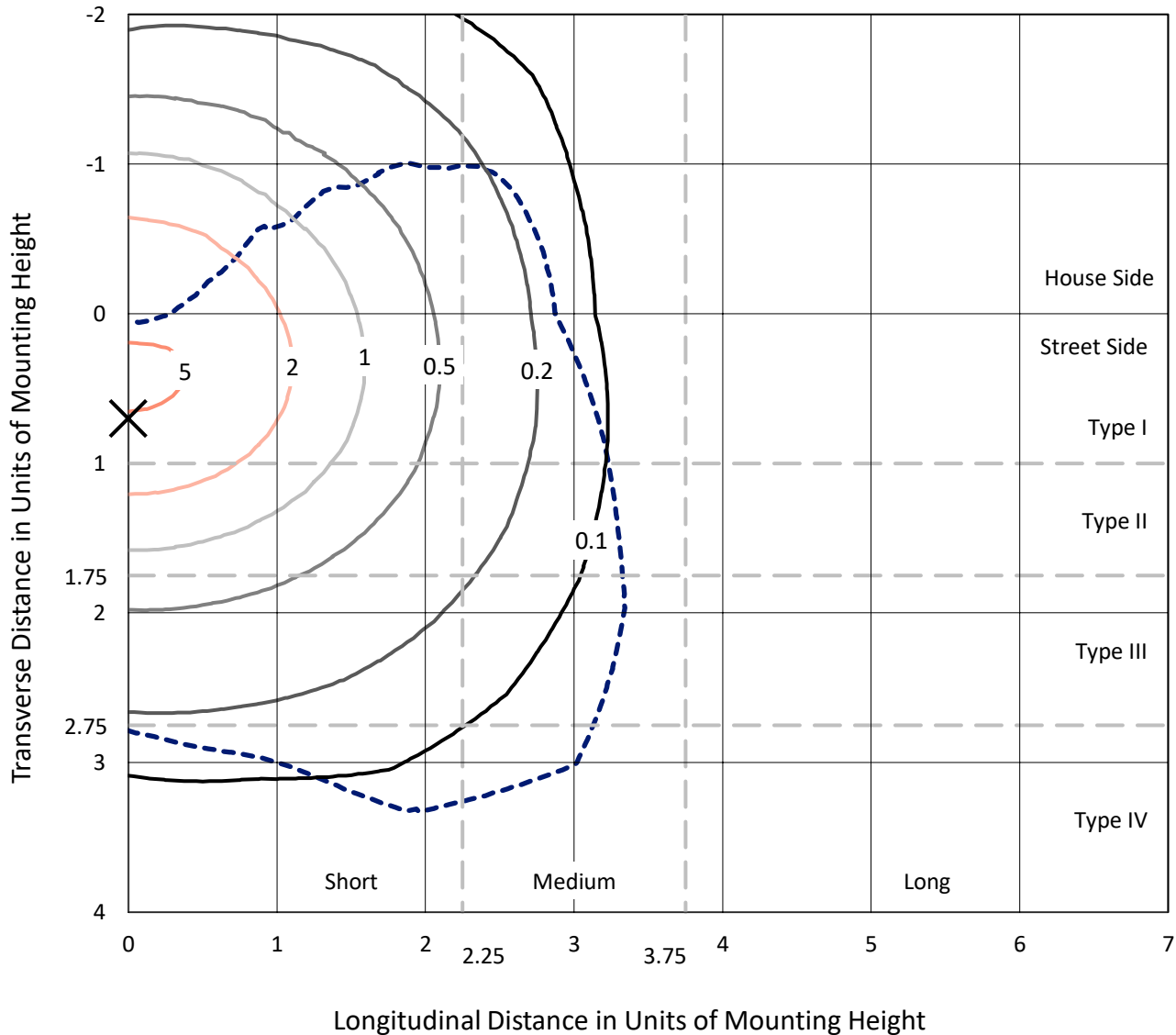
**Summary**

Lumens per Lamp: 24748 (1 lamp)  
Luminaire Lumens: 10030.7 lumens  
Efficiency: 40.5%  
Efficacy: 136.8 lumens/watt  
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)  
IES Classification: Type IV - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 73.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT

REPORT NUMBER: P1436718  
 CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3-HSS)

### Iso-Footcandle Lines of Horizontal Illumination

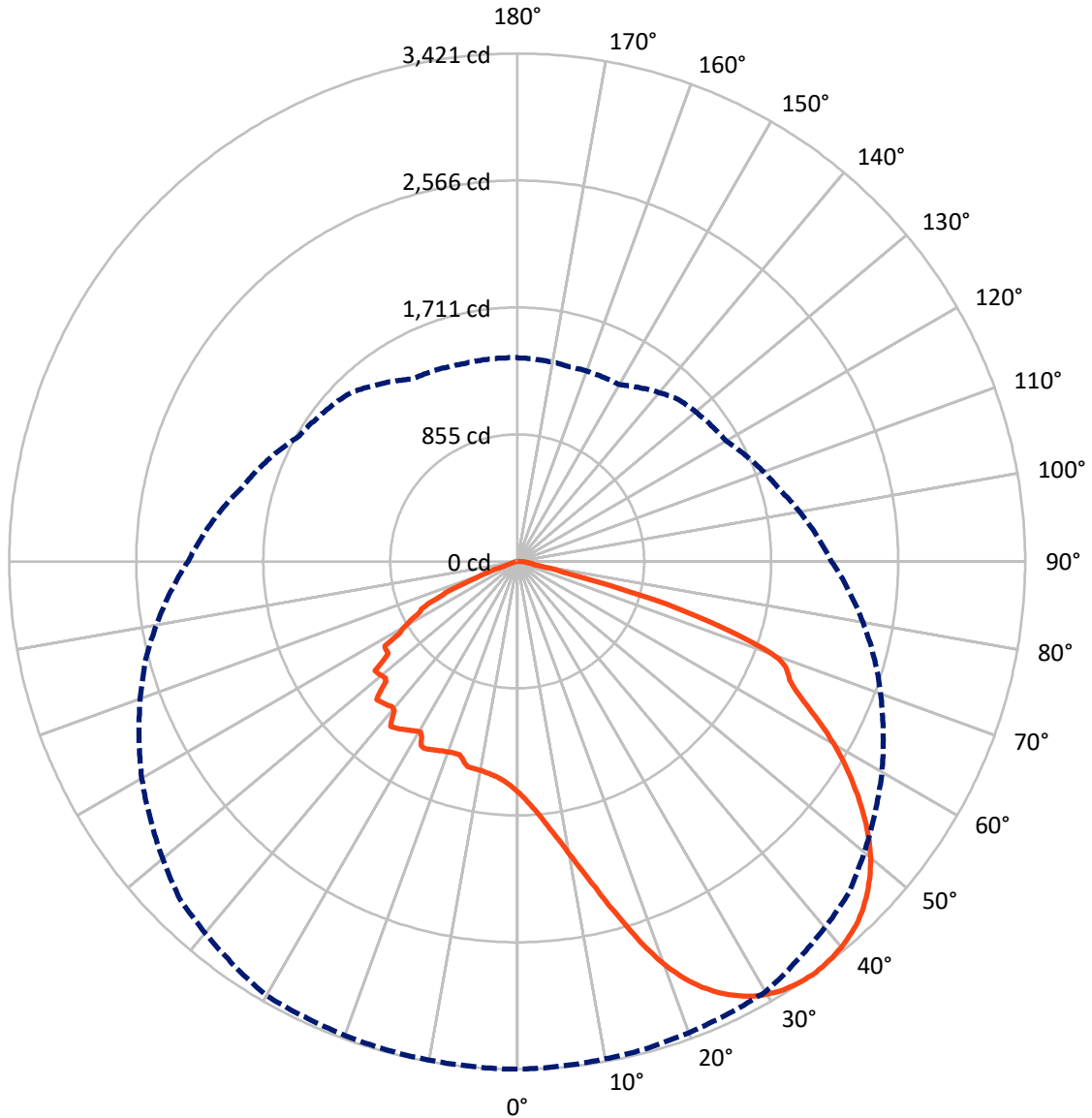
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.1 fc  
 Type IV - Short - Full Cutoff

REPORT NUMBER: P1436718  
CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3-HSS)

### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 35-Deg Vertical

REPORT NUMBER: P1436718

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

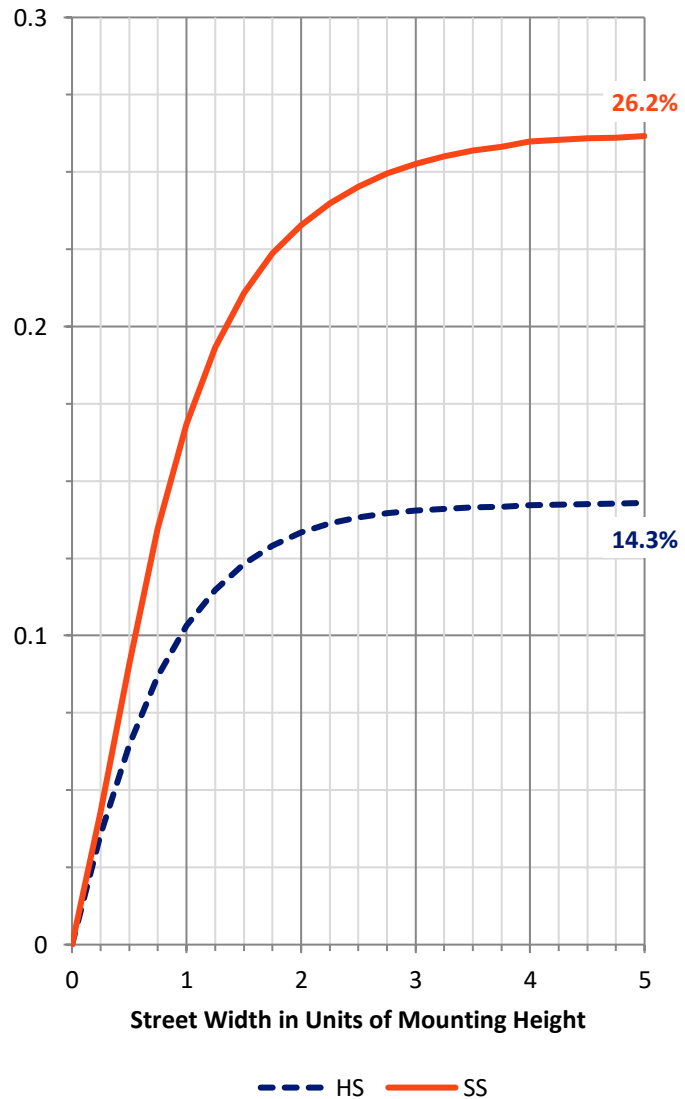
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3553.5	0.0	3553.5
	% Lamp	14.4	0.0	14.4
<b>Street Side</b>	Lumens	6477.1	0.0	6477.1
	% Lamp	26.2	0.0	26.2
<b>Total</b>	Lumens	10030.7	0.0	10030.7
	% Lamp	40.5	0.0	40.5

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	154.9	1.5	0.6
10°-20°	523.2	5.2	2.1
20°-30°	989.4	9.9	4.0
30°-40°	1454.5	14.5	5.9
40°-50°	1837.3	18.3	7.4
50°-60°	2034.4	20.3	8.2
60°-70°	1914.1	19.1	7.7
70°-80°	1043.2	10.4	4.2
80°-90°	79.6	0.8	0.3
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°	10030.7	100.0	40.5
0°-180°	10030.7	100.0	40.5

**Coefficient of Utilization**



REPORT NUMBER: P1436718

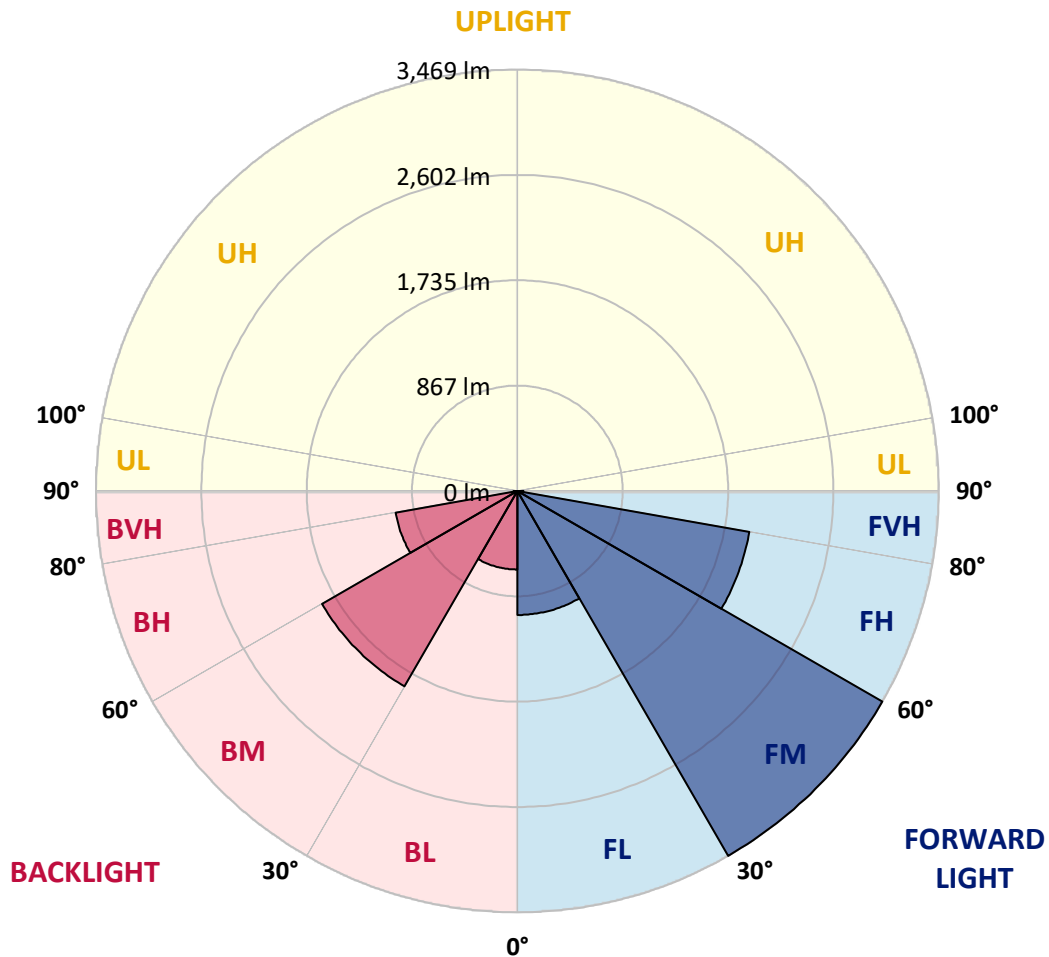
CATALOG NUMBER: XAS180-SFPM (3000K-72W-T3-HSS)

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1020.6	4.1			
FM (30°-60°)	3469.3	14.0			
FH (60°-80°)	1939.1	7.8			G2/5000
FVH (80°-90°)	48.1	0.2			G1/100
BL (0°-30°)	646.9	2.6	B2/1000		
BM (30°-60°)	1856.9	7.5	B2/2500		
BH (60°-80°)	1018.2	4.1	B3/2500		G3/2500
BVH (80°-90°)	31.5	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	14717.3	59.5			

**BUG Rating: B3-U0-G3**

Type IV Short





REPORT NUMBER: P1436718

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

**CANDELA DISTRIBUTION (FULL):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2
1°	1589.2	1588.6	1586.7	1582.7	1576.6	1570.2	1557.3	1551.3	1546.4	1541.8	1538.7
2°	1621.4	1619.6	1614.3	1604.7	1591.9	1578.1	1558.0	1545.6	1534.6	1525.8	1519.5
3°	1656.7	1654.1	1644.2	1628.7	1609.4	1588.3	1561.0	1541.8	1525.3	1512.3	1502.6
4°	1696.1	1691.4	1676.9	1655.7	1629.2	1600.6	1565.0	1539.8	1517.9	1500.7	1488.4
5°	1740.9	1734.0	1714.7	1685.4	1650.8	1613.7	1570.2	1538.6	1512.2	1491.3	1477.4
6°	1789.2	1780.2	1755.8	1718.9	1674.7	1628.2	1576.6	1538.6	1507.6	1484.4	1468.2
7°	1841.6	1830.2	1801.0	1755.9	1700.8	1645.1	1584.6	1540.5	1504.5	1479.1	1461.1
8°	1898.7	1884.9	1848.8	1794.8	1729.0	1663.1	1594.9	1544.1	1503.8	1474.9	1455.4
9°	1960.5	1943.5	1900.9	1836.7	1760.5	1682.9	1606.1	1548.5	1504.2	1472.2	1450.7
10°	2027.6	2007.5	1957.2	1881.9	1793.5	1704.1	1618.0	1554.1	1506.3	1471.5	1447.2
11°	2100.1	2076.6	2017.3	1930.1	1828.4	1727.8	1631.7	1561.1	1509.0	1472.0	1445.4
12°	2177.8	2150.2	2081.3	1980.9	1865.1	1752.1	1646.2	1568.9	1513.1	1473.3	1445.0
13°	2261.6	2229.5	2149.6	2036.2	1904.0	1778.3	1661.4	1577.3	1517.8	1475.5	1445.8
14°	2351.7	2316.1	2224.0	2093.5	1944.7	1805.2	1677.0	1585.9	1522.5	1478.5	1446.5
15°	2448.3	2405.9	2302.7	2155.4	1987.4	1831.9	1693.3	1595.7	1528.6	1482.0	1448.5
16°	2547.9	2502.0	2383.3	2219.4	2032.8	1860.9	1711.1	1605.7	1535.3	1485.5	1450.5
17°	2649.1	2596.9	2464.5	2285.5	2080.0	1890.8	1729.2	1616.7	1542.4	1489.8	1442.8
18°	2746.5	2688.7	2544.9	2351.8	2129.9	1921.9	1747.2	1625.6	1549.9	1495.1	1417.5
19°	2839.6	2777.8	2625.1	2417.4	2180.7	1953.1	1759.6	1632.1	1553.9	1500.5	1399.7
20°	2925.4	2862.2	2701.6	2482.1	2231.3	1982.8	1775.4	1640.2	1556.4	1504.6	1389.7
21°	3001.2	2937.9	2775.1	2545.3	2283.5	2010.1	1792.9	1654.0	1560.6	1485.3	1393.8
22°	3067.2	3008.4	2843.6	2606.2	2334.7	2041.5	1814.9	1667.5	1570.2	1469.5	1398.8
23°	3128.3	3070.7	2907.9	2664.0	2385.6	2074.1	1837.2	1679.5	1579.2	1460.1	1404.7
24°	3181.2	3126.6	2968.2	2719.9	2429.7	2110.4	1857.8	1689.4	1585.3	1453.8	1411.6
25°	3227.5	3176.6	3023.3	2773.2	2471.7	2148.9	1876.3	1701.3	1592.0	1460.5	1418.7
26°	3266.9	3219.8	3073.7	2824.2	2514.9	2186.7	1896.2	1714.5	1599.7	1463.9	1426.9
27°	3301.6	3258.0	3119.7	2873.9	2556.1	2223.2	1917.6	1730.4	1611.1	1468.2	1434.8
28°	3331.1	3290.3	3162.5	2920.3	2596.2	2255.0	1941.1	1747.0	1617.8	1474.3	1442.5
29°	3356.0	3317.9	3199.9	2963.4	2635.6	2287.6	1966.9	1763.4	1609.0	1485.0	1451.0
30°	3376.6	3340.9	3234.4	3005.9	2675.2	2320.7	1993.4	1780.3	1609.5	1495.7	1457.9
31°	3392.9	3359.9	3264.0	3044.4	2712.7	2353.5	2020.4	1796.9	1604.9	1506.9	1460.0
32°	3404.6	3373.9	3289.1	3076.5	2748.2	2387.1	2047.6	1809.5	1608.6	1517.6	1417.0
33°	3413.4	3384.4	3312.1	3106.7	2780.4	2421.3	2074.5	1816.2	1605.4	1526.4	1381.2
34°	3419.1	3391.2	3330.4	3133.5	2809.2	2454.9	2099.4	1824.3	1614.3	1533.9	1367.2
35°	3421.3	3394.6	3346.6	3158.5	2836.2	2488.1	2117.3	1837.4	1623.7	1540.6	1374.9
36°	3420.3	3396.2	3358.2	3182.5	2862.8	2519.4	2133.4	1851.4	1634.9	1548.4	1382.9
37°	3415.9	3393.8	3367.3	3204.1	2888.2	2549.9	2152.8	1865.9	1645.9	1546.7	1389.0
38°	3409.3	3389.9	3373.1	3222.9	2912.8	2579.8	2176.5	1881.9	1653.6	1504.3	1394.3
39°	3400.5	3383.2	3376.4	3239.5	2936.5	2608.0	2198.9	1895.8	1660.8	1470.8	1402.2
40°	3389.1	3375.1	3375.3	3253.6	2959.4	2630.3	2221.5	1908.3	1673.2	1462.0	1412.5
41°	3373.9	3363.8	3372.7	3266.8	2981.5	2648.9	2244.2	1920.0	1688.5	1473.0	1422.7
42°	3356.9	3350.4	3366.3	3278.4	3003.1	2665.8	2266.9	1928.9	1703.6	1484.8	1431.4
43°	3335.5	3334.7	3357.7	3287.3	3024.8	2685.6	2286.1	1938.2	1718.9	1497.2	1401.1
44°	3310.5	3315.9	3346.6	3292.3	3045.2	2706.3	2303.6	1955.4	1734.8	1508.7	1352.5

REPORT NUMBER: P1436718

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

**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3282.4	3294.7	3331.9	3293.8	3063.8	2728.2	2318.8	1976.1	1747.1	1516.3	1332.3
46°	3249.6	3269.9	3315.3	3291.7	3082.4	2749.5	2330.3	1997.2	1751.1	1521.3	1339.7
47°	3212.8	3240.8	3296.8	3286.2	3100.1	2770.3	2340.4	2016.6	1751.3	1529.6	1345.9
48°	3174.2	3208.3	3274.5	3277.7	3115.2	2789.6	2349.8	2027.4	1723.1	1539.5	1350.9
49°	3130.9	3171.6	3248.1	3267.5	3126.8	2810.0	2365.1	2034.3	1699.7	1508.7	1357.9
50°	3082.5	3130.7	3218.3	3253.9	3134.3	2827.5	2383.6	2038.7	1691.4	1460.9	1365.4
51°	3030.1	3085.2	3182.7	3237.2	3138.4	2842.1	2401.9	2036.0	1685.2	1440.4	1339.1
52°	2972.1	3035.5	3144.0	3216.3	3140.3	2854.5	2419.3	2050.0	1697.1	1451.4	1266.5
53°	2912.1	2980.6	3101.3	3192.1	3138.2	2865.6	2435.9	2058.0	1704.4	1462.9	1243.5
54°	2848.5	2920.9	3054.0	3165.8	3135.3	2871.0	2450.9	2062.7	1712.4	1471.2	1254.1
55°	2782.0	2858.4	3002.3	3134.9	3127.9	2871.3	2461.0	2072.5	1725.5	1478.8	1266.0
56°	2714.0	2793.2	2949.5	3100.3	3119.1	2869.5	2465.8	2078.3	1740.0	1481.0	1277.7
57°	2645.3	2726.8	2892.7	3064.0	3107.1	2862.6	2465.1	2081.1	1747.4	1430.0	1287.4
58°	2574.7	2656.9	2834.0	3023.9	3090.9	2857.9	2460.5	2086.5	1753.2	1383.6	1222.1
59°	2502.4	2588.9	2773.9	2980.5	3070.3	2852.4	2458.2	2086.5	1724.2	1382.1	1171.2
60°	2425.8	2518.0	2711.8	2934.7	3043.2	2842.7	2453.6	2077.5	1688.1	1398.6	1174.4
61°	2347.1	2444.7	2648.2	2885.7	3010.9	2828.4	2443.9	2065.9	1677.5	1416.5	1178.4
62°	2264.9	2369.9	2586.5	2833.5	2973.4	2807.9	2432.0	2059.9	1682.4	1433.8	1130.9
63°	2184.9	2294.2	2525.9	2780.0	2932.1	2779.9	2411.5	2043.8	1686.9	1399.0	1063.9
64°	2108.2	2221.3	2467.7	2724.5	2883.6	2743.1	2383.6	2024.8	1686.0	1355.3	1050.2
65°	2047.1	2154.3	2410.3	2666.8	2830.7	2699.2	2349.5	1996.7	1667.7	1354.8	1037.4
66°	2001.5	2100.7	2355.3	2609.2	2771.8	2644.6	2308.8	1959.4	1609.4	1363.2	947.9
67°	1975.8	2060.6	2306.0	2550.7	2705.1	2582.6	2261.9	1911.2	1585.3	1307.4	933.3
68°	1947.2	2033.4	2262.2	2492.0	2628.4	2511.7	2182.3	1859.6	1594.6	1276.6	874.4
69°	1883.0	2004.0	2226.0	2434.4	2545.8	2415.4	2052.2	1799.5	1599.0	1272.4	815.5
70°	1759.1	1951.0	2196.9	2376.7	2462.5	2286.4	1870.4	1711.7	1595.4	1210.6	756.3
71°	1568.3	1848.9	2169.5	2319.1	2362.5	2123.8	1669.2	1591.9	1543.8	1191.0	661.4
72°	1373.0	1684.0	2136.0	2258.2	2247.0	1938.4	1487.4	1450.9	1480.4	1145.7	592.7
73°	1164.6	1475.1	2082.6	2198.0	2113.8	1748.1	1321.4	1312.8	1409.7	1109.7	528.5
74°	928.1	1250.8	1981.8	2125.7	1963.6	1565.2	1127.2	1190.5	1327.6	1046.1	446.6
75°	631.4	1007.4	1808.9	2024.2	1794.7	1355.9	858.1	1056.8	1222.5	982.1	398.6
76°	350.0	714.8	1585.4	1875.9	1617.9	1072.5	589.0	848.3	1128.3	870.6	356.7
77°	270.5	408.5	1346.5	1663.5	1421.5	708.0	320.1	638.2	1035.3	759.0	314.3
78°	192.8	311.3	1057.5	1372.3	1177.8	393.9	154.2	368.3	856.3	647.0	270.4
79°	115.1	214.8	693.8	1031.3	858.9	261.0	115.9	267.1	677.3	510.6	224.3
80°	101.9	118.2	378.0	678.7	529.3	133.3	77.9	166.0	497.5	388.8	189.6
81°	91.1	102.5	286.7	354.5	385.3	110.4	66.1	65.1	267.8	286.0	170.5
82°	81.3	90.6	198.4	235.1	243.7	94.3	56.0	51.9	196.8	228.3	168.4
83°	72.2	79.8	110.1	123.1	102.2	77.3	46.7	41.1	125.7	181.0	138.4
84°	63.6	69.7	91.9	100.7	82.9	60.2	38.1	32.6	56.7	139.2	106.4
85°	55.3	60.4	74.7	85.4	65.8	47.1	29.8	25.7	48.6	97.4	74.5
86°	47.3	51.9	60.9	71.1	50.6	38.0	22.2	19.7	38.3	55.9	42.7
87°	39.5	43.7	49.0	55.4	39.0	28.8	15.4	14.5	28.3	31.6	26.6
88°	34.1	36.8	38.1	38.4	28.4	19.7	10.8	10.3	19.6	21.7	18.3
89°	28.8	29.8	29.3	27.3	17.7	12.0	6.2	6.1	11.0	11.7	9.9



REPORT NUMBER: P1436718

CATALOG NUMBER: XAS180-SFPM (3000K-72W-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: P1436718

CATALOG NUMBER: XAS180-SFPM (3000K-72W-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: P1436718

CATALOG NUMBER: XAS180-SFPM (3000K-72W-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: P1436718

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

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2
1°	1537.1	1537.3	1539.0	1542.4	1547.1	1552.0	1558.9	1560.0	1566.8	1573.7	1579.9
2°	1516.0	1515.8	1518.5	1524.7	1532.7	1543.3	1555.6	1563.3	1577.4	1590.8	1603.2
3°	1497.5	1496.8	1500.4	1508.2	1520.4	1535.4	1553.7	1568.3	1589.0	1610.4	1629.2
4°	1481.8	1481.0	1485.4	1495.1	1510.2	1530.0	1553.6	1574.5	1603.1	1632.0	1658.0
5°	1470.0	1468.7	1473.3	1484.8	1502.0	1525.8	1554.8	1582.6	1618.7	1655.6	1689.6
6°	1459.7	1457.8	1463.5	1476.7	1496.0	1522.8	1557.4	1592.1	1636.0	1681.6	1723.5
7°	1451.0	1448.9	1455.1	1469.8	1492.4	1522.3	1561.7	1603.4	1655.0	1710.1	1762.2
8°	1444.3	1441.8	1448.3	1465.0	1489.9	1523.3	1567.5	1615.4	1675.8	1741.5	1803.2
9°	1438.2	1435.9	1443.1	1461.6	1488.9	1525.4	1573.7	1628.2	1698.1	1774.7	1847.4
10°	1434.0	1430.9	1439.2	1459.7	1489.0	1528.3	1581.1	1643.1	1722.0	1810.0	1894.5
11°	1430.6	1427.5	1436.8	1459.0	1490.7	1533.1	1590.1	1659.8	1748.8	1847.5	1944.7
12°	1428.6	1425.5	1435.2	1459.5	1493.7	1538.7	1600.5	1676.6	1775.6	1887.6	1998.2
13°	1428.4	1424.7	1435.1	1460.7	1498.0	1545.5	1611.3	1694.7	1804.4	1929.9	2055.9
14°	1428.4	1424.2	1436.1	1463.5	1503.2	1553.0	1623.0	1713.5	1833.7	1974.1	2116.7
15°	1426.9	1406.7	1434.7	1466.6	1508.6	1561.7	1635.2	1734.0	1864.7	2021.8	2181.6
16°	1396.6	1378.0	1406.9	1469.9	1514.4	1571.1	1648.3	1754.0	1897.2	2070.2	2250.0
17°	1374.2	1361.1	1385.3	1464.3	1520.8	1580.8	1662.5	1775.4	1930.4	2122.2	2320.1
18°	1362.4	1358.1	1373.8	1439.7	1528.5	1591.0	1675.1	1796.8	1965.4	2176.3	2390.7
19°	1364.1	1360.1	1375.4	1423.7	1535.3	1598.5	1683.9	1814.8	2001.2	2231.2	2461.1
20°	1367.2	1363.1	1378.9	1415.6	1541.5	1603.6	1694.4	1832.6	2038.0	2287.2	2529.2
21°	1371.2	1367.7	1383.4	1419.2	1528.8	1610.0	1709.4	1853.1	2071.4	2344.3	2595.1
22°	1377.0	1372.9	1389.4	1425.4	1510.3	1621.8	1726.1	1876.7	2105.4	2399.7	2657.3
23°	1383.0	1379.8	1396.8	1432.4	1501.8	1634.2	1743.2	1902.5	2143.1	2454.8	2716.8
24°	1389.5	1386.4	1404.4	1440.4	1499.2	1644.5	1756.9	1928.3	2182.8	2507.2	2773.2
25°	1396.4	1392.7	1411.8	1448.9	1506.1	1652.4	1770.0	1951.8	2224.6	2553.6	2825.9
26°	1403.6	1400.2	1419.7	1458.8	1512.5	1660.7	1784.2	1973.9	2267.2	2596.0	2876.3
27°	1410.7	1407.9	1427.3	1467.9	1517.6	1671.0	1799.7	1997.6	2309.3	2638.2	2925.0
28°	1418.2	1400.1	1435.2	1477.3	1524.0	1679.6	1818.0	2023.1	2348.8	2678.7	2971.4
29°	1395.7	1350.3	1417.9	1486.5	1534.5	1676.9	1836.6	2050.2	2383.6	2718.0	3015.5
30°	1348.9	1323.6	1370.2	1494.2	1546.3	1674.8	1855.2	2078.6	2420.2	2757.4	3056.6
31°	1326.1	1326.9	1347.0	1497.3	1558.3	1674.7	1873.6	2108.1	2455.9	2794.5	3095.8
32°	1330.6	1337.3	1350.7	1462.6	1570.7	1675.2	1888.3	2137.4	2489.9	2830.0	3131.4
33°	1340.0	1348.2	1360.0	1427.4	1581.9	1674.9	1897.8	2166.2	2525.2	2864.2	3162.6
34°	1349.2	1359.5	1369.6	1411.9	1591.0	1683.8	1907.3	2194.8	2558.8	2894.0	3189.4
35°	1358.6	1371.9	1379.3	1417.9	1599.9	1693.7	1921.9	2217.8	2592.9	2920.2	3214.9
36°	1369.0	1383.2	1389.6	1427.5	1606.9	1704.9	1937.7	2236.8	2624.9	2946.2	3239.1
37°	1378.2	1393.9	1399.8	1434.7	1611.0	1717.3	1953.6	2258.2	2655.7	2971.0	3261.7
38°	1387.1	1402.5	1409.5	1440.8	1569.9	1727.0	1971.8	2282.4	2685.4	2996.2	3280.7
39°	1393.6	1351.2	1417.2	1447.4	1537.7	1735.5	1989.7	2306.4	2713.7	3019.8	3297.1
40°	1340.8	1302.1	1370.3	1457.9	1528.1	1747.7	2004.8	2330.1	2737.7	3042.0	3311.2
41°	1293.0	1291.6	1320.2	1469.0	1537.6	1763.9	2018.1	2354.0	2756.3	3064.2	3323.5
42°	1282.0	1299.0	1306.3	1479.1	1549.7	1781.0	2027.5	2377.7	2773.1	3086.3	3332.9
43°	1290.7	1307.1	1315.1	1459.3	1562.5	1797.8	2037.9	2399.8	2791.0	3107.1	3340.5
44°	1300.2	1314.7	1325.3	1407.2	1575.0	1815.1	2057.6	2419.9	2809.5	3126.1	3345.0

REPORT NUMBER: P1436718

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

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1310.0	1322.4	1335.0	1382.6	1583.9	1829.0	2079.6	2437.8	2829.3	3143.8	3345.0
46°	1320.0	1326.9	1345.1	1388.1	1589.8	1834.3	2101.8	2449.6	2850.1	3159.5	3341.0
47°	1329.5	1273.4	1353.3	1394.0	1597.5	1837.9	2123.5	2459.2	2869.4	3174.5	3332.9
48°	1278.7	1200.2	1310.7	1399.1	1607.8	1823.1	2140.4	2467.5	2887.5	3187.4	3323.3
49°	1207.2	1186.1	1237.9	1405.9	1588.4	1798.5	2145.1	2481.7	2903.7	3196.1	3310.8
50°	1194.7	1192.0	1220.4	1412.7	1538.7	1781.1	2148.5	2498.9	2918.3	3199.9	3295.4
51°	1204.5	1198.5	1230.2	1394.3	1510.8	1773.3	2145.5	2514.1	2928.6	3199.0	3277.7
52°	1214.9	1205.1	1239.4	1320.9	1519.3	1782.2	2146.2	2528.6	2936.5	3195.7	3255.5
53°	1224.2	1208.0	1248.2	1292.5	1531.3	1789.4	2154.8	2540.6	2940.9	3188.6	3231.0
54°	1228.8	1121.0	1253.3	1302.5	1539.0	1796.1	2157.1	2550.5	2939.0	3181.1	3202.3
55°	1150.0	1067.5	1174.9	1314.1	1546.3	1804.8	2158.6	2555.3	2932.5	3169.8	3171.8
56°	1091.7	1063.7	1115.8	1326.1	1548.8	1818.2	2158.8	2552.7	2921.4	3157.2	3138.2
57°	1087.8	1065.6	1109.6	1334.7	1511.0	1823.4	2156.0	2544.0	2906.8	3140.9	3100.6
58°	1089.5	1056.6	1110.9	1272.8	1456.8	1826.0	2154.8	2532.7	2891.5	3118.3	3060.4
59°	1069.0	931.3	1094.1	1217.5	1451.4	1805.8	2151.6	2521.6	2875.8	3092.8	3016.9
60°	958.7	897.0	982.8	1217.8	1467.2	1761.1	2136.6	2508.3	2856.3	3063.1	2969.1
61°	937.4	844.3	958.6	1221.3	1484.1	1739.5	2118.6	2491.5	2832.5	3027.7	2918.2
62°	934.6	791.6	952.6	1180.7	1499.1	1739.0	2108.3	2470.5	2803.5	2986.4	2865.3
63°	880.2	739.5	896.7	1106.6	1468.4	1738.5	2089.8	2442.6	2767.9	2938.0	2809.9
64°	825.8	724.5	840.9	1091.9	1415.9	1733.6	2065.4	2406.0	2724.9	2885.8	2753.8
65°	771.3	662.0	784.6	1082.8	1408.2	1713.7	2031.2	2360.8	2671.8	2828.5	2693.2
66°	686.1	553.6	701.4	986.6	1408.6	1655.8	1988.4	2306.8	2608.8	2766.5	2629.6
67°	599.5	527.8	611.8	965.9	1350.5	1617.8	1937.3	2241.6	2540.0	2695.2	2566.2
68°	539.3	368.5	553.3	928.0	1317.9	1619.4	1867.6	2128.9	2452.1	2616.3	2503.4
69°	439.4	304.3	451.4	846.9	1305.5	1616.1	1783.5	1962.7	2330.4	2529.5	2442.7
70°	351.9	209.7	362.0	765.8	1239.4	1603.2	1667.2	1745.0	2177.3	2433.8	2378.0
71°	242.0	115.0	241.7	684.9	1209.8	1538.1	1521.2	1543.8	1985.5	2320.4	2310.2
72°	133.7	21.1	125.0	615.7	1159.0	1454.2	1365.6	1359.3	1781.9	2192.0	2242.3
73°	112.6	0.3	101.4	543.2	1107.2	1367.7	1214.9	1175.6	1582.6	2036.8	2166.3
74°	91.5	0.2	78.0	446.7	1030.5	1272.6	1074.9	957.0	1385.1	1860.5	2077.5
75°	70.4	0.2	67.7	392.0	944.8	1161.0	863.6	670.5	1149.7	1665.2	1953.5
76°	53.6	0.2	53.9	348.5	823.8	1050.0	652.3	388.4	832.1	1459.1	1787.3
77°	37.7	0.2	42.7	307.2	702.7	889.9	440.9	249.6	495.6	1239.8	1555.3
78°	28.2	0.3	34.5	266.2	581.8	729.7	227.0	114.0	370.8	971.2	1254.4
79°	27.8	0.3	34.3	221.3	465.4	568.4	148.2	87.0	247.9	656.8	909.4
80°	37.2	0.3	41.4	191.6	361.5	325.0	70.3	73.8	125.1	383.8	565.8
81°	45.5	0.4	42.8	178.1	271.6	235.7	56.4	62.8	106.3	254.8	414.7
82°	40.2	0.4	26.7	166.0	210.7	146.4	46.4	52.8	90.8	127.7	267.3
83°	25.1	0.5	19.0	125.8	158.2	57.7	37.9	43.9	74.9	97.5	119.8
84°	18.4	0.6	11.3	85.7	105.7	48.0	30.4	36.0	59.3	80.3	99.7
85°	11.7	0.6	3.7	46.0	53.7	37.9	24.2	28.0	46.3	63.0	84.7
86°	5.1	0.7	3.4	23.4	29.9	28.2	18.7	20.1	37.2	48.9	70.5
87°	3.8	0.8	3.3	16.5	17.0	20.3	13.7	13.5	28.1	37.7	54.7
88°	2.8	0.8	2.9	9.6	11.9	14.2	9.7	7.9	19.1	27.4	38.1
89°	2.1	0.9	1.8	2.8	6.8	8.0	5.7	3.4	11.7	17.1	27.2



REPORT NUMBER: P1436718

CATALOG NUMBER: XAS180-SFPM (3000K-72W-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: P1436718

CATALOG NUMBER: XAS180-SFPM (3000K-72W-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: P1436718

CATALOG NUMBER: XAS180-SFPM (3000K-72W-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: P1436718

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

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
0°	1561.2	1561.2	1561.2
1°	1584.4	1587.7	1589.2
2°	1612.7	1619.1	1621.4
3°	1643.8	1653.4	1656.7
4°	1678.7	1692.1	1696.1
5°	1716.6	1735.1	1740.9
6°	1758.5	1782.3	1789.2
7°	1804.6	1832.5	1841.6
8°	1854.3	1887.6	1898.7
9°	1908.0	1947.8	1960.5
10°	1964.3	2012.8	2027.6
11°	2027.1	2082.3	2100.1
12°	2093.7	2158.4	2177.8
13°	2165.6	2238.4	2261.6
14°	2242.3	2324.9	2351.7
15°	2322.8	2416.4	2448.3
16°	2404.6	2509.8	2547.9
17°	2487.9	2605.9	2649.1
18°	2571.6	2701.1	2746.5
19°	2652.5	2792.8	2839.6
20°	2730.7	2877.9	2925.4
21°	2804.1	2955.4	3001.2
22°	2872.4	3026.1	3067.2
23°	2938.0	3087.8	3128.3
24°	2998.9	3142.9	3181.2
25°	3055.3	3191.3	3227.5
26°	3106.7	3234.0	3266.9
27°	3155.0	3270.8	3301.6
28°	3196.8	3302.9	3331.1
29°	3235.1	3329.4	3356.0
30°	3268.2	3351.4	3376.6
31°	3298.1	3370.0	3392.9
32°	3323.9	3384.9	3404.6
33°	3345.9	3395.5	3413.4
34°	3363.5	3402.7	3419.1
35°	3377.8	3406.5	3421.3
36°	3389.1	3406.1	3420.3
37°	3397.5	3403.9	3415.9
38°	3402.7	3399.8	3409.3
39°	3404.4	3392.4	3400.5
40°	3403.4	3383.5	3389.1
41°	3399.9	3372.9	3373.9
42°	3393.4	3359.6	3356.9
43°	3383.8	3344.2	3335.5
44°	3372.2	3326.0	3310.5



REPORT NUMBER: P1436718

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

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
45°	3357.6	3305.0	3282.4
46°	3341.1	3281.0	3249.6
47°	3321.5	3252.3	3212.8
48°	3300.4	3220.9	3174.2
49°	3275.2	3185.5	3130.9
50°	3245.4	3146.6	3082.5
51°	3211.3	3102.9	3030.1
52°	3171.8	3053.4	2972.1
53°	3129.0	3001.4	2912.1
54°	3082.2	2943.5	2848.5
55°	3033.7	2883.8	2782.0
56°	2980.8	2818.5	2714.0
57°	2925.4	2752.2	2645.3
58°	2866.6	2683.6	2574.7
59°	2805.7	2614.2	2502.4
60°	2744.1	2542.5	2425.8
61°	2682.7	2469.6	2347.1
62°	2621.0	2394.3	2264.9
63°	2561.6	2321.6	2184.9
64°	2505.7	2251.2	2108.2
65°	2451.5	2186.4	2047.1
66°	2398.9	2131.8	2001.5
67°	2349.0	2092.2	1975.8
68°	2302.9	2064.8	1947.2
69°	2262.0	2035.3	1883.0
70°	2229.8	1987.1	1759.1
71°	2196.9	1892.9	1568.3
72°	2156.3	1730.5	1373.0
73°	2096.5	1519.9	1164.6
74°	1987.0	1287.6	928.1
75°	1812.5	1042.3	631.4
76°	1590.4	762.8	350.0
77°	1338.5	455.0	270.5
78°	1036.9	341.5	192.8
79°	681.6	231.4	115.1
80°	382.7	121.3	101.9
81°	288.1	105.7	91.1
82°	200.4	93.4	81.3
83°	112.7	82.2	72.2
84°	93.3	71.7	63.6
85°	75.6	62.0	55.3
86°	61.8	53.2	47.3
87°	49.6	44.7	39.5
88°	37.9	37.5	34.1
89°	29.3	30.2	28.8



REPORT NUMBER: P1436718

CATALOG NUMBER: XAS180-SFPM (3000K-72W-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: P1436718

CATALOG NUMBER: XAS180-SFPM (3000K-72W-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: P1436718

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

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)