

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: P1436722

Luminaire Tested: XAS180-SFPM (3000K-72W-T5-HSS)

Issue Date: 3/25/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1436722  
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-T5-HSS)  
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.  
LUMEN OUTPUT - 40% (72W)  
OPTICS - TYPE 5 WITH HOUSE SIDE SHIELD  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: 23809 (1 lamp)  
Luminaire Lumens: 9785.9 lumens  
Efficiency: 41.1%  
Efficacy: 133.9 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

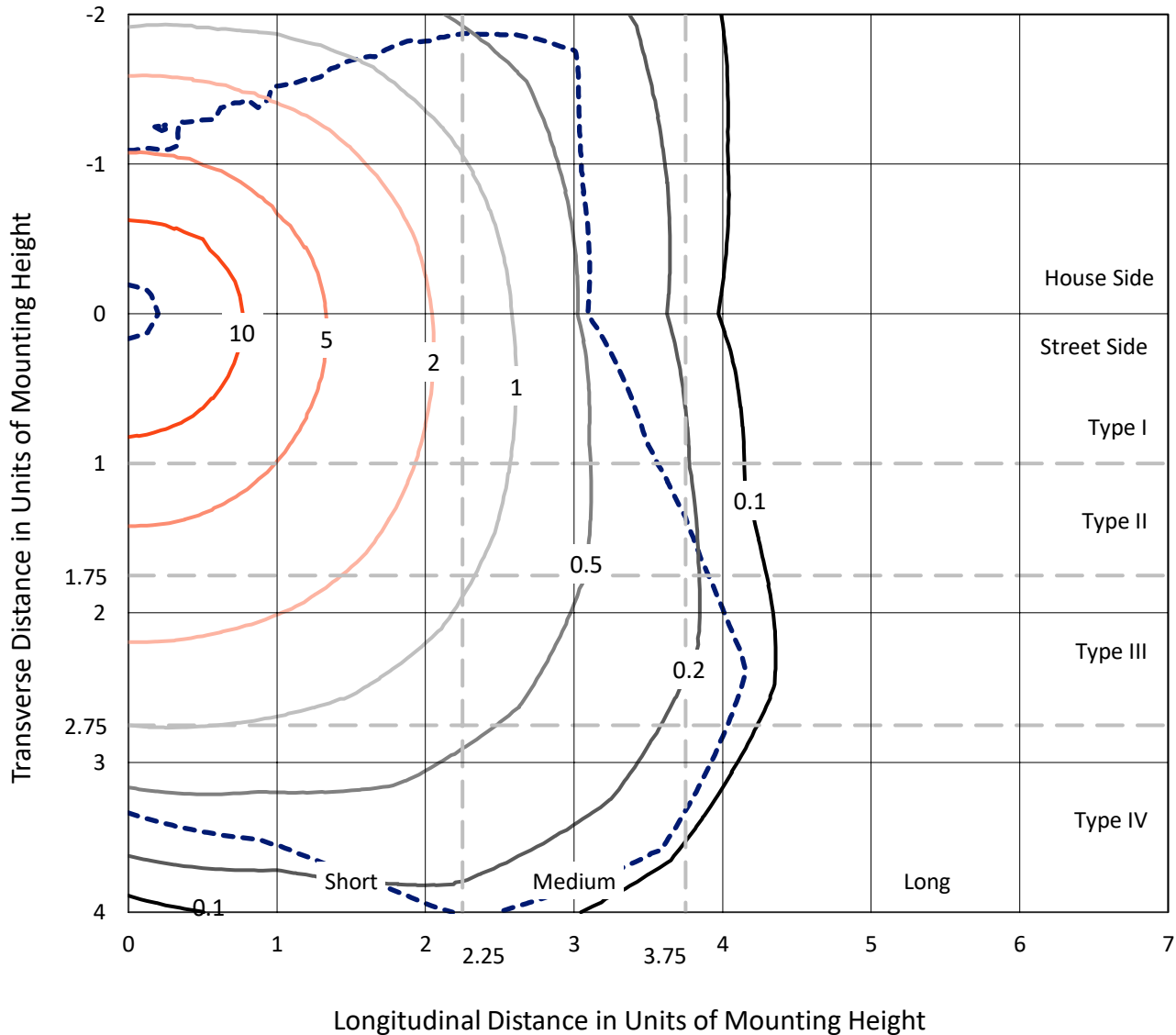
Input Watts (W): 73.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT

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### Iso-Footcandle Lines of Horizontal Illumination

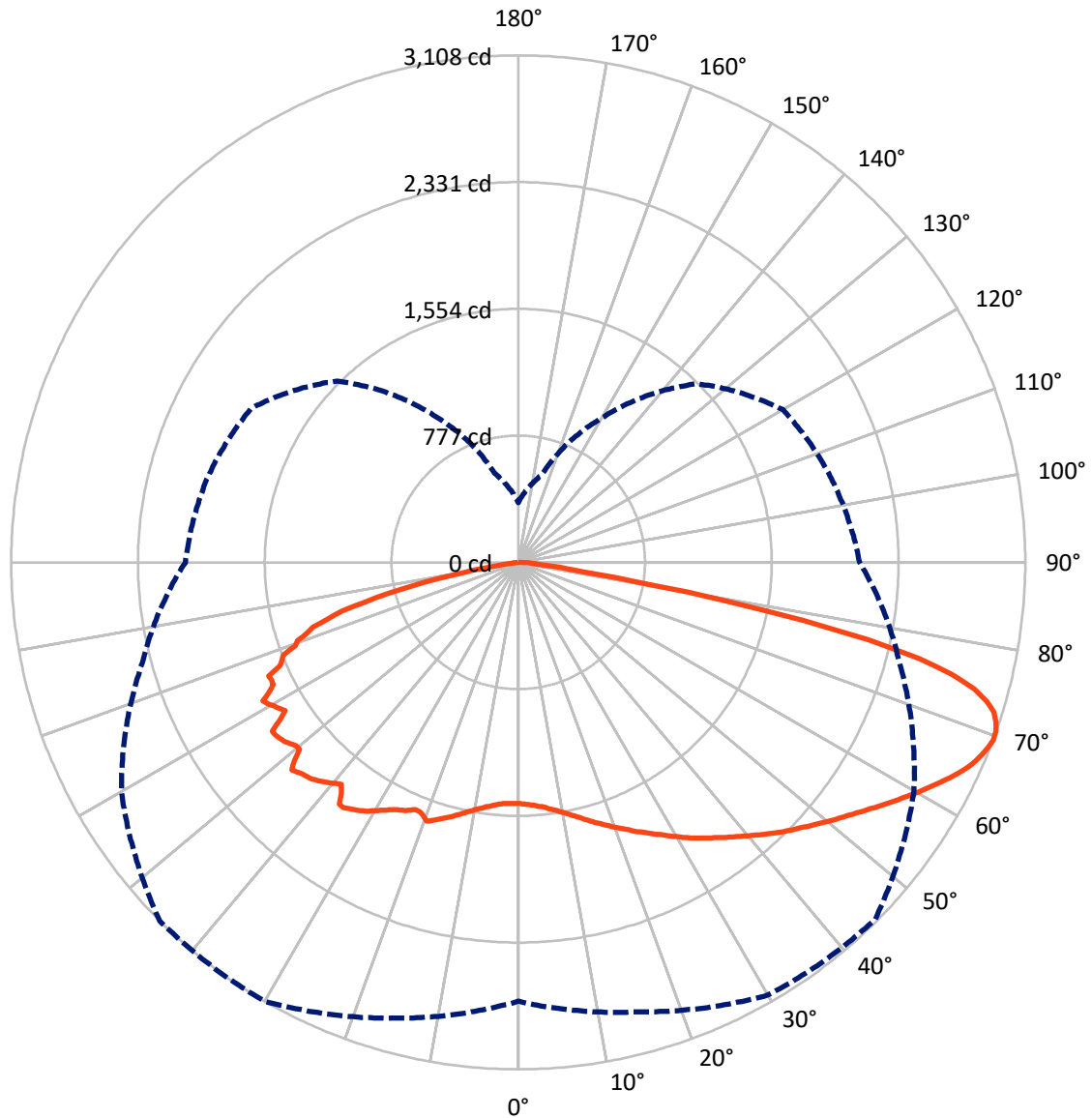
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.9 fc  
 Type IV - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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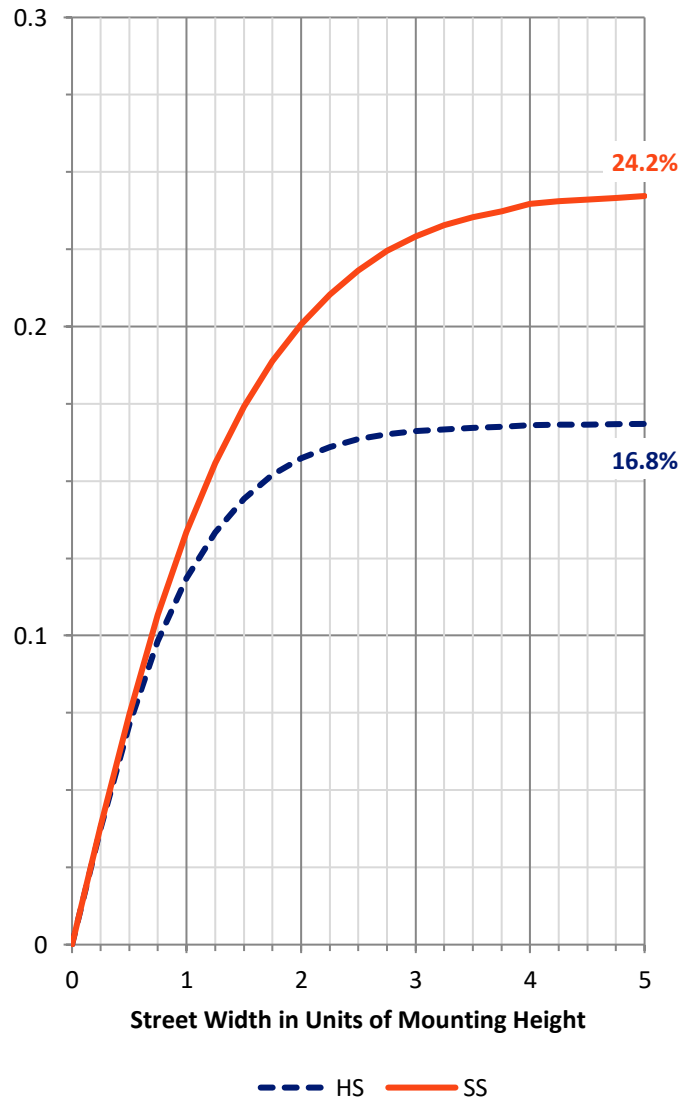
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4019.0	0.0	4019.0
	% Lamp	16.9	0.0	16.9
<b>Street Side</b>	Lumens	5766.9	0.0	5766.9
	% Lamp	24.2	0.0	24.2
<b>Total</b>	Lumens	9785.9	0.0	9785.9
	% Lamp	41.1	0.0	41.1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	144.5	1.5	0.6
10°-20°	459.9	4.7	1.9
20°-30°	819.8	8.4	3.4
30°-40°	1213.7	12.4	5.1
40°-50°	1619.4	16.5	6.8
50°-60°	1986.0	20.3	8.3
60°-70°	2163.4	22.1	9.1
70°-80°	1305.0	13.3	5.5
80°-90°	74.2	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°	9785.9	100.0	41.1
0°-180°	9785.9	100.0	41.1

**Coefficient of Utilization**



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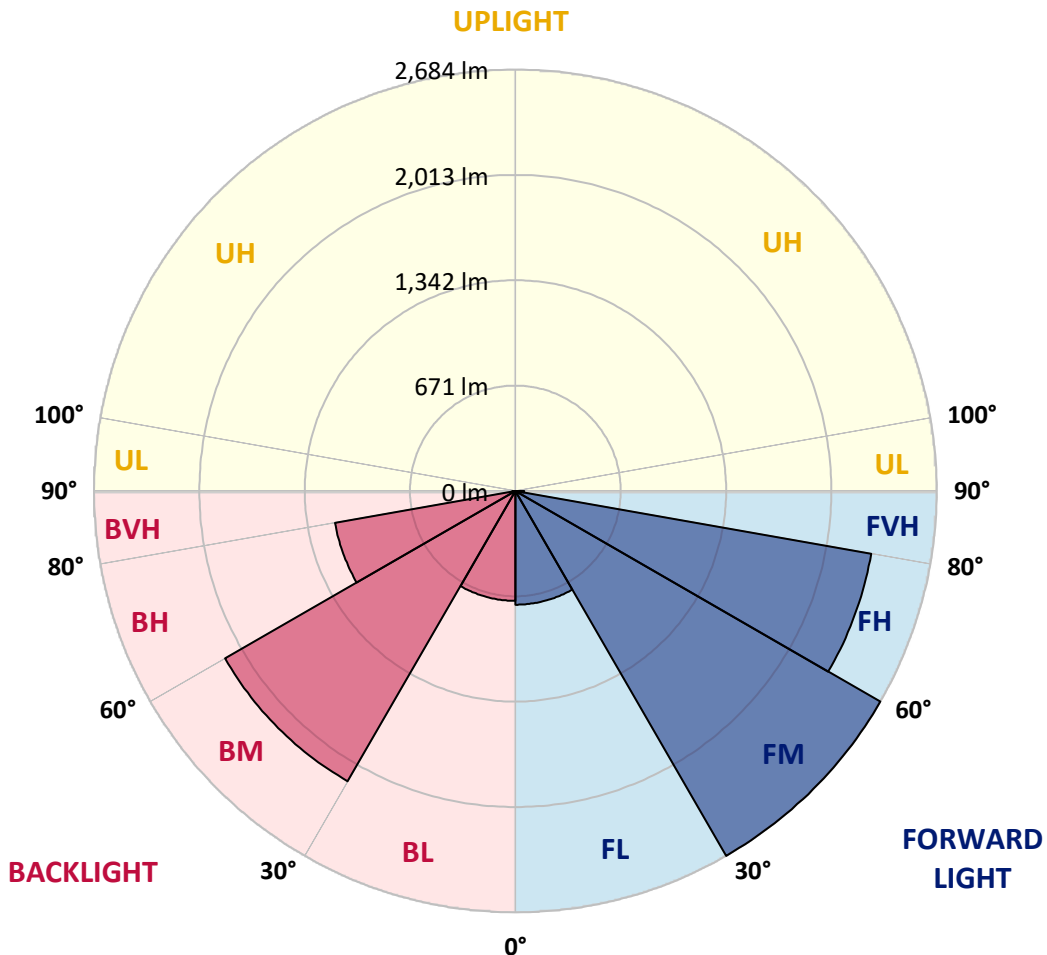
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	724.7	3.0			
FM (30°-60°)	2684.0	11.3			
FH (60°-80°)	2301.7	9.7			G2/5000
FVH (80°-90°)	56.4	0.2			G1/100
BL (0°-30°)	699.5	2.9	B2/1000		
BM (30°-60°)	2135.1	9.0	B2/2500		
BH (60°-80°)	1166.6	4.9	B3/2500		G3/2500
BVH (80°-90°)	17.8	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	14023.1	58.9			

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

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1479.7	1479.7	1479.7	1479.7	1479.7	1479.7	1479.7	1479.7	1479.7	1479.7	1479.7
1°	1481.8	1481.8	1481.7	1481.3	1480.9	1480.1	1479.1	1478.7	1478.3	1478.2	1478.2
2°	1485.7	1485.2	1484.9	1483.9	1482.9	1481.3	1479.9	1479.0	1478.3	1477.9	1478.2
3°	1490.8	1490.1	1489.1	1487.5	1486.4	1484.4	1482.5	1481.2	1479.9	1479.2	1479.3
4°	1497.5	1496.3	1494.9	1492.9	1491.2	1488.8	1486.4	1484.8	1483.0	1482.2	1482.1
5°	1505.1	1503.5	1502.0	1499.4	1497.0	1494.2	1491.4	1489.4	1487.7	1486.7	1487.6
6°	1513.5	1511.5	1510.1	1507.5	1504.3	1500.4	1497.3	1494.8	1493.0	1493.9	1495.2
7°	1522.1	1520.5	1519.2	1516.4	1512.9	1508.4	1504.6	1501.6	1499.5	1502.1	1504.0
8°	1531.9	1530.2	1528.9	1526.3	1522.4	1517.5	1513.6	1510.3	1508.6	1511.4	1514.0
9°	1542.9	1541.2	1539.4	1537.0	1533.1	1527.5	1523.0	1519.7	1519.6	1521.8	1524.7
10°	1554.8	1553.0	1551.6	1549.0	1545.3	1538.6	1533.7	1529.9	1531.3	1534.1	1536.3
11°	1567.5	1565.3	1564.6	1562.2	1558.1	1551.1	1545.4	1541.6	1543.9	1547.8	1549.3
12°	1580.2	1577.8	1577.9	1576.1	1571.3	1564.2	1557.5	1554.1	1557.2	1561.5	1562.8
13°	1593.2	1590.5	1591.8	1591.1	1585.6	1578.0	1570.4	1567.0	1571.8	1575.9	1577.1
14°	1606.6	1603.6	1605.5	1605.9	1600.9	1592.1	1583.6	1580.1	1586.1	1591.6	1591.5
15°	1620.7	1617.9	1620.4	1621.6	1616.1	1606.6	1597.9	1594.1	1601.1	1606.8	1605.8
16°	1634.7	1632.9	1635.4	1637.4	1631.8	1622.1	1612.6	1608.8	1617.0	1622.1	1620.4
17°	1650.0	1648.2	1651.0	1653.5	1648.4	1637.8	1627.6	1623.9	1633.4	1637.2	1616.3
18°	1666.2	1663.7	1667.3	1669.6	1665.2	1653.7	1641.5	1636.0	1649.7	1652.9	1589.8
19°	1682.7	1680.1	1684.0	1686.3	1682.4	1670.8	1651.2	1647.7	1661.3	1668.6	1576.5
20°	1700.1	1697.4	1700.9	1703.2	1699.8	1685.3	1664.5	1660.4	1673.2	1682.1	1589.8
21°	1718.9	1715.6	1718.4	1720.6	1718.1	1697.8	1680.4	1679.0	1686.2	1658.6	1604.1
22°	1738.3	1734.7	1736.9	1739.1	1737.2	1713.7	1698.7	1697.2	1703.8	1643.2	1619.1
23°	1758.8	1754.8	1755.6	1757.6	1757.1	1730.3	1718.0	1712.6	1720.1	1640.5	1634.9
24°	1780.2	1775.7	1775.1	1776.7	1773.0	1750.1	1734.7	1727.7	1732.3	1656.1	1651.3
25°	1802.0	1797.0	1795.1	1797.2	1789.0	1770.7	1750.4	1744.7	1747.1	1671.3	1667.6
26°	1825.0	1819.0	1815.6	1818.1	1808.2	1791.4	1769.4	1763.6	1763.1	1682.2	1684.9
27°	1848.8	1841.2	1837.0	1838.9	1825.1	1809.4	1787.4	1784.6	1781.6	1694.8	1701.8
28°	1873.3	1864.4	1858.9	1861.0	1844.5	1826.1	1809.4	1805.4	1791.4	1709.6	1718.7
29°	1898.7	1887.3	1881.3	1884.0	1865.5	1844.9	1832.3	1826.9	1780.1	1728.7	1735.8
30°	1924.7	1911.1	1904.9	1907.4	1887.2	1864.0	1856.4	1848.5	1781.1	1748.4	1750.1
31°	1950.8	1934.5	1928.5	1930.4	1909.4	1882.3	1881.1	1869.4	1775.9	1768.4	1757.8
32°	1976.7	1958.1	1952.6	1950.7	1931.6	1904.7	1905.2	1883.6	1790.6	1787.6	1695.0
33°	2003.0	1982.3	1976.9	1971.1	1951.4	1927.1	1929.8	1894.5	1805.2	1803.6	1648.4
34°	2029.6	2006.4	2002.0	1992.2	1970.3	1949.0	1950.3	1906.2	1820.6	1817.3	1655.3
35°	2057.0	2031.3	2027.5	2015.7	1990.4	1971.0	1964.7	1923.9	1837.6	1831.0	1672.6
36°	2084.6	2056.4	2053.1	2038.1	2012.6	1993.6	1980.9	1942.0	1856.5	1846.2	1687.2
37°	2112.0	2081.2	2079.5	2061.2	2034.5	2015.5	1998.5	1960.4	1873.7	1843.3	1699.3
38°	2139.6	2106.9	2105.9	2085.7	2056.1	2038.9	2019.7	1979.6	1885.4	1783.5	1709.8
39°	2166.7	2133.2	2131.5	2111.5	2078.6	2061.4	2042.6	1995.5	1899.3	1740.3	1725.0
40°	2194.3	2160.1	2158.0	2137.5	2103.1	2077.9	2065.8	2010.3	1920.0	1757.2	1742.6
41°	2220.7	2188.6	2185.3	2163.6	2128.7	2096.6	2087.6	2025.9	1941.1	1775.8	1759.9
42°	2248.4	2216.3	2212.5	2191.1	2154.4	2114.6	2108.9	2037.4	1962.6	1795.2	1775.4
43°	2274.7	2245.3	2240.6	2218.4	2181.5	2135.0	2126.2	2052.7	1983.9	1815.2	1724.4
44°	2300.7	2275.6	2268.5	2245.6	2207.6	2158.3	2140.5	2077.0	2005.5	1832.2	1659.0

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**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	2327.8	2306.0	2298.3	2271.0	2235.3	2184.5	2157.3	2101.9	2021.0	1843.3	1658.0
46°	2354.8	2338.1	2328.6	2297.4	2263.8	2212.0	2168.7	2127.9	2024.5	1853.5	1672.9
47°	2381.7	2371.1	2359.8	2324.4	2293.1	2240.0	2180.8	2149.6	2027.7	1868.6	1684.7
48°	2409.9	2404.8	2391.4	2351.9	2321.7	2267.2	2195.2	2158.0	1983.6	1882.4	1694.3
49°	2438.5	2438.7	2423.6	2381.5	2348.3	2295.9	2214.6	2162.9	1949.4	1833.1	1707.3
50°	2468.0	2473.6	2456.0	2412.4	2371.4	2324.3	2235.7	2165.0	1945.2	1763.8	1723.7
51°	2497.7	2508.9	2489.4	2443.9	2397.1	2349.1	2256.7	2161.0	1964.4	1766.0	1677.3
52°	2527.8	2544.4	2522.0	2475.8	2424.3	2372.2	2278.9	2176.9	1979.6	1785.0	1575.9
53°	2558.7	2579.2	2555.1	2507.4	2448.5	2396.3	2300.2	2197.0	1987.5	1803.2	1575.7
54°	2588.6	2613.2	2589.9	2541.6	2475.6	2416.3	2320.3	2216.9	1997.4	1815.4	1593.9
55°	2618.4	2645.4	2625.1	2576.9	2504.2	2429.6	2335.2	2229.5	2018.2	1826.6	1612.9
56°	2645.5	2676.8	2662.6	2613.9	2534.5	2446.6	2343.7	2234.0	2035.6	1828.7	1631.9
57°	2671.5	2706.6	2700.4	2653.8	2565.2	2463.7	2350.4	2242.1	2043.1	1752.2	1648.0
58°	2696.3	2734.3	2738.3	2693.4	2595.4	2481.6	2355.1	2249.7	2054.3	1693.8	1548.9
59°	2718.4	2760.3	2775.1	2732.8	2625.6	2497.1	2362.7	2246.8	2003.4	1714.3	1495.4
60°	2737.7	2783.5	2811.3	2774.6	2654.1	2510.5	2368.5	2232.3	1953.5	1736.8	1502.5
61°	2753.5	2804.3	2847.3	2816.1	2681.2	2522.5	2370.9	2230.0	1961.4	1760.6	1510.1
62°	2765.9	2821.8	2882.4	2858.7	2706.9	2530.1	2370.3	2227.5	1966.5	1781.6	1436.1
63°	2776.6	2837.3	2918.1	2901.5	2731.6	2532.9	2362.3	2208.7	1970.3	1721.6	1352.9
64°	2786.1	2849.9	2951.1	2944.1	2753.0	2532.1	2345.0	2193.6	1965.8	1677.4	1343.0
65°	2795.0	2860.6	2981.6	2983.8	2773.6	2527.1	2326.3	2165.1	1938.2	1675.0	1317.7
66°	2800.2	2870.5	3008.8	3018.9	2791.6	2513.5	2307.5	2133.7	1860.2	1680.7	1193.8
67°	2799.4	2876.6	3032.1	3050.0	2803.0	2495.2	2282.8	2081.2	1856.0	1591.8	1189.1
68°	2773.3	2873.9	3051.9	3075.7	2802.9	2472.1	2216.3	2035.9	1866.9	1566.2	1118.5
69°	2690.7	2851.8	3062.8	3094.4	2800.4	2421.5	2092.2	1986.7	1872.3	1547.6	1020.4
70°	2519.5	2786.3	3065.2	3104.9	2797.4	2329.5	1913.2	1905.4	1865.6	1459.7	921.1
71°	2250.5	2645.6	3053.8	3102.9	2772.1	2192.4	1729.8	1782.0	1798.1	1434.7	821.9
72°	1965.5	2416.2	3025.4	3084.2	2722.8	2017.2	1560.3	1627.7	1729.4	1363.4	723.1
73°	1664.7	2117.0	2962.1	3045.6	2640.0	1839.2	1410.6	1468.5	1652.8	1319.6	644.9
74°	1315.7	1790.9	2826.1	2972.9	2520.7	1674.8	1237.6	1324.3	1557.6	1210.8	536.9
75°	878.2	1436.6	2582.7	2848.5	2366.0	1490.8	941.4	1175.4	1425.0	1121.7	462.5
76°	478.8	1014.6	2263.9	2652.2	2184.0	1213.3	645.1	923.3	1299.7	972.6	397.1
77°	356.8	564.2	1923.2	2367.3	1960.4	799.7	353.2	671.2	1155.4	823.5	324.3
78°	239.0	413.9	1505.1	1955.0	1652.7	416.9	256.9	423.4	921.5	674.2	237.0
79°	121.1	269.7	978.7	1474.4	1221.7	301.0	160.7	300.4	687.7	501.1	167.8
80°	107.4	125.4	506.3	957.9	745.0	193.4	66.3	177.4	456.8	334.7	98.6
81°	95.6	109.4	376.3	486.8	373.7	85.7	56.7	56.3	320.8	233.3	30.4
82°	85.0	96.2	249.0	360.2	245.2	72.9	48.1	47.2	184.7	131.9	15.6
83°	75.3	84.3	121.7	239.1	119.1	61.6	40.3	39.2	50.4	33.6	12.7
84°	66.0	73.3	100.1	118.0	96.2	51.7	33.1	32.1	39.0	25.6	10.5
85°	57.1	63.2	81.1	97.9	76.0	43.0	26.5	26.0	30.4	21.3	8.4
86°	48.7	54.2	66.2	81.8	58.0	35.6	20.5	20.4	22.5	17.4	6.2
87°	40.7	45.7	53.1	63.9	45.0	28.1	15.1	15.3	16.6	13.6	4.9
88°	35.1	38.3	40.9	43.9	34.0	20.7	9.8	10.8	11.8	9.7	3.7
89°	29.6	30.9	33.7	34.4	23.0	13.4	4.5	6.4	7.1	5.9	2.7



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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: P1436722

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5-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: P1436722

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5-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: P1436722

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5-HSS)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1479.7	1479.7	1479.7	1479.7	1479.7	1479.7	1479.7	1479.7	1479.7	1479.7	1479.7
1°	1478.4	1478.3	1479.0	1479.3	1479.9	1480.5	1480.9	1480.8	1481.3	1481.5	1481.8
2°	1478.6	1478.2	1479.4	1480.2	1481.3	1482.3	1483.3	1483.7	1484.8	1485.4	1485.9
3°	1479.9	1479.7	1481.1	1482.5	1484.0	1485.4	1487.1	1487.9	1489.4	1490.4	1491.2
4°	1482.9	1483.7	1485.1	1486.3	1488.2	1490.3	1492.6	1493.9	1495.7	1496.7	1497.5
5°	1489.4	1490.1	1491.7	1492.8	1494.2	1496.6	1499.1	1500.8	1502.9	1504.4	1505.4
6°	1497.0	1497.9	1500.2	1501.4	1502.8	1504.0	1507.1	1509.0	1511.7	1513.5	1514.5
7°	1506.4	1507.2	1509.6	1511.1	1512.6	1513.4	1516.8	1519.2	1521.8	1524.0	1525.1
8°	1516.2	1517.1	1520.1	1522.6	1524.0	1524.7	1527.8	1530.0	1533.2	1535.7	1536.4
9°	1527.0	1528.1	1531.1	1534.5	1536.8	1537.6	1539.0	1541.4	1545.3	1548.5	1549.2
10°	1538.2	1539.9	1543.8	1548.0	1551.0	1551.3	1552.0	1554.2	1558.4	1562.2	1562.7
11°	1550.8	1552.3	1557.0	1563.0	1565.9	1566.3	1566.0	1568.9	1573.7	1577.6	1577.2
12°	1563.2	1565.0	1570.2	1578.2	1582.1	1582.2	1581.1	1584.1	1589.3	1593.5	1592.8
13°	1576.7	1578.1	1584.1	1593.7	1599.4	1599.3	1596.9	1600.2	1606.2	1610.1	1609.4
14°	1589.7	1590.4	1598.4	1609.2	1617.7	1616.8	1613.2	1616.8	1623.7	1628.3	1627.1
15°	1598.3	1573.9	1607.4	1625.6	1635.3	1635.5	1631.1	1633.7	1641.6	1647.3	1644.2
16°	1566.0	1544.3	1576.6	1641.3	1652.7	1654.7	1649.2	1651.7	1659.7	1666.2	1662.5
17°	1545.8	1546.2	1557.9	1640.2	1670.9	1674.3	1668.1	1670.4	1678.4	1685.2	1680.6
18°	1558.7	1559.8	1570.4	1614.3	1689.3	1693.3	1685.2	1689.3	1698.0	1704.1	1699.1
19°	1571.9	1573.7	1584.5	1603.3	1707.2	1707.9	1698.2	1703.3	1718.1	1724.3	1717.6
20°	1586.2	1588.6	1599.3	1617.7	1722.9	1722.6	1713.4	1718.6	1738.6	1744.7	1736.8
21°	1601.1	1603.6	1614.8	1633.9	1708.9	1738.4	1734.1	1735.7	1754.6	1765.9	1756.0
22°	1617.1	1619.7	1631.4	1650.5	1690.3	1758.9	1755.6	1756.5	1773.0	1786.6	1775.9
23°	1632.9	1636.4	1649.1	1667.8	1688.7	1780.1	1776.6	1779.1	1791.5	1807.9	1796.6
24°	1649.8	1653.7	1666.9	1685.8	1706.7	1797.3	1793.7	1801.1	1813.2	1829.1	1816.9
25°	1666.2	1669.8	1684.4	1704.0	1725.5	1812.7	1812.1	1820.3	1836.2	1847.2	1838.1
26°	1682.6	1687.0	1701.6	1723.5	1740.0	1828.9	1830.4	1839.4	1859.2	1865.2	1859.8
27°	1699.0	1703.7	1719.0	1742.6	1753.9	1847.8	1851.9	1860.5	1881.9	1885.5	1881.9
28°	1713.8	1691.3	1735.0	1761.7	1769.1	1860.9	1874.6	1882.5	1901.8	1905.3	1905.4
29°	1677.7	1624.6	1706.2	1780.6	1789.5	1858.0	1897.5	1907.3	1920.7	1927.9	1929.7
30°	1616.3	1604.2	1643.2	1795.6	1810.2	1855.0	1921.0	1932.5	1942.2	1950.8	1954.6
31°	1606.6	1621.9	1631.2	1806.1	1831.1	1856.4	1943.3	1957.8	1961.4	1973.8	1979.3
32°	1622.9	1640.7	1647.7	1753.9	1851.7	1866.1	1960.8	1983.7	1982.4	1997.2	2003.9
33°	1639.4	1660.1	1664.8	1708.5	1870.9	1882.2	1972.9	2009.0	2005.8	2019.9	2027.0
34°	1656.1	1678.9	1681.5	1707.9	1886.3	1899.5	1986.3	2034.4	2028.7	2041.5	2049.6
35°	1672.5	1699.4	1698.5	1726.1	1901.8	1916.7	2005.3	2052.1	2052.6	2063.1	2073.4
36°	1689.9	1718.6	1717.0	1743.8	1916.2	1934.7	2024.7	2070.3	2077.1	2086.0	2099.0
37°	1705.6	1737.7	1734.6	1756.8	1921.7	1953.9	2045.1	2088.2	2101.4	2110.3	2123.2
38°	1722.5	1753.9	1752.0	1768.3	1864.1	1966.8	2066.7	2111.3	2126.4	2133.1	2147.8
39°	1736.5	1673.6	1767.7	1782.3	1820.8	1980.7	2088.0	2133.4	2151.3	2157.8	2174.1
40°	1653.6	1608.2	1693.6	1800.8	1833.0	2001.1	2104.3	2155.5	2171.4	2184.6	2201.7
41°	1592.2	1618.8	1629.3	1819.3	1852.5	2023.2	2120.2	2177.2	2189.8	2212.4	2229.5
42°	1603.1	1633.1	1635.5	1836.1	1872.7	2046.8	2131.2	2199.3	2210.2	2239.5	2257.8
43°	1620.0	1647.9	1653.0	1798.3	1893.2	2070.4	2148.3	2220.4	2231.3	2267.2	2285.7
44°	1638.1	1662.0	1671.6	1728.0	1912.0	2093.9	2173.3	2237.8	2256.8	2294.7	2314.5

REPORT NUMBER: P1436722

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5-HSS)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1656.1	1675.6	1689.2	1717.6	1925.1	2112.0	2200.3	2255.1	2284.1	2323.2	2341.2
46°	1674.2	1685.6	1707.6	1733.4	1935.3	2117.3	2227.1	2268.7	2313.1	2353.0	2368.5
47°	1689.6	1598.4	1723.7	1744.7	1950.5	2126.3	2254.3	2278.6	2341.4	2382.4	2396.2
48°	1612.2	1504.2	1657.6	1754.4	1965.7	2099.6	2272.5	2293.3	2369.2	2411.7	2425.3
49°	1514.8	1511.1	1557.0	1767.5	1931.9	2064.5	2272.2	2313.6	2397.3	2439.0	2455.3
50°	1526.3	1524.1	1560.7	1783.4	1859.9	2040.6	2271.9	2335.5	2424.1	2463.4	2487.0
51°	1544.8	1537.4	1578.0	1749.7	1848.8	2057.4	2267.4	2355.9	2447.3	2486.8	2518.2
52°	1563.2	1550.6	1594.7	1646.6	1868.8	2070.5	2268.0	2376.5	2467.8	2512.4	2549.1
53°	1579.6	1559.8	1610.3	1636.2	1887.1	2078.0	2281.9	2395.3	2489.0	2535.3	2581.5
54°	1591.0	1430.6	1623.1	1653.5	1898.4	2086.4	2297.3	2412.8	2505.8	2561.5	2616.2
55°	1472.3	1367.9	1502.5	1672.0	1908.2	2102.6	2308.4	2423.9	2514.9	2590.0	2652.5
56°	1404.2	1377.1	1432.4	1690.1	1910.2	2118.6	2308.3	2426.1	2527.4	2618.6	2689.8
57°	1407.7	1382.6	1434.7	1705.6	1849.7	2122.2	2308.7	2425.2	2537.6	2645.7	2726.8
58°	1413.3	1363.4	1440.4	1610.3	1779.3	2127.5	2309.5	2424.6	2548.7	2671.1	2764.7
59°	1370.1	1182.9	1404.7	1547.9	1795.3	2089.2	2304.1	2426.9	2558.9	2696.0	2802.4
60°	1219.6	1164.2	1246.6	1553.8	1815.3	2026.0	2286.9	2427.9	2567.0	2720.5	2840.5
61°	1215.8	1163.4	1240.5	1562.3	1836.4	2021.7	2277.9	2424.3	2574.3	2745.1	2879.2
62°	1209.8	1035.8	1233.5	1494.7	1855.4	2023.3	2273.4	2420.4	2579.0	2767.1	2917.9
63°	1084.1	938.8	1100.2	1400.0	1798.0	2022.4	2252.8	2410.8	2578.5	2785.1	2957.1
64°	998.9	858.6	1014.1	1389.9	1737.3	2015.1	2234.9	2390.3	2574.6	2799.9	2994.5
65°	990.6	778.3	1006.1	1371.9	1727.1	1988.2	2200.4	2366.9	2560.6	2812.6	3027.6
66°	882.5	698.7	893.7	1234.1	1724.1	1909.0	2164.7	2341.1	2539.5	2823.2	3055.0
67°	774.4	673.8	782.0	1223.0	1630.7	1887.1	2112.6	2298.4	2514.5	2824.6	3077.4
68°	680.4	447.2	693.5	1154.4	1598.6	1892.3	2049.6	2202.3	2469.6	2818.7	3094.7
69°	553.7	365.1	565.6	1043.1	1571.4	1889.5	1975.4	2040.6	2386.0	2809.2	3107.8
70°	424.5	248.8	432.1	949.7	1477.5	1872.3	1861.4	1825.5	2254.4	2785.4	3106.0
71°	299.4	132.6	296.1	848.3	1443.0	1785.6	1704.1	1635.6	2069.1	2737.3	3087.7
72°	146.7	17.8	126.2	746.9	1366.6	1690.9	1525.6	1466.1	1872.1	2659.2	3056.1
73°	122.0	0.3	105.9	644.6	1300.8	1589.7	1355.8	1297.5	1680.9	2540.0	2995.6
74°	99.0	0.2	85.5	513.7	1180.1	1473.5	1199.3	1084.8	1493.5	2382.7	2900.3
75°	76.0	0.2	65.2	428.6	1068.4	1322.6	968.8	783.1	1259.7	2188.5	2748.2
76°	53.8	0.2	46.3	361.5	906.4	1170.7	738.4	458.2	920.3	1962.5	2527.2
77°	30.2	0.3	27.1	290.1	744.3	967.1	509.7	215.6	532.7	1701.1	2204.0
78°	21.5	0.3	19.4	211.3	582.2	763.5	360.7	165.1	389.0	1356.7	1780.2
79°	12.8	0.4	11.6	150.3	417.7	559.5	211.7	115.9	246.2	921.6	1302.6
80°	4.1	0.4	4.0	89.4	253.0	305.4	65.0	66.6	103.3	525.4	806.2
81°	3.5	0.5	3.4	29.8	149.1	218.5	53.3	55.8	82.7	383.9	403.3
82°	3.0	0.6	3.0	16.8	47.9	131.6	44.9	47.0	70.1	248.1	303.7
83°	2.7	0.7	2.6	13.1	31.8	46.3	37.3	39.2	59.3	112.2	209.8
84°	2.4	0.7	2.3	10.8	26.1	37.3	30.5	32.4	49.8	91.9	115.9
85°	2.1	0.8	2.1	8.5	21.8	28.6	24.7	25.5	41.3	72.1	97.2
86°	1.9	0.9	1.9	6.3	17.9	21.1	19.4	19.3	34.1	55.4	81.2
87°	1.8	1.0	1.7	4.7	13.4	15.9	14.4	13.4	27.0	43.0	62.7
88°	1.6	1.1	1.6	3.5	9.0	11.3	10.2	8.1	19.8	32.7	43.7
89°	1.5	1.2	1.5	2.5	4.5	6.7	5.9	3.7	12.9	22.5	34.2



REPORT NUMBER: P1436722

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5-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: P1436722

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5-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: P1436722

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5-HSS)

**CANDELA DISTRIBUTION (continued):**

180°	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1436722

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5-HSS)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
0°	1479.7	1479.7	1479.7
1°	1482.2	1482.4	1481.8
2°	1486.3	1486.6	1485.7
3°	1491.7	1492.1	1490.8
4°	1498.6	1498.7	1497.5
5°	1506.1	1506.2	1505.1
6°	1514.8	1514.9	1513.5
7°	1524.7	1524.0	1522.1
8°	1535.4	1534.2	1531.9
9°	1547.6	1545.5	1542.9
10°	1560.8	1558.0	1554.8
11°	1574.7	1571.3	1567.5
12°	1589.5	1585.0	1580.2
13°	1605.0	1598.5	1593.2
14°	1621.2	1612.7	1606.6
15°	1636.8	1627.6	1620.7
16°	1652.8	1642.9	1634.7
17°	1669.6	1658.6	1650.0
18°	1686.5	1675.1	1666.2
19°	1704.2	1691.8	1682.7
20°	1722.0	1709.1	1700.1
21°	1740.5	1727.5	1718.9
22°	1760.1	1746.5	1738.3
23°	1780.1	1766.5	1758.8
24°	1799.8	1786.6	1780.2
25°	1820.9	1808.1	1802.0
26°	1842.8	1830.2	1825.0
27°	1865.5	1852.8	1848.8
28°	1888.7	1875.3	1873.3
29°	1912.9	1898.7	1898.7
30°	1937.1	1922.7	1924.7
31°	1962.2	1947.1	1950.8
32°	1987.0	1971.5	1976.7
33°	2012.3	1996.7	2003.0
34°	2038.2	2021.4	2029.6
35°	2064.4	2046.2	2057.0
36°	2091.2	2071.0	2084.6
37°	2118.0	2096.9	2112.0
38°	2145.2	2123.2	2139.6
39°	2172.6	2150.0	2166.7
40°	2201.1	2177.8	2194.3
41°	2228.9	2206.5	2220.7
42°	2257.0	2235.8	2248.4
43°	2286.1	2265.1	2274.7
44°	2315.6	2295.6	2300.7

REPORT NUMBER: P1436722

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5-HSS)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
45°	2345.7	2328.0	2327.8
46°	2375.9	2360.1	2354.8
47°	2407.2	2393.5	2381.7
48°	2439.5	2427.6	2409.9
49°	2472.7	2463.7	2438.5
50°	2506.2	2499.1	2468.0
51°	2539.6	2535.4	2497.7
52°	2573.0	2571.6	2527.8
53°	2607.1	2608.1	2558.7
54°	2641.1	2643.4	2588.6
55°	2676.9	2678.0	2618.4
56°	2714.3	2710.8	2645.5
57°	2752.4	2741.1	2671.5
58°	2788.6	2768.8	2696.3
59°	2823.7	2794.5	2718.4
60°	2860.1	2816.9	2737.7
61°	2896.0	2836.4	2753.5
62°	2931.2	2853.6	2765.9
63°	2967.0	2868.9	2776.6
64°	3002.4	2883.2	2786.1
65°	3034.7	2895.7	2795.0
66°	3063.3	2907.4	2800.2
67°	3086.0	2914.8	2799.4
68°	3101.6	2912.8	2773.3
69°	3107.1	2892.7	2690.7
70°	3103.9	2835.5	2519.5
71°	3086.8	2707.9	2250.5
72°	3049.6	2483.5	1965.5
73°	2975.7	2183.6	1664.7
74°	2829.0	1844.7	1315.7
75°	2587.8	1485.6	878.2
76°	2268.5	1083.6	478.8
77°	1913.7	627.1	356.8
78°	1474.6	461.5	239.0
79°	957.7	298.4	121.1
80°	517.2	135.3	107.4
81°	378.1	113.9	95.6
82°	250.0	100.0	85.0
83°	121.9	87.4	75.3
84°	101.6	75.8	66.0
85°	82.7	65.3	57.1
86°	67.4	55.8	48.7
87°	54.1	47.0	40.7
88°	41.7	39.2	35.1
89°	34.2	31.4	29.6



REPORT NUMBER: P1436722

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5-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: P1436722

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5-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: P1436722

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5-HSS)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)