

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: P1436744

Luminaire Tested: XAS180-SFPM (4000K-72W-T4-HSS)

Issue Date: 3/25/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1436744  
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 (4000K-72W-T4-HSS)  
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.  
LUMEN OUTPUT - 40% (72W)  
OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

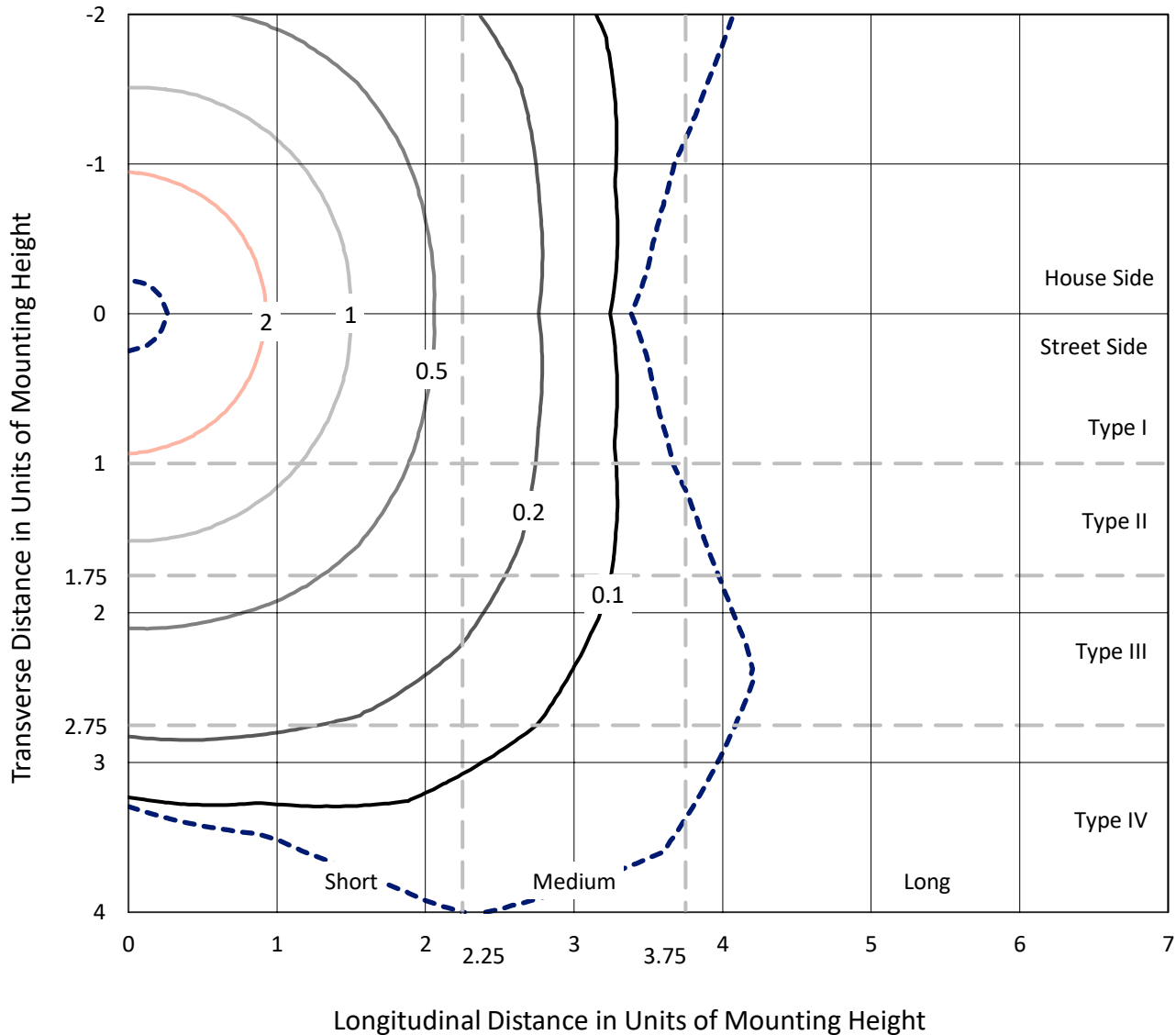
Lumens per Lamp: 28062 (1 lamp)  
Luminaire Lumens: 10631.5 lumens  
Efficiency: 37.9%  
Efficacy: 151.4 lumens/watt  
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G2

Input Watts (W): 70.2  
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: P1436744  
 CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

### Iso-Footcandle Lines of Horizontal Illumination

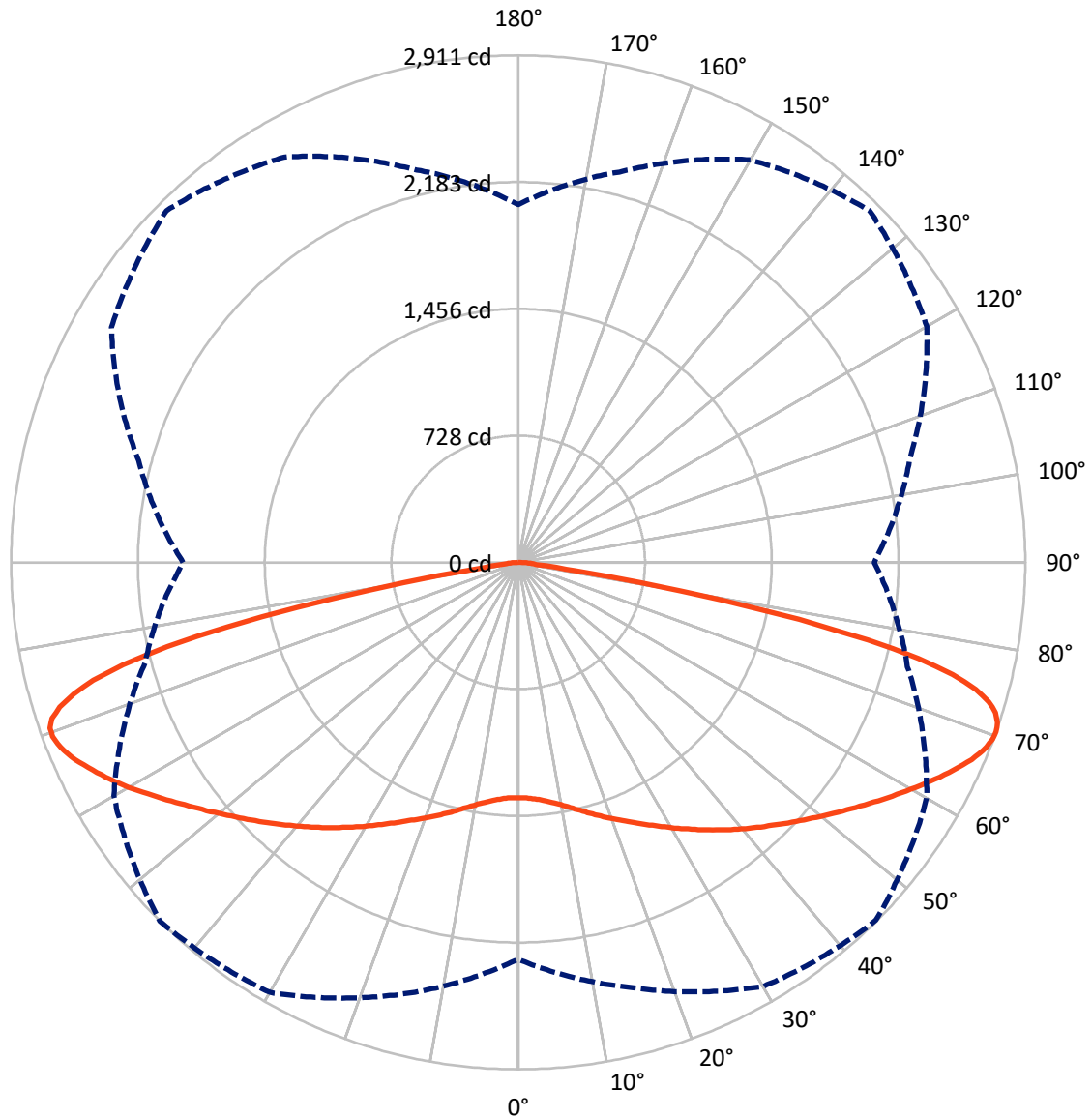
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.4 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: P1436744  
CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

### Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

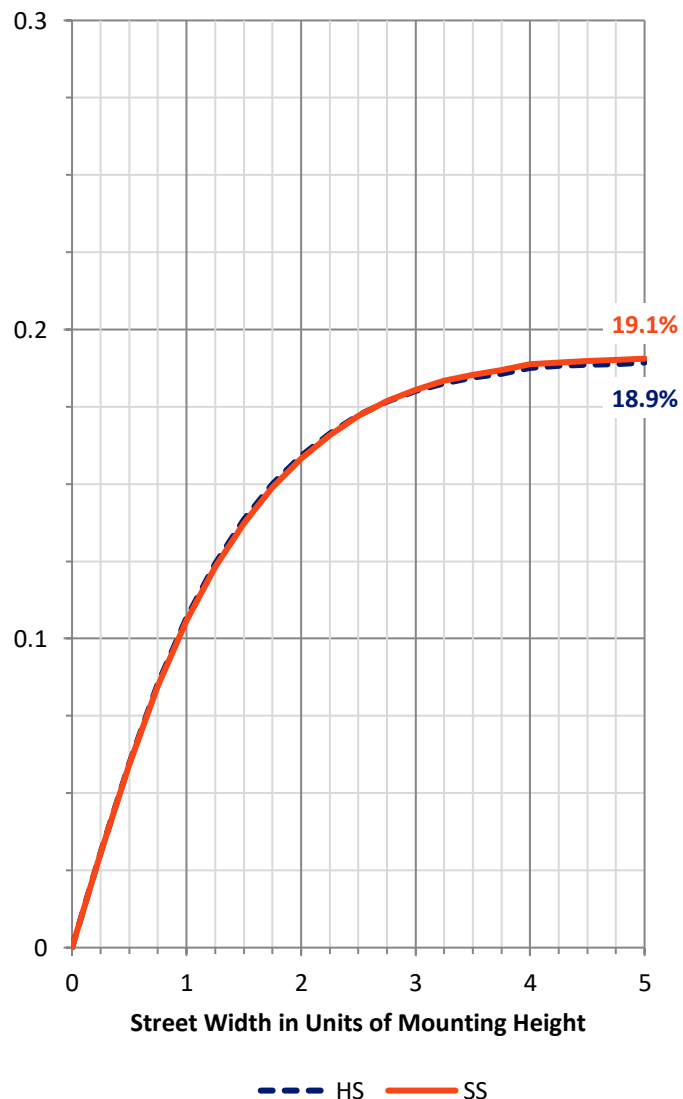
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5290.4	0.0	5290.4
	% Lamp	18.9	0.0	18.9
<b>Street Side</b>	Lumens	5341.1	0.0	5341.1
	% Lamp	19.0	0.0	19.0
<b>Total</b>	Lumens	10631.5	0.0	10631.5
	% Lamp	37.9	0.0	37.9

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	132.0	1.2	0.5
10°-20°	422.4	4.0	1.5
20°-30°	768.0	7.2	2.7
30°-40°	1176.3	11.1	4.2
40°-50°	1639.6	15.4	5.8
50°-60°	2145.9	20.2	7.6
60°-70°	2564.6	24.1	9.1
70°-80°	1699.1	16.0	6.1
80°-90°	83.5	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°	10631.5	100.0	37.9
0°-180°	10631.5	100.0	37.9

**Coefficient of Utilization**



REPORT NUMBER: P1436744

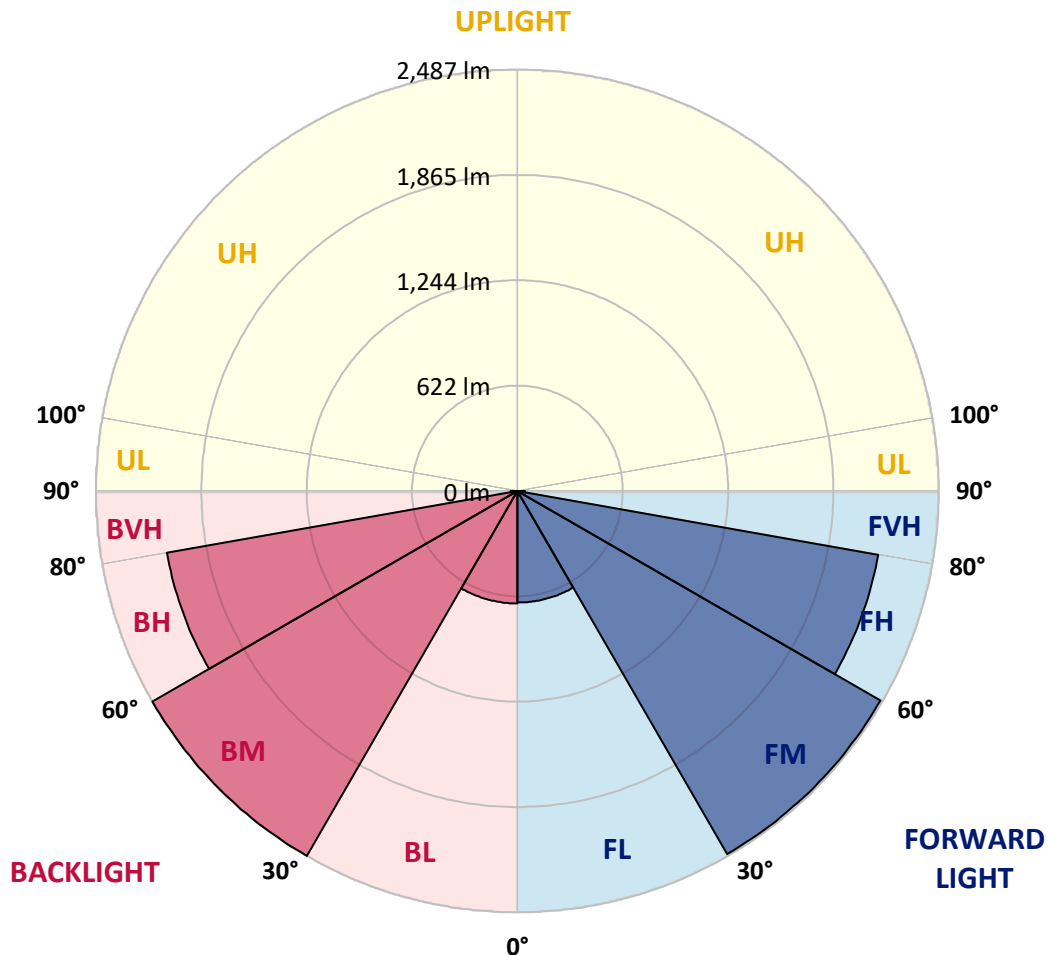
CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

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

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	658.6	2.3			
FM (30°-60°)	2474.6	8.8			
FH (60°-80°)	2163.1	7.7			G2/5000
FVH (80°-90°)	44.8	0.2			G1/100
BL (0°-30°)	663.8	2.4	B2/1000		
BM (30°-60°)	2487.3	8.9	B2/2500		
BH (60°-80°)	2100.7	7.5	B3/2500		G2/5000
BVH (80°-90°)	38.7	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	17430.5	62.1			

**BUG Rating: B3-U0-G2**

Type V Short





REPORT NUMBER: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

**CANDELA DISTRIBUTION (FULL):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4
1°	1352.1	1351.8	1352.1	1351.8	1351.8	1351.7	1350.7	1350.8	1350.8	1351.3	1351.6
2°	1354.2	1353.6	1353.5	1353.2	1352.7	1352.2	1351.3	1351.3	1351.6	1352.2	1353.0
3°	1357.7	1356.9	1356.3	1355.5	1355.2	1354.4	1353.6	1353.5	1353.7	1354.5	1355.6
4°	1362.8	1361.7	1360.7	1359.8	1358.9	1358.0	1357.0	1356.9	1357.3	1358.4	1359.8
5°	1368.5	1367.2	1366.0	1364.6	1363.3	1362.5	1361.2	1361.7	1362.6	1363.9	1365.3
6°	1375.0	1373.4	1372.6	1370.9	1368.9	1367.6	1366.4	1366.8	1368.2	1370.4	1372.3
7°	1382.2	1380.5	1380.0	1378.2	1376.1	1374.3	1372.7	1373.4	1374.6	1378.0	1380.6
8°	1390.5	1388.7	1387.9	1386.3	1384.1	1382.0	1381.0	1381.7	1383.2	1386.3	1389.9
9°	1399.6	1398.0	1396.8	1395.2	1393.3	1390.7	1389.2	1390.4	1393.0	1396.3	1399.9
10°	1409.6	1407.9	1406.9	1405.2	1403.5	1400.6	1399.2	1400.4	1403.7	1407.6	1410.8
11°	1420.5	1418.6	1418.1	1416.6	1414.4	1411.5	1409.7	1411.6	1415.2	1420.1	1422.9
12°	1431.6	1429.1	1429.5	1428.6	1426.1	1423.1	1420.9	1423.4	1427.6	1433.1	1436.3
13°	1442.4	1440.0	1441.5	1441.6	1438.5	1435.6	1432.5	1435.6	1441.1	1446.7	1450.6
14°	1454.3	1451.6	1453.5	1454.7	1451.7	1448.2	1444.7	1448.5	1454.3	1461.4	1465.1
15°	1466.0	1463.5	1466.0	1468.6	1465.3	1461.2	1457.7	1461.4	1468.6	1476.4	1479.5
16°	1478.8	1476.8	1478.9	1482.2	1479.7	1475.1	1471.7	1475.2	1483.4	1491.8	1494.9
17°	1492.5	1490.7	1493.1	1496.5	1494.7	1489.3	1485.7	1489.4	1499.1	1506.7	1510.2
18°	1506.7	1504.3	1507.3	1510.8	1509.5	1504.0	1500.4	1504.5	1514.6	1522.2	1525.0
19°	1521.4	1518.7	1522.2	1525.7	1525.1	1519.4	1515.8	1520.5	1530.6	1538.0	1539.8
20°	1537.3	1534.1	1537.3	1540.8	1540.9	1535.7	1532.1	1537.2	1547.2	1553.8	1554.7
21°	1553.5	1550.3	1552.6	1556.4	1557.3	1552.2	1548.5	1554.5	1563.9	1569.1	1570.2
22°	1570.7	1567.2	1568.8	1572.2	1574.8	1569.5	1566.3	1572.5	1581.8	1585.8	1586.6
23°	1588.8	1585.2	1585.5	1589.1	1592.5	1587.6	1584.3	1591.4	1599.7	1602.7	1603.9
24°	1607.9	1603.8	1602.8	1606.4	1610.5	1606.0	1603.4	1610.7	1618.5	1620.3	1621.7
25°	1627.9	1623.0	1620.9	1624.8	1629.5	1625.3	1623.5	1630.8	1637.1	1638.5	1639.3
26°	1648.6	1642.8	1639.8	1643.4	1648.5	1644.2	1643.9	1651.1	1656.2	1657.1	1657.4
27°	1670.0	1663.1	1658.7	1662.8	1667.4	1663.6	1664.6	1671.7	1675.6	1676.5	1676.1
28°	1692.3	1683.6	1678.2	1682.5	1686.8	1683.5	1686.1	1692.1	1695.8	1696.5	1695.0
29°	1715.1	1704.3	1698.5	1703.2	1706.2	1703.6	1708.6	1712.8	1715.9	1717.3	1714.7
30°	1738.4	1725.0	1719.3	1724.1	1726.1	1724.3	1731.7	1734.0	1736.5	1738.3	1734.6
31°	1762.0	1746.3	1740.8	1745.7	1746.0	1744.5	1755.1	1755.0	1757.3	1759.9	1755.5
32°	1785.5	1767.7	1762.3	1767.5	1766.2	1766.1	1778.0	1776.7	1778.5	1781.9	1776.5
33°	1809.0	1789.6	1784.9	1789.1	1787.5	1787.1	1801.6	1797.8	1800.2	1803.8	1798.1
34°	1832.6	1811.3	1807.0	1811.1	1808.7	1807.6	1824.6	1818.8	1822.0	1825.4	1819.8
35°	1857.6	1833.0	1829.7	1833.5	1830.4	1828.2	1848.4	1839.6	1844.1	1847.9	1842.7
36°	1882.2	1855.3	1853.0	1856.3	1852.8	1849.6	1872.0	1861.0	1867.2	1870.8	1866.1
37°	1906.9	1877.9	1876.8	1879.6	1875.4	1870.3	1895.4	1882.6	1890.1	1894.0	1889.9
38°	1931.9	1901.3	1900.6	1902.8	1897.9	1892.0	1919.7	1903.9	1912.5	1917.2	1913.7
39°	1956.5	1924.7	1924.2	1926.4	1920.4	1914.4	1944.2	1925.9	1935.8	1940.3	1936.9
40°	1980.8	1949.2	1947.7	1950.3	1943.4	1937.0	1968.6	1948.6	1959.2	1964.3	1961.1
41°	2004.7	1974.1	1972.1	1974.2	1967.1	1960.5	1993.0	1972.3	1982.2	1988.4	1984.3
42°	2029.7	1999.6	1997.1	1999.2	1991.0	1984.4	2016.4	1996.2	2006.1	2013.4	2009.7
43°	2054.0	2026.1	2022.4	2024.5	2015.8	2009.2	2039.1	2021.1	2030.3	2038.7	2034.9
44°	2077.7	2053.4	2047.9	2050.1	2040.5	2034.8	2061.0	2046.7	2054.4	2063.7	2060.5

REPORT NUMBER: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	2101.5	2080.6	2074.2	2075.4	2065.7	2061.5	2082.3	2072.6	2079.0	2089.5	2087.1
46°	2125.3	2109.4	2101.4	2101.9	2092.1	2089.0	2104.0	2099.7	2104.0	2115.7	2113.9
47°	2150.0	2139.8	2129.6	2129.5	2119.3	2117.4	2126.4	2126.8	2130.5	2143.1	2142.3
48°	2175.1	2169.8	2158.1	2157.7	2146.5	2146.3	2147.4	2155.1	2157.9	2170.0	2171.1
49°	2201.0	2201.4	2188.2	2186.8	2174.5	2175.5	2168.3	2183.0	2185.6	2198.0	2199.5
50°	2227.5	2232.2	2218.3	2216.1	2202.4	2204.9	2189.3	2210.8	2213.1	2227.5	2229.1
51°	2254.6	2264.1	2249.3	2246.0	2232.1	2233.9	2211.2	2238.0	2241.6	2257.3	2260.4
52°	2282.5	2296.6	2282.0	2278.0	2262.2	2262.5	2233.7	2266.2	2271.0	2288.8	2291.3
53°	2310.4	2328.5	2315.2	2309.6	2292.1	2290.1	2255.2	2293.8	2300.3	2319.5	2322.9
54°	2338.4	2360.4	2349.0	2343.4	2322.6	2317.0	2276.5	2320.2	2330.7	2351.1	2354.7
55°	2365.2	2389.5	2383.5	2376.7	2352.8	2342.3	2297.4	2344.2	2361.4	2385.0	2388.0
56°	2390.4	2418.4	2418.8	2411.9	2383.9	2366.1	2317.4	2368.2	2391.9	2419.2	2422.1
57°	2414.2	2445.6	2454.1	2448.7	2414.6	2388.1	2335.4	2389.8	2422.2	2454.1	2455.3
58°	2436.6	2471.2	2490.2	2486.0	2444.9	2407.8	2350.7	2409.1	2452.6	2490.3	2487.2
59°	2456.8	2495.1	2527.1	2523.8	2475.5	2424.1	2365.0	2427.0	2482.2	2527.1	2517.9
60°	2474.9	2516.6	2563.2	2563.2	2504.8	2437.9	2376.2	2442.1	2510.5	2564.3	2547.4
61°	2489.7	2536.1	2598.3	2602.4	2533.8	2450.2	2384.9	2455.3	2539.9	2601.0	2577.2
62°	2501.2	2552.4	2632.7	2642.7	2561.8	2459.1	2389.8	2464.9	2567.0	2637.2	2605.7
63°	2511.4	2567.1	2666.2	2683.3	2590.5	2463.7	2390.1	2472.4	2594.4	2670.7	2632.4
64°	2520.5	2579.1	2696.8	2723.5	2617.4	2464.7	2386.3	2476.9	2621.6	2703.0	2657.5
65°	2529.3	2589.2	2726.4	2763.0	2643.2	2464.3	2379.6	2477.7	2646.7	2736.1	2679.5
66°	2534.5	2598.9	2752.8	2800.9	2665.5	2459.3	2369.7	2474.1	2669.3	2769.2	2700.0
67°	2534.5	2605.6	2775.3	2836.1	2684.0	2450.5	2353.3	2466.3	2687.9	2799.8	2716.5
68°	2511.1	2604.3	2794.5	2867.0	2696.7	2435.9	2303.1	2450.3	2702.6	2824.1	2705.9
69°	2436.3	2584.6	2807.0	2890.2	2704.2	2396.0	2197.8	2410.5	2709.8	2843.4	2681.1
70°	2278.5	2527.7	2811.7	2904.9	2707.1	2313.4	2044.0	2329.5	2708.6	2854.4	2667.8
71°	2029.0	2399.4	2805.1	2911.0	2688.8	2185.2	1853.6	2202.4	2686.9	2852.6	2630.9
72°	1769.0	2189.7	2782.8	2902.4	2641.8	2021.4	1679.9	2035.7	2630.1	2823.2	2569.1
73°	1493.5	1916.4	2728.4	2872.1	2561.5	1845.5	1545.9	1855.9	2535.0	2759.5	2491.3
74°	1175.0	1618.2	2608.9	2807.5	2449.2	1685.6	1377.7	1690.4	2411.0	2662.5	2362.9
75°	778.0	1293.3	2390.3	2692.6	2301.6	1507.6	1052.7	1515.6	2253.2	2533.2	2171.6
76°	402.3	907.6	2095.2	2507.9	2127.1	1240.3	727.7	1260.6	2079.3	2342.3	1910.5
77°	291.1	488.3	1775.5	2237.8	1912.7	834.7	403.1	912.9	1872.1	2072.7	1586.9
78°	186.0	351.0	1387.7	1841.4	1614.6	432.7	173.6	565.2	1585.1	1714.1	1199.0
79°	81.0	218.6	900.2	1403.2	1198.0	312.8	136.7	220.0	1182.4	1297.1	811.1
80°	67.3	86.1	459.3	913.7	725.4	196.2	99.9	169.9	779.8	877.5	424.6
81°	57.6	70.9	332.2	462.4	356.3	79.5	63.8	119.8	380.9	462.2	195.1
82°	49.0	59.9	210.2	332.5	262.7	67.6	54.5	69.8	169.6	186.9	148.8
83°	41.1	50.0	88.2	211.4	171.9	57.3	46.1	58.9	133.3	145.9	102.6
84°	34.0	41.0	69.1	90.4	81.2	47.7	38.2	48.8	96.9	104.9	56.7
85°	26.8	33.6	52.8	74.5	61.7	39.0	30.8	39.7	61.0	64.0	41.0
86°	19.7	26.1	39.6	59.9	45.3	31.3	23.8	31.5	43.7	50.2	27.5
87°	13.3	18.7	28.8	44.0	33.3	23.6	17.0	23.9	31.6	35.6	17.1
88°	7.6	12.1	18.1	35.3	21.4	16.0	11.8	17.0	21.8	22.2	12.1
89°	3.1	5.2	7.3	26.8	9.5	8.6	6.7	11.7	15.0	15.3	7.2



REPORT NUMBER: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-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: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-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: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-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: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4
1°	1351.8	1352.1	1352.4	1352.8	1353.0	1353.2	1353.4	1352.5	1352.3	1352.2	1352.4
2°	1353.5	1354.2	1354.4	1355.2	1355.7	1355.8	1356.0	1355.2	1355.3	1354.9	1355.0
3°	1356.3	1357.5	1358.3	1359.0	1359.7	1360.0	1360.5	1359.4	1359.4	1359.1	1359.3
4°	1361.0	1362.4	1363.3	1364.2	1365.0	1365.4	1365.9	1365.0	1364.8	1364.5	1364.3
5°	1366.8	1368.6	1369.7	1371.0	1371.6	1372.1	1372.2	1371.3	1371.1	1370.8	1370.6
6°	1374.2	1376.0	1377.6	1379.0	1379.7	1379.7	1379.7	1378.6	1378.6	1378.4	1378.2
7°	1382.9	1384.5	1386.6	1388.2	1388.8	1389.2	1389.6	1388.1	1387.9	1387.3	1387.1
8°	1392.2	1394.3	1396.5	1398.5	1399.4	1400.2	1399.9	1398.1	1397.7	1397.2	1396.5
9°	1402.5	1404.8	1407.4	1410.1	1411.6	1411.9	1411.0	1408.4	1408.5	1408.3	1407.6
10°	1413.8	1416.5	1419.6	1422.8	1424.6	1424.6	1423.1	1420.5	1420.4	1420.7	1419.1
11°	1426.3	1429.3	1432.9	1436.8	1438.8	1438.5	1436.6	1433.9	1433.8	1434.2	1432.2
12°	1439.3	1442.4	1446.8	1451.5	1453.9	1453.3	1451.0	1447.8	1448.2	1448.1	1445.9
13°	1452.6	1455.7	1460.6	1467.3	1470.2	1469.3	1465.9	1462.7	1463.2	1463.2	1460.4
14°	1466.7	1469.5	1475.3	1483.0	1487.0	1485.8	1482.0	1478.1	1478.9	1479.3	1475.7
15°	1480.8	1483.4	1490.1	1499.2	1504.5	1503.1	1498.4	1494.1	1495.3	1496.2	1491.2
16°	1495.3	1497.9	1505.1	1515.4	1522.2	1521.6	1515.5	1510.6	1512.0	1513.0	1507.1
17°	1509.9	1512.4	1520.4	1531.7	1540.2	1539.5	1533.6	1528.1	1529.2	1530.3	1523.6
18°	1525.0	1527.4	1536.1	1547.8	1557.8	1558.3	1551.8	1545.6	1547.4	1548.0	1540.3
19°	1540.2	1543.4	1551.6	1564.2	1576.0	1576.8	1570.1	1563.8	1565.7	1565.9	1556.5
20°	1555.7	1559.5	1568.0	1581.8	1593.8	1596.1	1589.3	1582.7	1584.8	1584.4	1573.5
21°	1572.1	1576.1	1585.0	1599.1	1612.0	1615.8	1609.5	1602.3	1603.9	1603.3	1590.4
22°	1589.2	1593.4	1602.7	1617.3	1631.3	1635.9	1630.1	1622.2	1624.2	1622.5	1608.7
23°	1606.1	1611.2	1621.5	1636.5	1650.6	1656.8	1650.3	1643.1	1645.2	1641.8	1627.4
24°	1624.5	1630.1	1640.5	1655.8	1670.8	1677.4	1671.3	1664.3	1666.1	1661.3	1645.7
25°	1642.6	1649.2	1659.9	1675.3	1691.2	1698.1	1693.2	1686.1	1687.1	1681.5	1664.6
26°	1661.7	1669.8	1680.1	1695.8	1712.0	1719.0	1714.8	1708.9	1708.1	1701.5	1684.8
27°	1680.9	1690.3	1700.2	1716.1	1732.6	1739.7	1736.4	1731.6	1729.3	1721.7	1704.7
28°	1700.4	1712.9	1720.8	1737.1	1754.9	1761.5	1758.6	1755.6	1751.0	1742.6	1725.8
29°	1720.5	1735.3	1742.0	1758.8	1776.6	1782.9	1781.1	1779.4	1772.7	1764.1	1747.9
30°	1741.3	1759.0	1763.6	1780.2	1798.8	1804.6	1803.3	1803.3	1794.2	1785.1	1770.3
31°	1762.7	1782.8	1785.5	1801.7	1820.0	1826.4	1825.0	1827.9	1815.9	1806.3	1792.7
32°	1784.1	1806.9	1807.5	1823.4	1842.5	1849.0	1847.5	1852.1	1837.0	1827.5	1815.3
33°	1806.1	1831.4	1829.5	1846.2	1865.0	1871.9	1869.9	1876.6	1858.9	1850.0	1838.8
34°	1828.0	1855.8	1851.2	1869.3	1888.2	1894.5	1892.5	1901.4	1880.6	1872.4	1862.3
35°	1849.5	1881.3	1873.9	1892.8	1911.4	1917.6	1914.7	1926.2	1903.0	1895.7	1887.0
36°	1871.7	1906.9	1896.8	1916.5	1934.4	1940.0	1937.3	1951.4	1925.3	1919.1	1911.3
37°	1893.5	1932.4	1920.1	1940.5	1957.8	1962.8	1960.7	1976.7	1948.3	1942.9	1935.6
38°	1916.4	1957.7	1943.9	1964.7	1981.7	1986.4	1983.9	2001.9	1971.5	1966.9	1960.5
39°	1939.8	1983.2	1968.0	1989.5	2006.3	2009.7	2008.1	2026.7	1994.9	1991.4	1984.9
40°	1964.3	2007.1	1993.1	2014.8	2030.8	2034.0	2032.2	2050.5	2018.8	2016.3	2009.9
41°	1989.8	2031.1	2018.6	2040.2	2056.3	2058.0	2056.4	2073.5	2043.5	2041.5	2034.9
42°	2014.9	2054.5	2045.2	2065.3	2081.4	2082.9	2081.3	2096.4	2069.3	2067.3	2061.0
43°	2041.0	2077.6	2071.9	2090.9	2107.6	2109.2	2107.6	2119.5	2096.0	2092.7	2086.3
44°	2067.9	2100.8	2099.3	2117.3	2134.2	2135.3	2134.0	2143.6	2123.3	2118.5	2112.8

REPORT NUMBER: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2095.4	2124.4	2127.1	2144.9	2161.6	2162.0	2162.1	2166.7	2151.2	2145.1	2139.5
46°	2123.9	2147.4	2156.2	2171.9	2189.3	2188.5	2190.0	2187.8	2180.5	2172.2	2166.8
47°	2153.8	2169.9	2185.7	2199.2	2217.3	2215.2	2217.9	2208.8	2208.4	2199.6	2195.3
48°	2184.1	2193.5	2216.1	2227.5	2245.6	2242.6	2245.3	2230.2	2236.7	2227.1	2224.4
49°	2214.6	2218.9	2247.5	2255.9	2275.0	2270.2	2272.5	2252.2	2264.5	2255.0	2253.6
50°	2246.6	2243.8	2279.3	2285.9	2304.2	2298.2	2299.1	2274.4	2292.0	2284.0	2283.5
51°	2280.3	2269.6	2311.0	2315.9	2334.4	2325.8	2325.6	2294.5	2318.5	2312.9	2314.1
52°	2312.4	2293.9	2342.0	2346.0	2365.2	2353.5	2350.8	2314.9	2344.4	2341.7	2345.4
53°	2341.2	2314.1	2370.7	2377.3	2396.7	2381.2	2374.3	2333.9	2367.6	2369.7	2377.0
54°	2366.2	2329.1	2396.8	2409.0	2428.8	2409.7	2396.0	2350.9	2389.7	2399.5	2410.2
55°	2388.9	2344.5	2419.3	2441.0	2461.5	2437.3	2416.4	2367.0	2409.8	2427.9	2444.6
56°	2412.1	2361.9	2441.3	2474.5	2494.8	2464.1	2434.6	2381.7	2428.0	2456.0	2480.1
57°	2434.1	2380.1	2463.0	2507.1	2528.1	2491.2	2450.6	2393.8	2443.4	2483.1	2514.3
58°	2454.7	2392.9	2483.9	2540.6	2562.0	2517.9	2464.2	2405.6	2456.2	2510.2	2550.2
59°	2470.6	2401.9	2499.3	2572.2	2597.4	2543.2	2475.7	2415.5	2466.8	2536.2	2585.9
60°	2483.6	2412.9	2512.3	2601.9	2632.2	2567.8	2486.1	2423.0	2475.8	2562.1	2622.3
61°	2496.2	2423.9	2524.8	2632.1	2667.4	2592.4	2494.4	2426.1	2484.4	2587.1	2659.0
62°	2508.2	2432.8	2536.4	2660.8	2699.5	2617.7	2499.9	2426.9	2489.4	2611.1	2696.2
63°	2519.0	2440.1	2547.3	2687.2	2728.6	2640.5	2502.2	2426.1	2490.7	2633.3	2733.0
64°	2528.7	2441.5	2556.5	2711.3	2756.1	2662.5	2503.4	2420.1	2489.2	2653.6	2769.9
65°	2527.3	2418.6	2553.0	2732.7	2782.9	2681.6	2499.7	2409.4	2483.6	2670.8	2804.7
66°	2496.2	2398.3	2518.7	2749.3	2808.5	2696.9	2493.2	2394.2	2475.0	2685.4	2837.8
67°	2476.2	2385.8	2497.4	2758.7	2828.4	2709.6	2480.4	2357.2	2459.8	2696.0	2866.0
68°	2464.2	2345.3	2479.0	2739.9	2844.0	2717.9	2448.9	2269.2	2423.9	2702.1	2889.5
69°	2415.8	2238.9	2425.6	2708.2	2854.3	2715.4	2380.4	2120.3	2346.8	2698.2	2905.8
70°	2324.8	2053.2	2337.2	2687.3	2855.8	2697.4	2256.0	1923.8	2216.9	2681.1	2911.1
71°	2186.0	1786.1	2197.7	2641.6	2842.0	2652.4	2085.7	1727.4	2039.3	2634.5	2901.2
72°	1973.8	1544.1	1981.9	2575.6	2798.5	2568.7	1892.6	1563.3	1845.5	2557.1	2873.9
73°	1714.4	1296.7	1719.0	2485.4	2719.4	2442.5	1705.8	1403.9	1661.2	2438.9	2818.1
74°	1445.6	971.9	1451.1	2346.7	2606.0	2288.4	1528.4	1186.3	1481.7	2286.6	2726.2
75°	1100.3	647.1	1107.1	2136.8	2454.7	2101.4	1306.6	846.1	1249.5	2099.0	2577.6
76°	755.0	327.3	763.2	1857.4	2231.8	1897.6	960.0	479.6	904.6	1883.2	2364.0
77°	412.7	240.1	422.2	1533.2	1928.1	1651.5	613.4	344.3	505.8	1623.3	2057.0
78°	174.1	152.8	182.6	1147.9	1532.7	1308.3	271.7	213.7	366.5	1274.6	1646.2
79°	135.7	67.6	141.6	762.6	1118.9	950.2	126.0	83.1	227.4	845.0	1182.1
80°	97.3	55.7	100.7	380.3	705.1	592.1	105.3	69.5	88.2	463.8	715.7
81°	59.0	46.4	60.3	170.9	298.1	234.8	84.5	59.4	72.6	335.2	337.1
82°	48.2	38.1	49.2	132.4	128.4	124.1	63.9	50.5	61.6	214.4	217.8
83°	38.4	30.2	39.4	94.0	106.1	100.8	53.8	42.3	51.8	93.5	105.6
84°	29.7	23.4	30.3	55.8	83.7	77.5	44.8	35.1	42.8	72.3	85.2
85°	21.6	16.7	22.0	39.7	61.4	54.1	36.2	27.9	35.1	54.1	70.7
86°	15.3	11.5	15.5	26.2	47.8	38.9	28.4	20.8	27.5	39.5	56.6
87°	9.0	6.3	9.0	18.9	33.6	28.1	21.2	14.2	19.9	28.6	39.9
88°	2.7	1.3	2.4	11.6	22.9	19.3	14.6	8.3	13.3	17.7	32.0
89°	2.0	1.1	1.8	4.3	12.3	10.6	8.0	3.3	6.0	6.9	24.3



REPORT NUMBER: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-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: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-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: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-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: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
0°	1351.4	1351.4	1351.4
1°	1352.4	1352.1	1352.1
2°	1354.9	1354.6	1354.2
3°	1358.9	1358.5	1357.7
4°	1364.2	1363.5	1362.8
5°	1370.2	1369.4	1368.5
6°	1377.4	1376.5	1375.0
7°	1385.2	1384.1	1382.2
8°	1394.3	1392.4	1390.5
9°	1404.6	1402.0	1399.6
10°	1415.9	1412.6	1409.6
11°	1428.0	1424.1	1420.5
12°	1440.9	1435.9	1431.6
13°	1454.7	1447.8	1442.4
14°	1468.3	1460.1	1454.3
15°	1482.0	1472.8	1466.0
16°	1496.6	1486.1	1478.8
17°	1511.2	1500.4	1492.5
18°	1526.6	1515.0	1506.7
19°	1542.3	1529.8	1521.4
20°	1557.7	1544.9	1537.3
21°	1574.1	1561.2	1553.5
22°	1591.2	1578.2	1570.7
23°	1609.1	1595.8	1588.8
24°	1627.5	1614.1	1607.9
25°	1645.9	1633.4	1627.9
26°	1665.9	1653.1	1648.6
27°	1686.4	1673.3	1670.0
28°	1707.0	1693.7	1692.3
29°	1728.8	1714.7	1715.1
30°	1751.2	1735.9	1738.4
31°	1773.5	1758.2	1762.0
32°	1796.0	1780.4	1785.5
33°	1818.8	1803.0	1809.0
34°	1841.6	1824.8	1832.6
35°	1865.3	1847.2	1857.6
36°	1890.0	1869.5	1882.2
37°	1913.9	1892.9	1906.9
38°	1938.8	1916.8	1931.9
39°	1963.1	1940.6	1956.5
40°	1988.7	1965.7	1980.8
41°	2014.0	1991.1	2004.7
42°	2040.1	2017.8	2029.7
43°	2066.4	2045.0	2054.0
44°	2092.9	2072.0	2077.7

REPORT NUMBER: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
45°	2120.0	2101.2	2101.5
46°	2147.8	2130.0	2125.3
47°	2176.1	2160.6	2150.0
48°	2205.5	2191.7	2175.1
49°	2235.5	2224.2	2201.0
50°	2266.5	2256.6	2227.5
51°	2298.1	2290.1	2254.6
52°	2330.7	2322.9	2282.5
53°	2364.6	2355.9	2310.4
54°	2397.6	2388.2	2338.4
55°	2432.3	2420.3	2365.2
56°	2467.9	2450.1	2390.4
57°	2502.8	2477.6	2414.2
58°	2539.0	2502.8	2436.6
59°	2574.1	2526.2	2456.8
60°	2609.2	2547.4	2474.9
61°	2644.3	2565.5	2489.7
62°	2678.5	2581.7	2501.2
63°	2711.4	2595.4	2511.4
64°	2744.3	2608.5	2520.5
65°	2774.5	2620.2	2529.3
66°	2802.7	2631.4	2534.5
67°	2825.5	2638.6	2534.5
68°	2843.0	2637.7	2511.1
69°	2851.5	2619.4	2436.3
70°	2851.3	2566.1	2278.5
71°	2838.0	2449.1	2029.0
72°	2805.0	2240.0	1769.0
73°	2735.5	1963.1	1493.5
74°	2598.0	1651.4	1175.0
75°	2371.0	1325.0	778.0
76°	2079.3	949.4	402.3
77°	1743.0	526.3	291.1
78°	1326.5	379.5	186.0
79°	838.3	233.7	81.0
80°	431.1	87.8	67.3
81°	309.3	73.9	57.6
82°	197.9	62.4	49.0
83°	86.5	51.9	41.1
84°	68.4	42.6	34.0
85°	51.8	34.8	26.8
86°	38.9	27.0	19.7
87°	28.0	19.1	13.3
88°	17.2	12.2	7.6
89°	6.3	5.0	3.1



REPORT NUMBER: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-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: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-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: P1436744

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)