

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: P1436720

Luminaire Tested: XAS180-SFPM (3000K-72W-T4-HSS)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436720
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-T4-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 40% (72W)
OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

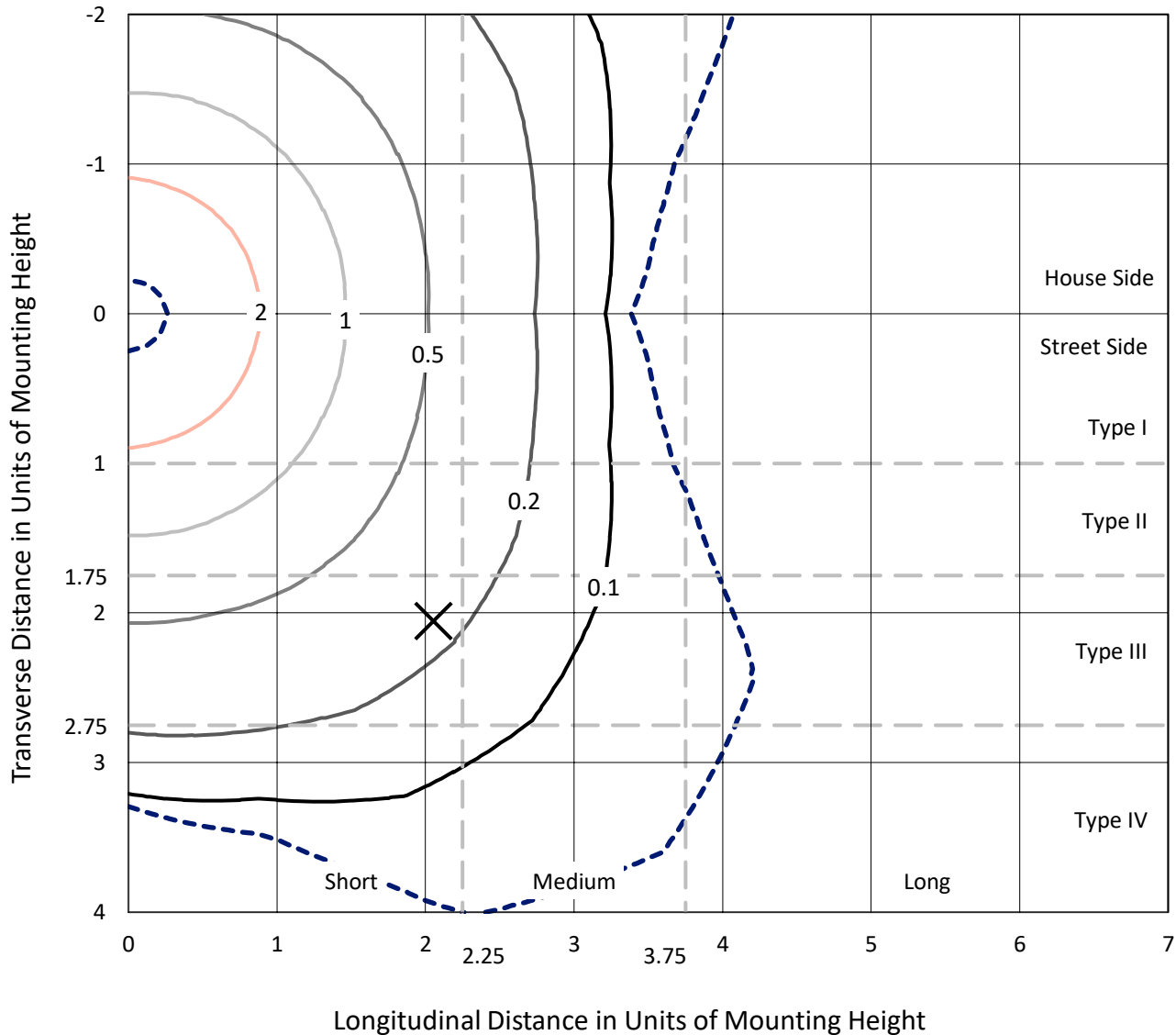
Lumens per Lamp: 28062 (1 lamp)
Luminaire Lumens: 10170.8 lumens
Efficiency: 36.2%
Efficacy: 141.7 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G2

Input Watts (W): 71.8
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: P1436720
 CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

Iso-Footcandle Lines of Horizontal Illumination

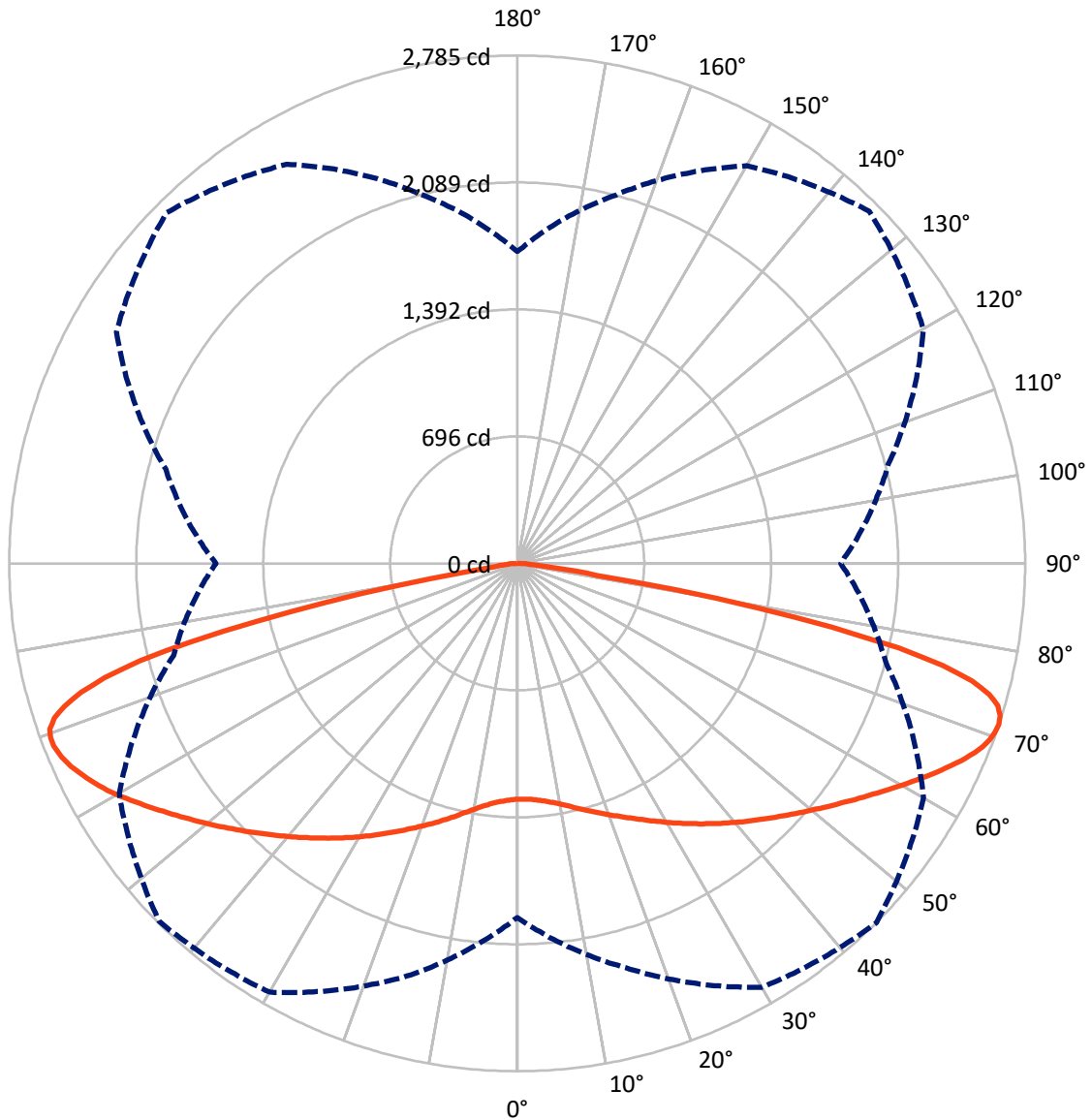
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.2 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P1436720
CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

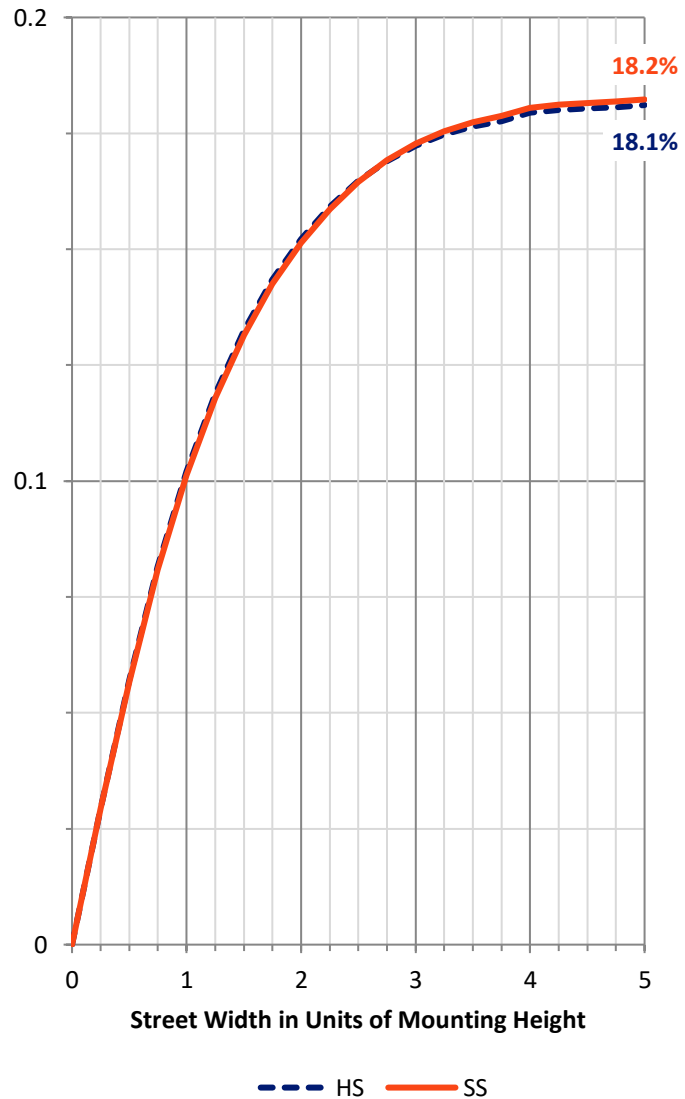
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5061.1	0.0	5061.1
	% Lamp	18.0	0.0	18.0
Street Side	Lumens	5109.6	0.0	5109.6
	% Lamp	18.2	0.0	18.2
Total	Lumens	10170.8	0.0	10170.8
	% Lamp	36.2	0.0	36.2

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	126.3	1.2	0.4
10°-20°	404.1	4.0	1.4
20°-30°	734.7	7.2	2.6
30°-40°	1125.4	11.1	4.0
40°-50°	1568.5	15.4	5.6
50°-60°	2052.9	20.2	7.3
60°-70°	2453.4	24.1	8.7
70°-80°	1625.5	16.0	5.8
80°-90°	79.9	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°	10170.8	100.0	36.2
0°-180°	10170.8	100.0	36.2

Coefficient of Utilization



REPORT NUMBER: P1436720

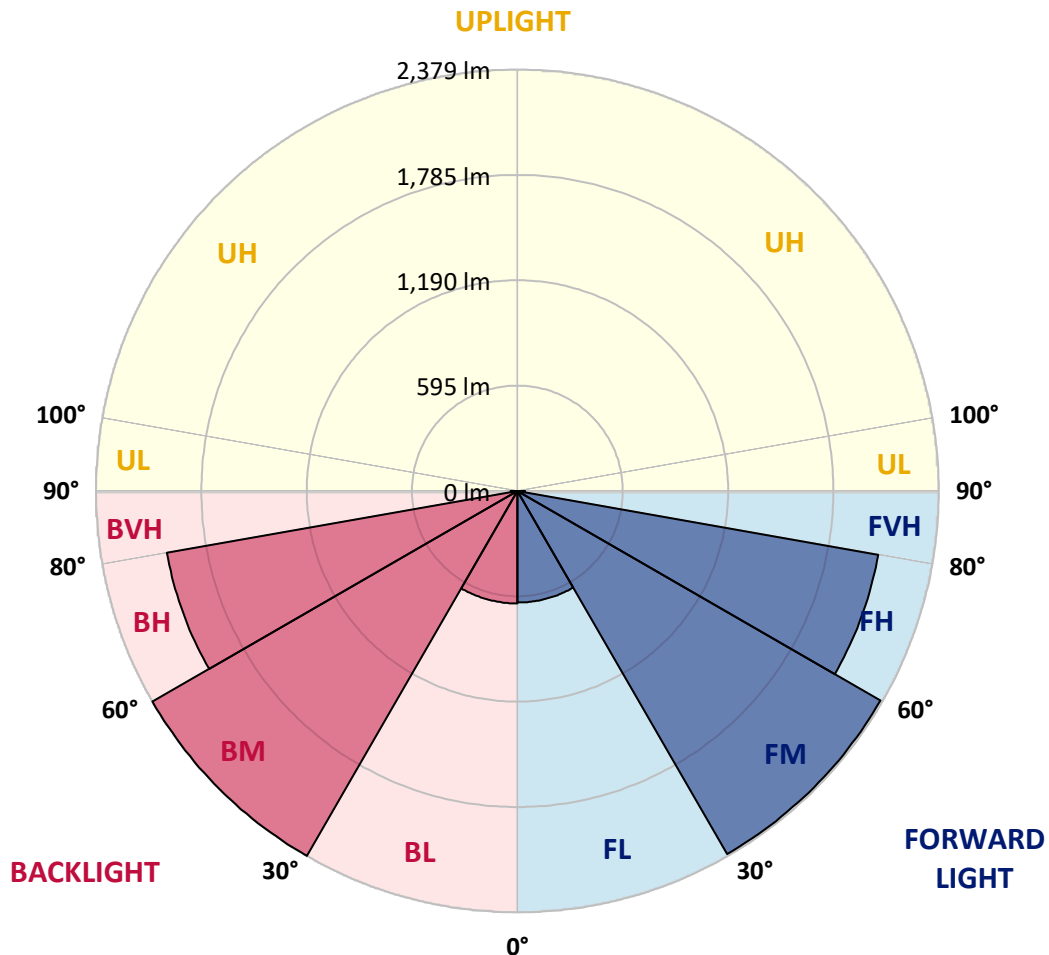
CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	630.1	2.2			
FM (30°-60°)	2367.4	8.4			
FH (60°-80°)	2069.3	7.4			G2/5000
FVH (80°-90°)	42.9	0.2			G1/100
BL (0°-30°)	635.0	2.3	B2/1000		
BM (30°-60°)	2379.5	8.5	B2/2500		
BH (60°-80°)	2009.6	7.2	B3/2500		G2/5000
BVH (80°-90°)	37.0	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	17891.2	63.8			

BUG Rating: B3-U0-G2

Type V Short





REPORT NUMBER: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8
1°	1293.5	1293.2	1293.5	1293.2	1293.2	1293.1	1292.1	1292.3	1292.3	1292.7	1293.0
2°	1295.5	1295.0	1294.9	1294.5	1294.0	1293.6	1292.8	1292.8	1293.0	1293.6	1294.3
3°	1298.9	1298.1	1297.5	1296.7	1296.4	1295.7	1294.9	1294.8	1295.0	1295.8	1296.9
4°	1303.7	1302.7	1301.7	1300.8	1300.0	1299.1	1298.2	1298.1	1298.5	1299.5	1300.8
5°	1309.2	1307.9	1306.8	1305.4	1304.2	1303.4	1302.2	1302.7	1303.5	1304.8	1306.1
6°	1315.5	1313.9	1313.1	1311.5	1309.5	1308.4	1307.2	1307.6	1308.9	1311.0	1312.8
7°	1322.3	1320.7	1320.2	1318.5	1316.5	1314.7	1313.2	1313.9	1315.1	1318.3	1320.7
8°	1330.3	1328.5	1327.7	1326.3	1324.1	1322.1	1321.1	1321.8	1323.2	1326.2	1329.7
9°	1339.0	1337.4	1336.2	1334.8	1332.9	1330.5	1329.0	1330.1	1332.7	1335.8	1339.3
10°	1348.5	1346.9	1345.9	1344.3	1342.7	1339.9	1338.6	1339.7	1342.9	1346.6	1349.6
11°	1358.9	1357.1	1356.7	1355.2	1353.1	1350.3	1348.6	1350.4	1353.9	1358.6	1361.3
12°	1369.6	1367.2	1367.5	1366.7	1364.3	1361.4	1359.3	1361.7	1365.7	1371.0	1374.1
13°	1379.9	1377.6	1379.0	1379.1	1376.1	1373.4	1370.4	1373.3	1378.6	1384.0	1387.8
14°	1391.3	1388.7	1390.6	1391.7	1388.8	1385.4	1382.1	1385.7	1391.3	1398.1	1401.6
15°	1402.5	1400.1	1402.4	1404.9	1401.8	1397.8	1394.5	1398.0	1405.0	1412.4	1415.4
16°	1414.7	1412.8	1414.8	1418.0	1415.5	1411.1	1407.9	1411.3	1419.1	1427.1	1430.1
17°	1427.8	1426.1	1428.4	1431.7	1429.9	1424.7	1421.3	1424.9	1434.1	1441.4	1444.7
18°	1441.4	1439.1	1442.0	1445.4	1444.1	1438.8	1435.4	1439.3	1448.9	1456.2	1458.9
19°	1455.5	1452.9	1456.3	1459.6	1459.0	1453.6	1450.1	1454.6	1464.3	1471.4	1473.1
20°	1470.7	1467.6	1470.7	1474.1	1474.1	1469.2	1465.7	1470.6	1480.1	1486.5	1487.3
21°	1486.2	1483.1	1485.3	1489.0	1489.8	1484.9	1481.4	1487.1	1496.1	1501.1	1502.1
22°	1502.6	1499.3	1500.8	1504.1	1506.5	1501.5	1498.4	1504.3	1513.2	1517.1	1517.8
23°	1520.0	1516.5	1516.7	1520.3	1523.5	1518.8	1515.7	1522.4	1530.4	1533.2	1534.4
24°	1538.2	1534.3	1533.3	1536.8	1540.7	1536.4	1533.9	1540.9	1548.4	1550.1	1551.4
25°	1557.3	1552.7	1550.6	1554.4	1558.9	1554.8	1553.1	1560.1	1566.1	1567.5	1568.3
26°	1577.2	1571.6	1568.7	1572.2	1577.1	1573.0	1572.6	1579.6	1584.5	1585.2	1585.5
27°	1597.6	1591.0	1586.8	1590.7	1595.2	1591.5	1592.4	1599.3	1603.0	1603.8	1603.4
28°	1619.0	1610.6	1605.5	1609.6	1613.7	1610.5	1613.0	1618.7	1622.3	1623.0	1621.5
29°	1640.8	1630.4	1624.9	1629.4	1632.3	1629.8	1634.6	1638.6	1641.6	1642.9	1640.4
30°	1663.0	1650.3	1644.8	1649.4	1651.2	1649.6	1656.7	1658.9	1661.3	1663.0	1659.4
31°	1685.7	1670.6	1665.4	1670.0	1670.3	1668.9	1679.0	1678.9	1681.1	1683.7	1679.4
32°	1708.2	1691.0	1685.9	1690.9	1689.6	1689.6	1700.9	1699.7	1701.4	1704.6	1699.5
33°	1730.6	1712.0	1707.5	1711.5	1710.1	1709.6	1723.5	1719.9	1722.2	1725.6	1720.2
34°	1753.2	1732.8	1728.7	1732.6	1730.3	1729.2	1745.6	1739.9	1743.1	1746.3	1741.0
35°	1777.0	1753.5	1750.4	1754.0	1751.0	1749.0	1768.3	1759.8	1764.1	1767.8	1762.8
36°	1800.6	1774.9	1772.7	1775.8	1772.5	1769.5	1790.9	1780.3	1786.3	1789.7	1785.2
37°	1824.2	1796.5	1795.4	1798.1	1794.1	1789.2	1813.3	1801.0	1808.2	1811.9	1808.0
38°	1848.2	1818.9	1818.2	1820.4	1815.6	1810.0	1836.5	1821.4	1829.6	1834.1	1830.7
39°	1871.7	1841.3	1840.8	1842.9	1837.2	1831.4	1859.9	1842.5	1851.9	1856.2	1852.9
40°	1894.9	1864.7	1863.3	1865.8	1859.2	1853.1	1883.3	1864.1	1874.3	1879.2	1876.1
41°	1917.8	1888.5	1886.6	1888.6	1881.9	1875.5	1906.6	1886.8	1896.3	1902.2	1898.3
42°	1941.7	1912.9	1910.5	1912.5	1904.7	1898.4	1929.0	1909.7	1919.2	1926.1	1922.6
43°	1964.9	1938.3	1934.7	1936.7	1928.4	1922.1	1950.7	1933.5	1942.3	1950.4	1946.7
44°	1987.6	1964.4	1959.2	1961.2	1952.1	1946.6	1971.7	1958.0	1965.3	1974.3	1971.2



REPORT NUMBER: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	2010.4	1990.5	1984.3	1985.5	1976.2	1972.1	1992.1	1982.8	1988.9	1998.9	1996.6
46°	2033.2	2018.0	2010.3	2010.8	2001.4	1998.4	2012.8	2008.7	2012.8	2024.0	2022.3
47°	2056.8	2047.1	2037.3	2037.2	2027.5	2025.6	2034.2	2034.7	2038.1	2050.2	2049.5
48°	2080.8	2075.8	2064.6	2064.2	2053.4	2053.3	2054.3	2061.7	2064.4	2076.0	2077.0
49°	2105.6	2106.0	2093.4	2092.0	2080.3	2081.2	2074.3	2088.3	2090.9	2102.7	2104.1
50°	2131.0	2135.5	2122.2	2120.0	2107.0	2109.4	2094.4	2114.9	2117.2	2131.0	2132.5
51°	2156.9	2165.9	2151.8	2148.7	2135.3	2137.1	2115.4	2141.0	2144.5	2159.5	2162.4
52°	2183.6	2197.1	2183.1	2179.3	2164.1	2164.4	2136.9	2168.0	2172.6	2189.6	2192.0
53°	2210.3	2227.6	2214.9	2209.5	2192.8	2190.8	2157.4	2194.4	2200.6	2219.0	2222.3
54°	2237.1	2258.1	2247.2	2241.9	2221.9	2216.6	2177.8	2219.7	2229.7	2249.2	2252.6
55°	2262.7	2285.9	2280.2	2273.7	2250.8	2240.7	2197.8	2242.6	2259.0	2281.7	2284.5
56°	2286.8	2313.6	2314.0	2307.3	2280.6	2263.5	2217.0	2265.6	2288.3	2314.4	2317.1
57°	2309.6	2339.6	2347.8	2342.6	2309.9	2284.6	2234.2	2286.3	2317.3	2347.8	2348.9
58°	2331.0	2364.1	2382.2	2378.3	2339.0	2303.4	2248.8	2304.7	2346.3	2382.4	2379.4
59°	2350.3	2386.9	2417.5	2414.5	2368.2	2319.0	2262.5	2321.8	2374.7	2417.6	2408.7
60°	2367.6	2407.5	2452.2	2452.2	2396.2	2332.2	2273.2	2336.3	2401.7	2453.2	2437.0
61°	2381.8	2426.2	2485.7	2489.6	2424.0	2344.0	2281.6	2348.9	2429.8	2488.3	2465.5
62°	2392.8	2441.8	2518.6	2528.2	2450.7	2352.5	2286.3	2358.1	2455.8	2522.9	2492.8
63°	2402.6	2455.9	2550.6	2567.0	2478.3	2356.9	2286.5	2365.2	2481.9	2554.9	2518.3
64°	2411.2	2467.3	2579.9	2605.4	2504.0	2357.9	2282.9	2369.5	2507.9	2585.9	2542.3
65°	2419.7	2477.0	2608.3	2643.3	2528.6	2357.5	2276.5	2370.3	2532.0	2617.5	2563.4
66°	2424.6	2486.3	2633.5	2679.5	2550.0	2352.7	2267.0	2366.9	2553.6	2649.2	2583.0
67°	2424.6	2492.7	2655.0	2713.1	2567.6	2344.3	2251.3	2359.4	2571.4	2678.5	2598.8
68°	2402.3	2491.4	2673.4	2742.8	2579.8	2330.3	2203.3	2344.2	2585.4	2701.7	2588.6
69°	2330.7	2472.6	2685.3	2764.9	2587.0	2292.2	2102.6	2306.0	2592.3	2720.1	2564.9
70°	2179.8	2418.2	2689.8	2779.0	2589.7	2213.2	1955.4	2228.6	2591.2	2730.7	2552.2
71°	1941.1	2295.4	2683.5	2784.9	2572.2	2090.5	1773.2	2107.0	2570.5	2729.0	2516.9
72°	1692.3	2094.8	2662.2	2776.6	2527.3	1933.8	1607.1	1947.5	2516.1	2700.8	2457.8
73°	1428.8	1833.3	2610.1	2747.6	2450.5	1765.5	1478.9	1775.4	2425.2	2639.9	2383.4
74°	1124.1	1548.0	2495.9	2685.8	2343.0	1612.5	1318.0	1617.1	2306.5	2547.1	2260.5
75°	744.3	1237.2	2286.7	2575.9	2201.9	1442.3	1007.1	1450.0	2155.6	2423.4	2077.5
76°	384.8	868.3	2004.4	2399.2	2034.9	1186.6	696.1	1206.0	1989.2	2240.7	1827.7
77°	278.5	467.1	1698.6	2140.8	1829.8	798.6	385.7	873.3	1791.0	1982.9	1518.1
78°	178.0	335.8	1327.6	1761.6	1544.7	413.9	166.1	540.7	1516.4	1639.8	1147.1
79°	77.5	209.1	861.2	1342.4	1146.1	299.3	130.8	210.4	1131.2	1240.9	776.0
80°	64.4	82.4	439.4	874.1	694.0	187.7	95.5	162.5	746.0	839.5	406.2
81°	55.1	67.9	317.8	442.4	340.9	76.0	61.0	114.6	364.4	442.2	186.6
82°	46.9	57.3	201.1	318.1	251.3	64.7	52.1	66.7	162.2	178.8	142.4
83°	39.3	47.9	84.4	202.3	164.5	54.8	44.1	56.3	127.5	139.6	98.1
84°	32.5	39.2	66.1	86.4	77.7	45.6	36.6	46.7	92.7	100.3	54.2
85°	25.7	32.1	50.5	71.3	59.0	37.3	29.4	38.0	58.3	61.2	39.2
86°	18.9	25.0	37.9	57.3	43.3	29.9	22.8	30.2	41.8	48.0	26.3
87°	12.7	17.9	27.6	42.1	31.8	22.6	16.2	22.8	30.2	34.1	16.3
88°	7.3	11.6	17.3	33.8	20.5	15.3	11.3	16.2	20.9	21.2	11.6
89°	2.9	5.0	7.0	25.6	9.1	8.2	6.4	11.2	14.4	14.7	6.8



REPORT NUMBER: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8
1°	1293.2	1293.5	1293.7	1294.1	1294.4	1294.6	1294.7	1293.9	1293.7	1293.6	1293.8
2°	1294.8	1295.5	1295.7	1296.5	1296.9	1297.0	1297.2	1296.5	1296.5	1296.2	1296.3
3°	1297.5	1298.7	1299.4	1300.1	1300.8	1301.1	1301.5	1300.4	1300.5	1300.2	1300.4
4°	1302.0	1303.3	1304.3	1305.1	1305.9	1306.2	1306.7	1305.9	1305.6	1305.4	1305.2
5°	1307.6	1309.3	1310.3	1311.6	1312.2	1312.6	1312.7	1311.8	1311.7	1311.4	1311.2
6°	1314.6	1316.4	1317.9	1319.3	1319.9	1319.9	1319.9	1318.9	1318.9	1318.7	1318.5
7°	1322.9	1324.5	1326.5	1328.0	1328.6	1329.0	1329.4	1327.9	1327.7	1327.2	1327.0
8°	1331.9	1333.8	1336.0	1337.9	1338.8	1339.6	1339.2	1337.5	1337.1	1336.6	1335.9
9°	1341.7	1343.9	1346.4	1349.0	1350.4	1350.7	1349.8	1347.4	1347.5	1347.3	1346.6
10°	1352.5	1355.1	1358.1	1361.2	1362.9	1362.9	1361.4	1359.0	1358.8	1359.1	1357.6
11°	1364.5	1367.4	1370.8	1374.5	1376.5	1376.2	1374.3	1371.7	1371.7	1372.0	1370.1
12°	1376.9	1379.9	1384.1	1388.6	1390.9	1390.3	1388.2	1385.0	1385.4	1385.4	1383.2
13°	1389.7	1392.6	1397.3	1403.7	1406.5	1405.7	1402.4	1399.3	1399.8	1399.8	1397.1
14°	1403.1	1405.8	1411.4	1418.7	1422.6	1421.4	1417.8	1414.0	1414.8	1415.2	1411.7
15°	1416.6	1419.1	1425.6	1434.3	1439.3	1437.9	1433.5	1429.4	1430.5	1431.3	1426.6
16°	1430.5	1433.0	1439.8	1449.7	1456.3	1455.6	1449.8	1445.2	1446.5	1447.4	1441.8
17°	1444.5	1446.9	1454.5	1465.4	1473.4	1472.8	1467.1	1461.9	1462.9	1463.9	1457.6
18°	1458.9	1461.2	1469.5	1480.7	1490.3	1490.7	1484.5	1478.6	1480.3	1480.9	1473.5
19°	1473.4	1476.6	1484.3	1496.4	1507.7	1508.5	1502.1	1496.0	1497.8	1498.0	1489.0
20°	1488.3	1491.9	1500.1	1513.2	1524.7	1526.9	1520.4	1514.1	1516.1	1515.8	1505.3
21°	1504.0	1507.8	1516.3	1529.8	1542.2	1545.8	1539.8	1532.9	1534.4	1533.9	1521.5
22°	1520.3	1524.3	1533.2	1547.2	1560.6	1565.0	1559.5	1551.9	1553.8	1552.2	1539.0
23°	1536.5	1541.4	1551.2	1565.5	1579.1	1585.0	1578.8	1571.9	1573.9	1570.7	1556.9
24°	1554.1	1559.5	1569.4	1584.1	1598.4	1604.7	1598.8	1592.2	1593.9	1589.3	1574.4
25°	1571.4	1577.7	1588.0	1602.7	1617.9	1624.5	1619.8	1613.0	1614.0	1608.7	1592.5
26°	1589.7	1597.5	1607.2	1622.3	1637.8	1644.5	1640.5	1634.9	1634.1	1627.8	1611.7
27°	1608.0	1617.1	1626.5	1641.8	1657.6	1664.3	1661.1	1656.5	1654.4	1647.1	1630.8
28°	1626.7	1638.6	1646.2	1661.8	1678.8	1685.1	1682.4	1679.5	1675.1	1667.1	1651.0
29°	1646.0	1660.1	1666.5	1682.6	1699.6	1705.6	1703.9	1702.3	1695.9	1687.6	1672.1
30°	1665.9	1682.7	1687.2	1703.0	1720.8	1726.4	1725.1	1725.2	1716.4	1707.8	1693.5
31°	1686.3	1705.5	1708.1	1723.6	1741.1	1747.2	1745.9	1748.6	1737.2	1728.0	1715.0
32°	1706.7	1728.6	1729.1	1744.4	1762.7	1768.9	1767.4	1771.9	1757.4	1748.3	1736.6
33°	1727.8	1752.0	1750.2	1766.1	1784.2	1790.7	1788.8	1795.2	1778.3	1769.8	1759.1
34°	1748.8	1775.3	1771.0	1788.2	1806.4	1812.4	1810.5	1819.0	1799.1	1791.3	1781.6
35°	1769.3	1799.8	1792.7	1810.8	1828.6	1834.5	1831.7	1842.8	1820.5	1813.6	1805.2
36°	1790.6	1824.2	1814.6	1833.5	1850.6	1856.0	1853.3	1866.9	1841.9	1835.9	1828.4
37°	1811.4	1848.6	1836.9	1856.4	1872.9	1877.8	1875.7	1891.1	1863.9	1858.7	1851.7
38°	1833.3	1872.8	1859.7	1879.6	1895.9	1900.3	1897.9	1915.1	1886.0	1881.6	1875.5
39°	1855.7	1897.2	1882.7	1903.3	1919.4	1922.6	1921.0	1938.8	1908.4	1905.1	1898.9
40°	1879.1	1920.1	1906.8	1927.5	1942.8	1945.9	1944.1	1961.6	1931.3	1928.9	1922.8
41°	1903.5	1943.1	1931.1	1951.8	1967.1	1968.8	1967.3	1983.6	1954.9	1953.0	1946.7
42°	1927.6	1965.5	1956.5	1975.8	1991.2	1992.7	1991.1	2005.5	1979.7	1977.7	1971.7
43°	1952.5	1987.6	1982.1	2000.3	2016.3	2017.8	2016.2	2027.7	2005.1	2002.0	1995.9
44°	1978.3	2009.7	2008.3	2025.6	2041.7	2042.8	2041.6	2050.7	2031.3	2026.7	2021.3



REPORT NUMBER: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2004.5	2032.3	2035.0	2051.9	2067.9	2068.3	2068.4	2072.8	2058.0	2052.1	2046.7
46°	2031.8	2054.3	2062.8	2077.8	2094.4	2093.7	2095.1	2093.0	2086.0	2078.1	2072.9
47°	2060.5	2075.8	2091.0	2103.9	2121.2	2119.2	2121.8	2113.1	2112.7	2104.3	2100.2
48°	2089.5	2098.5	2120.1	2131.0	2148.3	2145.4	2148.0	2133.6	2139.8	2130.6	2128.0
49°	2118.6	2122.7	2150.1	2158.1	2176.4	2171.8	2174.0	2154.6	2166.3	2157.3	2156.0
50°	2149.3	2146.6	2180.5	2186.8	2204.4	2198.6	2199.5	2175.8	2192.6	2185.0	2184.5
51°	2181.5	2171.2	2210.9	2215.5	2233.2	2225.0	2224.8	2195.0	2218.1	2212.6	2213.8
52°	2212.2	2194.5	2240.5	2244.3	2262.7	2251.5	2248.9	2214.6	2242.8	2240.2	2243.8
53°	2239.7	2213.8	2268.0	2274.2	2292.9	2278.0	2271.4	2232.8	2265.0	2267.0	2274.0
54°	2263.7	2228.1	2292.9	2304.6	2323.5	2305.3	2292.2	2249.0	2286.1	2295.5	2305.7
55°	2285.4	2242.9	2314.4	2335.2	2354.8	2331.6	2311.6	2264.5	2305.4	2322.7	2338.6
56°	2307.6	2259.6	2335.5	2367.2	2386.6	2357.3	2329.0	2278.4	2322.8	2349.6	2372.6
57°	2328.6	2277.0	2356.2	2398.4	2418.5	2383.2	2344.4	2290.1	2337.5	2375.5	2405.3
58°	2348.3	2289.2	2376.2	2430.5	2450.9	2408.7	2357.4	2301.4	2349.8	2401.4	2439.7
59°	2363.5	2297.8	2391.0	2460.7	2484.8	2432.9	2368.4	2310.8	2359.9	2426.2	2473.8
60°	2376.0	2308.3	2403.4	2489.1	2518.1	2456.5	2378.3	2318.0	2368.5	2451.0	2508.7
61°	2388.0	2318.8	2415.4	2518.0	2551.8	2480.1	2386.3	2320.9	2376.8	2475.0	2543.7
62°	2399.5	2327.3	2426.5	2545.5	2582.5	2504.3	2391.6	2321.7	2381.6	2497.9	2579.4
63°	2409.9	2334.3	2436.9	2570.7	2610.4	2526.1	2393.8	2321.0	2382.7	2519.2	2614.6
64°	2419.1	2335.7	2445.7	2593.8	2636.7	2547.1	2394.9	2315.2	2381.3	2538.6	2649.9
65°	2417.8	2313.7	2442.4	2614.2	2662.3	2565.4	2391.4	2305.0	2376.0	2555.1	2683.2
66°	2388.0	2294.4	2409.6	2630.2	2686.8	2580.0	2385.2	2290.4	2367.7	2569.0	2714.8
67°	2368.9	2282.4	2389.1	2639.2	2705.8	2592.2	2372.9	2255.0	2353.2	2579.2	2741.8
68°	2357.4	2243.6	2371.6	2621.2	2720.8	2600.1	2342.8	2170.9	2318.9	2585.0	2764.3
69°	2311.1	2141.9	2320.4	2590.8	2730.6	2597.7	2277.2	2028.4	2245.1	2581.2	2779.9
70°	2224.1	1964.2	2235.9	2570.8	2732.0	2580.5	2158.2	1840.4	2120.8	2564.9	2784.9
71°	2091.3	1708.7	2102.4	2527.1	2718.8	2537.5	1995.3	1652.5	1950.9	2520.3	2775.4
72°	1888.2	1477.1	1896.0	2464.0	2677.2	2457.4	1810.6	1495.5	1765.5	2446.2	2749.4
73°	1640.0	1240.5	1644.5	2377.7	2601.6	2336.6	1631.8	1343.0	1589.2	2333.2	2696.0
74°	1382.9	929.8	1388.2	2245.0	2493.1	2189.2	1462.2	1134.9	1417.5	2187.5	2608.1
75°	1052.6	619.0	1059.1	2044.2	2348.3	2010.3	1249.9	809.4	1195.4	2008.0	2465.9
76°	722.3	313.2	730.1	1776.9	2135.0	1815.3	918.4	458.8	865.4	1801.6	2261.6
77°	394.8	229.7	403.9	1466.8	1844.5	1580.0	586.8	329.4	483.8	1553.0	1967.8
78°	166.6	146.2	174.7	1098.2	1466.3	1251.6	259.9	204.4	350.6	1219.4	1574.8
79°	129.9	64.6	135.5	729.6	1070.4	909.0	120.6	79.5	217.5	808.4	1130.8
80°	93.1	53.3	96.3	363.8	674.6	566.4	100.7	66.5	84.4	443.7	684.6
81°	56.5	44.4	57.7	163.5	285.2	224.6	80.8	56.8	69.4	320.7	322.5
82°	46.1	36.4	47.1	126.7	122.9	118.8	61.1	48.3	58.9	205.1	208.3
83°	36.8	28.9	37.7	89.9	101.5	96.4	51.5	40.5	49.6	89.4	101.0
84°	28.4	22.4	29.0	53.3	80.1	74.1	42.8	33.6	40.9	69.1	81.5
85°	20.7	15.9	21.1	38.0	58.7	51.8	34.6	26.7	33.6	51.8	67.6
86°	14.6	11.0	14.8	25.1	45.8	37.2	27.1	19.9	26.3	37.8	54.2
87°	8.6	6.1	8.6	18.1	32.1	26.9	20.3	13.5	19.0	27.4	38.2
88°	2.6	1.2	2.3	11.1	21.9	18.5	14.0	7.9	12.7	17.0	30.7
89°	1.9	1.1	1.7	4.1	11.7	10.1	7.7	3.2	5.8	6.6	23.3



REPORT NUMBER: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-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: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1292.8	1292.8	1292.8
1°	1293.8	1293.5	1293.5
2°	1296.2	1295.9	1295.5
3°	1300.0	1299.6	1298.9
4°	1305.1	1304.4	1303.7
5°	1310.9	1310.1	1309.2
6°	1317.7	1316.9	1315.5
7°	1325.2	1324.1	1322.3
8°	1333.9	1332.0	1330.3
9°	1343.8	1341.3	1339.0
10°	1354.5	1351.4	1348.5
11°	1366.1	1362.4	1358.9
12°	1378.5	1373.6	1369.6
13°	1391.7	1385.1	1379.9
14°	1404.6	1396.9	1391.3
15°	1417.8	1408.9	1402.5
16°	1431.8	1421.7	1414.7
17°	1445.7	1435.4	1427.8
18°	1460.4	1449.3	1441.4
19°	1475.5	1463.5	1455.5
20°	1490.1	1477.9	1470.7
21°	1505.8	1493.6	1486.2
22°	1522.3	1509.8	1502.6
23°	1539.4	1526.7	1520.0
24°	1557.0	1544.1	1538.2
25°	1574.6	1562.6	1557.3
26°	1593.7	1581.4	1577.2
27°	1613.3	1600.8	1597.6
28°	1633.0	1620.3	1619.0
29°	1653.9	1640.4	1640.8
30°	1675.3	1660.7	1663.0
31°	1696.7	1682.0	1685.7
32°	1718.2	1703.3	1708.2
33°	1739.9	1724.9	1730.6
34°	1761.8	1745.7	1753.2
35°	1784.5	1767.2	1777.0
36°	1808.1	1788.5	1800.6
37°	1830.9	1810.9	1824.2
38°	1854.8	1833.7	1848.2
39°	1878.0	1856.5	1871.7
40°	1902.5	1880.5	1894.9
41°	1926.7	1904.8	1917.8
42°	1951.7	1930.4	1941.7
43°	1976.9	1956.4	1964.9
44°	2002.2	1982.2	1987.6



REPORT NUMBER: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	2028.1	2010.1	2010.4
46°	2054.7	2037.7	2033.2
47°	2081.8	2067.0	2056.8
48°	2109.9	2096.8	2080.8
49°	2138.7	2127.8	2105.6
50°	2168.3	2158.8	2131.0
51°	2198.5	2190.8	2156.9
52°	2229.7	2222.2	2183.6
53°	2262.1	2253.8	2210.3
54°	2293.7	2284.7	2237.1
55°	2326.9	2315.4	2262.7
56°	2360.9	2343.9	2286.8
57°	2394.3	2370.2	2309.6
58°	2429.0	2394.3	2331.0
59°	2462.5	2416.7	2350.3
60°	2496.1	2437.0	2367.6
61°	2529.7	2454.3	2381.8
62°	2562.4	2469.8	2392.8
63°	2593.9	2482.9	2402.6
64°	2625.3	2495.4	2411.2
65°	2654.2	2506.7	2419.7
66°	2681.2	2517.3	2424.6
67°	2703.1	2524.2	2424.6
68°	2719.8	2523.4	2402.3
69°	2727.9	2505.9	2330.7
70°	2727.7	2454.9	2179.8
71°	2715.0	2343.0	1941.1
72°	2683.4	2142.9	1692.3
73°	2616.9	1878.0	1428.8
74°	2485.4	1579.8	1124.1
75°	2268.3	1267.6	744.3
76°	1989.1	908.3	384.8
77°	1667.4	503.5	278.5
78°	1269.0	363.1	178.0
79°	802.0	223.6	77.5
80°	412.4	84.0	64.4
81°	295.9	70.7	55.1
82°	189.3	59.7	46.9
83°	82.8	49.6	39.3
84°	65.4	40.8	32.5
85°	49.5	33.3	25.7
86°	37.2	25.8	18.9
87°	26.8	18.3	12.7
88°	16.4	11.6	7.3
89°	6.1	4.7	2.9



REPORT NUMBER: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436720

CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)