

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: P1436770

Luminaire Tested: XAS180-SFPM (5000K-72W-T5-HSS)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436770
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 (5000K-72W-T5-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 40% (72W)
OPTICS - TYPE 5 WITH HOUSE SIDE SHIELD
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 23809 (1 lamp)
Luminaire Lumens: 10367.8 lumens
Efficiency: 43.5%
Efficacy: 141.8 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

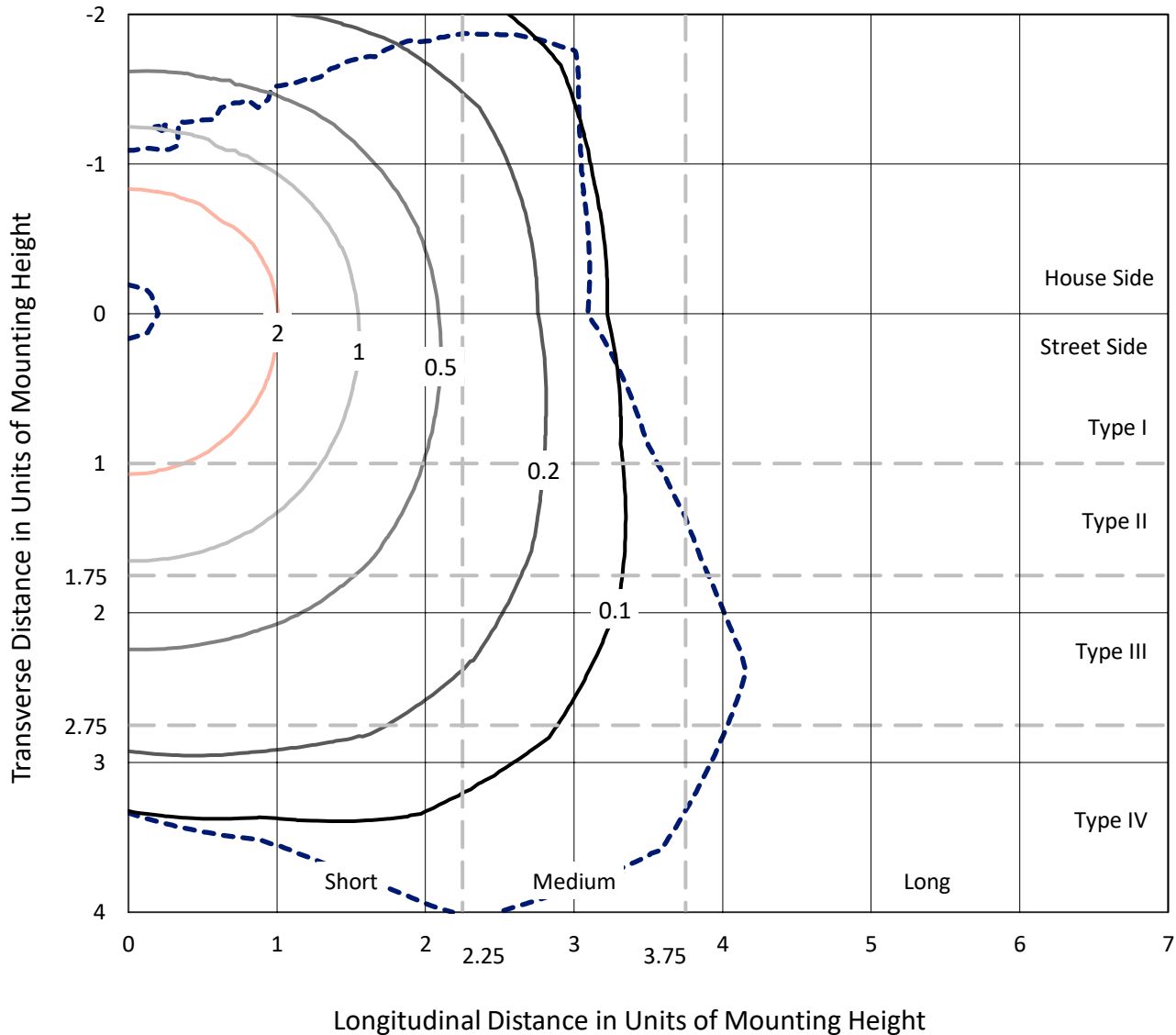
Input Watts (W): 73.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

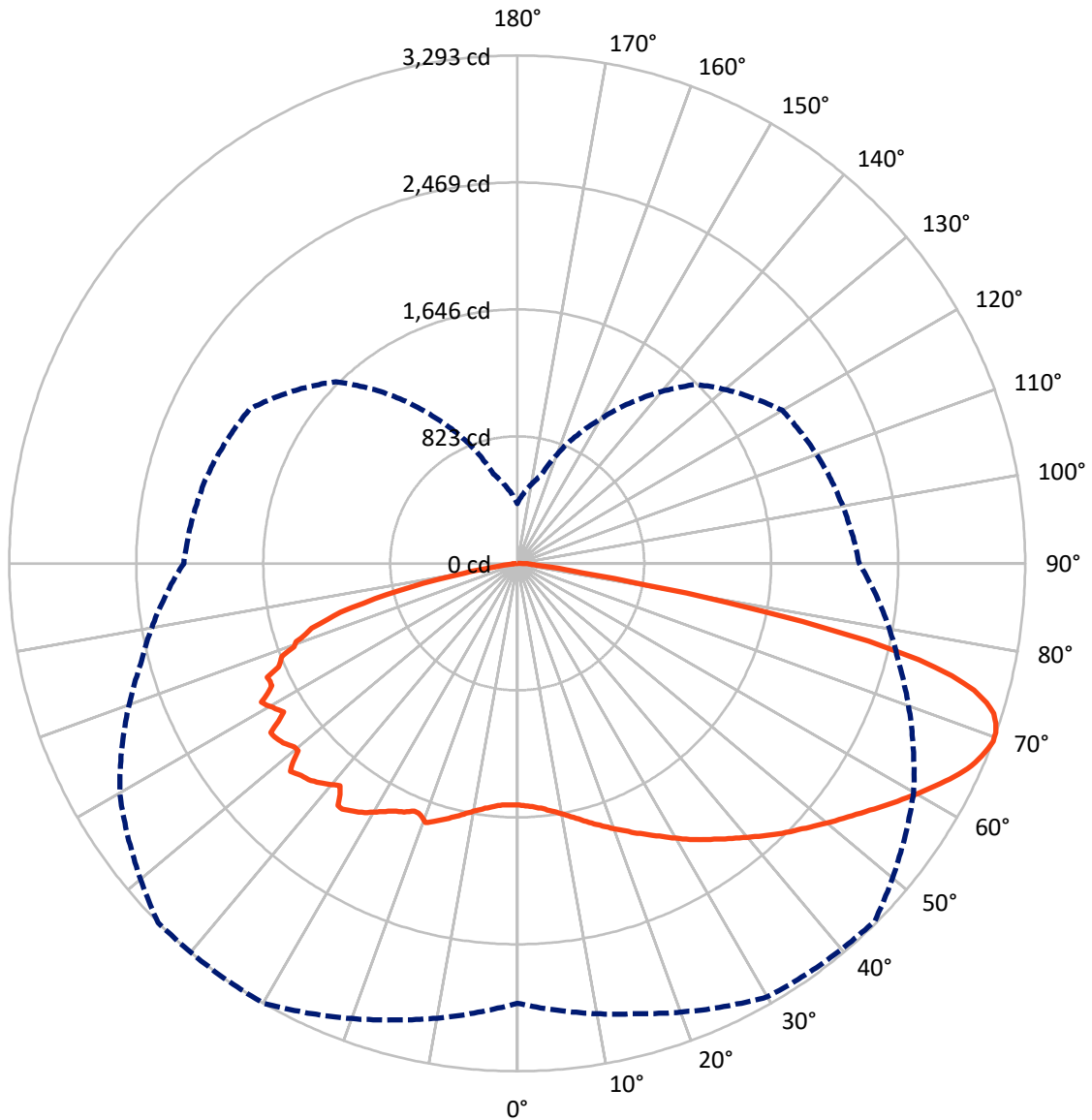
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.9 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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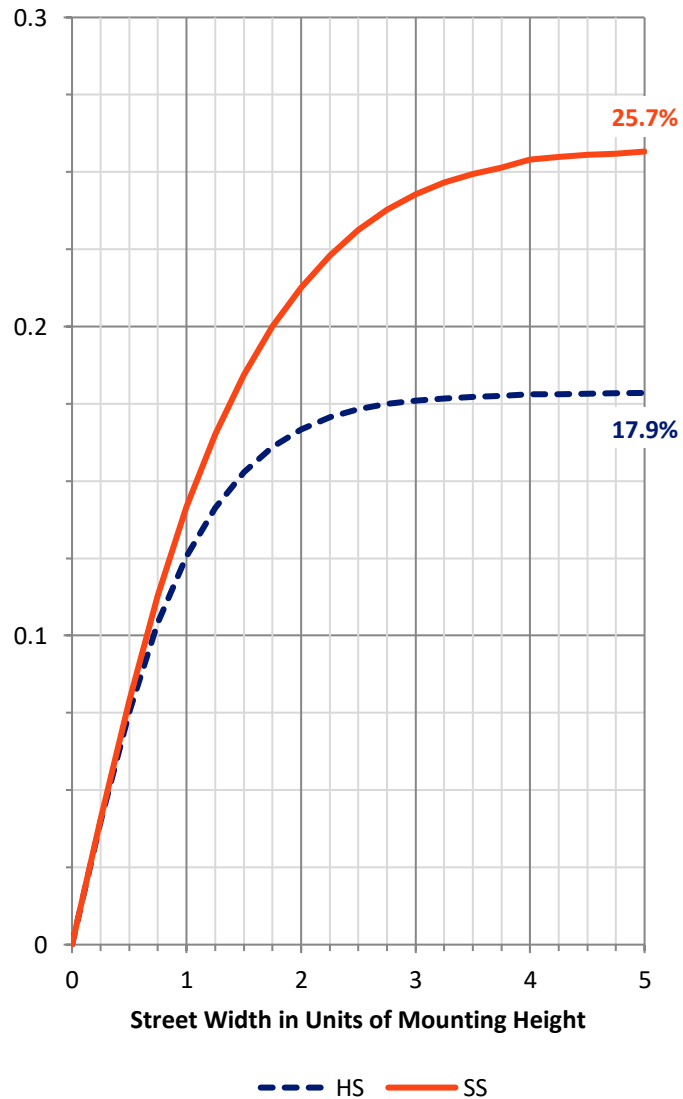
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4258.0	0.0	4258.0
	% Lamp	17.9	0.0	17.9
Street Side	Lumens	6109.9	0.0	6109.9
	% Lamp	25.7	0.0	25.7
Total	Lumens	10367.8	0.0	10367.8
	% Lamp	43.5	0.0	43.5

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	153.1	1.5	0.6
10°-20°	487.2	4.7	2.0
20°-30°	868.5	8.4	3.6
30°-40°	1285.9	12.4	5.4
40°-50°	1715.7	16.5	7.2
50°-60°	2104.1	20.3	8.8
60°-70°	2292.0	22.1	9.6
70°-80°	1382.7	13.3	5.8
80°-90°	78.6	0.8	0.3
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	10367.8	100.0	43.5
0°-180°	10367.8	100.0	43.5

Coefficient of Utilization



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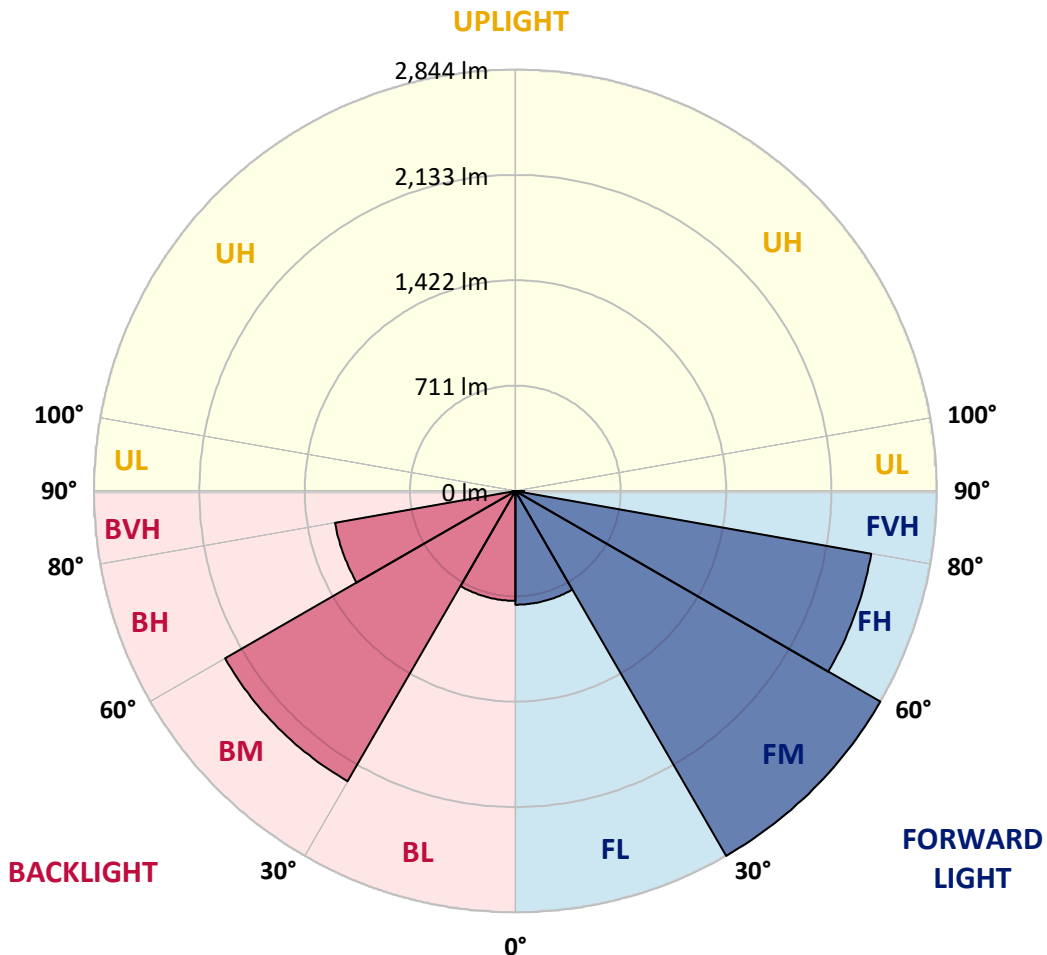
CATALOG NUMBER: XAS180-SFPM (5000K-72W-T5-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	767.8	3.2			
FM (30°-60°)	2843.7	11.9			
FH (60°-80°)	2438.6	10.2			G2/5000
FVH (80°-90°)	59.8	0.3			G1/100
BL (0°-30°)	741.1	3.1	B2/1000		
BM (30°-60°)	2262.0	9.5	B2/2500		
BH (60°-80°)	1236.0	5.2	B3/2500		G3/2500
BVH (80°-90°)	18.8	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	13441.2	56.5			

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°	1567.7	1567.7	1567.7	1567.7	1567.7	1567.7	1567.7	1567.7	1567.7	1567.7	1567.7
1°	1570.0	1570.0	1569.8	1569.4	1569.0	1568.1	1567.1	1566.7	1566.2	1566.1	1566.1
2°	1574.1	1573.6	1573.2	1572.1	1571.1	1569.4	1567.9	1567.0	1566.2	1565.8	1566.1
3°	1579.5	1578.7	1577.7	1576.0	1574.8	1572.7	1570.6	1569.3	1567.9	1567.1	1567.3
4°	1586.5	1585.3	1583.8	1581.7	1579.9	1577.4	1574.8	1573.1	1571.2	1570.3	1570.2
5°	1594.6	1592.9	1591.3	1588.6	1586.1	1583.1	1580.1	1577.9	1576.2	1575.1	1576.1
6°	1603.5	1601.4	1599.9	1597.1	1593.7	1589.6	1586.4	1583.7	1581.8	1582.8	1584.1
7°	1612.6	1611.0	1609.5	1606.6	1602.9	1598.1	1594.1	1590.9	1588.6	1591.4	1593.4
8°	1623.0	1621.3	1619.8	1617.1	1612.9	1607.8	1603.6	1600.1	1598.3	1601.3	1604.1
9°	1634.7	1632.8	1630.9	1628.4	1624.3	1618.4	1613.5	1610.1	1610.0	1612.3	1615.4
10°	1647.2	1645.4	1643.9	1641.1	1637.2	1630.1	1624.9	1620.9	1622.3	1625.3	1627.7
11°	1660.7	1658.4	1657.7	1655.1	1650.8	1643.4	1637.3	1633.3	1635.8	1639.8	1641.5
12°	1674.2	1671.6	1671.7	1669.8	1664.7	1657.3	1650.2	1646.6	1649.8	1654.4	1655.7
13°	1687.9	1685.1	1686.5	1685.7	1679.9	1671.8	1663.7	1660.2	1665.2	1669.7	1670.8
14°	1702.1	1699.0	1701.0	1701.5	1696.1	1686.8	1677.8	1674.1	1680.5	1686.2	1686.1
15°	1717.0	1714.2	1716.7	1718.1	1712.2	1702.2	1692.9	1688.9	1696.4	1702.3	1701.3
16°	1731.9	1730.0	1732.7	1734.8	1728.9	1718.5	1708.6	1704.5	1713.2	1718.6	1716.7
17°	1748.2	1746.2	1749.2	1751.8	1746.5	1735.2	1724.4	1720.5	1730.5	1734.6	1712.4
18°	1765.2	1762.7	1766.4	1768.9	1764.2	1752.0	1739.1	1733.3	1747.8	1751.2	1684.3
19°	1782.7	1780.0	1784.1	1786.6	1782.4	1770.2	1749.4	1745.7	1760.1	1767.8	1670.2
20°	1801.3	1798.4	1802.1	1804.5	1800.9	1785.5	1763.5	1759.1	1772.7	1782.2	1684.3
21°	1821.2	1817.6	1820.6	1822.9	1820.3	1798.8	1780.3	1778.8	1786.4	1757.2	1699.5
22°	1841.7	1837.8	1840.2	1842.5	1840.5	1815.6	1799.8	1798.2	1805.1	1740.9	1715.4
23°	1863.4	1859.2	1860.0	1862.1	1861.6	1833.2	1820.1	1814.5	1822.4	1738.1	1732.2
24°	1886.1	1881.3	1880.7	1882.4	1878.4	1854.2	1837.9	1830.5	1835.3	1754.6	1749.5
25°	1909.2	1903.9	1901.8	1904.1	1895.3	1876.0	1854.5	1848.4	1851.0	1770.7	1766.7
26°	1933.6	1927.2	1923.6	1926.2	1915.8	1898.0	1874.6	1868.5	1868.0	1782.2	1785.1
27°	1958.8	1950.7	1946.3	1948.3	1933.6	1917.0	1893.7	1890.8	1887.6	1795.5	1803.0
28°	1984.7	1975.3	1969.4	1971.7	1954.2	1934.7	1917.0	1912.8	1897.9	1811.2	1820.9
29°	2011.6	1999.6	1993.2	1996.0	1976.4	1954.6	1941.2	1935.6	1885.9	1831.5	1839.0
30°	2039.2	2024.7	2018.2	2020.8	1999.4	1974.9	1966.8	1958.5	1887.0	1852.3	1854.2
31°	2066.9	2049.5	2043.2	2045.2	2023.0	1994.2	1992.9	1980.6	1881.5	1873.6	1862.3
32°	2094.3	2074.5	2068.7	2066.7	2046.4	2018.0	2018.5	1995.7	1897.1	1894.0	1795.8
33°	2122.2	2100.2	2094.5	2088.4	2067.4	2041.7	2044.5	2007.1	1912.5	1910.8	1746.4
34°	2150.3	2125.8	2121.0	2110.7	2087.4	2064.9	2066.3	2019.6	1928.9	1925.4	1753.7
35°	2179.4	2152.1	2148.1	2135.6	2108.8	2088.2	2081.6	2038.3	1946.9	1939.9	1772.1
36°	2208.5	2178.7	2175.2	2159.3	2132.3	2112.1	2098.7	2057.4	1966.9	1956.0	1787.6
37°	2237.6	2205.0	2203.1	2183.8	2155.5	2135.4	2117.4	2077.0	1985.2	1952.9	1800.3
38°	2266.8	2232.2	2231.2	2209.8	2178.4	2160.2	2139.8	2097.3	1997.5	1889.6	1811.5
39°	2295.6	2260.0	2258.3	2237.1	2202.2	2184.0	2164.1	2114.1	2012.3	1843.8	1827.6
40°	2324.7	2288.6	2286.3	2264.7	2228.2	2201.5	2188.6	2129.9	2034.2	1861.7	1846.2
41°	2352.7	2318.7	2315.2	2292.2	2255.3	2221.3	2211.8	2146.4	2056.5	1881.4	1864.6
42°	2382.1	2348.1	2344.1	2321.4	2282.5	2240.4	2234.3	2158.6	2079.3	1901.9	1881.0
43°	2410.0	2378.8	2373.9	2350.3	2311.2	2261.9	2252.7	2174.7	2101.9	1923.1	1827.0
44°	2437.6	2410.9	2403.4	2379.1	2338.9	2286.7	2267.8	2200.5	2124.8	1941.1	1757.7



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	2466.2	2443.2	2435.0	2406.1	2368.2	2314.4	2285.6	2227.0	2141.2	1952.9	1756.6
46°	2494.8	2477.1	2467.0	2434.0	2398.4	2343.6	2297.7	2254.4	2144.9	1963.7	1772.4
47°	2523.3	2512.1	2500.1	2462.6	2429.5	2373.2	2310.5	2277.5	2148.3	1979.8	1784.8
48°	2553.3	2547.8	2533.6	2491.8	2459.8	2402.0	2325.7	2286.4	2101.6	1994.3	1795.1
49°	2583.5	2583.7	2567.7	2523.2	2487.9	2432.4	2346.3	2291.5	2065.4	1942.2	1808.8
50°	2614.8	2620.7	2602.0	2555.9	2512.5	2462.5	2368.7	2293.7	2060.9	1868.7	1826.2
51°	2646.2	2658.1	2637.4	2589.2	2539.6	2488.8	2390.9	2289.5	2081.2	1871.0	1777.0
52°	2678.1	2695.8	2672.0	2623.0	2568.5	2513.3	2414.4	2306.3	2097.4	1891.2	1669.7
53°	2710.8	2732.6	2707.0	2656.5	2594.1	2538.8	2437.0	2327.7	2105.6	1910.5	1669.4
54°	2742.5	2768.6	2744.0	2692.7	2622.8	2560.0	2458.3	2348.7	2116.2	1923.4	1688.7
55°	2774.1	2802.7	2781.2	2730.2	2653.2	2574.1	2474.1	2362.1	2138.3	1935.3	1708.8
56°	2802.9	2836.0	2820.9	2769.3	2685.2	2592.1	2483.1	2366.9	2156.7	1937.4	1728.9
57°	2830.4	2867.5	2861.0	2811.6	2717.7	2610.2	2490.2	2375.5	2164.6	1856.4	1746.0
58°	2856.7	2896.9	2901.1	2853.6	2749.7	2629.1	2495.2	2383.5	2176.5	1794.5	1641.0
59°	2880.0	2924.5	2940.2	2895.3	2781.8	2645.6	2503.2	2380.4	2122.6	1816.3	1584.3
60°	2900.5	2949.0	2978.5	2939.6	2812.0	2659.8	2509.3	2365.0	2069.6	1840.1	1591.9
61°	2917.3	2971.1	3016.7	2983.5	2840.7	2672.6	2511.9	2362.6	2078.0	1865.3	1599.9
62°	2930.4	2989.6	3053.8	3028.7	2867.8	2680.6	2511.3	2360.0	2083.4	1887.5	1521.5
63°	2941.7	3006.0	3091.6	3074.0	2894.0	2683.6	2502.8	2340.1	2087.5	1824.0	1433.3
64°	2951.8	3019.4	3126.6	3119.2	2916.7	2682.7	2484.5	2324.0	2082.7	1777.1	1422.8
65°	2961.2	3030.7	3158.9	3161.2	2938.6	2677.4	2464.7	2293.8	2053.4	1774.6	1396.0
66°	2966.7	3041.3	3187.7	3198.4	2957.7	2663.0	2444.7	2260.6	1970.8	1780.6	1264.8
67°	2965.9	3047.7	3212.4	3231.4	2969.7	2643.6	2418.6	2205.0	1966.4	1686.5	1259.9
68°	2938.2	3044.8	3233.4	3258.6	2969.6	2619.1	2348.1	2157.0	1977.9	1659.4	1185.0
69°	2850.8	3021.4	3244.9	3278.5	2966.9	2565.5	2216.6	2104.8	1983.6	1639.6	1081.0
70°	2669.3	2952.0	3247.5	3289.6	2963.8	2468.0	2027.0	2018.7	1976.6	1546.5	975.9
71°	2384.3	2803.0	3235.4	3287.4	2937.0	2322.8	1832.6	1888.0	1905.1	1520.1	870.8
72°	2082.4	2559.9	3205.4	3267.6	2884.7	2137.2	1653.1	1724.5	1832.3	1444.4	766.1
73°	1763.7	2242.9	3138.2	3226.7	2797.0	1948.6	1494.5	1555.8	1751.1	1398.1	683.2
74°	1393.9	1897.4	2994.1	3149.7	2670.6	1774.4	1311.2	1403.0	1650.3	1282.8	568.8
75°	930.4	1522.1	2736.3	3017.9	2506.7	1579.5	997.4	1245.3	1509.8	1188.5	490.0
76°	507.3	1074.9	2398.5	2810.0	2313.9	1285.5	683.5	978.2	1377.0	1030.5	420.7
77°	378.1	597.7	2037.6	2508.1	2077.0	847.2	374.2	711.2	1224.1	872.5	343.6
78°	253.2	438.5	1594.6	2071.3	1751.0	441.7	272.2	448.6	976.3	714.3	251.1
79°	128.3	285.7	1036.9	1562.1	1294.3	318.9	170.2	318.2	728.6	530.9	177.7
80°	113.8	132.9	536.4	1014.9	789.3	204.9	70.3	187.9	484.0	354.6	104.4
81°	101.3	115.9	398.7	515.8	395.9	90.8	60.0	59.6	339.8	247.2	32.2
82°	90.0	102.0	263.8	381.6	259.7	77.2	50.9	50.1	195.7	139.7	16.5
83°	79.8	89.3	129.0	253.3	126.2	65.3	42.7	41.5	53.4	35.6	13.4
84°	70.0	77.7	106.0	125.0	101.9	54.8	35.1	34.0	41.4	27.1	11.1
85°	60.5	67.0	85.9	103.7	80.6	45.6	28.1	27.5	32.2	22.6	8.9
86°	51.6	57.4	70.1	86.6	61.5	37.7	21.7	21.7	23.8	18.5	6.6
87°	43.1	48.4	56.2	67.7	47.6	29.8	16.0	16.2	17.6	14.4	5.2
88°	37.2	40.5	43.4	46.5	36.0	21.9	10.4	11.5	12.6	10.3	4.0
89°	31.3	32.7	35.7	36.4	24.3	14.2	4.8	6.8	7.5	6.2	2.9



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CATALOG NUMBER: XAS180-SFPM (5000K-72W-T5-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: P1436770

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436770

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436770

CATALOG NUMBER: XAS180-SFPM (5000K-72W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1567.7	1567.7	1567.7	1567.7	1567.7	1567.7	1567.7	1567.7	1567.7	1567.7	1567.7
1°	1566.3	1566.2	1567.0	1567.3	1568.0	1568.6	1569.0	1568.8	1569.4	1569.7	1569.9
2°	1566.5	1566.1	1567.4	1568.3	1569.4	1570.5	1571.5	1572.0	1573.1	1573.7	1574.3
3°	1567.9	1567.7	1569.2	1570.6	1572.3	1573.7	1575.5	1576.4	1578.0	1579.0	1579.8
4°	1571.1	1571.9	1573.4	1574.7	1576.8	1578.9	1581.4	1582.8	1584.7	1585.7	1586.6
5°	1577.9	1578.8	1580.4	1581.6	1583.1	1585.6	1588.2	1590.1	1592.3	1593.9	1594.9
6°	1586.0	1587.0	1589.4	1590.7	1592.2	1593.4	1596.7	1598.8	1601.6	1603.5	1604.6
7°	1596.0	1596.8	1599.4	1601.0	1602.6	1603.4	1607.0	1609.5	1612.3	1614.6	1615.8
8°	1606.4	1607.4	1610.5	1613.1	1614.7	1615.4	1618.6	1620.9	1624.4	1627.0	1627.7
9°	1617.8	1619.0	1622.2	1625.8	1628.2	1629.1	1630.6	1633.1	1637.2	1640.6	1641.4
10°	1629.7	1631.5	1635.6	1640.1	1643.2	1643.6	1644.3	1646.7	1651.1	1655.1	1655.6
11°	1643.1	1644.6	1649.6	1656.0	1659.0	1659.5	1659.1	1662.2	1667.3	1671.5	1671.0
12°	1656.2	1658.1	1663.6	1672.1	1676.2	1676.3	1675.2	1678.3	1683.8	1688.2	1687.6
13°	1670.5	1671.9	1678.3	1688.5	1694.5	1694.4	1691.8	1695.4	1701.7	1705.8	1705.1
14°	1684.3	1685.0	1693.5	1704.9	1713.9	1713.0	1709.1	1713.0	1720.2	1725.1	1723.9
15°	1693.3	1667.5	1703.0	1722.3	1732.6	1732.7	1728.1	1730.8	1739.2	1745.3	1742.0
16°	1659.1	1636.1	1670.4	1738.9	1751.0	1753.1	1747.3	1750.0	1758.4	1765.2	1761.3
17°	1637.7	1638.2	1650.6	1737.8	1770.3	1773.8	1767.3	1769.8	1778.2	1785.4	1780.5
18°	1651.4	1652.6	1663.8	1710.3	1789.8	1794.0	1785.4	1789.7	1798.9	1805.5	1800.1
19°	1665.4	1667.3	1678.7	1698.6	1808.7	1809.4	1799.2	1804.6	1820.3	1826.8	1819.7
20°	1680.6	1683.1	1694.4	1713.9	1825.3	1825.1	1815.3	1820.8	1842.0	1848.5	1840.1
21°	1696.3	1699.0	1710.9	1731.1	1810.5	1841.8	1837.3	1838.9	1858.9	1870.9	1860.5
22°	1713.3	1716.0	1728.5	1748.7	1790.8	1863.5	1860.0	1861.0	1878.5	1892.8	1881.5
23°	1730.0	1733.7	1747.1	1767.0	1789.1	1886.0	1882.2	1884.9	1898.1	1915.4	1903.4
24°	1748.0	1752.0	1766.0	1786.0	1808.2	1904.2	1900.4	1908.2	1921.1	1937.9	1925.0
25°	1765.2	1769.1	1784.5	1805.3	1828.1	1920.6	1919.9	1928.5	1945.4	1957.1	1947.4
26°	1782.7	1787.3	1802.8	1826.0	1843.4	1937.7	1939.3	1948.8	1969.8	1976.1	1970.4
27°	1800.1	1805.0	1821.3	1846.2	1858.2	1957.7	1962.0	1971.1	1993.8	1997.7	1993.8
28°	1815.7	1791.9	1838.1	1866.5	1874.4	1971.5	1986.1	1994.4	2014.9	2018.6	2018.7
29°	1777.5	1721.2	1807.7	1886.5	1896.0	1968.5	2010.3	2020.7	2034.9	2042.5	2044.4
30°	1712.5	1699.6	1740.9	1902.4	1917.9	1965.3	2035.2	2047.5	2057.7	2066.8	2070.9
31°	1702.2	1718.3	1728.2	1913.5	1940.0	1966.8	2058.8	2074.2	2078.0	2091.2	2097.0
32°	1719.4	1738.2	1745.7	1858.2	1961.8	1977.0	2077.4	2101.7	2100.3	2116.0	2123.0
33°	1736.9	1758.8	1763.8	1810.1	1982.2	1994.1	2090.2	2128.5	2125.1	2140.0	2147.6
34°	1754.6	1778.7	1781.5	1809.5	1998.4	2012.5	2104.4	2155.4	2149.4	2162.9	2171.4
35°	1771.9	1800.4	1799.6	1828.8	2014.9	2030.7	2124.6	2174.2	2174.6	2185.8	2196.7
36°	1790.4	1820.8	1819.1	1847.5	2030.2	2049.7	2145.1	2193.5	2200.6	2210.1	2223.8
37°	1807.0	1841.0	1837.8	1861.3	2036.0	2070.1	2166.7	2212.4	2226.4	2235.7	2249.5
38°	1824.9	1858.2	1856.2	1873.5	1974.9	2083.8	2189.6	2236.8	2252.8	2259.9	2275.5
39°	1839.8	1773.1	1872.9	1888.3	1929.1	2098.5	2212.2	2260.3	2279.3	2286.1	2303.4
40°	1751.9	1703.9	1794.3	1907.9	1942.0	2120.1	2229.4	2283.7	2300.5	2314.6	2332.6
41°	1686.9	1715.0	1726.1	1927.5	1962.7	2143.5	2246.2	2306.7	2320.0	2344.0	2362.1
42°	1698.4	1730.2	1732.8	1945.3	1984.1	2168.5	2257.9	2330.1	2341.6	2372.7	2392.1
43°	1716.3	1745.9	1751.3	1905.2	2005.8	2193.6	2276.0	2352.5	2364.0	2402.0	2421.6
44°	1735.5	1760.9	1771.0	1830.8	2025.7	2218.4	2302.5	2370.9	2391.0	2431.2	2452.1

REPORT NUMBER: P1436770

CATALOG NUMBER: XAS180-SFPM (5000K-72W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1754.6	1775.2	1789.6	1819.7	2039.6	2237.6	2331.2	2389.2	2419.9	2461.3	2480.4
46°	1773.8	1785.9	1809.2	1836.5	2050.4	2243.2	2359.5	2403.6	2450.6	2492.9	2509.4
47°	1790.1	1693.5	1826.2	1848.5	2066.5	2252.7	2388.3	2414.1	2480.6	2524.1	2538.7
48°	1708.1	1593.6	1756.2	1858.7	2082.6	2224.5	2407.6	2429.7	2510.1	2555.2	2569.5
49°	1604.9	1600.9	1649.6	1872.6	2046.8	2187.3	2407.3	2451.2	2539.9	2584.0	2601.4
50°	1617.1	1614.7	1653.6	1889.5	1970.5	2161.9	2407.0	2474.4	2568.2	2609.9	2634.9
51°	1636.6	1628.9	1671.8	1853.7	1958.7	2179.7	2402.2	2496.0	2592.8	2634.7	2668.0
52°	1656.1	1642.8	1689.5	1744.5	1979.9	2193.6	2402.9	2517.9	2614.6	2661.8	2700.7
53°	1673.5	1652.6	1706.1	1733.5	1999.3	2201.6	2417.6	2537.8	2637.0	2686.1	2735.0
54°	1685.6	1515.7	1719.6	1751.8	2011.3	2210.5	2433.9	2556.3	2654.8	2713.8	2771.8
55°	1559.8	1449.2	1591.9	1771.4	2021.7	2227.7	2445.7	2568.1	2664.5	2744.0	2810.3
56°	1487.7	1459.0	1517.5	1790.6	2023.8	2244.5	2445.6	2570.4	2677.7	2774.3	2849.8
57°	1491.5	1464.9	1520.0	1807.0	1959.7	2248.4	2446.0	2569.4	2688.5	2803.0	2889.0
58°	1497.4	1444.5	1526.0	1706.1	1885.1	2254.0	2446.9	2568.8	2700.3	2829.9	2929.1
59°	1451.6	1253.2	1488.2	1639.9	1902.1	2213.4	2441.1	2571.3	2711.1	2856.4	2969.0
60°	1292.1	1233.4	1320.7	1646.2	1923.3	2146.5	2422.9	2572.3	2719.7	2882.2	3009.5
61°	1288.1	1232.6	1314.3	1655.2	1945.6	2141.9	2413.4	2568.4	2727.4	2908.4	3050.4
62°	1281.7	1097.4	1306.9	1583.6	1965.7	2143.6	2408.7	2564.3	2732.4	2931.7	3091.5
63°	1148.6	994.7	1165.6	1483.3	1904.9	2142.7	2386.7	2554.1	2731.8	2950.8	3133.0
64°	1058.3	909.6	1074.4	1472.6	1840.7	2135.0	2367.9	2532.5	2727.7	2966.5	3172.6
65°	1049.5	824.5	1066.0	1453.5	1829.9	2106.4	2331.3	2507.6	2712.9	2979.8	3207.7
66°	935.0	740.3	946.8	1307.5	1826.6	2022.5	2293.5	2480.4	2690.5	2991.1	3236.7
67°	820.4	713.9	828.5	1295.7	1727.7	1999.4	2238.2	2435.0	2664.0	2992.5	3260.4
68°	720.8	473.8	734.7	1223.0	1693.7	2004.8	2171.4	2333.3	2616.5	2986.4	3278.8
69°	586.7	386.8	599.2	1105.1	1664.8	2001.9	2092.8	2162.0	2527.9	2976.3	3292.6
70°	449.7	263.6	457.7	1006.2	1565.3	1983.6	1972.1	1934.1	2388.4	2951.0	3290.7
71°	317.2	140.5	313.7	898.8	1528.9	1891.8	1805.5	1732.9	2192.2	2900.1	3271.4
72°	155.4	18.9	133.7	791.3	1447.9	1791.5	1616.3	1553.2	1983.5	2817.3	3237.8
73°	129.3	0.3	112.2	682.9	1378.1	1684.2	1436.5	1374.7	1780.8	2691.1	3173.8
74°	104.9	0.2	90.6	544.2	1250.3	1561.2	1270.6	1149.3	1582.3	2524.4	3072.8
75°	80.6	0.2	69.0	454.0	1132.0	1401.3	1026.4	829.6	1334.6	2318.7	2911.7
76°	57.0	0.3	49.1	383.0	960.3	1240.4	782.3	485.5	975.0	2079.2	2677.5
77°	32.0	0.3	28.7	307.4	788.6	1024.6	540.0	228.4	564.3	1802.3	2335.0
78°	22.8	0.3	20.5	223.9	616.8	808.9	382.2	175.0	412.1	1437.4	1886.0
79°	13.6	0.4	12.3	159.3	442.6	592.8	224.3	122.7	260.8	976.4	1380.0
80°	4.4	0.5	4.3	94.7	268.1	323.6	68.9	70.5	109.5	556.7	854.2
81°	3.7	0.5	3.6	31.5	158.0	231.5	56.4	59.1	87.6	406.8	427.3
82°	3.2	0.6	3.1	17.8	50.8	139.4	47.5	49.8	74.3	262.8	321.7
83°	2.8	0.7	2.8	13.8	33.7	49.1	39.5	41.6	62.8	118.9	222.2
84°	2.5	0.8	2.4	11.4	27.6	39.5	32.4	34.3	52.8	97.4	122.7
85°	2.2	0.9	2.2	9.0	23.1	30.3	26.2	27.0	43.7	76.4	103.0
86°	2.0	1.0	2.0	6.6	19.0	22.3	20.5	20.5	36.1	58.7	86.0
87°	1.9	1.1	1.8	5.0	14.2	16.8	15.3	14.2	28.6	45.6	66.5
88°	1.7	1.2	1.7	3.7	9.5	11.9	10.8	8.6	21.0	34.7	46.3
89°	1.6	1.3	1.6	2.6	4.8	7.1	6.3	3.9	13.6	23.8	36.2



REPORT NUMBER: P1436770

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436770

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436770

CATALOG NUMBER: XAS180-SFPM (5000K-72W-T5-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: P1436770

CATALOG NUMBER: XAS180-SFPM (5000K-72W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1567.7	1567.7	1567.7
1°	1570.4	1570.5	1570.0
2°	1574.7	1575.0	1574.1
3°	1580.5	1580.8	1579.5
4°	1587.7	1587.9	1586.5
5°	1595.7	1595.8	1594.6
6°	1604.9	1605.0	1603.5
7°	1615.4	1614.6	1612.6
8°	1626.7	1625.4	1623.0
9°	1639.6	1637.5	1634.7
10°	1653.6	1650.7	1647.2
11°	1668.3	1664.8	1660.7
12°	1684.0	1679.2	1674.2
13°	1700.4	1693.5	1687.9
14°	1717.6	1708.6	1702.1
15°	1734.2	1724.4	1717.0
16°	1751.1	1740.6	1731.9
17°	1768.9	1757.2	1748.2
18°	1786.8	1774.7	1765.2
19°	1805.6	1792.4	1782.7
20°	1824.5	1810.8	1801.3
21°	1844.0	1830.2	1821.2
22°	1864.7	1850.4	1841.7
23°	1885.9	1871.6	1863.4
24°	1906.8	1892.9	1886.1
25°	1929.2	1915.6	1909.2
26°	1952.3	1939.0	1933.6
27°	1976.4	1963.0	1958.8
28°	2001.0	1986.9	1984.7
29°	2026.7	2011.6	2011.6
30°	2052.3	2037.1	2039.2
31°	2078.9	2062.9	2066.9
32°	2105.1	2088.8	2094.3
33°	2132.0	2115.4	2122.2
34°	2159.4	2141.6	2150.3
35°	2187.2	2167.9	2179.4
36°	2215.5	2194.2	2208.5
37°	2243.9	2221.6	2237.6
38°	2272.8	2249.4	2266.8
39°	2301.8	2277.8	2295.6
40°	2332.0	2307.3	2324.7
41°	2361.5	2337.7	2352.7
42°	2391.3	2368.8	2382.1
43°	2422.0	2399.8	2410.0
44°	2453.3	2432.1	2437.6

REPORT NUMBER: P1436770

CATALOG NUMBER: XAS180-SFPM (5000K-72W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	2485.2	2466.5	2466.2
46°	2517.2	2500.5	2494.8
47°	2550.4	2535.9	2523.3
48°	2584.6	2572.0	2553.3
49°	2619.7	2610.2	2583.5
50°	2655.3	2647.7	2614.8
51°	2690.6	2686.2	2646.2
52°	2726.0	2724.5	2678.1
53°	2762.2	2763.2	2710.8
54°	2798.2	2800.7	2742.5
55°	2836.1	2837.3	2774.1
56°	2875.7	2872.0	2802.9
57°	2916.0	2904.1	2830.4
58°	2954.5	2933.5	2856.7
59°	2991.7	2960.7	2880.0
60°	3030.2	2984.4	2900.5
61°	3068.3	3005.0	2917.3
62°	3105.5	3023.3	2930.4
63°	3143.5	3039.5	2941.7
64°	3180.9	3054.7	2951.8
65°	3215.2	3067.9	2961.2
66°	3245.5	3080.3	2966.7
67°	3269.5	3088.1	2965.9
68°	3286.1	3086.0	2938.2
69°	3291.9	3064.7	2850.8
70°	3288.4	3004.1	2669.3
71°	3270.3	2868.9	2384.3
72°	3230.9	2631.2	2082.4
73°	3152.7	2313.5	1763.7
74°	2997.2	1954.4	1393.9
75°	2741.7	1574.0	930.4
76°	2403.4	1148.0	507.3
77°	2027.5	664.4	378.1
78°	1562.3	488.9	253.2
79°	1014.7	316.1	128.3
80°	547.9	143.3	113.8
81°	400.5	120.7	101.3
82°	264.8	106.0	90.0
83°	129.1	92.6	79.8
84°	107.7	80.3	70.0
85°	87.6	69.2	60.5
86°	71.4	59.1	51.6
87°	57.3	49.7	43.1
88°	44.1	41.5	37.2
89°	36.3	33.3	31.3



REPORT NUMBER: P1436770

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436770

CATALOG NUMBER: XAS180-SFPM (5000K-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: P1436770

CATALOG NUMBER: XAS180-SFPM (5000K-72W-T5-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)