

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: P1445012

Luminaire Tested: XAS180-SFPM (4000K-72W-T5)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1445012
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/5/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: XAS180-SFPM (4000K-72W-T5)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 40% (72W)
OPTICS - TYPE 5
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 28062 (1 lamp)
Luminaire Lumens: 12055.3 lumens
Efficiency: 43.0%
Efficacy: 168.4 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): 71.6
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

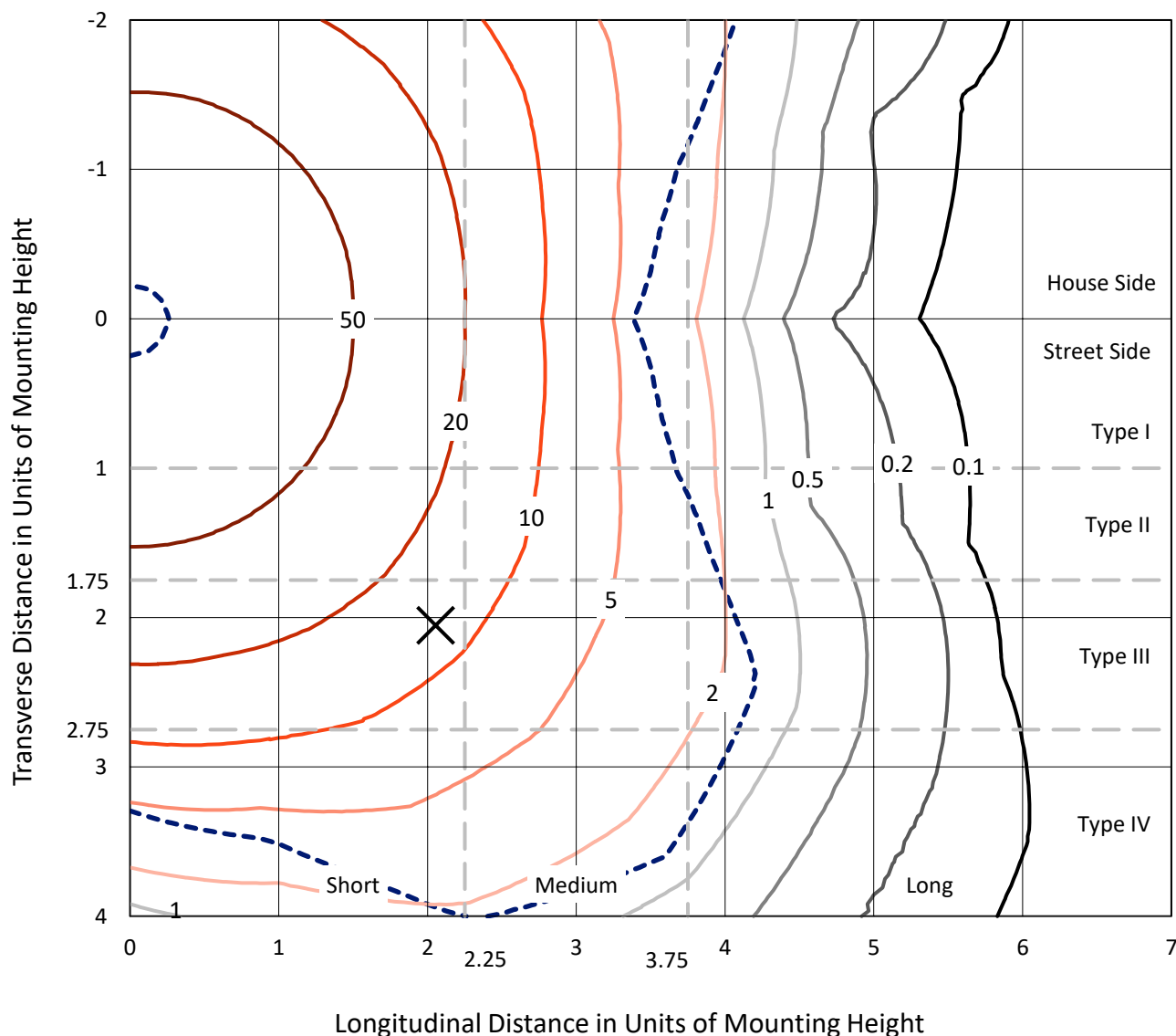
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

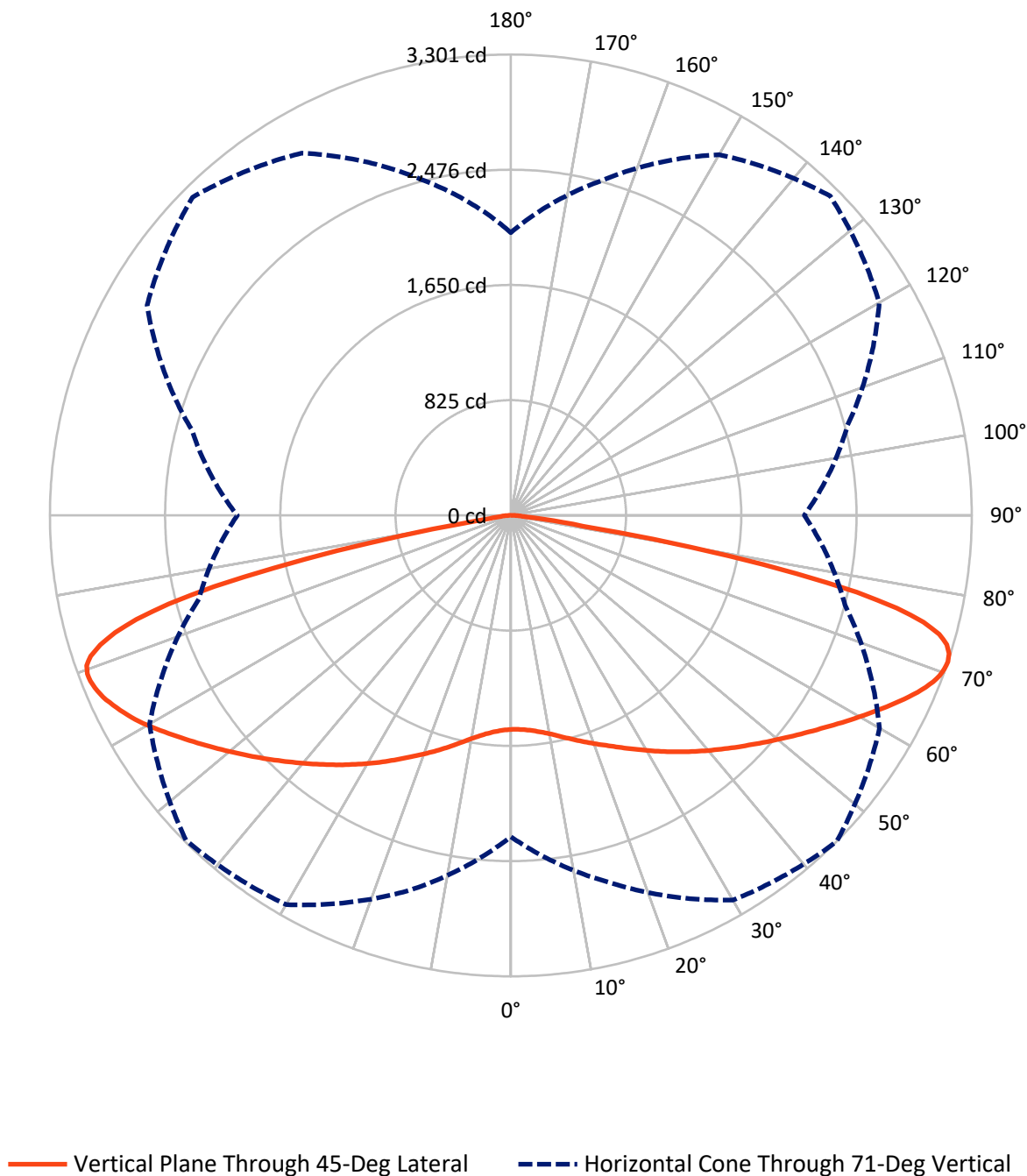


Based on 3 foot mounting height. Maximum calculated value = 170.6 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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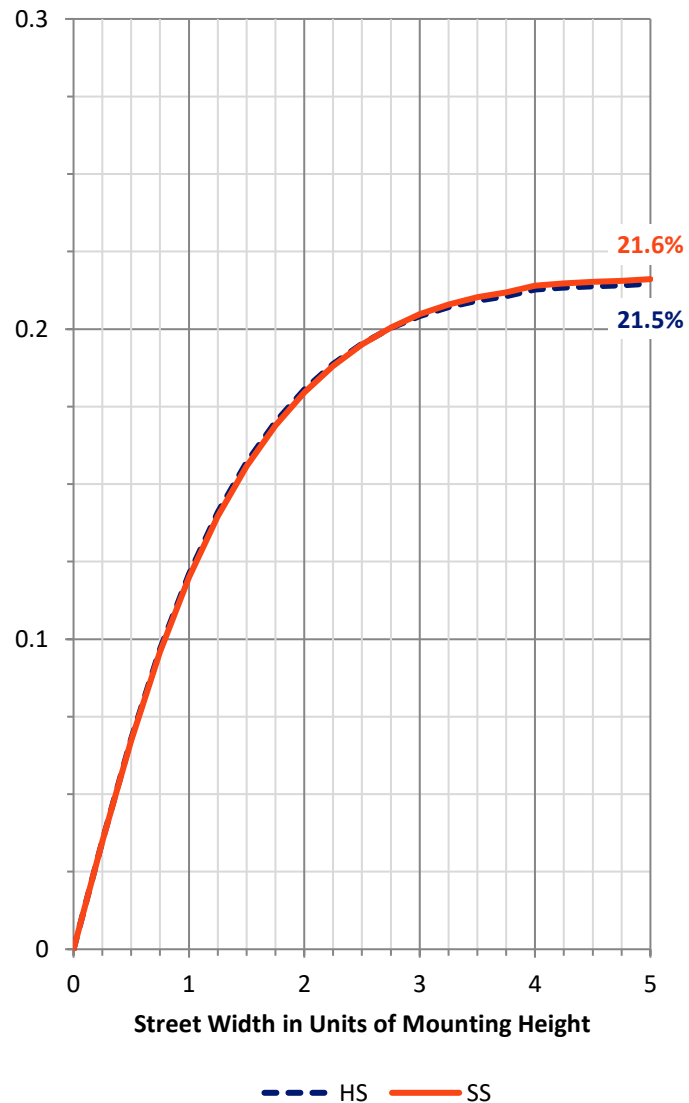
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5998.9	0.0	5998.9
	% Lamp	21.4	0.0	21.4
Street Side	Lumens	6056.4	0.0	6056.4
	% Lamp	21.6	0.0	21.6
Total	Lumens	12055.3	0.0	12055.3
	% Lamp	43.0	0.0	43.0

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	149.7	1.2	0.5
10°-20°	479.0	4.0	1.7
20°-30°	870.9	7.2	3.1
30°-40°	1333.9	11.1	4.8
40°-50°	1859.2	15.4	6.6
50°-60°	2433.3	20.2	8.7
60°-70°	2908.0	24.1	10.4
70°-80°	1926.7	16.0	6.9
80°-90°	94.7	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°	12055.3	100.0	43.0
0°-180°	12055.3	100.0	43.0

Coefficient of Utilization



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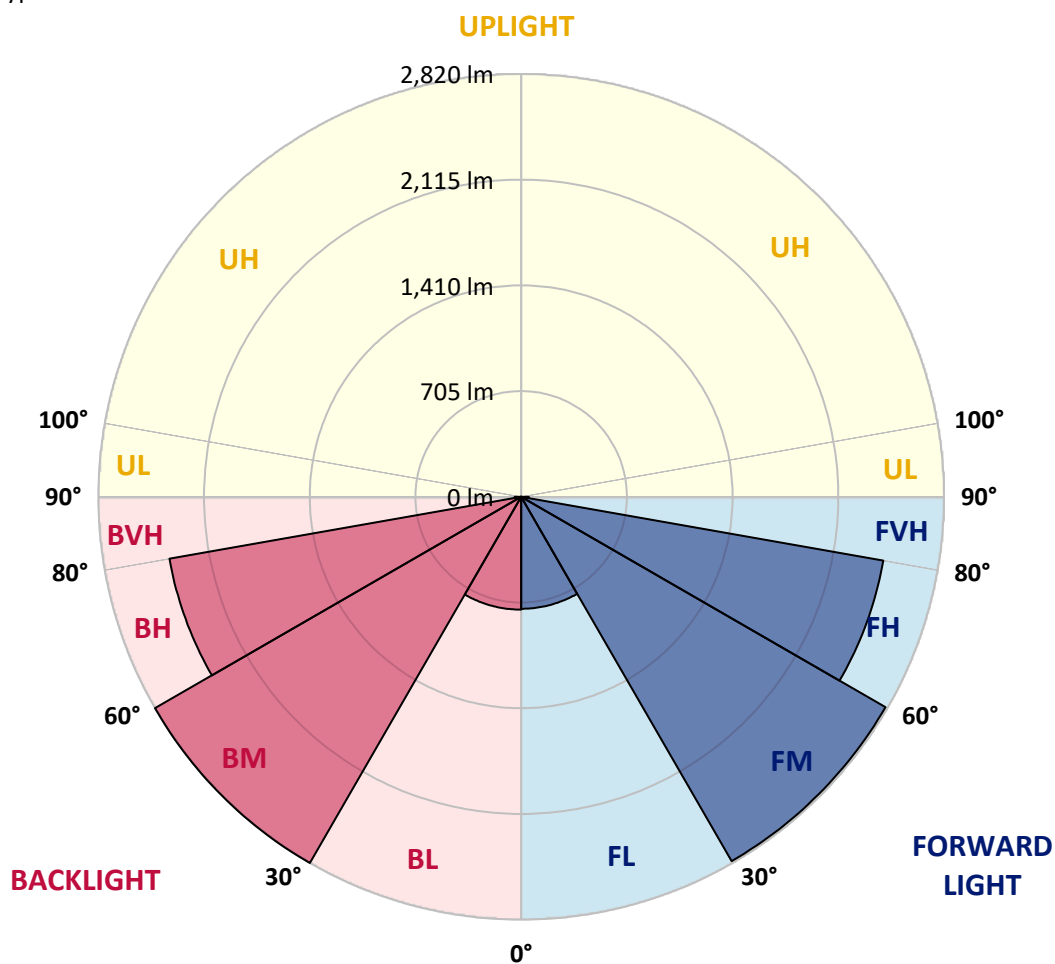
CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	746.8	2.7			
FM	(30°-60°)	2806.0	10.0			
FH	(60°-80°)	2452.7	8.7			G2/5000
FVH	(80°-90°)	50.8	0.2			G1/100
BL	(0°-30°)	752.7	2.7	B2/1000		
BM	(30°-60°)	2820.3	10.1	B3/5000		
BH	(60°-80°)	2382.0	8.5	B3/2500		G2/5000
BVH	(80°-90°)	43.9	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		16006.7	57.0			

BUG Rating: B3-U0-G2

Type V Short



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CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4
1°	1533.1	1532.8	1533.1	1532.8	1532.9	1532.7	1531.6	1531.7	1531.7	1532.3	1532.6
2°	1535.5	1534.9	1534.8	1534.4	1533.8	1533.2	1532.3	1532.3	1532.6	1533.3	1534.1
3°	1539.6	1538.6	1538.0	1537.0	1536.6	1535.8	1534.8	1534.7	1535.0	1535.9	1537.2
4°	1545.3	1544.0	1542.9	1541.9	1540.9	1539.9	1538.7	1538.7	1539.0	1540.3	1541.9
5°	1551.8	1550.3	1549.0	1547.3	1545.8	1544.9	1543.5	1544.1	1545.1	1546.5	1548.2
6°	1559.2	1557.3	1556.4	1554.5	1552.2	1550.8	1549.4	1549.8	1551.4	1554.0	1556.1
7°	1567.3	1565.4	1564.9	1562.8	1560.4	1558.3	1556.6	1557.3	1558.7	1562.6	1565.5
8°	1576.8	1574.7	1573.8	1572.0	1569.5	1567.1	1565.9	1566.8	1568.4	1572.0	1576.1
9°	1587.1	1585.2	1583.8	1582.1	1579.9	1577.0	1575.3	1576.5	1579.6	1583.3	1587.4
10°	1598.3	1596.5	1595.3	1593.4	1591.5	1588.1	1586.6	1587.9	1591.7	1596.1	1599.7
11°	1610.7	1608.6	1608.0	1606.3	1603.8	1600.5	1598.5	1600.6	1604.7	1610.3	1613.5
12°	1623.3	1620.5	1620.9	1619.9	1617.1	1613.7	1611.2	1614.0	1618.8	1625.0	1628.7
13°	1635.5	1632.9	1634.5	1634.7	1631.1	1627.8	1624.4	1627.8	1634.1	1640.5	1644.9
14°	1649.1	1646.0	1648.2	1649.5	1646.1	1642.1	1638.2	1642.5	1649.1	1657.1	1661.3
15°	1662.3	1659.5	1662.3	1665.2	1661.6	1656.8	1652.9	1657.1	1665.3	1674.1	1677.6
16°	1676.8	1674.6	1676.9	1680.7	1677.8	1672.6	1668.8	1672.8	1682.0	1691.5	1695.1
17°	1692.4	1690.3	1693.0	1697.0	1694.9	1688.7	1684.6	1688.9	1699.8	1708.5	1712.4
18°	1708.5	1705.7	1709.2	1713.2	1711.7	1705.4	1701.4	1706.0	1717.4	1726.0	1729.2
19°	1725.1	1722.1	1726.1	1730.0	1729.3	1722.9	1718.8	1724.1	1735.6	1744.0	1746.0
20°	1743.2	1739.6	1743.2	1747.2	1747.3	1741.4	1737.3	1743.1	1754.4	1761.9	1762.9
21°	1761.6	1757.9	1760.5	1764.9	1765.8	1760.1	1755.9	1762.7	1773.3	1779.2	1780.5
22°	1781.0	1777.1	1778.9	1782.8	1785.7	1779.7	1776.0	1783.1	1793.6	1798.2	1799.0
23°	1801.6	1797.4	1797.8	1802.0	1805.7	1800.2	1796.5	1804.5	1813.9	1817.3	1818.7
24°	1823.3	1818.5	1817.4	1821.5	1826.1	1821.1	1818.1	1826.4	1835.3	1837.3	1838.9
25°	1845.9	1840.4	1838.0	1842.4	1847.7	1842.9	1840.9	1849.2	1856.3	1857.9	1858.8
26°	1869.4	1862.8	1859.3	1863.5	1869.3	1864.4	1864.0	1872.2	1878.0	1879.0	1879.3
27°	1893.6	1885.8	1880.8	1885.5	1890.8	1886.4	1887.5	1895.6	1900.0	1901.0	1900.5
28°	1919.0	1909.1	1903.0	1907.8	1912.7	1909.0	1911.9	1918.7	1922.9	1923.7	1921.9
29°	1944.8	1932.5	1926.0	1931.3	1934.7	1931.7	1937.4	1942.2	1945.7	1947.3	1944.4
30°	1971.2	1956.0	1949.5	1955.0	1957.2	1955.2	1963.7	1966.2	1969.1	1971.1	1966.9
31°	1998.0	1980.2	1974.0	1979.5	1979.8	1978.1	1990.1	1990.0	1992.6	1995.6	1990.6
32°	2024.7	2004.4	1998.3	2004.2	2002.7	2002.7	2016.1	2014.7	2016.7	2020.5	2014.4
33°	2051.2	2029.2	2023.9	2028.6	2026.9	2026.4	2042.9	2038.5	2041.3	2045.4	2038.9
34°	2078.0	2053.9	2049.0	2053.7	2050.9	2049.7	2069.0	2062.3	2066.0	2069.8	2063.5
35°	2106.3	2078.4	2074.8	2079.0	2075.5	2073.0	2096.0	2085.9	2091.0	2095.4	2089.4
36°	2134.2	2103.7	2101.2	2104.9	2100.9	2097.3	2122.7	2110.2	2117.3	2121.3	2116.0
37°	2162.3	2129.3	2128.1	2131.3	2126.6	2120.8	2149.2	2134.8	2143.3	2147.6	2143.0
38°	2190.6	2155.9	2155.1	2157.7	2152.0	2145.3	2176.7	2158.9	2168.7	2174.0	2169.9
39°	2218.5	2182.5	2181.8	2184.4	2177.6	2170.8	2204.6	2183.9	2195.0	2200.1	2196.3
40°	2246.1	2210.2	2208.6	2211.5	2203.7	2196.4	2232.2	2209.5	2221.5	2227.4	2223.8
41°	2273.2	2238.5	2236.2	2238.6	2230.6	2223.0	2259.9	2236.4	2247.7	2254.7	2250.1
42°	2301.5	2267.4	2264.5	2266.9	2257.6	2250.1	2286.4	2263.5	2274.8	2283.0	2278.8
43°	2329.0	2297.5	2293.2	2295.6	2285.7	2278.3	2312.2	2291.8	2302.2	2311.7	2307.4
44°	2355.9	2328.4	2322.2	2324.6	2313.8	2307.3	2337.0	2320.8	2329.5	2340.1	2336.5

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CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	2382.9	2359.3	2352.0	2353.4	2342.3	2337.5	2361.2	2350.2	2357.4	2369.3	2366.6
46°	2410.0	2391.9	2382.8	2383.4	2372.2	2368.7	2385.8	2380.9	2385.8	2399.0	2397.0
47°	2437.9	2426.4	2414.8	2414.7	2403.2	2401.0	2411.2	2411.7	2415.8	2430.1	2429.2
48°	2466.4	2460.4	2447.2	2446.7	2433.9	2433.8	2435.0	2443.7	2446.9	2460.6	2461.9
49°	2495.8	2496.3	2481.3	2479.7	2465.8	2466.8	2458.7	2475.3	2478.3	2492.3	2494.0
50°	2525.8	2531.1	2515.4	2512.8	2497.4	2500.2	2482.5	2506.8	2509.4	2525.8	2527.6
51°	2556.6	2567.3	2550.6	2546.8	2531.0	2533.0	2507.3	2537.8	2541.8	2559.6	2563.1
52°	2588.2	2604.2	2587.6	2583.1	2565.1	2565.5	2532.9	2569.7	2575.1	2595.3	2598.2
53°	2619.8	2640.4	2625.3	2618.9	2599.1	2596.8	2557.2	2601.0	2608.4	2630.2	2634.0
54°	2651.6	2676.5	2663.6	2657.3	2633.6	2627.3	2581.3	2630.9	2642.8	2665.9	2670.0
55°	2681.9	2709.5	2702.7	2695.0	2667.9	2655.9	2605.0	2658.1	2677.6	2704.4	2707.7
56°	2710.5	2742.3	2742.8	2734.8	2703.1	2683.0	2627.8	2685.4	2712.3	2743.2	2746.5
57°	2737.6	2773.1	2782.8	2776.6	2737.9	2708.0	2648.1	2709.9	2746.6	2782.8	2784.2
58°	2762.9	2802.2	2823.6	2819.0	2772.4	2730.2	2665.5	2731.8	2781.0	2823.8	2820.3
59°	2785.8	2829.2	2865.5	2861.8	2807.0	2748.7	2681.7	2752.0	2814.7	2865.5	2855.0
60°	2806.3	2853.6	2906.5	2906.5	2840.2	2764.4	2694.4	2769.2	2846.8	2907.8	2888.6
61°	2823.1	2875.8	2946.3	2950.9	2873.1	2778.4	2704.3	2784.1	2880.0	2949.3	2922.3
62°	2836.2	2894.2	2985.2	2996.6	2904.8	2788.4	2709.9	2795.0	2910.8	2990.4	2954.7
63°	2847.7	2910.9	3023.2	3042.7	2937.4	2793.7	2710.2	2803.5	2941.8	3028.3	2984.9
64°	2858.0	2924.5	3057.9	3088.2	2967.9	2794.8	2705.9	2808.6	2972.6	3065.0	3013.4
65°	2868.1	2936.0	3091.5	3133.0	2997.2	2794.3	2698.3	2809.5	3001.2	3102.5	3038.3
66°	2873.9	2946.9	3121.4	3176.0	3022.5	2788.7	2687.0	2805.4	3026.8	3140.1	3061.6
67°	2873.9	2954.6	3147.0	3215.9	3043.4	2778.6	2668.5	2796.6	3047.8	3174.8	3080.3
68°	2847.4	2953.0	3168.7	3251.0	3057.9	2762.1	2611.6	2778.5	3064.5	3202.3	3068.3
69°	2762.5	2930.7	3182.9	3277.2	3066.3	2716.9	2492.1	2733.3	3072.7	3224.2	3040.2
70°	2583.6	2866.2	3188.2	3294.0	3069.6	2623.2	2317.7	2641.5	3071.3	3236.7	3025.1
71°	2300.7	2720.8	3180.8	3300.9	3048.8	2477.8	2101.8	2497.4	3046.7	3234.6	2983.3
72°	2005.9	2482.9	3155.5	3291.1	2995.6	2292.1	1904.8	2308.4	2982.3	3201.3	2913.2
73°	1693.5	2173.0	3093.8	3256.7	2904.6	2092.7	1752.9	2104.4	2874.5	3129.0	2825.0
74°	1332.3	1834.9	2958.3	3183.4	2777.2	1911.3	1562.2	1916.8	2733.9	3019.0	2679.4
75°	882.2	1466.5	2710.4	3053.1	2609.9	1709.5	1193.7	1718.6	2555.0	2872.4	2462.4
76°	456.1	1029.2	2375.8	2843.8	2412.0	1406.4	825.1	1429.4	2357.8	2655.9	2166.4
77°	330.1	553.7	2013.3	2537.5	2168.9	946.5	457.1	1035.1	2122.9	2350.3	1799.4
78°	211.0	398.0	1573.6	2088.0	1830.9	490.6	196.8	640.9	1797.4	1943.6	1359.6
79°	91.9	247.8	1020.8	1591.1	1358.4	354.7	155.0	249.4	1340.8	1470.8	919.8
80°	76.3	97.7	520.8	1036.1	822.5	222.4	113.2	192.6	884.2	995.0	481.5
81°	65.3	80.4	376.7	524.4	404.1	90.1	72.3	135.9	431.9	524.1	221.2
82°	55.6	68.0	238.4	377.0	297.9	76.7	61.8	79.1	192.3	212.0	168.8
83°	46.6	56.7	100.0	239.7	195.0	64.9	52.3	66.7	151.1	165.4	116.3
84°	38.5	46.5	78.4	102.5	92.1	54.1	43.3	55.4	109.9	118.9	64.3
85°	30.4	38.1	59.8	84.5	69.9	44.2	34.9	45.1	69.1	72.6	46.5
86°	22.4	29.6	44.9	67.9	51.4	35.5	27.0	35.7	49.6	56.9	31.1
87°	15.1	21.2	32.7	49.9	37.7	26.8	19.2	27.1	35.8	40.4	19.4
88°	8.7	13.7	20.5	40.0	24.3	18.1	13.4	19.2	24.8	25.1	13.7
89°	3.5	5.9	8.3	30.4	10.8	9.7	7.6	13.3	17.1	17.4	8.1

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CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

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: P1445012

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

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: P1445012
CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

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: P1445012

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4	1532.4
1°	1532.9	1533.2	1533.5	1533.9	1534.2	1534.4	1534.6	1533.6	1533.4	1533.2	1533.5
2°	1534.7	1535.6	1535.8	1536.7	1537.2	1537.4	1537.6	1536.7	1536.8	1536.4	1536.5
3°	1538.0	1539.3	1540.2	1541.0	1541.8	1542.1	1542.7	1541.4	1541.5	1541.1	1541.4
4°	1543.3	1544.8	1545.9	1546.9	1547.9	1548.3	1548.8	1547.9	1547.6	1547.3	1547.0
5°	1549.8	1551.9	1553.1	1554.6	1555.3	1555.8	1556.0	1554.9	1554.8	1554.4	1554.1
6°	1558.2	1560.3	1562.1	1563.7	1564.4	1564.4	1564.5	1563.2	1563.3	1563.0	1562.8
7°	1568.0	1569.9	1572.3	1574.1	1574.7	1575.2	1575.7	1574.0	1573.7	1573.1	1572.9
8°	1578.7	1581.0	1583.5	1585.8	1586.9	1587.8	1587.3	1585.3	1584.9	1584.3	1583.5
9°	1590.3	1592.9	1595.9	1598.9	1600.6	1600.9	1600.0	1597.0	1597.1	1596.9	1596.1
10°	1603.1	1606.2	1609.7	1613.4	1615.4	1615.4	1613.7	1610.8	1610.6	1610.9	1609.2
11°	1617.3	1620.7	1624.7	1629.2	1631.5	1631.1	1629.0	1625.9	1625.9	1626.2	1624.0
12°	1632.1	1635.5	1640.6	1645.9	1648.6	1647.9	1645.4	1641.6	1642.1	1642.1	1639.5
13°	1647.2	1650.6	1656.2	1663.8	1667.1	1666.1	1662.3	1658.6	1659.2	1659.2	1656.0
14°	1663.1	1666.3	1672.9	1681.6	1686.1	1684.8	1680.5	1676.0	1676.9	1677.5	1673.3
15°	1679.1	1682.0	1689.7	1700.0	1705.9	1704.4	1699.1	1694.2	1695.5	1696.5	1690.9
16°	1695.6	1698.5	1706.6	1718.4	1726.1	1725.4	1718.5	1712.9	1714.5	1715.6	1708.9
17°	1712.1	1715.0	1724.0	1736.9	1746.4	1745.7	1738.9	1732.8	1734.0	1735.2	1727.6
18°	1729.2	1732.0	1741.8	1755.1	1766.5	1766.9	1759.6	1752.6	1754.6	1755.3	1746.5
19°	1746.4	1750.1	1759.4	1773.7	1787.1	1788.0	1780.4	1773.2	1775.4	1775.6	1764.9
20°	1764.0	1768.4	1778.0	1793.6	1807.2	1809.8	1802.1	1794.7	1797.0	1796.6	1784.3
21°	1782.6	1787.1	1797.3	1813.2	1827.9	1832.2	1825.1	1816.9	1818.7	1818.1	1803.4
22°	1802.0	1806.8	1817.3	1833.9	1849.8	1855.0	1848.4	1839.5	1841.7	1839.8	1824.1
23°	1821.2	1827.0	1838.6	1855.6	1871.7	1878.7	1871.3	1863.1	1865.5	1861.7	1845.3
24°	1842.0	1848.4	1860.2	1877.6	1894.5	1902.0	1895.1	1887.2	1889.2	1883.8	1866.1
25°	1862.5	1870.0	1882.2	1899.6	1917.7	1925.5	1919.9	1911.9	1913.1	1906.7	1887.6
26°	1884.3	1893.5	1905.1	1922.9	1941.3	1949.2	1944.5	1937.8	1936.8	1929.4	1910.4
27°	1906.0	1916.7	1927.9	1946.0	1964.7	1972.7	1968.9	1963.5	1960.9	1952.3	1932.9
28°	1928.1	1942.3	1951.2	1969.8	1989.9	1997.4	1994.1	1990.7	1985.5	1975.9	1956.9
29°	1950.9	1967.7	1975.3	1994.3	2014.5	2021.6	2019.6	2017.7	2010.1	2000.3	1982.0
30°	1974.5	1994.5	1999.8	2018.6	2039.7	2046.3	2044.8	2044.8	2034.4	2024.2	2007.3
31°	1998.7	2021.6	2024.6	2043.0	2063.7	2071.0	2069.4	2072.6	2059.1	2048.2	2032.8
32°	2023.0	2048.9	2049.5	2067.6	2089.3	2096.7	2094.9	2100.2	2083.0	2072.2	2058.4
33°	2047.9	2076.6	2074.5	2093.4	2114.7	2122.6	2120.3	2127.9	2107.8	2097.8	2085.1
34°	2072.8	2104.3	2099.1	2119.6	2141.1	2148.2	2145.9	2156.1	2132.4	2123.2	2111.7
35°	2097.2	2133.3	2124.9	2146.3	2167.4	2174.4	2171.1	2184.2	2157.8	2149.6	2139.7
36°	2122.3	2162.3	2150.9	2173.2	2193.5	2199.8	2196.7	2212.8	2183.1	2176.1	2167.2
37°	2147.0	2191.2	2177.2	2200.3	2219.9	2225.7	2223.3	2241.5	2209.2	2203.1	2194.8
38°	2173.0	2219.8	2204.3	2227.8	2247.1	2252.4	2249.6	2270.0	2235.5	2230.3	2223.0
39°	2199.6	2248.8	2231.5	2255.9	2275.0	2278.9	2277.0	2298.1	2262.0	2258.0	2250.7
40°	2227.3	2275.8	2260.1	2284.6	2302.8	2306.4	2304.4	2325.1	2289.2	2286.4	2279.1
41°	2256.2	2303.1	2288.9	2313.4	2331.6	2333.6	2331.8	2351.2	2317.2	2314.9	2307.5
42°	2284.7	2329.7	2319.1	2341.9	2360.1	2361.9	2360.0	2377.1	2346.5	2344.1	2337.1
43°	2314.3	2355.9	2349.3	2370.9	2389.9	2391.7	2389.8	2403.4	2376.7	2373.0	2365.7
44°	2344.9	2382.1	2380.4	2400.9	2420.0	2421.3	2419.8	2430.6	2407.7	2402.2	2395.8

REPORT NUMBER: P1445012

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2376.0	2408.9	2412.0	2432.1	2451.1	2451.5	2451.7	2456.9	2439.3	2432.4	2426.0
46°	2408.3	2435.0	2445.0	2462.7	2482.5	2481.6	2483.3	2480.8	2472.5	2463.1	2457.0
47°	2442.3	2460.5	2478.4	2493.7	2514.2	2511.8	2514.9	2504.6	2504.2	2494.2	2489.3
48°	2476.6	2487.3	2512.9	2525.8	2546.3	2542.9	2546.0	2528.9	2536.3	2525.3	2522.2
49°	2511.2	2516.1	2548.5	2558.0	2579.6	2574.2	2576.8	2553.8	2567.7	2557.0	2555.5
50°	2547.5	2544.3	2584.5	2592.0	2612.8	2606.0	2607.0	2579.0	2598.9	2589.8	2589.3
51°	2585.7	2573.5	2620.5	2626.0	2647.0	2637.2	2637.0	2601.8	2629.0	2622.6	2624.0
52°	2622.0	2601.1	2655.6	2660.1	2681.9	2668.6	2665.6	2624.9	2658.4	2655.2	2659.5
53°	2654.7	2624.0	2688.2	2695.6	2717.7	2700.1	2692.2	2646.5	2684.7	2687.0	2695.3
54°	2683.1	2641.0	2717.8	2731.6	2754.0	2732.4	2716.9	2665.7	2709.7	2720.8	2732.9
55°	2708.9	2658.5	2743.3	2767.9	2791.1	2763.7	2740.0	2684.0	2732.5	2753.1	2772.0
56°	2735.2	2678.2	2768.3	2805.9	2828.8	2794.1	2760.6	2700.6	2753.2	2784.9	2812.2
57°	2760.0	2698.9	2792.8	2842.8	2866.6	2824.8	2778.8	2714.4	2770.6	2815.6	2851.0
58°	2783.4	2713.4	2816.5	2880.8	2905.1	2855.0	2794.2	2727.8	2785.2	2846.3	2891.7
59°	2801.4	2723.5	2834.0	2916.7	2945.2	2883.7	2807.2	2739.0	2797.2	2875.8	2932.2
60°	2816.2	2736.1	2848.7	2950.3	2984.7	2911.6	2819.0	2747.5	2807.4	2905.2	2973.5
61°	2830.5	2748.5	2863.0	2984.6	3024.6	2939.6	2828.4	2751.0	2817.2	2933.6	3015.1
62°	2844.1	2758.6	2876.1	3017.1	3061.0	2968.3	2834.7	2751.9	2822.8	2960.7	3057.3
63°	2856.4	2766.9	2888.4	3047.0	3094.0	2994.1	2837.3	2751.0	2824.2	2985.9	3099.0
64°	2867.4	2768.5	2898.8	3074.4	3125.2	3019.1	2838.7	2744.2	2822.5	3009.0	3140.9
65°	2865.8	2742.5	2894.9	3098.6	3155.6	3040.8	2834.5	2732.1	2816.2	3028.5	3180.3
66°	2830.4	2719.5	2856.0	3117.5	3184.6	3058.0	2827.1	2714.8	2806.4	3045.0	3217.8
67°	2807.8	2705.3	2831.8	3128.2	3207.2	3072.5	2812.6	2672.8	2789.2	3057.0	3249.8
68°	2794.2	2659.3	2811.0	3106.8	3224.9	3081.9	2776.9	2573.1	2748.5	3063.9	3276.5
69°	2739.3	2538.8	2750.4	3070.9	3236.6	3079.0	2699.2	2404.3	2661.1	3059.5	3295.0
70°	2636.2	2328.1	2650.2	3047.2	3238.2	3058.6	2558.1	2181.4	2513.8	3040.2	3300.9
71°	2478.8	2025.3	2492.0	2995.4	3222.6	3007.6	2365.0	1958.7	2312.3	2987.3	3289.7
72°	2238.1	1750.8	2247.4	2920.6	3173.3	2912.7	2146.1	1772.7	2092.6	2899.5	3258.8
73°	1943.9	1470.3	1949.3	2818.3	3083.6	2769.6	1934.2	1591.9	1883.6	2765.5	3195.5
74°	1639.2	1102.0	1645.4	2660.9	2955.0	2594.9	1733.1	1345.2	1680.1	2592.8	3091.3
75°	1247.6	733.7	1255.4	2423.0	2783.4	2382.8	1481.5	959.4	1416.9	2380.1	2922.8
76°	856.1	371.2	865.4	2106.1	2530.6	2151.7	1088.5	543.9	1025.8	2135.4	2680.6
77°	468.0	272.2	478.7	1738.5	2186.3	1872.7	695.5	390.4	573.5	1840.7	2332.5
78°	197.5	173.2	207.0	1301.7	1737.9	1483.5	308.1	242.3	415.6	1445.3	1866.6
79°	153.9	76.6	160.6	864.8	1268.7	1077.4	142.9	94.2	257.8	958.2	1340.4
80°	110.4	63.2	114.1	431.2	799.6	671.4	119.4	78.8	100.0	525.9	811.5
81°	66.9	52.6	68.4	193.8	338.1	266.3	95.8	67.3	82.3	380.1	382.3
82°	54.7	43.2	55.8	150.2	145.6	140.8	72.4	57.2	69.8	243.1	246.9
83°	43.6	34.3	44.7	106.5	120.3	114.3	61.0	48.0	58.7	106.0	119.7
84°	33.6	26.5	34.3	63.2	95.0	87.8	50.8	39.8	48.5	81.9	96.6
85°	24.5	18.9	25.0	45.1	69.6	61.4	41.1	31.7	39.8	61.4	80.1
86°	17.4	13.0	17.6	29.8	54.2	44.1	32.2	23.5	31.2	44.8	64.2
87°	10.2	7.2	10.2	21.4	38.1	31.9	24.0	16.0	22.5	32.4	45.2
88°	3.1	1.4	2.8	13.1	26.0	21.9	16.6	9.4	15.1	20.1	36.3
89°	2.2	1.3	2.1	4.9	13.9	12.0	9.1	3.8	6.8	7.8	27.6

REPORT NUMBER: P1445012

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

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: P1445012

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

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: P1445012
CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

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: P1445012

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1532.4	1532.4	1532.4
1°	1533.5	1533.1	1533.1
2°	1536.3	1536.0	1535.5
3°	1540.8	1540.4	1539.6
4°	1546.9	1546.1	1545.3
5°	1553.7	1552.8	1551.8
6°	1561.8	1560.9	1559.2
7°	1570.7	1569.5	1567.3
8°	1581.0	1578.8	1576.8
9°	1592.7	1589.8	1587.1
10°	1605.5	1601.8	1598.3
11°	1619.2	1614.8	1610.7
12°	1633.9	1628.1	1623.3
13°	1649.5	1641.7	1635.5
14°	1664.9	1655.7	1649.1
15°	1680.5	1670.0	1662.3
16°	1697.0	1685.1	1676.8
17°	1713.6	1701.3	1692.4
18°	1731.0	1717.8	1708.5
19°	1748.9	1734.7	1725.1
20°	1766.3	1751.7	1743.2
21°	1784.9	1770.3	1761.6
22°	1804.3	1789.5	1781.0
23°	1824.6	1809.6	1801.6
24°	1845.5	1830.2	1823.3
25°	1866.3	1852.1	1845.9
26°	1888.9	1874.4	1869.4
27°	1912.2	1897.4	1893.6
28°	1935.6	1920.6	1919.0
29°	1960.3	1944.4	1944.8
30°	1985.7	1968.4	1971.2
31°	2011.0	1993.7	1998.0
32°	2036.5	2018.9	2024.7
33°	2062.3	2044.5	2051.2
34°	2088.2	2069.2	2078.0
35°	2115.1	2094.6	2106.3
36°	2143.1	2119.8	2134.2
37°	2170.2	2146.4	2162.3
38°	2198.4	2173.5	2190.6
39°	2226.0	2200.5	2218.5
40°	2255.0	2228.9	2246.1
41°	2283.7	2257.8	2273.2
42°	2313.3	2288.1	2301.5
43°	2343.2	2318.9	2329.0
44°	2373.2	2349.5	2355.9

REPORT NUMBER: P1445012

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	2403.9	2382.5	2382.9
46°	2435.4	2415.3	2410.0
47°	2467.5	2449.9	2437.9
48°	2500.8	2485.3	2466.4
49°	2534.9	2522.1	2495.8
50°	2570.0	2558.8	2525.8
51°	2605.9	2596.8	2556.6
52°	2642.8	2634.0	2588.2
53°	2681.2	2671.4	2619.8
54°	2718.7	2708.0	2651.6
55°	2758.0	2744.4	2681.9
56°	2798.3	2778.2	2710.5
57°	2838.0	2809.3	2737.6
58°	2879.0	2838.0	2762.9
59°	2918.8	2864.5	2785.8
60°	2958.6	2888.6	2806.3
61°	2998.4	2909.0	2823.1
62°	3037.2	2927.5	2836.2
63°	3074.5	2943.0	2847.7
64°	3111.8	2957.8	2858.0
65°	3146.1	2971.1	2868.1
66°	3178.0	2983.8	2873.9
67°	3203.9	2991.9	2873.9
68°	3223.7	2990.9	2847.4
69°	3233.3	2970.2	2762.5
70°	3233.1	2909.7	2583.6
71°	3218.1	2777.1	2300.7
72°	3180.6	2539.9	2005.9
73°	3101.8	2226.0	1693.5
74°	2945.9	1872.6	1332.3
75°	2688.5	1502.5	882.2
76°	2357.7	1076.6	456.1
77°	1976.4	596.8	330.1
78°	1504.1	430.4	211.0
79°	950.6	265.0	91.9
80°	488.8	99.6	76.3
81°	350.7	83.8	65.3
82°	224.4	70.8	55.6
83°	98.1	58.8	46.6
84°	77.5	48.3	38.5
85°	58.7	39.4	30.4
86°	44.1	30.6	22.4
87°	31.7	21.7	15.1
88°	19.5	13.8	8.7
89°	7.2	5.6	3.5

REPORT NUMBER: P1445012

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

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: P1445012

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

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: P1445012

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T5)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)