

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: P1436721

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

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436721
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 3/25/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: XAS180-SFPM (3000K-72W-T5)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 40% (72W)
OPTICS - TYPE 5
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

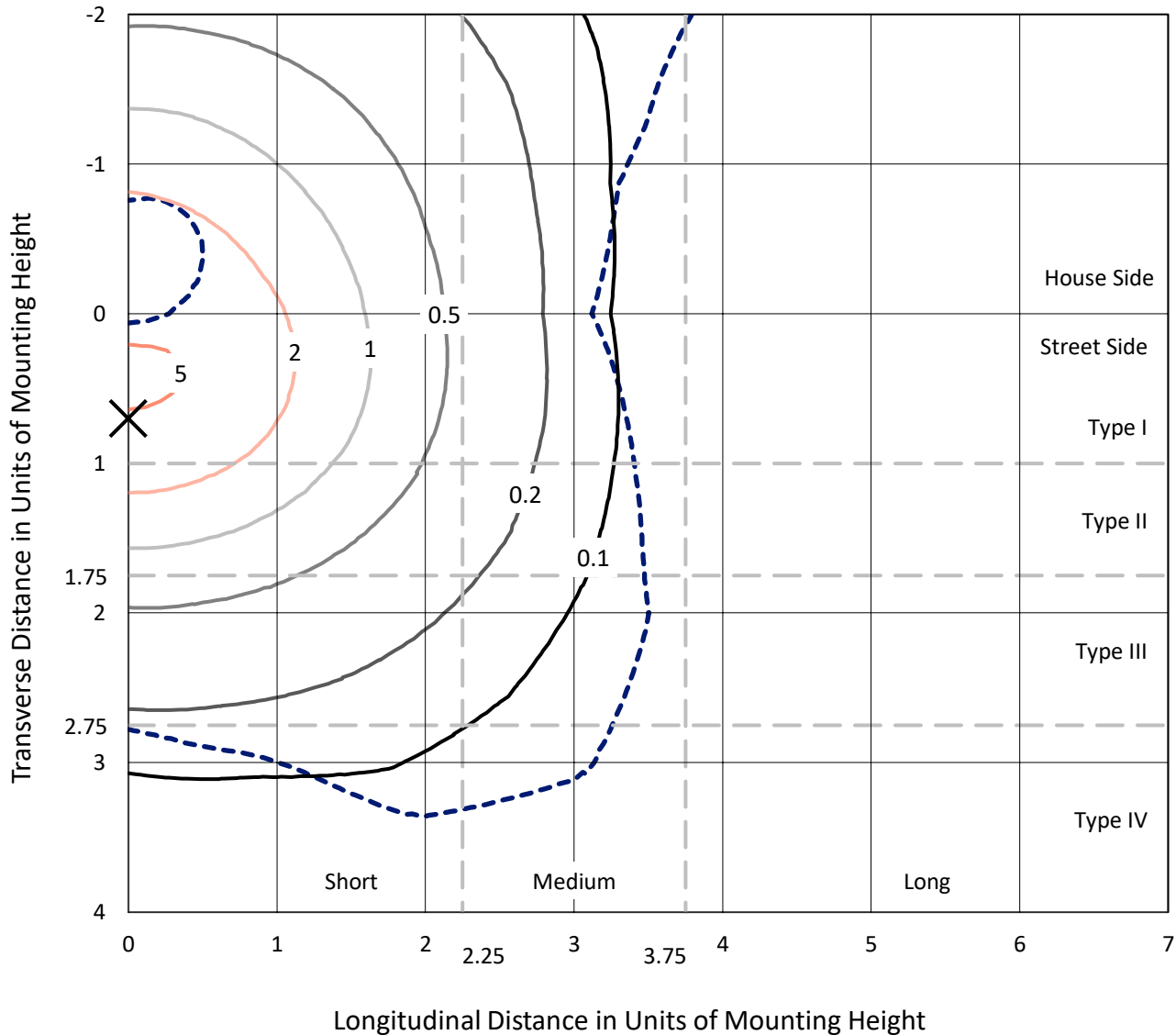
Lumens per Lamp: 28628 (1 lamp)
Luminaire Lumens: 11532.8 lumens
Efficiency: 40.3%
Efficacy: 157.6 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 73.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

REPORT NUMBER: P1436721
 CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5)

Iso-Footcandle Lines of Horizontal Illumination

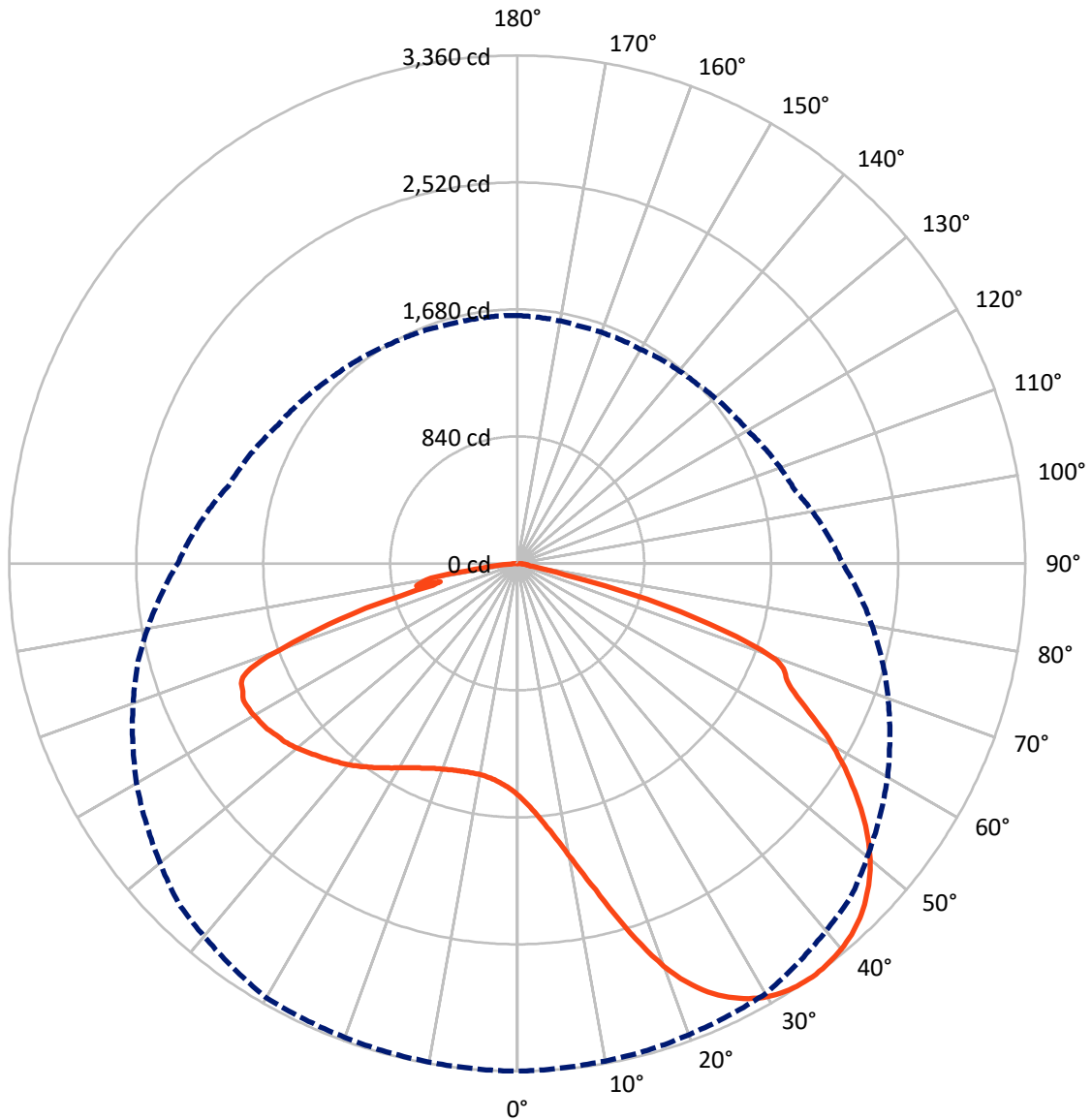
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6 fc
 Type IV - Short - Full Cutoff

REPORT NUMBER: P1436721
CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5)

Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 35-Deg Vertical

REPORT NUMBER: P1436721

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

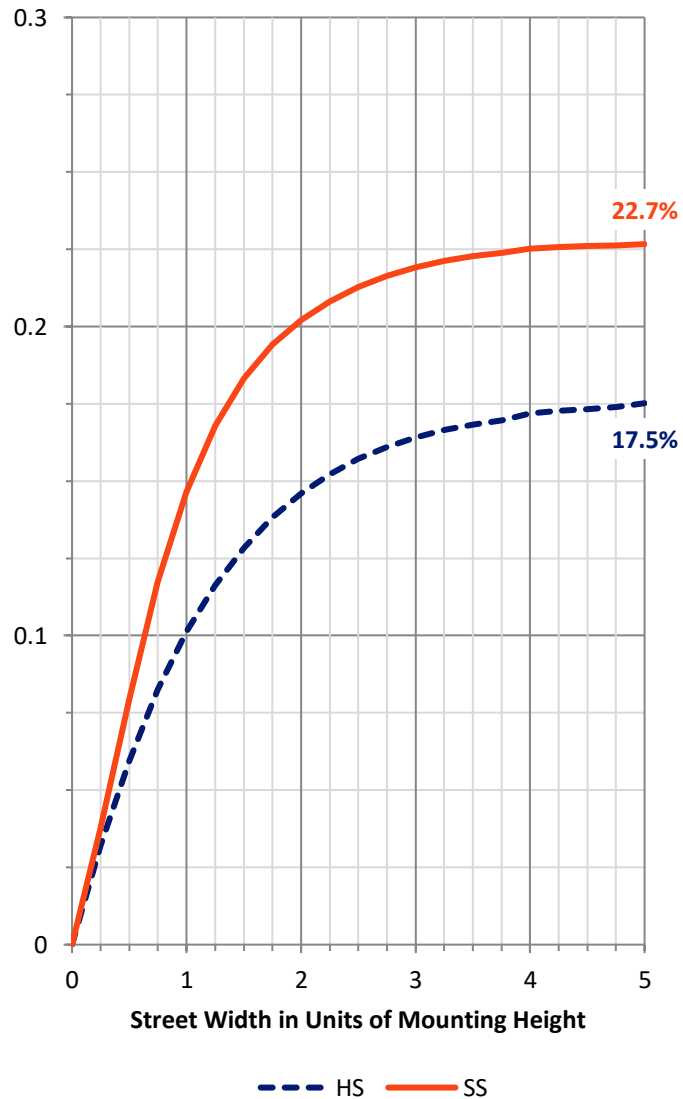
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5048.9	0.0	5048.9
	% Lamp	17.6	0.0	17.6
Street Side	Lumens	6483.9	0.0	6483.9
	% Lamp	22.6	0.0	22.6
Total	Lumens	11532.8	0.0	11532.8
	% Lamp	40.3	0.0	40.3

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	152.8	1.3	0.5
10°-20°	518.5	4.5	1.8
20°-30°	995.4	8.6	3.5
30°-40°	1499.4	13.0	5.2
40°-50°	1960.8	17.0	6.8
50°-60°	2306.0	20.0	8.1
60°-70°	2405.9	20.9	8.4
70°-80°	1540.3	13.4	5.4
80°-90°	153.7	1.3	0.5
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°	11532.8	100.0	40.3
0°-180°	11532.8	100.0	40.3

Coefficient of Utilization



REPORT NUMBER: P1436721

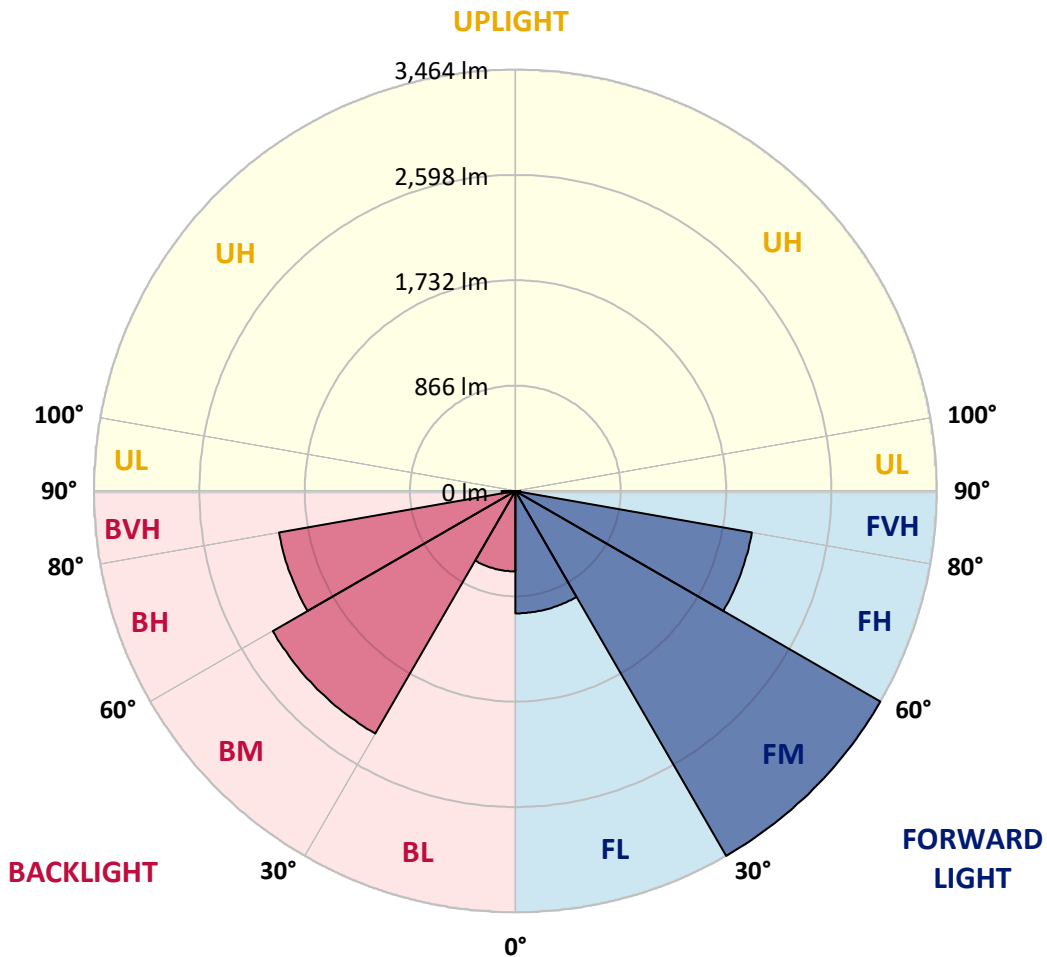
CATALOG NUMBER: XAS180-SFPM (3000K-72W-T5)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1005.8	3.5			
FM (30°-60°)	3464.0	12.1			
FH (60°-80°)	1973.7	6.9			G2/5000
FVH (80°-90°)	40.5	0.1			G1/100
BL (0°-30°)	660.9	2.3	B2/1000		
BM (30°-60°)	2302.2	8.0	B2/2500		
BH (60°-80°)	1972.5	6.9	B3/2500		G3/2500
BVH (80°-90°)	113.2	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	17095.2	59.7			

BUG Rating: B3-U0-G3

Type IV Short





REPORT NUMBER: P1436721

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

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1540.3	1540.3	1540.3	1540.3	1540.3	1540.3	1540.3	1540.3	1540.3	1540.3	1540.3
1°	1566.4	1566.0	1563.9	1560.1	1555.0	1549.4	1537.5	1531.3	1526.3	1522.0	1519.3
2°	1596.7	1595.3	1590.0	1580.9	1569.0	1556.4	1538.0	1526.1	1515.7	1507.2	1501.7
3°	1630.8	1628.1	1618.5	1604.0	1586.0	1566.1	1540.7	1522.7	1507.2	1494.9	1486.2
4°	1668.8	1664.1	1650.4	1630.0	1604.7	1577.1	1544.3	1520.7	1500.4	1484.7	1473.6
5°	1711.5	1705.0	1686.4	1658.4	1625.6	1590.0	1549.4	1519.7	1495.1	1476.2	1462.7
6°	1758.5	1749.5	1726.3	1690.3	1648.2	1603.9	1555.3	1520.1	1491.3	1469.5	1453.8
7°	1809.8	1798.6	1769.7	1726.0	1673.1	1619.6	1563.4	1522.1	1488.8	1464.3	1447.0
8°	1865.9	1851.8	1817.0	1763.4	1699.9	1637.5	1573.0	1525.8	1488.0	1460.0	1441.3
9°	1926.5	1911.0	1867.8	1804.0	1730.1	1656.2	1583.6	1530.1	1488.7	1457.5	1437.1
10°	1991.9	1971.9	1922.5	1848.3	1762.7	1676.7	1595.8	1536.3	1490.5	1457.0	1434.2
11°	2063.1	2040.5	1981.5	1896.1	1796.7	1698.9	1608.8	1543.7	1493.4	1457.6	1433.0
12°	2139.8	2112.0	2044.1	1945.3	1831.7	1723.2	1623.2	1551.6	1497.5	1459.2	1433.9
13°	2221.2	2190.3	2112.1	1998.3	1869.7	1748.9	1638.2	1560.5	1502.3	1462.0	1435.6
14°	2311.1	2275.0	2184.7	2054.8	1909.9	1774.6	1653.4	1569.3	1507.5	1465.7	1437.7
15°	2406.9	2365.8	2261.3	2114.3	1951.3	1801.3	1669.8	1578.8	1513.8	1470.1	1440.9
16°	2505.7	2458.3	2341.2	2178.2	1995.9	1829.9	1687.4	1589.7	1520.4	1475.0	1445.1
17°	2604.2	2551.9	2420.8	2243.7	2042.3	1859.4	1705.7	1600.6	1528.1	1480.3	1449.7
18°	2701.3	2643.4	2500.8	2309.6	2090.9	1889.6	1724.8	1613.0	1536.4	1486.8	1454.2
19°	2792.5	2731.2	2579.6	2373.6	2141.1	1921.1	1744.7	1625.9	1544.8	1493.6	1459.7
20°	2876.5	2814.1	2654.4	2437.4	2192.1	1954.1	1765.6	1639.6	1553.8	1500.9	1466.0
21°	2952.2	2891.0	2726.9	2499.4	2242.6	1988.3	1786.9	1653.9	1563.3	1507.9	1472.9
22°	3017.4	2956.8	2794.8	2559.7	2293.5	2023.4	1809.2	1668.8	1574.2	1516.0	1480.5
23°	3076.6	3020.1	2857.9	2617.5	2343.8	2060.1	1832.4	1684.0	1586.1	1524.8	1489.0
24°	3128.6	3074.8	2916.5	2671.7	2393.1	2097.8	1855.9	1700.1	1598.3	1534.7	1498.1
25°	3173.3	3123.6	2970.8	2724.9	2441.4	2136.1	1880.7	1716.7	1610.8	1545.4	1507.4
26°	3211.8	3166.7	3021.6	2774.5	2487.9	2173.9	1906.0	1733.9	1623.9	1556.3	1517.6
27°	3246.4	3203.4	3066.5	2822.2	2533.1	2212.6	1931.3	1751.3	1637.2	1567.9	1528.2
28°	3275.6	3234.7	3107.0	2868.0	2575.9	2250.9	1957.6	1768.2	1651.2	1580.5	1539.5
29°	3299.9	3262.0	3144.1	2911.4	2616.5	2289.1	1984.5	1785.9	1664.8	1594.2	1551.3
30°	3319.0	3283.8	3177.2	2953.4	2656.7	2326.0	2012.2	1804.0	1679.7	1607.7	1563.5
31°	3334.6	3301.3	3206.2	2991.9	2693.9	2362.7	2039.9	1821.7	1695.1	1621.5	1576.3
32°	3346.0	3315.6	3231.8	3028.0	2729.7	2398.8	2068.0	1840.3	1710.3	1635.8	1590.0
33°	3354.7	3326.0	3254.2	3062.2	2764.1	2433.8	2095.9	1859.5	1726.4	1650.1	1604.2
34°	3358.6	3332.2	3272.1	3092.9	2796.9	2468.0	2124.1	1877.8	1742.6	1664.8	1618.8
35°	3360.4	3335.1	3287.2	3121.2	2829.3	2501.0	2152.1	1896.5	1759.2	1680.0	1634.3
36°	3359.4	3335.9	3299.1	3147.3	2859.0	2533.1	2180.1	1915.2	1776.2	1695.5	1650.4
37°	3354.8	3333.3	3307.5	3171.1	2888.0	2563.9	2207.4	1934.6	1793.3	1711.7	1666.9
38°	3347.8	3328.6	3313.2	3192.4	2915.7	2594.2	2235.7	1954.3	1810.4	1728.7	1683.7
39°	3339.3	3322.7	3315.2	3210.4	2942.5	2623.9	2263.9	1974.0	1827.9	1745.6	1700.4
40°	3328.0	3314.2	3315.1	3226.8	2967.7	2652.7	2292.6	1995.0	1845.9	1763.0	1717.3
41°	3312.5	3302.7	3311.5	3240.5	2991.1	2680.3	2319.9	2017.0	1864.5	1780.6	1734.5
42°	3295.4	3288.5	3305.4	3252.4	3014.4	2707.5	2346.3	2039.1	1883.2	1799.0	1752.1
43°	3274.5	3272.9	3297.2	3261.2	3035.5	2734.5	2372.4	2060.6	1901.9	1818.2	1769.8
44°	3250.1	3254.8	3285.9	3266.2	3055.4	2760.3	2396.2	2083.1	1921.2	1837.3	1788.3

REPORT NUMBER: P1436721

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

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3221.7	3232.4	3270.6	3270.0	3074.9	2786.0	2420.7	2106.7	1941.7	1856.7	1806.9
46°	3188.5	3208.8	3254.9	3270.7	3093.4	2811.5	2444.5	2131.2	1962.9	1876.7	1826.0
47°	3152.7	3179.7	3235.7	3268.5	3111.3	2837.3	2467.6	2155.9	1984.4	1896.9	1845.9
48°	3114.4	3148.1	3213.4	3262.4	3127.2	2860.9	2489.2	2180.9	2006.8	1917.4	1866.0
49°	3070.9	3112.1	3189.0	3255.4	3141.1	2883.7	2509.9	2206.2	2029.9	1939.2	1886.6
50°	3023.9	3071.7	3159.6	3243.7	3153.5	2906.1	2530.0	2231.2	2053.1	1961.1	1908.3
51°	2970.9	3027.4	3127.3	3229.7	3164.1	2926.7	2550.1	2256.5	2077.5	1984.7	1930.0
52°	2914.6	2977.3	3090.4	3211.3	3172.6	2945.6	2569.0	2282.9	2102.5	2009.1	1953.5
53°	2854.7	2923.9	3051.1	3189.3	3178.9	2962.8	2586.8	2307.9	2127.8	2033.3	1975.9
54°	2792.7	2865.0	3007.3	3165.0	3181.2	2977.9	2603.8	2332.3	2154.7	2058.5	2000.0
55°	2727.4	2802.2	2958.8	3136.2	3179.9	2990.2	2618.6	2354.2	2181.7	2085.1	2024.7
56°	2657.7	2738.2	2906.1	3103.7	3175.7	2999.5	2632.1	2375.5	2208.9	2112.3	2050.0
57°	2590.1	2671.2	2852.4	3068.5	3166.1	3005.4	2644.0	2394.9	2236.3	2141.1	2076.0
58°	2518.6	2603.1	2794.8	3029.4	3151.5	3006.4	2652.1	2412.5	2263.8	2170.9	2100.5
59°	2447.9	2533.8	2737.1	2985.9	3132.1	3002.3	2656.9	2428.3	2291.3	2202.4	2124.7
60°	2371.9	2464.0	2676.4	2939.1	3107.4	2992.9	2659.2	2441.7	2318.8	2234.3	2148.6
61°	2293.1	2390.5	2615.6	2890.7	3076.9	2979.2	2656.5	2452.6	2346.5	2266.6	2172.7
62°	2210.7	2315.6	2555.4	2838.4	3042.6	2958.1	2649.0	2460.2	2373.1	2298.6	2196.3
63°	2129.5	2240.3	2495.9	2783.8	3004.4	2929.2	2635.2	2464.5	2399.2	2330.1	2219.2
64°	2053.0	2167.1	2436.8	2728.4	2959.3	2892.6	2614.8	2465.5	2424.8	2361.6	2241.0
65°	1991.3	2100.3	2379.3	2671.7	2910.6	2849.3	2589.2	2461.4	2449.4	2393.5	2261.7
66°	1946.0	2045.3	2323.9	2615.3	2855.6	2797.1	2554.3	2451.2	2470.7	2428.6	2280.4
67°	1920.3	2005.1	2273.9	2559.7	2793.1	2738.5	2509.4	2434.3	2488.6	2461.8	2297.8
68°	1893.5	1977.6	2230.2	2504.7	2723.8	2669.6	2430.7	2404.8	2501.9	2493.1	2297.2
69°	1832.5	1950.9	2194.8	2450.0	2646.6	2579.1	2304.6	2346.4	2506.9	2521.1	2287.8
70°	1712.0	1901.7	2166.8	2394.8	2565.7	2452.5	2129.9	2249.3	2503.7	2544.0	2289.3
71°	1529.5	1804.5	2141.4	2342.4	2469.1	2288.1	1917.0	2108.8	2480.0	2558.5	2276.1
72°	1332.3	1646.2	2111.3	2288.1	2351.0	2093.1	1715.6	1946.2	2422.3	2552.7	2249.2
73°	1128.7	1441.2	2063.4	2230.0	2213.6	1894.0	1546.4	1784.8	2331.3	2521.6	2212.5
74°	894.0	1220.5	1970.2	2160.1	2059.5	1700.1	1344.5	1631.8	2214.3	2463.9	2140.1
75°	599.6	982.3	1805.9	2058.7	1884.5	1486.7	1022.5	1452.4	2082.8	2373.9	2031.6
76°	326.3	697.1	1584.5	1911.0	1702.0	1195.2	700.5	1124.4	1953.0	2228.0	1884.6
77°	213.4	389.1	1346.9	1699.9	1502.8	810.0	381.1	796.3	1806.2	2014.2	1710.5
78°	101.5	286.6	1061.3	1408.4	1250.4	444.0	185.0	470.2	1588.3	1723.3	1496.8
79°	80.8	185.9	699.9	1067.1	925.6	329.5	115.3	229.2	1203.9	1405.7	1256.4
80°	69.7	85.2	370.1	704.0	567.0	222.2	99.7	127.6	819.5	1122.0	1032.9
81°	59.9	72.0	236.4	368.5	404.8	114.8	84.1	106.8	436.4	887.1	937.0
82°	51.2	61.2	105.4	237.3	249.2	96.9	68.6	86.0	209.5	653.8	792.3
83°	43.1	51.3	84.6	107.7	93.7	79.7	57.8	65.3	137.9	489.7	647.5
84°	35.8	42.2	68.5	84.4	75.2	61.7	47.5	52.7	110.6	344.6	501.3
85°	28.4	34.6	52.4	69.6	57.9	47.4	37.7	42.0	90.6	222.3	310.0
86°	21.1	27.0	39.3	55.8	42.6	37.3	28.5	32.6	70.6	159.7	219.0
87°	14.4	19.4	28.4	40.7	31.4	27.3	19.8	24.2	51.6	97.1	128.0
88°	8.3	12.7	17.6	32.7	20.3	17.2	13.8	18.5	34.1	35.9	38.1
89°	3.5	5.5	7.4	24.8	9.2	8.7	7.7	12.7	23.2	24.3	25.8



REPORT NUMBER: P1436721

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436721

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436721

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436721

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1540.3	1540.3	1540.3	1540.3	1540.3	1540.3	1540.3	1540.3	1540.3	1540.3	1540.3
1°	1517.9	1517.7	1519.0	1523.0	1527.0	1532.7	1538.7	1540.0	1546.0	1552.5	1557.6
2°	1498.6	1497.9	1500.8	1506.5	1514.4	1523.9	1535.9	1543.1	1556.3	1569.0	1580.0
3°	1481.9	1480.8	1484.5	1492.1	1503.3	1517.7	1534.7	1548.3	1567.6	1587.6	1605.3
4°	1467.9	1466.6	1471.0	1480.4	1494.7	1513.0	1535.0	1554.6	1580.9	1608.1	1633.1
5°	1456.0	1454.2	1459.5	1470.8	1487.5	1509.9	1536.5	1562.3	1596.4	1631.2	1662.8
6°	1446.1	1444.0	1450.0	1462.7	1482.5	1508.2	1539.4	1571.6	1612.8	1656.0	1697.0
7°	1437.5	1435.6	1441.9	1456.3	1478.4	1508.1	1544.4	1582.8	1631.5	1683.9	1734.0
8°	1431.3	1428.9	1436.0	1451.8	1476.0	1509.2	1550.4	1594.6	1651.4	1714.2	1774.0
9°	1426.0	1423.7	1431.4	1448.8	1475.1	1511.5	1557.3	1607.8	1673.3	1746.6	1816.6
10°	1422.6	1420.1	1428.5	1447.3	1475.5	1514.7	1565.1	1622.3	1696.5	1780.9	1862.8
11°	1421.0	1418.2	1427.4	1447.6	1477.9	1519.2	1574.6	1638.6	1722.6	1817.8	1913.0
12°	1420.5	1417.8	1427.5	1449.3	1481.3	1525.3	1585.3	1655.6	1749.2	1857.1	1965.1
13°	1421.7	1418.3	1428.5	1451.9	1485.7	1532.2	1596.8	1673.9	1777.4	1898.7	2022.0
14°	1423.1	1420.2	1431.1	1455.7	1491.6	1540.0	1608.8	1692.6	1806.7	1942.3	2081.8
15°	1425.8	1422.5	1434.4	1460.2	1498.5	1549.1	1621.3	1712.1	1837.1	1988.5	2146.2
16°	1428.9	1425.6	1438.0	1464.9	1505.3	1558.8	1634.8	1733.0	1869.1	2037.6	2213.5
17°	1432.4	1429.2	1442.4	1470.7	1513.3	1569.3	1649.2	1754.6	1902.8	2088.5	2282.3
18°	1436.8	1433.5	1447.7	1476.6	1521.7	1579.7	1663.7	1776.7	1936.6	2141.9	2352.3
19°	1441.7	1438.7	1453.1	1483.4	1530.1	1591.4	1679.2	1799.4	1971.9	2196.2	2421.6
20°	1448.0	1444.7	1459.7	1491.0	1539.0	1603.0	1695.3	1823.0	2009.7	2250.9	2487.8
21°	1454.8	1451.9	1467.0	1499.3	1548.0	1615.3	1712.5	1847.7	2047.1	2308.0	2552.2
22°	1462.3	1459.3	1475.3	1508.4	1558.1	1628.4	1730.0	1873.1	2087.6	2362.9	2614.0
23°	1470.7	1468.2	1484.3	1518.0	1568.9	1642.0	1747.5	1899.3	2129.5	2417.3	2672.9
24°	1479.6	1478.0	1494.2	1528.6	1580.2	1655.6	1765.5	1926.2	2170.9	2469.1	2727.6
25°	1489.4	1488.1	1504.9	1539.7	1592.5	1670.0	1784.4	1952.9	2213.0	2519.9	2779.8
26°	1500.2	1499.5	1516.3	1551.0	1605.2	1684.4	1803.1	1980.8	2255.6	2567.0	2830.4
27°	1511.0	1511.7	1528.2	1562.9	1618.4	1698.6	1822.2	2009.1	2298.3	2612.6	2877.1
28°	1522.5	1525.5	1540.6	1575.7	1632.1	1714.0	1841.5	2038.7	2340.6	2656.4	2922.5
29°	1535.0	1539.7	1553.7	1588.7	1646.3	1729.4	1861.1	2067.5	2381.4	2697.9	2965.8
30°	1548.4	1555.2	1567.9	1602.0	1660.0	1745.4	1880.5	2096.9	2422.2	2737.1	3006.2
31°	1562.5	1570.9	1582.7	1615.7	1674.8	1761.4	1899.8	2126.3	2461.0	2774.0	3044.1
32°	1577.1	1587.8	1597.6	1630.6	1690.2	1778.1	1919.7	2156.2	2498.3	2809.1	3079.8
33°	1592.5	1604.9	1612.8	1645.4	1705.5	1794.7	1939.3	2186.2	2534.8	2844.0	3113.9
34°	1607.7	1622.1	1628.1	1660.9	1721.6	1811.6	1959.0	2216.1	2568.6	2876.5	3145.6
35°	1623.0	1639.7	1643.3	1676.9	1737.6	1829.2	1978.9	2246.4	2602.3	2908.8	3173.8
36°	1638.7	1657.7	1658.6	1693.4	1753.9	1846.7	2000.1	2277.3	2634.9	2937.9	3200.1
37°	1653.3	1675.2	1674.4	1709.8	1770.6	1865.0	2021.3	2306.8	2665.9	2966.7	3223.7
38°	1669.4	1693.7	1690.8	1727.4	1787.7	1882.7	2043.2	2337.0	2696.7	2993.8	3245.7
39°	1685.4	1711.6	1707.2	1744.7	1805.1	1901.9	2065.2	2366.0	2725.2	3019.7	3264.4
40°	1702.0	1728.9	1724.4	1762.4	1823.3	1920.4	2087.6	2394.2	2752.7	3044.2	3280.6
41°	1719.2	1745.4	1741.6	1780.5	1841.9	1939.5	2110.2	2422.3	2779.2	3067.3	3292.8
42°	1736.4	1762.0	1759.4	1798.2	1861.4	1959.6	2133.2	2448.9	2806.0	3090.3	3302.3
43°	1753.7	1778.0	1777.9	1817.7	1880.4	1980.3	2157.7	2475.0	2832.2	3110.7	3310.4
44°	1772.0	1794.8	1796.8	1836.9	1900.3	2002.2	2182.2	2500.7	2858.0	3129.3	3314.4



REPORT NUMBER: P1436721

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1790.8	1811.6	1815.8	1856.9	1921.0	2023.1	2207.1	2525.9	2882.4	3147.4	3316.4
46°	1810.0	1827.2	1835.3	1876.5	1941.6	2045.7	2231.7	2549.1	2905.9	3163.5	3314.7
47°	1830.2	1842.5	1856.0	1896.4	1963.2	2067.5	2256.8	2570.4	2928.6	3178.5	3310.4
48°	1850.7	1858.9	1877.1	1917.0	1984.9	2090.5	2281.8	2591.6	2949.4	3190.9	3303.6
49°	1872.0	1875.9	1898.1	1937.3	2006.9	2113.9	2306.0	2611.6	2969.1	3201.9	3293.6
50°	1893.7	1892.3	1920.2	1958.5	2030.0	2138.4	2330.2	2630.6	2986.1	3211.8	3281.3
51°	1916.9	1909.3	1942.4	1980.1	2052.6	2162.4	2354.0	2647.6	3002.1	3218.3	3265.2
52°	1939.5	1925.8	1964.7	2002.7	2077.5	2186.5	2377.1	2663.4	3015.1	3222.5	3244.9
53°	1960.3	1938.9	1984.9	2025.3	2102.1	2211.3	2398.2	2677.6	3024.9	3223.2	3221.7
54°	1978.4	1948.2	2003.8	2048.9	2128.2	2235.7	2418.3	2688.5	3032.5	3222.4	3195.7
55°	1994.7	1958.0	2020.1	2073.0	2154.2	2260.4	2436.7	2697.6	3036.5	3216.5	3167.3
56°	2011.6	1970.1	2036.2	2097.8	2182.3	2285.6	2452.4	2704.6	3036.1	3207.2	3134.4
57°	2027.7	1982.9	2052.5	2122.2	2209.7	2310.9	2467.2	2708.3	3030.9	3192.5	3097.8
58°	2043.5	1992.0	2068.1	2148.6	2238.7	2335.2	2479.0	2709.9	3021.2	3173.8	3057.0
59°	2056.3	1998.9	2080.9	2173.1	2269.0	2358.4	2488.4	2708.6	3006.8	3150.2	3013.1
60°	2067.4	2007.1	2091.9	2197.9	2299.9	2381.4	2496.5	2703.3	2987.8	3121.7	2965.0
61°	2078.7	2014.9	2103.4	2221.3	2331.5	2404.6	2501.7	2692.1	2964.5	3087.5	2914.0
62°	2089.9	2020.0	2114.4	2245.8	2361.5	2428.2	2503.4	2675.3	2935.0	3048.1	2860.3
63°	2098.5	2023.9	2124.1	2269.1	2390.5	2449.7	2502.0	2653.7	2898.1	3003.2	2804.6
64°	2105.9	2025.6	2132.8	2291.2	2419.5	2469.8	2497.7	2626.0	2855.8	2954.8	2748.3
65°	2106.5	2010.2	2133.4	2311.8	2448.7	2487.7	2486.8	2589.7	2805.4	2899.8	2689.4
66°	2086.6	1997.1	2111.7	2328.9	2477.4	2501.6	2470.7	2544.3	2747.5	2838.5	2629.7
67°	2075.3	1990.5	2100.0	2342.0	2503.0	2512.8	2444.8	2477.7	2682.2	2771.6	2571.5
68°	2070.7	1965.5	2091.9	2336.8	2527.2	2518.7	2396.4	2364.5	2597.9	2699.1	2512.3
69°	2040.9	1894.7	2059.4	2323.6	2547.3	2514.5	2309.1	2198.5	2477.2	2616.6	2453.6
70°	1982.4	1766.0	2001.6	2322.1	2562.6	2496.6	2171.9	1984.4	2316.5	2521.8	2394.7
71°	1889.3	1576.3	1909.0	2305.6	2565.3	2451.6	1999.4	1764.1	2115.9	2407.2	2331.6
72°	1740.1	1399.6	1761.0	2278.3	2547.4	2371.2	1817.6	1569.7	1902.5	2268.0	2265.9
73°	1555.9	1231.9	1571.1	2236.0	2500.4	2255.2	1645.1	1378.4	1696.4	2106.9	2190.4
74°	1375.2	1044.7	1396.7	2160.1	2423.8	2124.3	1468.5	1135.8	1487.0	1923.8	2101.9
75°	1185.2	795.5	1211.3	2043.4	2308.3	1979.9	1230.5	789.7	1234.6	1722.5	1976.8
76°	956.7	574.7	981.2	1889.4	2130.1	1825.9	884.9	447.2	889.8	1512.0	1804.8
77°	736.3	523.5	777.7	1712.2	1888.4	1640.1	541.7	327.6	520.4	1280.6	1567.6
78°	692.7	682.7	755.1	1493.0	1591.9	1349.1	267.3	214.5	385.0	994.1	1253.4
79°	853.6	649.3	909.1	1239.1	1300.5	938.0	142.3	101.3	255.7	658.4	905.2
80°	997.6	616.0	776.9	988.9	1055.6	529.9	118.3	86.4	126.4	371.9	557.0
81°	778.6	579.5	644.8	897.5	810.7	254.5	94.2	74.0	104.8	241.6	402.3
82°	559.6	332.7	510.6	742.0	565.8	150.5	70.2	62.6	89.2	112.2	251.8
83°	318.9	236.5	289.3	586.5	391.5	116.4	58.4	52.3	72.8	85.4	101.4
84°	179.9	140.4	174.7	430.3	237.2	95.5	47.6	42.3	56.8	68.3	80.3
85°	119.3	45.5	140.4	241.3	173.0	74.6	37.9	33.6	43.4	51.7	66.2
86°	59.2	30.8	106.0	193.2	108.8	53.9	29.1	24.9	33.7	37.6	52.8
87°	41.1	16.1	71.7	145.1	45.3	38.0	21.3	16.2	24.0	27.0	37.0
88°	23.0	1.5	37.4	96.9	30.8	25.9	14.7	9.2	14.4	16.4	21.7
89°	5.1	1.0	3.4	48.8	16.2	13.7	8.0	3.4	6.2	6.6	6.3



REPORT NUMBER: P1436721

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436721

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436721

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436721

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1540.3	1540.3	1540.3
1°	1562.0	1565.1	1566.4
2°	1589.4	1595.5	1596.7
3°	1619.1	1628.1	1630.8
4°	1652.4	1665.7	1668.8
5°	1689.7	1706.9	1711.5
6°	1731.0	1752.3	1758.5
7°	1775.1	1802.5	1809.8
8°	1822.9	1856.2	1865.9
9°	1875.7	1913.8	1926.5
10°	1931.7	1977.5	1991.9
11°	1992.7	2047.8	2063.1
12°	2058.9	2121.0	2139.8
13°	2129.9	2200.6	2221.2
14°	2205.1	2286.5	2311.1
15°	2283.6	2375.5	2406.9
16°	2364.2	2468.2	2505.7
17°	2447.6	2562.9	2604.2
18°	2529.4	2656.9	2701.3
19°	2609.0	2745.8	2792.5
20°	2685.9	2830.3	2876.5
21°	2757.7	2906.9	2952.2
22°	2825.1	2975.3	3017.4
23°	2889.4	3036.2	3076.6
24°	2949.0	3090.9	3128.6
25°	3005.0	3138.1	3173.3
26°	3055.2	3180.1	3211.8
27°	3102.0	3215.6	3246.4
28°	3143.3	3246.6	3275.6
29°	3180.8	3272.7	3299.9
30°	3212.6	3295.1	3319.0
31°	3241.8	3312.0	3334.6
32°	3266.5	3326.5	3346.0
33°	3287.7	3336.5	3354.7
34°	3304.8	3343.1	3358.6
35°	3319.3	3345.7	3360.4
36°	3330.4	3345.5	3359.4
37°	3337.4	3343.3	3354.8
38°	3342.0	3338.2	3347.8
39°	3343.4	3331.3	3339.3
40°	3342.4	3322.0	3328.0
41°	3338.2	3310.8	3312.5
42°	3331.5	3297.3	3295.4
43°	3322.2	3282.4	3274.5
44°	3309.7	3263.7	3250.1



REPORT NUMBER: P1436721

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	3295.7	3243.0	3221.7
46°	3278.5	3218.4	3188.5
47°	3259.1	3190.4	3152.7
48°	3237.0	3159.6	3114.4
49°	3212.1	3123.8	3070.9
50°	3183.8	3085.6	3023.9
51°	3151.4	3042.7	2970.9
52°	3114.9	2993.7	2914.6
53°	3074.1	2941.4	2854.7
54°	3031.3	2885.4	2792.7
55°	2984.9	2824.0	2727.4
56°	2933.7	2760.4	2657.7
57°	2879.5	2694.6	2590.1
58°	2821.7	2625.3	2518.6
59°	2763.4	2556.1	2447.9
60°	2704.4	2485.1	2371.9
61°	2643.3	2412.0	2293.1
62°	2583.7	2337.9	2210.7
63°	2524.8	2263.2	2129.5
64°	2467.8	2194.0	2053.0
65°	2413.1	2128.3	1991.3
66°	2361.4	2074.6	1946.0
67°	2312.1	2035.1	1920.3
68°	2267.8	2007.9	1893.5
69°	2229.3	1979.8	1832.5
70°	2199.9	1932.8	1712.0
71°	2169.7	1842.5	1529.5
72°	2131.2	1683.4	1332.3
73°	2071.9	1475.1	1128.7
74°	1964.0	1244.1	894.0
75°	1793.9	1001.3	599.6
76°	1571.7	724.5	326.3
77°	1323.3	416.3	213.4
78°	1012.3	307.3	101.5
79°	649.2	198.5	80.8
80°	346.3	89.6	69.7
81°	227.1	74.2	59.9
82°	109.3	63.0	51.2
83°	84.4	52.9	43.1
84°	67.8	43.7	35.8
85°	51.5	35.7	28.4
86°	38.3	27.8	21.1
87°	27.4	19.9	14.4
88°	16.5	12.6	8.3
89°	6.4	5.3	3.5



REPORT NUMBER: P1436721

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436721

CATALOG NUMBER: XAS180-SFPM (3000K-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: P1436721

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)