

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: P1444987

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

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1444987
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 (3000K-72W-T4-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 40% (72W)
OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 24748 (1 lamp)
Luminaire Lumens: 10170.8 lumens
Efficiency: 41.1%
Efficacy: 141.7 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

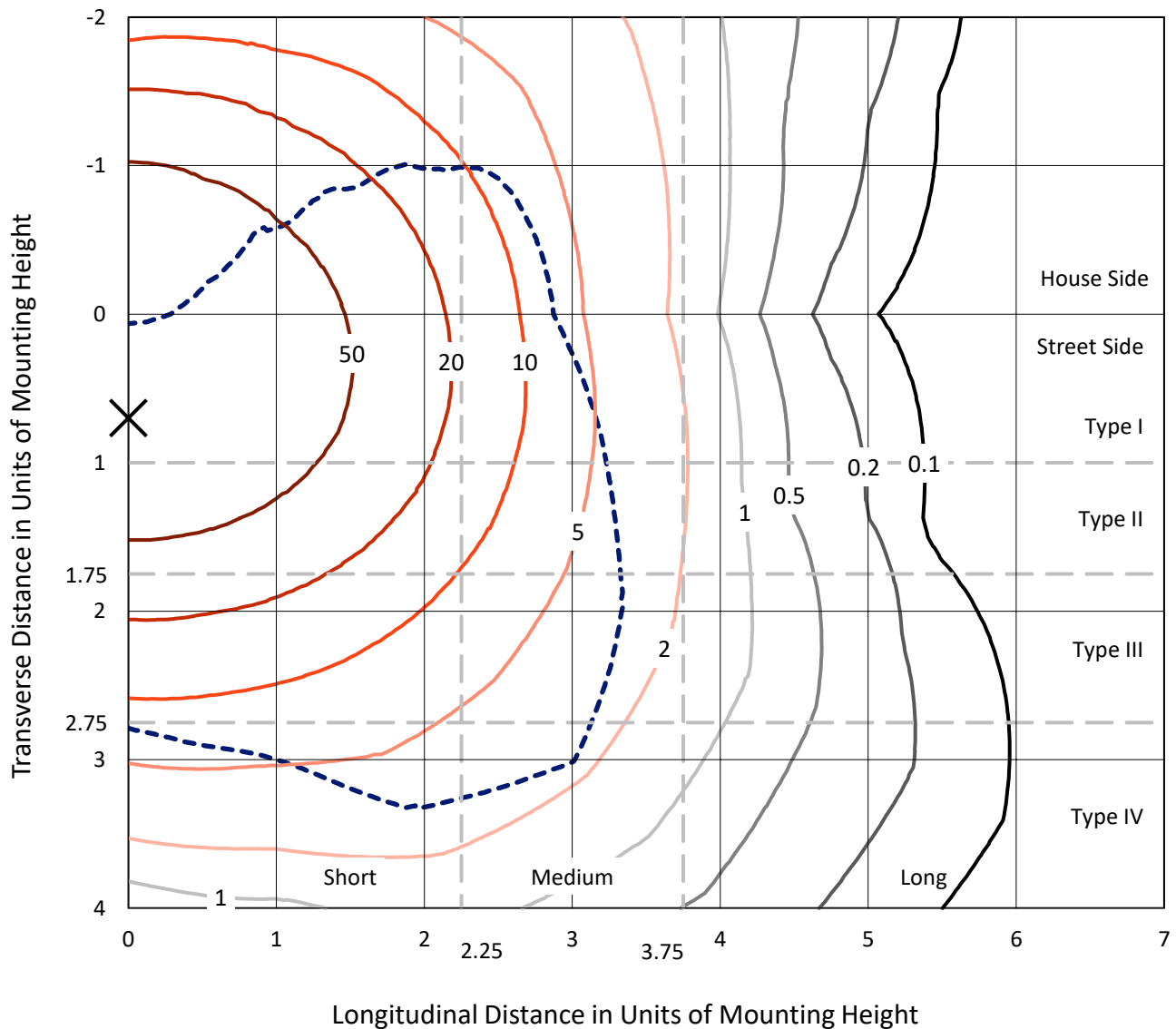
Input Watts (W): 71.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

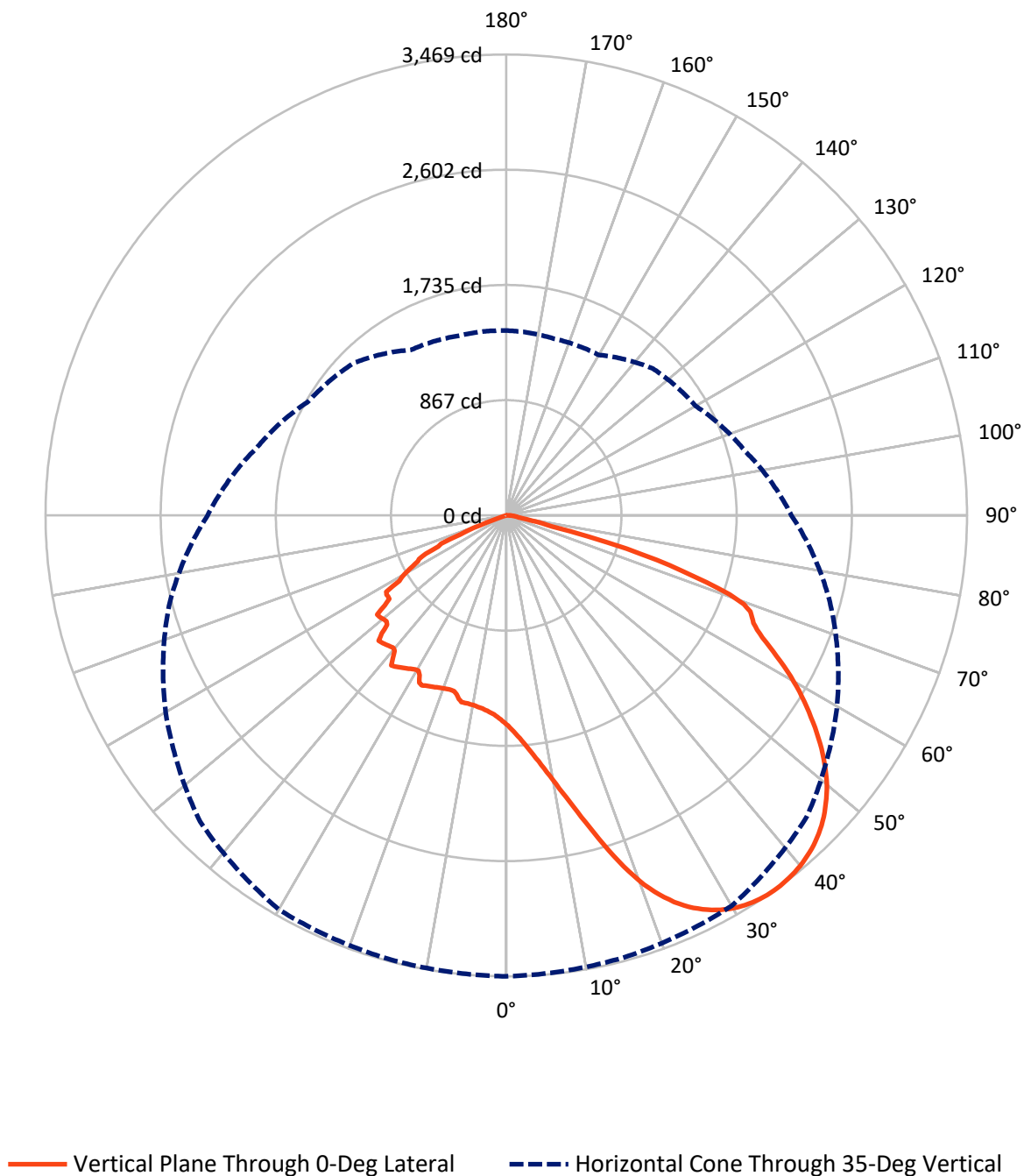


Based on 3 foot mounting height. Maximum calculated value = 274.5 fc
Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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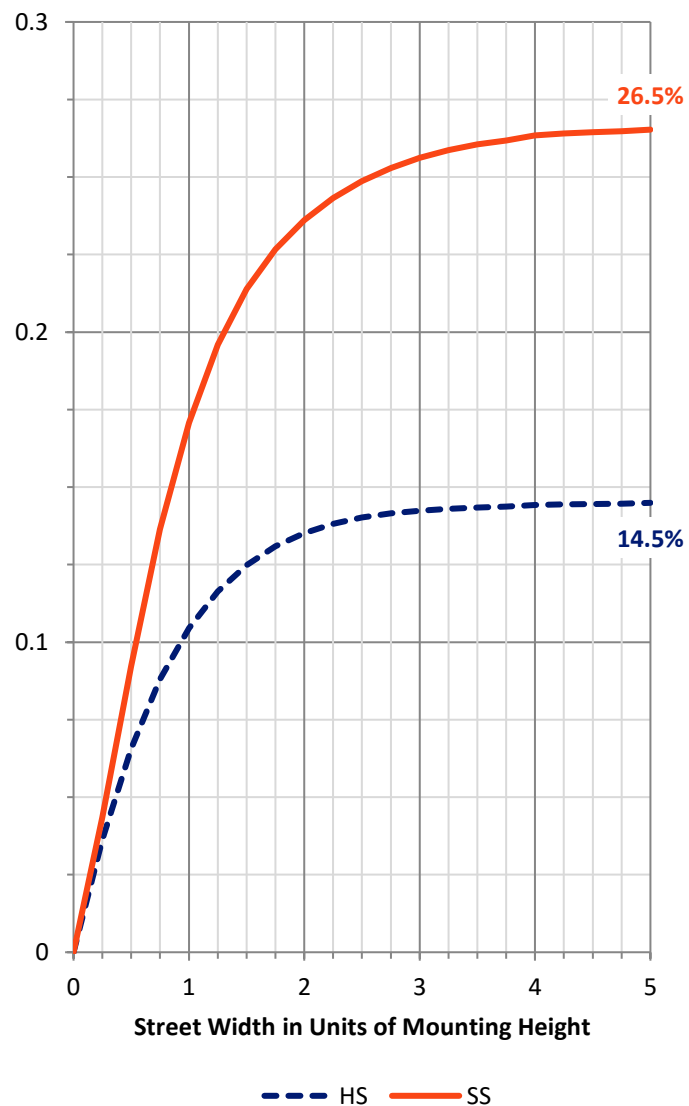
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3603.1	0.0	3603.1
	% Lamp	14.6	0.0	14.6
Street Side	Lumens	6567.6	0.0	6567.6
	% Lamp	26.5	0.0	26.5
Total	Lumens	10170.8	0.0	10170.8
	% Lamp	41.1	0.0	41.1

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	157.0	1.5	0.6
10°-20°	530.5	5.2	2.1
20°-30°	1003.2	9.9	4.1
30°-40°	1474.8	14.5	6.0
40°-50°	1863.0	18.3	7.5
50°-60°	2062.9	20.3	8.3
60°-70°	1940.9	19.1	7.8
70°-80°	1057.8	10.4	4.3
80°-90°	80.7	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°	10170.8	100.0	41.1
0°-180°	10170.8	100.0	41.1

Coefficient of Utilization



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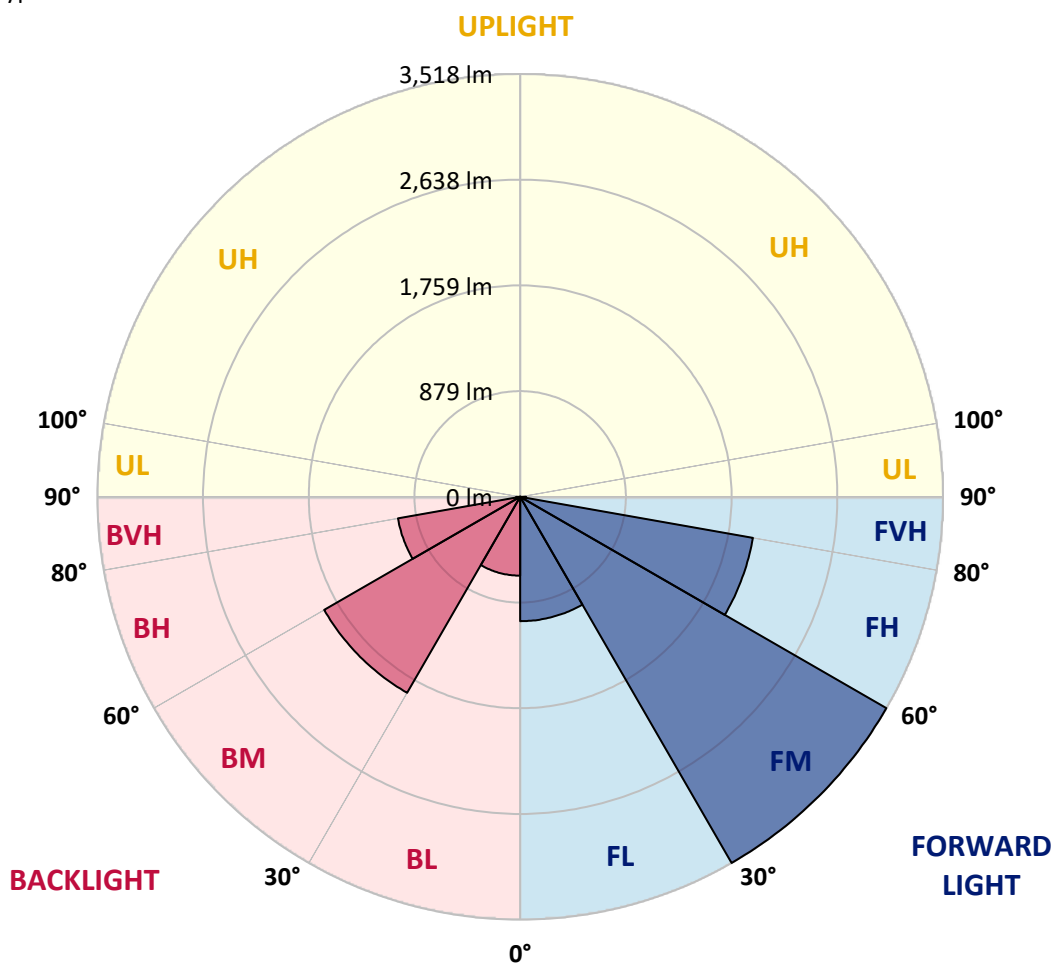
CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1034.8	4.2			
FM	(30°-60°)	3517.8	14.2			
FH	(60°-80°)	1966.2	7.9			G2/5000
FVH	(80°-90°)	48.8	0.2			G1/100
BL	(0°-30°)	655.9	2.7	B2/1000		
BM	(30°-60°)	1882.9	7.6	B2/2500		
BH	(60°-80°)	1032.5	4.2	B3/2500		G3/2500
BVH	(80°-90°)	31.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		14577.2	58.9			

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°	1583.0	1583.0	1583.0	1583.0	1583.0	1583.0	1583.0	1583.0	1583.0	1583.0	1583.0
1°	1611.4	1610.8	1608.9	1604.8	1598.6	1592.2	1579.0	1572.9	1568.0	1563.3	1560.2
2°	1644.1	1642.2	1636.8	1627.1	1614.2	1600.1	1579.8	1567.2	1556.0	1547.1	1540.7
3°	1679.8	1677.2	1667.1	1651.4	1631.9	1610.5	1582.9	1563.3	1546.6	1533.4	1523.5
4°	1719.8	1715.1	1700.3	1678.8	1651.9	1622.9	1586.8	1561.3	1539.1	1521.7	1509.2
5°	1765.2	1758.2	1738.6	1708.9	1673.9	1636.2	1592.1	1560.0	1533.3	1512.2	1498.0
6°	1814.2	1805.1	1780.3	1742.9	1698.0	1651.0	1598.6	1560.1	1528.7	1505.2	1488.7
7°	1867.3	1855.8	1826.2	1780.4	1724.5	1668.0	1606.7	1562.1	1525.6	1499.8	1481.5
8°	1925.2	1911.3	1874.6	1819.9	1753.2	1686.4	1617.1	1565.7	1524.8	1495.5	1475.7
9°	1987.9	1970.7	1927.5	1862.3	1785.1	1706.4	1628.5	1570.2	1525.2	1492.8	1470.9
10°	2055.9	2035.6	1984.6	1908.2	1818.5	1727.9	1640.6	1575.8	1527.3	1492.1	1467.4
11°	2129.4	2105.6	2045.4	1957.0	1854.0	1751.9	1654.4	1582.9	1530.1	1492.5	1465.6
12°	2208.3	2180.3	2110.3	2008.5	1891.1	1776.5	1669.2	1590.8	1534.3	1493.9	1465.2
13°	2293.2	2260.6	2179.7	2064.6	1930.6	1803.2	1684.7	1599.4	1539.0	1496.1	1466.0
14°	2384.5	2348.5	2255.0	2122.7	1971.8	1830.4	1700.4	1608.1	1543.8	1499.1	1466.7
15°	2482.5	2439.5	2334.9	2185.5	2015.2	1857.5	1717.0	1617.9	1550.0	1502.7	1468.7
16°	2583.4	2536.9	2416.6	2250.4	2061.2	1886.9	1735.0	1628.1	1556.7	1506.3	1470.8
17°	2686.1	2633.2	2498.9	2317.5	2109.1	1917.2	1753.3	1639.2	1563.9	1510.6	1462.9
18°	2784.8	2726.3	2580.5	2384.7	2159.6	1948.7	1771.6	1648.3	1571.6	1515.9	1437.3
19°	2879.3	2816.6	2661.8	2451.2	2211.1	1980.3	1784.2	1654.9	1575.6	1521.5	1419.3
20°	2966.3	2902.2	2739.3	2516.8	2262.5	2010.5	1800.2	1663.1	1578.1	1525.6	1409.1
21°	3043.1	2978.9	2813.9	2580.9	2315.4	2038.2	1817.9	1677.1	1582.4	1506.0	1413.3
22°	3110.1	3050.4	2883.4	2642.6	2367.3	2070.1	1840.3	1690.8	1592.1	1490.0	1418.3
23°	3172.0	3113.6	2948.5	2701.2	2418.9	2103.1	1862.9	1703.0	1601.3	1480.5	1424.3
24°	3225.7	3170.3	3009.7	2757.9	2463.6	2139.9	1883.7	1713.0	1607.5	1474.2	1431.3
25°	3272.6	3220.9	3065.5	2811.9	2506.3	2179.0	1902.5	1725.1	1614.2	1480.8	1438.5
26°	3312.5	3264.8	3116.6	2863.6	2550.0	2217.3	1922.7	1738.4	1622.1	1484.4	1446.8
27°	3347.7	3303.5	3163.3	2914.0	2591.8	2254.3	1944.4	1754.6	1633.6	1488.7	1454.8
28°	3377.6	3336.3	3206.6	2961.0	2632.5	2286.5	1968.2	1771.4	1640.4	1494.9	1462.6
29°	3402.9	3364.3	3244.6	3004.8	2672.4	2319.6	1994.4	1788.0	1631.5	1505.8	1471.2
30°	3423.8	3387.5	3279.5	3047.9	2712.6	2353.1	2021.2	1805.2	1632.0	1516.6	1478.2
31°	3440.3	3406.9	3309.6	3087.0	2750.5	2386.3	2048.6	1822.0	1627.3	1527.9	1480.4
32°	3452.2	3421.0	3335.1	3119.5	2786.5	2420.4	2076.2	1834.8	1631.1	1538.8	1436.8
33°	3461.1	3431.6	3358.4	3150.1	2819.3	2455.1	2103.4	1841.6	1627.8	1547.7	1400.5
34°	3466.9	3438.6	3376.9	3177.3	2848.4	2489.2	2128.7	1849.7	1636.8	1555.3	1386.3
35°	3469.0	3442.0	3393.3	3202.7	2875.8	2522.9	2146.9	1863.1	1646.3	1562.1	1394.1
36°	3468.1	3443.6	3405.1	3227.0	2902.8	2554.6	2163.2	1877.2	1657.7	1570.1	1402.2
37°	3463.7	3441.2	3414.3	3248.9	2928.6	2585.5	2182.9	1891.9	1668.9	1568.3	1408.4
38°	3456.9	3437.2	3420.2	3267.9	2953.5	2615.9	2206.9	1908.2	1676.7	1525.3	1413.7
39°	3448.0	3430.5	3423.5	3284.7	2977.6	2644.4	2229.6	1922.2	1684.0	1491.3	1421.8
40°	3436.4	3422.2	3422.4	3299.1	3000.7	2667.0	2252.6	1935.0	1696.6	1482.4	1432.3
41°	3421.0	3410.8	3419.8	3312.5	3023.2	2685.9	2275.6	1946.8	1712.1	1493.5	1442.5
42°	3403.7	3397.2	3413.3	3324.2	3045.1	2703.1	2298.6	1955.8	1727.4	1505.5	1451.4
43°	3382.1	3381.3	3404.6	3333.2	3067.0	2723.1	2318.0	1965.3	1742.9	1518.1	1420.7
44°	3356.7	3362.2	3393.4	3338.3	3087.7	2744.1	2335.8	1982.7	1759.1	1529.8	1371.4

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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3328.2	3340.7	3378.5	3339.8	3106.6	2766.3	2351.2	2003.7	1771.5	1537.4	1350.9
46°	3295.0	3315.6	3361.6	3337.7	3125.5	2787.9	2362.8	2025.1	1775.5	1542.5	1358.4
47°	3257.6	3286.1	3342.8	3332.1	3143.4	2809.0	2373.1	2044.8	1775.8	1551.0	1364.7
48°	3218.5	3253.1	3320.2	3323.5	3158.7	2828.5	2382.6	2055.7	1747.2	1561.0	1369.8
49°	3174.6	3215.9	3293.5	3313.1	3170.5	2849.2	2398.2	2062.7	1723.4	1529.8	1376.9
50°	3125.6	3174.4	3263.3	3299.4	3178.0	2867.0	2416.9	2067.2	1715.1	1481.3	1384.5
51°	3072.4	3128.3	3227.2	3282.4	3182.3	2881.8	2435.5	2064.5	1708.7	1460.5	1357.8
52°	3013.6	3077.9	3187.9	3261.2	3184.1	2894.3	2453.1	2078.6	1720.8	1471.7	1284.2
53°	2952.8	3022.2	3144.6	3236.7	3182.1	2905.6	2470.0	2086.8	1728.2	1483.4	1260.9
54°	2888.3	2961.7	3096.6	3210.0	3179.1	2911.1	2485.1	2091.6	1736.3	1491.7	1271.7
55°	2820.8	2898.4	3044.2	3178.7	3171.5	2911.4	2495.4	2101.5	1749.6	1499.4	1283.7
56°	2751.9	2832.2	2990.7	3143.6	3162.7	2909.6	2500.3	2107.3	1764.3	1501.7	1295.5
57°	2682.3	2764.8	2933.1	3106.8	3150.5	2902.6	2499.5	2110.2	1771.8	1449.9	1305.4
58°	2610.7	2694.0	2873.6	3066.2	3134.1	2897.8	2494.9	2115.6	1777.7	1403.0	1239.2
59°	2537.3	2625.1	2812.6	3022.2	3113.1	2892.2	2492.5	2115.6	1748.3	1401.5	1187.6
60°	2459.7	2553.2	2749.6	2975.7	3085.7	2882.4	2487.9	2106.5	1711.7	1418.1	1190.8
61°	2379.9	2478.8	2685.2	2926.0	3053.0	2867.9	2478.1	2094.8	1701.0	1436.3	1194.9
62°	2296.6	2403.0	2622.6	2873.1	3014.9	2847.2	2466.0	2088.7	1705.9	1453.8	1146.7
63°	2215.4	2326.3	2561.2	2818.8	2973.1	2818.7	2445.2	2072.4	1710.4	1418.5	1078.8
64°	2137.6	2252.3	2502.2	2762.6	2923.9	2781.4	2416.9	2053.1	1709.5	1374.2	1064.9
65°	2075.7	2184.3	2443.9	2704.0	2870.3	2736.9	2382.3	2024.6	1691.0	1373.7	1051.9
66°	2029.5	2130.0	2388.1	2645.6	2810.5	2681.5	2341.0	1986.8	1631.9	1382.2	961.1
67°	2003.4	2089.4	2338.2	2586.4	2742.9	2618.7	2293.5	1937.9	1607.5	1325.7	946.4
68°	1974.4	2061.8	2293.7	2526.8	2665.1	2546.8	2212.7	1885.6	1616.8	1294.4	886.6
69°	1909.3	2032.0	2257.1	2468.4	2581.4	2449.1	2080.9	1824.6	1621.4	1290.2	826.9
70°	1783.7	1978.3	2227.5	2409.8	2496.9	2318.4	1896.5	1735.7	1617.7	1227.5	766.8
71°	1590.3	1874.7	2199.8	2351.4	2395.5	2153.5	1692.5	1614.2	1565.3	1207.7	670.7
72°	1392.2	1707.5	2165.9	2289.8	2278.4	1965.5	1508.2	1471.2	1501.0	1161.7	601.0
73°	1180.8	1495.7	2111.7	2228.7	2143.4	1772.6	1339.9	1331.1	1429.4	1125.2	535.9
74°	941.1	1268.3	2009.5	2155.4	1991.0	1587.0	1142.9	1207.1	1346.1	1060.7	452.8
75°	640.2	1021.5	1834.1	2052.5	1819.8	1374.8	870.1	1071.6	1239.5	995.9	404.2
76°	354.9	724.8	1607.6	1902.1	1640.5	1087.5	597.2	860.1	1144.0	882.7	361.7
77°	274.3	414.2	1365.3	1686.7	1441.4	717.9	324.6	647.1	1049.7	769.6	318.7
78°	195.5	315.6	1072.3	1391.4	1194.3	399.4	156.3	373.4	868.2	656.0	274.1
79°	116.8	217.8	703.5	1045.8	870.8	264.7	117.6	270.9	686.7	517.7	227.4
80°	103.3	119.9	383.3	688.2	536.7	135.1	79.0	168.3	504.5	394.3	192.2
81°	92.4	104.0	290.7	359.5	390.7	112.0	67.0	66.0	271.5	290.0	172.9
82°	82.5	91.9	201.2	238.4	247.2	95.6	56.8	52.6	199.5	231.5	170.7
83°	73.2	81.0	111.7	124.8	103.6	78.4	47.4	41.6	127.5	183.5	140.3
84°	64.5	70.7	93.1	102.1	84.0	61.1	38.7	33.1	57.5	141.1	107.9
85°	56.1	61.2	75.7	86.6	66.7	47.8	30.2	26.1	49.3	98.7	75.5
86°	48.0	52.6	61.7	72.1	51.3	38.5	22.5	20.0	38.8	56.6	43.3
87°	40.0	44.3	49.7	56.2	39.6	29.2	15.6	14.7	28.7	32.1	27.0
88°	34.6	37.3	38.6	38.9	28.8	20.0	11.0	10.4	19.9	22.0	18.5
89°	29.2	30.2	29.7	27.7	18.0	12.2	6.3	6.2	11.1	11.9	10.1

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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: P1444987

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

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1444987
CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1444987

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1583.0	1583.0	1583.0	1583.0	1583.0	1583.0	1583.0	1583.0	1583.0	1583.0	1583.0
1°	1558.6	1558.7	1560.5	1563.9	1568.8	1573.6	1580.6	1581.7	1588.7	1595.7	1601.9
2°	1537.2	1537.0	1539.7	1546.0	1554.1	1564.9	1577.3	1585.2	1599.4	1613.1	1625.6
3°	1518.5	1517.8	1521.3	1529.3	1541.6	1556.8	1575.4	1590.3	1611.2	1632.9	1652.0
4°	1502.5	1501.7	1506.2	1516.0	1531.3	1551.4	1575.3	1596.5	1625.5	1654.8	1681.2
5°	1490.5	1489.2	1493.9	1505.5	1523.0	1547.1	1576.5	1604.7	1641.3	1678.7	1713.2
6°	1480.1	1478.2	1483.9	1497.4	1516.9	1544.1	1579.1	1614.3	1658.9	1705.1	1747.6
7°	1471.2	1469.1	1475.4	1490.3	1513.2	1543.6	1583.5	1625.8	1678.2	1734.0	1786.9
8°	1464.5	1461.9	1468.5	1485.5	1510.7	1544.6	1589.3	1637.9	1699.2	1765.9	1828.4
9°	1458.3	1456.0	1463.3	1482.0	1509.7	1546.7	1595.7	1651.0	1721.8	1799.5	1873.2
10°	1454.0	1450.9	1459.3	1480.1	1509.8	1549.6	1603.2	1666.0	1746.0	1835.3	1921.0
11°	1450.6	1447.4	1456.9	1479.3	1511.5	1554.5	1612.3	1683.0	1773.2	1873.3	1971.8
12°	1448.5	1445.4	1455.3	1479.9	1514.6	1560.2	1622.8	1700.0	1800.4	1913.9	2026.1
13°	1448.3	1444.6	1455.2	1481.1	1518.9	1567.1	1633.9	1718.4	1829.6	1956.8	2084.6
14°	1448.4	1444.1	1456.1	1483.9	1524.2	1574.7	1645.7	1737.5	1859.3	2001.7	2146.3
15°	1446.8	1426.4	1454.8	1487.1	1529.7	1583.5	1658.1	1758.2	1890.7	2050.0	2212.1
16°	1416.1	1397.3	1426.6	1490.4	1535.6	1593.1	1671.3	1778.5	1923.7	2099.1	2281.4
17°	1393.4	1380.1	1404.7	1484.8	1542.1	1602.9	1685.8	1800.2	1957.4	2151.8	2352.5
18°	1381.4	1377.0	1393.0	1459.8	1549.8	1613.2	1698.5	1821.9	1992.8	2206.7	2424.1
19°	1383.2	1379.1	1394.6	1443.6	1556.8	1620.8	1707.4	1840.1	2029.1	2262.4	2495.5
20°	1386.3	1382.1	1398.1	1435.4	1563.0	1626.0	1718.1	1858.2	2066.4	2319.1	2564.5
21°	1390.4	1386.8	1402.7	1439.0	1550.1	1632.5	1733.3	1879.0	2100.3	2377.1	2631.3
22°	1396.2	1392.1	1408.8	1445.3	1531.4	1644.5	1750.2	1903.0	2134.8	2433.2	2694.4
23°	1402.3	1399.0	1416.3	1452.4	1522.8	1657.0	1767.5	1929.1	2173.0	2489.0	2754.8
24°	1408.9	1405.7	1424.1	1460.5	1520.2	1667.5	1781.5	1955.3	2213.2	2542.2	2812.0
25°	1415.9	1412.1	1431.5	1469.2	1527.2	1675.5	1794.7	1979.1	2255.7	2589.2	2865.3
26°	1423.2	1419.7	1439.5	1479.2	1533.7	1683.9	1809.1	2001.5	2298.9	2632.2	2916.5
27°	1430.4	1427.6	1447.3	1488.5	1538.8	1694.3	1824.9	2025.5	2341.6	2675.0	2965.8
28°	1438.0	1419.7	1455.3	1497.9	1545.3	1703.1	1843.4	2051.4	2381.6	2716.1	3012.9
29°	1415.2	1369.2	1437.7	1507.3	1556.0	1700.3	1862.3	2078.8	2416.9	2755.9	3057.6
30°	1367.7	1342.1	1389.3	1515.1	1567.9	1698.2	1881.1	2107.7	2454.0	2795.9	3099.3
31°	1344.6	1345.4	1365.8	1518.2	1580.0	1698.0	1899.8	2137.5	2490.2	2833.5	3139.1
32°	1349.2	1356.0	1369.6	1483.1	1592.6	1698.6	1914.7	2167.3	2524.7	2869.5	3175.2
33°	1358.7	1367.1	1379.0	1447.3	1604.0	1698.3	1924.3	2196.4	2560.4	2904.2	3206.8
34°	1368.0	1378.5	1388.8	1431.6	1613.2	1707.3	1933.9	2225.5	2594.5	2934.4	3234.0
35°	1377.6	1391.1	1398.5	1437.7	1622.2	1717.4	1948.8	2248.8	2629.1	2961.0	3259.8
36°	1388.1	1402.6	1409.0	1447.5	1629.4	1728.7	1964.7	2268.0	2661.5	2987.3	3284.4
37°	1397.4	1413.4	1419.3	1454.8	1633.5	1741.3	1980.9	2289.8	2692.8	3012.5	3307.3
38°	1406.5	1422.1	1429.1	1460.9	1591.8	1751.1	1999.4	2314.3	2722.9	3038.0	3326.5
39°	1413.1	1370.1	1437.0	1467.7	1559.2	1759.7	2017.5	2338.6	2751.6	3062.0	3343.1
40°	1359.5	1320.2	1389.5	1478.2	1549.4	1772.1	2032.8	2362.6	2776.0	3084.5	3357.4
41°	1311.1	1309.7	1338.6	1489.5	1559.1	1788.6	2046.3	2386.9	2794.8	3107.0	3369.9
42°	1299.9	1317.1	1324.6	1499.8	1571.3	1805.8	2055.8	2410.9	2811.8	3129.4	3379.5
43°	1308.7	1325.3	1333.5	1479.7	1584.4	1822.9	2066.3	2433.3	2830.0	3150.5	3387.1
44°	1318.4	1333.1	1343.8	1426.8	1597.0	1840.5	2086.3	2453.7	2848.8	3169.7	3391.7

REPORT NUMBER: P1444987

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1328.3	1340.8	1353.7	1401.9	1606.0	1854.6	2108.6	2471.9	2868.9	3187.7	3391.7
46°	1338.4	1345.4	1363.9	1407.5	1612.0	1860.0	2131.1	2483.8	2889.9	3203.7	3387.6
47°	1348.0	1291.2	1372.2	1413.5	1619.8	1863.6	2153.2	2493.5	2909.5	3218.8	3379.5
48°	1296.5	1217.0	1329.0	1418.6	1630.3	1848.5	2170.3	2501.9	2927.8	3231.9	3369.7
49°	1224.1	1202.7	1255.1	1425.6	1610.6	1823.6	2175.1	2516.4	2944.3	3240.7	3357.0
50°	1211.4	1208.6	1237.4	1432.4	1560.2	1805.9	2178.5	2533.8	2959.0	3244.6	3341.5
51°	1221.4	1215.3	1247.4	1413.8	1531.9	1798.1	2175.5	2549.2	2969.5	3243.7	3323.5
52°	1231.9	1221.9	1256.7	1339.4	1540.6	1807.1	2176.2	2563.9	2977.6	3240.3	3301.0
53°	1241.3	1224.9	1265.6	1310.6	1552.6	1814.4	2184.9	2576.1	2982.0	3233.1	3276.2
54°	1246.0	1136.7	1270.8	1320.7	1560.5	1821.2	2187.2	2586.1	2980.1	3225.5	3247.0
55°	1166.1	1082.4	1191.3	1332.4	1567.9	1830.1	2188.7	2591.0	2973.5	3214.1	3216.1
56°	1106.9	1078.6	1131.4	1344.6	1570.4	1843.6	2188.9	2588.4	2962.2	3201.3	3182.1
57°	1103.0	1080.4	1125.1	1353.4	1532.1	1848.8	2186.1	2579.5	2947.4	3184.8	3143.9
58°	1104.7	1071.4	1126.4	1290.6	1477.2	1851.5	2184.9	2568.1	2931.9	3161.8	3103.2
59°	1084.0	944.3	1109.3	1234.5	1471.6	1831.0	2181.6	2556.8	2916.0	3136.0	3059.1
60°	972.1	909.5	996.5	1234.8	1487.7	1785.7	2166.4	2543.4	2896.2	3105.9	3010.6
61°	950.5	856.1	972.0	1238.3	1504.9	1763.8	2148.2	2526.3	2872.0	3070.0	2959.0
62°	947.6	802.7	965.9	1197.2	1520.1	1763.3	2137.7	2505.0	2842.6	3028.1	2905.3
63°	892.5	749.8	909.3	1122.1	1488.9	1762.7	2119.0	2476.7	2806.6	2979.0	2849.1
64°	837.3	734.7	852.6	1107.2	1435.6	1757.8	2094.3	2439.6	2763.0	2926.1	2792.3
65°	782.0	671.2	795.6	1097.9	1427.8	1737.6	2059.6	2393.7	2709.2	2868.0	2730.9
66°	695.6	561.3	711.2	1000.4	1428.2	1678.9	2016.2	2339.0	2645.2	2805.1	2666.3
67°	607.8	535.2	620.3	979.3	1369.4	1640.4	1964.4	2272.9	2575.4	2732.8	2602.0
68°	546.8	373.7	561.1	940.9	1336.3	1642.0	1893.7	2158.7	2486.3	2652.9	2538.3
69°	445.5	308.6	457.7	858.7	1323.8	1638.7	1808.4	1990.1	2362.9	2564.8	2476.8
70°	356.8	212.6	367.0	776.5	1256.7	1625.6	1690.4	1769.4	2207.7	2467.8	2411.2
71°	245.3	116.6	245.1	694.5	1226.7	1559.6	1542.5	1565.3	2013.2	2352.8	2342.5
72°	135.6	21.4	126.8	624.3	1175.2	1474.6	1384.7	1378.3	1806.7	2222.6	2273.6
73°	114.2	0.3	102.8	550.8	1122.6	1386.8	1231.8	1192.0	1604.7	2065.2	2196.6
74°	92.7	0.2	79.1	453.0	1044.9	1290.4	1089.9	970.4	1404.5	1886.5	2106.5
75°	71.4	0.2	68.6	397.5	958.0	1177.3	875.7	679.8	1165.8	1688.5	1980.8
76°	54.3	0.2	54.7	353.3	835.3	1064.7	661.4	393.8	843.7	1479.5	1812.3
77°	38.2	0.2	43.3	311.5	712.5	902.3	447.1	253.0	502.5	1257.1	1577.0
78°	28.6	0.3	35.0	269.9	589.9	739.9	230.2	115.6	376.0	984.8	1271.9
79°	28.2	0.3	34.8	224.4	471.9	576.3	150.3	88.2	251.4	665.9	922.1
80°	37.7	0.4	42.0	194.3	366.5	329.6	71.3	74.8	126.8	389.2	573.7
81°	46.2	0.4	43.4	180.6	275.4	239.0	57.2	63.7	107.8	258.3	420.5
82°	40.7	0.5	27.1	168.3	213.7	148.5	47.0	53.5	92.1	129.4	271.0
83°	25.4	0.5	19.3	127.6	160.4	58.5	38.4	44.5	76.0	98.8	121.5
84°	18.6	0.6	11.4	86.9	107.1	48.7	30.9	36.5	60.1	81.4	101.1
85°	11.8	0.6	3.8	46.6	54.5	38.4	24.5	28.4	46.9	63.9	85.8
86°	5.2	0.7	3.4	23.7	30.3	28.6	18.9	20.4	37.7	49.6	71.5
87°	3.9	0.8	3.4	16.7	17.3	20.6	13.9	13.7	28.5	38.2	55.5
88°	2.8	0.8	3.0	9.7	12.1	14.3	9.8	8.0	19.4	27.8	38.6
89°	2.2	0.9	1.9	2.8	6.9	8.1	5.7	3.4	11.8	17.4	27.5

REPORT NUMBER: P1444987

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1444987

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1444987
CATALOG NUMBER: XAS180-SFPM (3000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1444987

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1583.0	1583.0	1583.0
1°	1606.5	1609.9	1611.4
2°	1635.2	1641.7	1644.1
3°	1666.7	1676.5	1679.8
4°	1702.1	1715.8	1719.8
5°	1740.6	1759.4	1765.2
6°	1783.1	1807.2	1814.2
7°	1829.8	1858.1	1867.3
8°	1880.2	1914.0	1925.2
9°	1934.7	1975.0	1987.9
10°	1991.7	2041.0	2055.9
11°	2055.4	2111.4	2129.4
12°	2123.0	2188.5	2208.3
13°	2195.8	2269.7	2293.2
14°	2273.7	2357.4	2384.5
15°	2355.2	2450.2	2482.5
16°	2438.2	2544.9	2583.4
17°	2522.6	2642.3	2686.1
18°	2607.5	2738.8	2784.8
19°	2689.6	2831.8	2879.3
20°	2768.9	2918.1	2966.3
21°	2843.2	2996.6	3043.1
22°	2912.5	3068.3	3110.1
23°	2979.1	3130.9	3172.0
24°	3040.8	3186.8	3225.7
25°	3097.9	3235.9	3272.6
26°	3150.0	3279.1	3312.5
27°	3199.1	3316.5	3347.7
28°	3241.4	3349.0	3377.6
29°	3280.2	3375.9	3402.9
30°	3313.8	3398.2	3423.8
31°	3344.1	3417.1	3440.3
32°	3370.3	3432.2	3452.2
33°	3392.7	3442.9	3461.1
34°	3410.4	3450.3	3466.9
35°	3425.0	3454.1	3469.0
36°	3436.4	3453.7	3468.1
37°	3445.0	3451.5	3463.7
38°	3450.2	3447.3	3456.9
39°	3452.0	3439.8	3448.0
40°	3450.9	3430.8	3436.4
41°	3447.4	3420.1	3421.0
42°	3440.8	3406.5	3403.7
43°	3431.1	3390.9	3382.1
44°	3419.3	3372.5	3356.7

REPORT NUMBER: P1444987

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	3404.5	3351.1	3328.2
46°	3387.8	3326.8	3295.0
47°	3367.9	3297.8	3257.6
48°	3346.5	3265.9	3218.5
49°	3320.9	3230.0	3174.6
50°	3290.7	3190.6	3125.6
51°	3256.2	3146.2	3072.4
52°	3216.1	3096.0	3013.6
53°	3172.7	3043.3	2952.8
54°	3125.2	2984.6	2888.3
55°	3076.0	2924.1	2820.8
56°	3022.4	2857.9	2751.9
57°	2966.3	2790.6	2682.3
58°	2906.7	2721.1	2610.7
59°	2844.9	2650.7	2537.3
60°	2782.5	2578.0	2459.7
61°	2720.1	2504.1	2379.9
62°	2657.6	2427.7	2296.6
63°	2597.4	2354.0	2215.4
64°	2540.7	2282.7	2137.6
65°	2485.8	2216.9	2075.7
66°	2432.5	2161.6	2029.5
67°	2381.8	2121.5	2003.4
68°	2335.1	2093.6	1974.4
69°	2293.6	2063.7	1909.3
70°	2261.0	2014.8	1783.7
71°	2227.6	1919.3	1590.3
72°	2186.4	1754.6	1392.2
73°	2125.7	1541.1	1180.8
74°	2014.7	1305.6	941.1
75°	1837.9	1056.9	640.2
76°	1612.6	773.4	354.9
77°	1357.1	461.3	274.3
78°	1051.4	346.3	195.5
79°	691.1	234.6	116.8
80°	388.0	123.0	103.3
81°	292.1	107.2	92.4
82°	203.2	94.7	82.5
83°	114.2	83.4	73.2
84°	94.6	72.7	64.5
85°	76.7	62.9	56.1
86°	62.7	53.9	48.0
87°	50.2	45.4	40.0
88°	38.5	38.0	34.6
89°	29.7	30.6	29.2

REPORT NUMBER: P1444987

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
90°	0.0	0.0	0.0
91°	0.0	0.0	0.0
92°	0.0	0.0	0.0
93°	0.0	0.0	0.0
94°	0.0	0.0	0.0
95°	0.0	0.0	0.0
96°	0.0	0.0	0.0
97°	0.0	0.0	0.0
98°	0.0	0.0	0.0
99°	0.0	0.0	0.0
100°	0.0	0.0	0.0
101°	0.0	0.0	0.0
102°	0.0	0.0	0.0
103°	0.0	0.0	0.0
104°	0.0	0.0	0.0
105°	0.0	0.0	0.0
106°	0.0	0.0	0.0
107°	0.0	0.0	0.0
108°	0.0	0.0	0.0
109°	0.0	0.0	0.0
110°	0.0	0.0	0.0
111°	0.0	0.0	0.0
112°	0.0	0.0	0.0
113°	0.0	0.0	0.0
114°	0.0	0.0	0.0
115°	0.0	0.0	0.0
116°	0.0	0.0	0.0
117°	0.0	0.0	0.0
118°	0.0	0.0	0.0
119°	0.0	0.0	0.0
120°	0.0	0.0	0.0
121°	0.0	0.0	0.0
122°	0.0	0.0	0.0
123°	0.0	0.0	0.0
124°	0.0	0.0	0.0
125°	0.0	0.0	0.0
126°	0.0	0.0	0.0
127°	0.0	0.0	0.0
128°	0.0	0.0	0.0
129°	0.0	0.0	0.0
130°	0.0	0.0	0.0
131°	0.0	0.0	0.0
132°	0.0	0.0	0.0
133°	0.0	0.0	0.0
134°	0.0	0.0	0.0

REPORT NUMBER: P1444987

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
135°	0.0	0.0	0.0
136°	0.0	0.0	0.0
137°	0.0	0.0	0.0
138°	0.0	0.0	0.0
139°	0.0	0.0	0.0
140°	0.0	0.0	0.0
141°	0.0	0.0	0.0
142°	0.0	0.0	0.0
143°	0.0	0.0	0.0
144°	0.0	0.0	0.0
145°	0.0	0.0	0.0
146°	0.0	0.0	0.0
147°	0.0	0.0	0.0
148°	0.0	0.0	0.0
149°	0.0	0.0	0.0
150°	0.0	0.0	0.0
151°	0.0	0.0	0.0
152°	0.0	0.0	0.0
153°	0.0	0.0	0.0
154°	0.0	0.0	0.0
155°	0.0	0.0	0.0
156°	0.0	0.0	0.0
157°	0.0	0.0	0.0
158°	0.0	0.0	0.0
159°	0.0	0.0	0.0
160°	0.0	0.0	0.0
161°	0.0	0.0	0.0
162°	0.0	0.0	0.0
163°	0.0	0.0	0.0
164°	0.0	0.0	0.0
165°	0.0	0.0	0.0
166°	0.0	0.0	0.0
167°	0.0	0.0	0.0
168°	0.0	0.0	0.0
169°	0.0	0.0	0.0
170°	0.0	0.0	0.0
171°	0.0	0.0	0.0
172°	0.0	0.0	0.0
173°	0.0	0.0	0.0
174°	0.0	0.0	0.0
175°	0.0	0.0	0.0
176°	0.0	0.0	0.0
177°	0.0	0.0	0.0
178°	0.0	0.0	0.0
179°	0.0	0.0	0.0

REPORT NUMBER: P1444987

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)