

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: P1436742

Luminaire Tested: XAS180-SFPM (4000K-72W-T3-HSS)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436742
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 (4000K-72W-T3-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 40% (72W)
OPTICS - TYPE 3 WITH HOUSE SIDE SHIELD
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

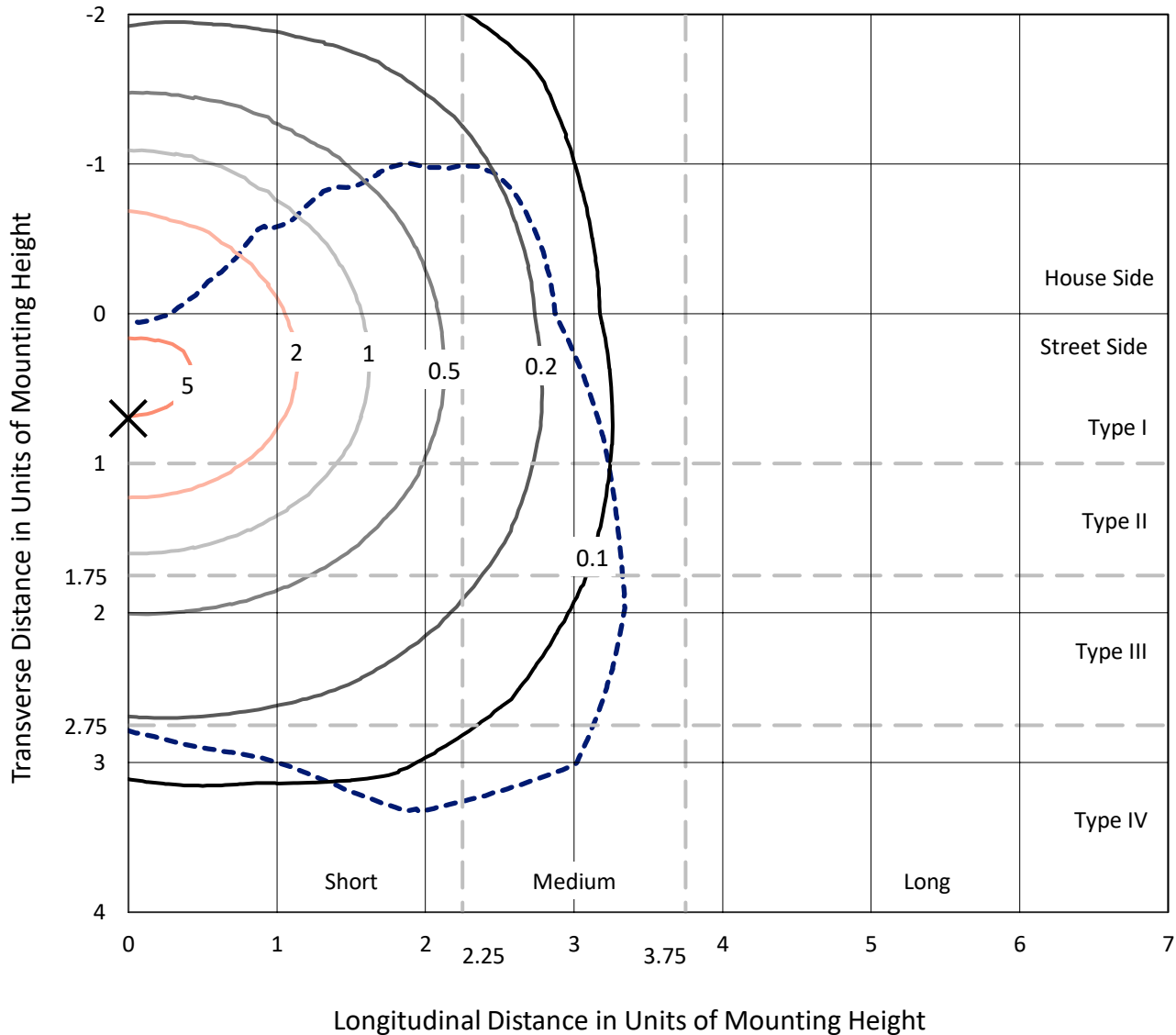
Lumens per Lamp: 24748 (1 lamp)
Luminaire Lumens: 10485.1 lumens
Efficiency: 42.4%
Efficacy: 146.2 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

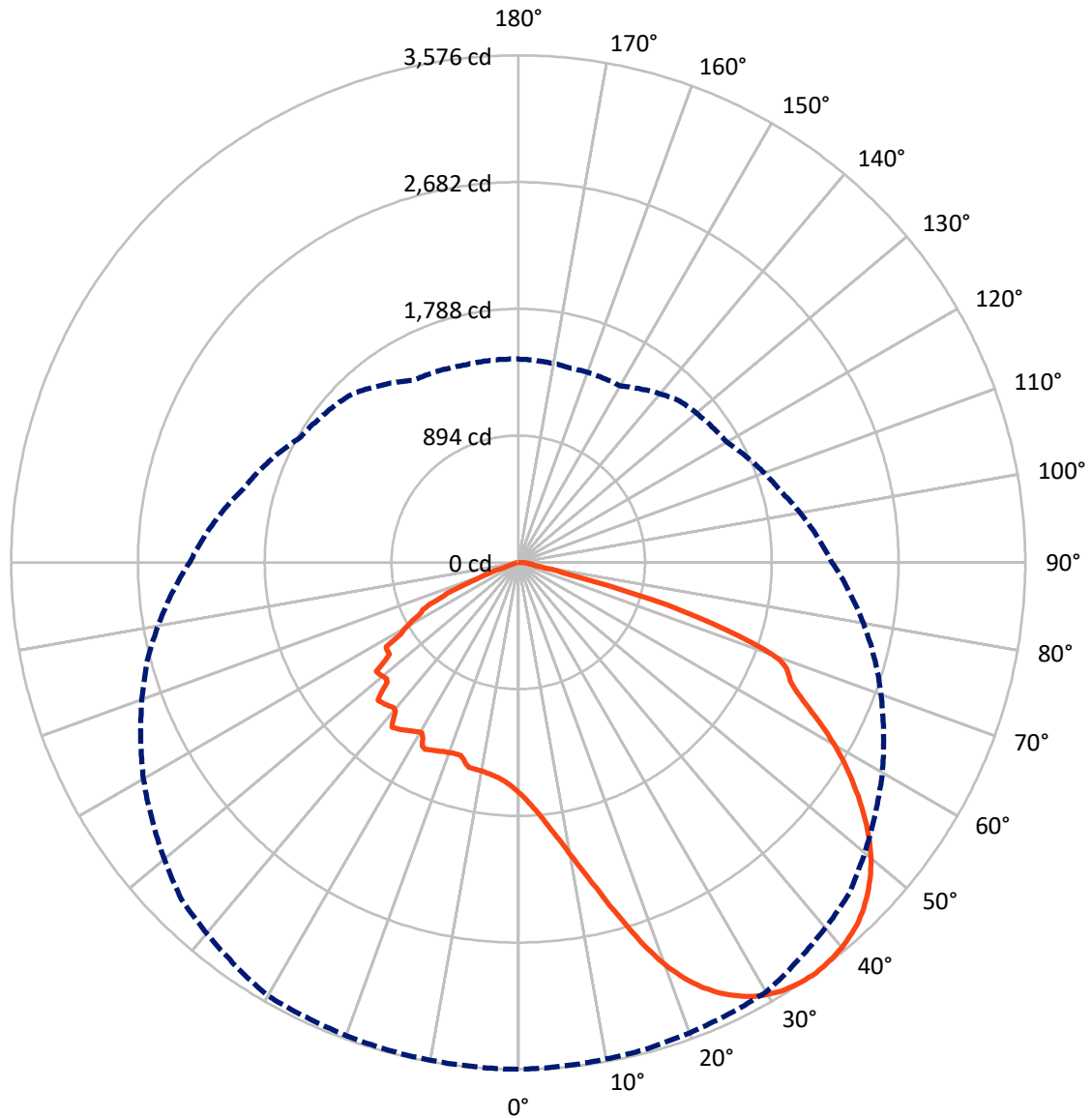
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.4 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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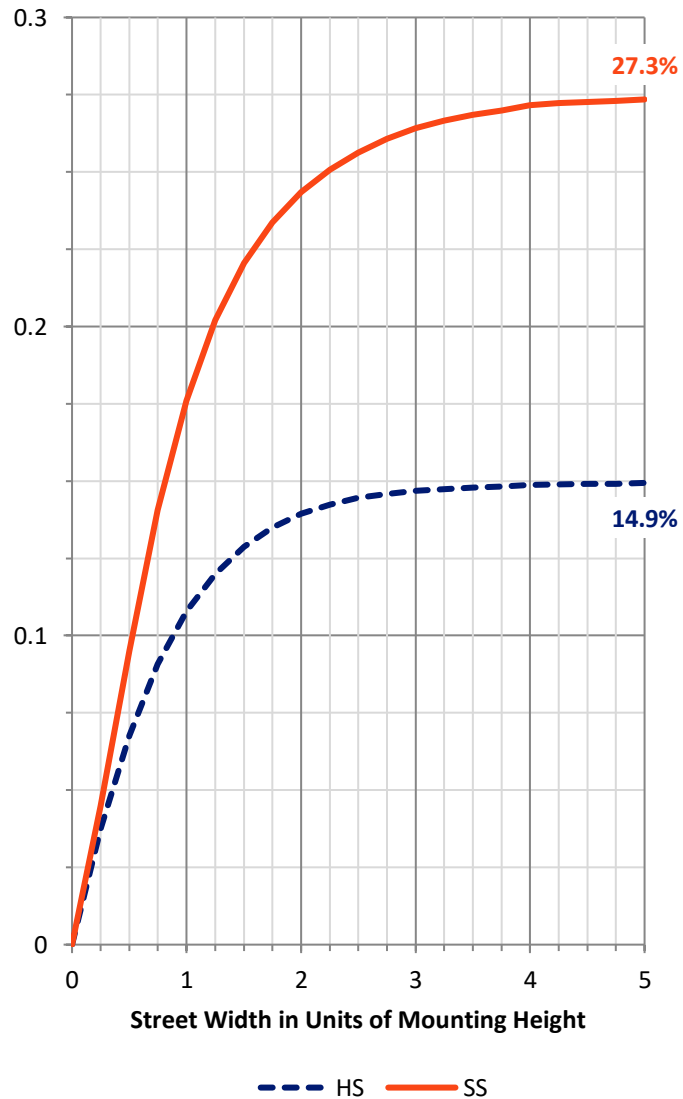
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3714.5	0.0	3714.5
	% Lamp	15.0	0.0	15.0
Street Side	Lumens	6770.6	0.0	6770.6
	% Lamp	27.4	0.0	27.4
Total	Lumens	10485.1	0.0	10485.1
	% Lamp	42.4	0.0	42.4

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	161.9	1.5	0.7
10°-20°	546.9	5.2	2.2
20°-30°	1034.2	9.9	4.2
30°-40°	1520.4	14.5	6.1
40°-50°	1920.5	18.3	7.8
50°-60°	2126.6	20.3	8.6
60°-70°	2000.8	19.1	8.1
70°-80°	1090.5	10.4	4.4
80°-90°	83.2	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°	10485.1	100.0	42.4
0°-180°	10485.1	100.0	42.4

Coefficient of Utilization



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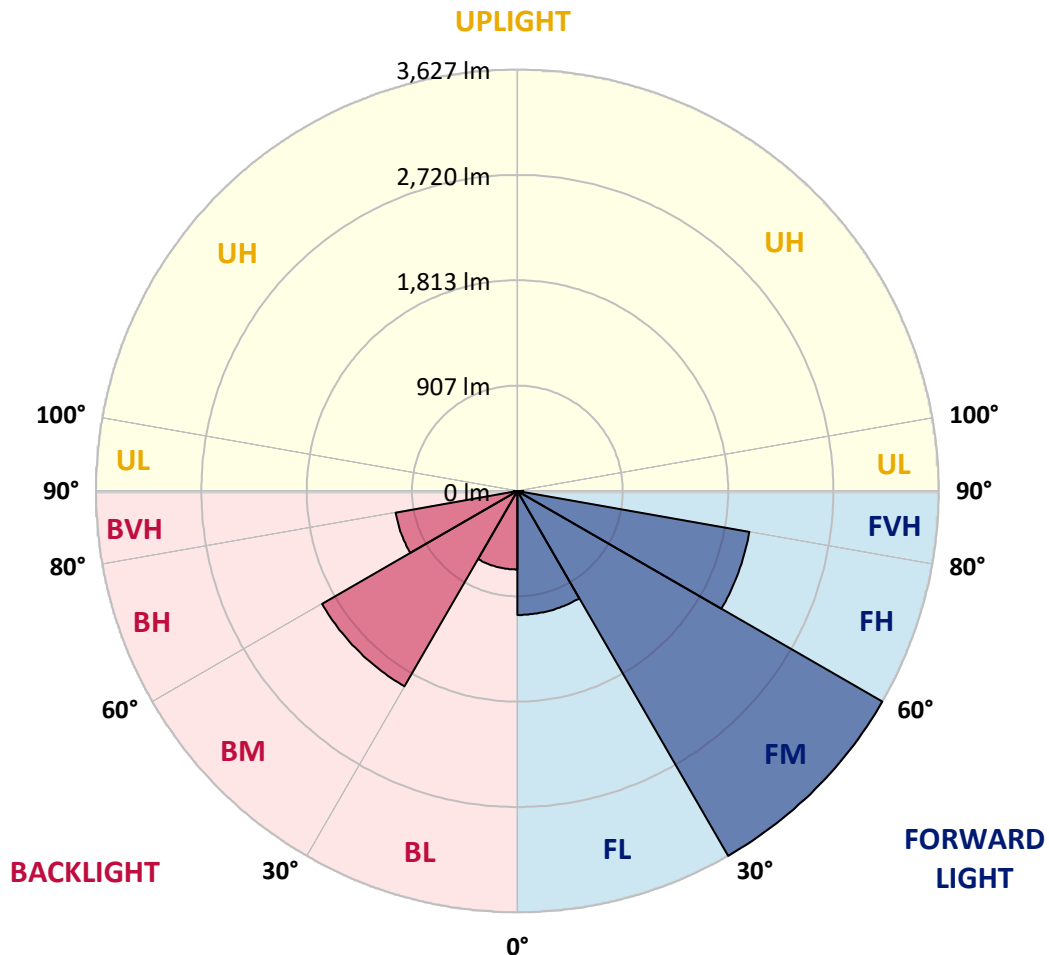
CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1066.8	4.3			
FM (30°-60°)	3626.5	14.7			
FH (60°-80°)	2027.0	8.2			G2/5000
FVH (80°-90°)	50.3	0.2			G1/100
BL (0°-30°)	676.2	2.7	B2/1000		
BM (30°-60°)	1941.0	7.8	B2/2500		
BH (60°-80°)	1064.4	4.3	B3/2500		G3/2500
BVH (80°-90°)	32.9	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	14262.9	57.6			

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°	1631.9	1631.9	1631.9	1631.9	1631.9	1631.9	1631.9	1631.9	1631.9	1631.9	1631.9
1°	1661.2	1660.5	1658.6	1654.4	1648.0	1641.4	1627.8	1621.6	1616.5	1611.6	1608.4
2°	1694.9	1693.0	1687.4	1677.4	1664.1	1649.6	1628.6	1615.6	1604.1	1595.0	1588.3
3°	1731.7	1729.0	1718.7	1702.4	1682.4	1660.3	1631.8	1611.6	1594.4	1580.8	1570.6
4°	1773.0	1768.1	1752.9	1730.7	1703.0	1673.1	1635.9	1609.5	1586.6	1568.7	1555.8
5°	1819.8	1812.5	1792.3	1761.7	1725.6	1686.8	1641.3	1608.3	1580.7	1558.9	1544.3
6°	1870.3	1860.8	1835.3	1796.7	1750.5	1702.0	1648.0	1608.3	1575.9	1551.7	1534.7
7°	1925.0	1913.1	1882.6	1835.4	1777.8	1719.6	1656.3	1610.3	1572.7	1546.1	1527.3
8°	1984.7	1970.3	1932.6	1876.1	1807.3	1738.5	1667.1	1614.1	1571.9	1541.7	1521.3
9°	2049.3	2031.6	1987.0	1919.9	1840.2	1759.2	1678.8	1618.7	1572.4	1538.9	1516.4
10°	2119.5	2098.5	2045.9	1967.2	1874.7	1781.3	1691.3	1624.5	1574.5	1538.2	1512.7
11°	2195.3	2170.6	2108.7	2017.5	1911.3	1806.1	1705.6	1631.9	1577.4	1538.6	1510.9
12°	2276.5	2247.7	2175.6	2070.6	1949.6	1831.4	1720.8	1639.9	1581.7	1540.0	1510.5
13°	2364.0	2330.5	2247.0	2128.4	1990.3	1858.9	1736.7	1648.8	1586.6	1542.3	1511.3
14°	2458.2	2421.1	2324.7	2188.3	2032.8	1887.0	1753.0	1657.8	1591.5	1545.5	1512.0
15°	2559.2	2514.9	2407.0	2253.0	2077.4	1914.9	1770.0	1668.0	1597.9	1549.2	1514.1
16°	2663.3	2615.3	2491.3	2320.0	2124.9	1945.2	1788.6	1678.4	1604.8	1552.8	1516.2
17°	2769.2	2714.6	2576.2	2389.1	2174.2	1976.4	1807.5	1689.9	1612.2	1557.3	1508.1
18°	2870.9	2810.5	2660.2	2458.4	2226.4	2008.9	1826.3	1699.2	1620.1	1562.8	1481.7
19°	2968.3	2903.6	2744.0	2526.9	2279.5	2041.5	1839.3	1706.0	1624.3	1568.5	1463.1
20°	3058.0	2991.9	2824.0	2594.6	2332.4	2072.6	1855.8	1714.5	1626.9	1572.8	1452.6
21°	3137.1	3071.0	2900.8	2660.7	2386.9	2101.2	1874.1	1729.0	1631.3	1552.6	1457.0
22°	3206.2	3144.7	2972.5	2724.3	2440.5	2134.0	1897.2	1743.1	1641.3	1536.1	1462.2
23°	3270.0	3209.9	3039.7	2784.7	2493.7	2168.1	1920.5	1755.6	1650.8	1526.3	1468.3
24°	3325.4	3268.3	3102.7	2843.1	2539.8	2206.0	1941.9	1765.9	1657.1	1519.7	1475.6
25°	3373.7	3320.5	3160.2	2898.8	2583.7	2246.3	1961.3	1778.4	1664.1	1526.6	1482.9
26°	3414.9	3365.7	3212.9	2952.1	2628.8	2285.8	1982.1	1792.2	1672.2	1530.3	1491.5
27°	3451.2	3405.6	3261.1	3004.1	2671.9	2323.9	2004.5	1808.8	1684.1	1534.7	1499.8
28°	3482.0	3439.4	3305.7	3052.6	2713.8	2357.1	2029.0	1826.2	1691.1	1541.1	1507.8
29°	3508.0	3468.3	3344.8	3097.7	2755.0	2391.2	2056.0	1843.3	1681.9	1552.3	1516.7
30°	3529.6	3492.2	3380.9	3142.1	2796.4	2425.9	2083.7	1861.0	1682.4	1563.4	1523.9
31°	3546.6	3512.2	3411.9	3182.4	2835.5	2460.1	2111.9	1878.3	1677.6	1575.2	1526.1
32°	3558.8	3526.7	3438.1	3215.9	2872.7	2495.2	2140.3	1891.5	1681.5	1586.4	1481.2
33°	3568.1	3537.7	3462.2	3247.4	2906.4	2531.0	2168.4	1898.5	1678.1	1595.5	1443.7
34°	3574.0	3544.9	3481.3	3275.4	2936.4	2566.1	2194.5	1906.9	1687.4	1603.3	1429.2
35°	3576.3	3548.4	3498.2	3301.6	2964.7	2600.8	2213.3	1920.7	1697.2	1610.4	1437.2
36°	3575.3	3550.0	3510.3	3326.7	2992.5	2633.6	2230.0	1935.2	1708.9	1618.6	1445.5
37°	3570.7	3547.6	3519.8	3349.3	3019.1	2665.4	2250.3	1950.4	1720.4	1616.7	1452.0
38°	3563.8	3543.5	3525.9	3368.9	3044.8	2696.7	2275.1	1967.1	1728.5	1572.4	1457.4
39°	3554.6	3536.5	3529.4	3386.2	3069.6	2726.1	2298.5	1981.6	1736.0	1537.4	1465.8
40°	3542.6	3528.0	3528.2	3401.0	3093.5	2749.5	2322.2	1994.8	1749.0	1528.2	1476.5
41°	3526.7	3516.2	3525.5	3414.8	3116.6	2768.9	2345.9	2007.0	1765.0	1539.7	1487.1
42°	3508.9	3502.2	3518.8	3427.0	3139.2	2786.6	2369.6	2016.3	1780.8	1552.1	1496.2
43°	3486.6	3485.8	3509.8	3436.2	3161.8	2807.3	2389.6	2026.0	1796.8	1565.0	1464.6
44°	3460.5	3466.1	3498.3	3441.5	3183.2	2828.9	2408.0	2044.0	1813.4	1577.1	1413.7



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3431.1	3444.0	3482.9	3443.0	3202.6	2851.8	2423.9	2065.7	1826.3	1585.0	1392.6
46°	3396.8	3418.1	3465.5	3440.8	3222.1	2874.1	2435.9	2087.7	1830.4	1590.2	1400.4
47°	3358.3	3387.6	3446.1	3435.0	3240.6	2895.8	2446.4	2108.0	1830.7	1598.9	1406.8
48°	3318.0	3353.6	3422.8	3426.2	3256.3	2916.0	2456.2	2119.2	1801.2	1609.3	1412.1
49°	3272.7	3315.3	3395.3	3415.5	3268.5	2937.3	2472.3	2126.5	1776.7	1577.1	1419.4
50°	3222.1	3272.5	3364.1	3401.3	3276.3	2955.6	2491.6	2131.1	1768.1	1527.1	1427.3
51°	3167.3	3225.0	3326.9	3383.8	3280.6	2970.9	2510.7	2128.3	1761.5	1505.7	1399.7
52°	3106.7	3173.0	3286.4	3362.0	3282.5	2983.8	2528.9	2142.8	1774.0	1517.2	1323.9
53°	3044.0	3115.6	3241.8	3336.8	3280.4	2995.4	2546.3	2151.3	1781.6	1529.2	1299.9
54°	2977.5	3053.2	3192.3	3309.3	3277.3	3001.1	2561.9	2156.2	1789.9	1537.8	1311.0
55°	2908.0	2987.9	3138.3	3276.9	3269.6	3001.4	2572.5	2166.4	1803.7	1545.8	1323.4
56°	2836.9	2919.7	3083.1	3240.7	3260.4	2999.6	2577.5	2172.4	1818.8	1548.1	1335.6
57°	2765.2	2850.3	3023.7	3202.8	3247.9	2992.3	2576.7	2175.4	1826.5	1494.8	1345.7
58°	2691.4	2777.3	2962.4	3160.9	3231.0	2987.3	2572.0	2181.0	1832.6	1446.3	1277.5
59°	2615.7	2706.2	2899.6	3115.6	3209.4	2981.6	2569.6	2181.0	1802.3	1444.8	1224.3
60°	2535.7	2632.1	2834.6	3067.6	3181.1	2971.5	2564.8	2171.6	1764.5	1462.0	1227.6
61°	2453.5	2555.4	2768.2	3016.5	3147.3	2956.5	2554.7	2159.5	1753.5	1480.6	1231.8
62°	2367.6	2477.2	2703.7	2961.9	3108.1	2935.2	2542.2	2153.2	1758.7	1498.8	1182.2
63°	2283.9	2398.1	2640.3	2905.9	3065.0	2905.8	2520.7	2136.4	1763.3	1462.3	1112.1
64°	2203.7	2321.9	2579.5	2848.0	3014.3	2867.4	2491.6	2116.6	1762.3	1416.7	1097.8
65°	2139.9	2251.9	2519.4	2787.6	2959.0	2821.5	2455.9	2087.2	1743.3	1416.2	1084.4
66°	2092.2	2195.8	2462.0	2727.4	2897.4	2764.4	2413.4	2048.2	1682.3	1424.9	990.8
67°	2065.3	2153.9	2410.5	2666.3	2827.7	2699.6	2364.4	1997.8	1657.1	1366.6	975.6
68°	2035.4	2125.6	2364.6	2604.9	2747.5	2625.5	2281.1	1943.8	1666.8	1334.4	914.0
69°	1968.3	2094.8	2326.8	2544.7	2661.2	2524.8	2145.2	1881.0	1671.5	1330.0	852.4
70°	1838.8	2039.4	2296.4	2484.3	2574.1	2390.0	1955.1	1789.3	1667.7	1265.4	790.5
71°	1639.4	1932.7	2267.7	2424.1	2469.6	2220.0	1744.8	1664.1	1613.7	1245.0	691.4
72°	1435.2	1760.3	2232.8	2360.5	2348.8	2026.3	1554.8	1516.6	1547.4	1197.6	619.5
73°	1217.3	1541.9	2177.0	2297.6	2209.6	1827.3	1381.3	1372.3	1473.6	1160.0	552.5
74°	970.2	1307.5	2071.6	2222.0	2052.6	1636.1	1178.2	1244.4	1387.7	1093.5	466.8
75°	660.0	1053.1	1890.8	2115.9	1876.1	1417.3	897.0	1104.7	1277.8	1026.6	416.7
76°	365.9	747.2	1657.3	1960.9	1691.2	1121.1	615.7	886.7	1179.4	910.0	372.8
77°	282.8	427.0	1407.5	1738.9	1485.9	740.1	334.6	667.1	1082.2	793.4	328.6
78°	201.6	325.4	1105.4	1434.4	1231.2	411.8	161.1	385.0	895.0	676.3	282.6
79°	120.4	224.5	725.3	1078.1	897.8	272.9	121.2	279.2	708.0	533.7	234.4
80°	106.5	123.6	395.1	709.5	553.3	139.3	81.5	173.5	520.1	406.5	198.2
81°	95.3	107.2	299.7	370.6	402.7	115.4	69.1	68.1	279.9	298.9	178.2
82°	85.0	94.7	207.4	245.7	254.8	98.6	58.6	54.2	205.7	238.7	176.0
83°	75.5	83.5	115.1	128.7	106.8	80.8	48.8	42.9	131.4	189.2	144.6
84°	66.4	72.8	96.0	105.3	86.6	62.9	39.9	34.1	59.3	145.5	111.3
85°	57.8	63.1	78.1	89.3	68.7	49.3	31.1	26.9	50.8	101.8	77.9
86°	49.5	54.2	63.6	74.4	52.9	39.7	23.2	20.6	40.0	58.4	44.7
87°	41.3	45.7	51.2	57.9	40.8	30.1	16.1	15.2	29.6	33.0	27.8
88°	35.6	38.4	39.8	40.1	29.7	20.6	11.3	10.8	20.5	22.7	19.1
89°	30.1	31.2	30.6	28.5	18.5	12.5	6.5	6.4	11.5	12.3	10.4



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CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1436742

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-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: P1436742

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-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: P1436742

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1631.9	1631.9	1631.9	1631.9	1631.9	1631.9	1631.9	1631.9	1631.9	1631.9	1631.9
1°	1606.7	1606.9	1608.7	1612.2	1617.2	1622.3	1629.5	1630.6	1637.8	1645.0	1651.4
2°	1584.7	1584.5	1587.3	1593.8	1602.1	1613.3	1626.1	1634.1	1648.8	1662.9	1675.9
3°	1565.4	1564.7	1568.3	1576.5	1589.3	1605.0	1624.1	1639.4	1661.0	1683.3	1703.0
4°	1548.9	1548.1	1552.7	1562.9	1578.6	1599.4	1624.0	1645.9	1675.7	1705.9	1733.2
5°	1536.6	1535.3	1540.0	1552.0	1570.0	1594.9	1625.2	1654.3	1692.0	1730.6	1766.1
6°	1525.9	1523.9	1529.8	1543.6	1563.8	1591.8	1627.9	1664.2	1710.1	1757.8	1801.6
7°	1516.7	1514.5	1521.0	1536.4	1560.0	1591.3	1632.4	1676.0	1730.0	1787.6	1842.1
8°	1509.7	1507.1	1513.9	1531.4	1557.4	1592.3	1638.5	1688.5	1751.7	1820.4	1884.9
9°	1503.4	1501.0	1508.5	1527.8	1556.3	1594.5	1645.0	1702.0	1775.1	1855.1	1931.1
10°	1498.9	1495.8	1504.4	1525.9	1556.5	1597.5	1652.7	1717.5	1800.0	1892.0	1980.3
11°	1495.4	1492.2	1501.9	1525.0	1558.2	1602.5	1662.1	1735.0	1828.0	1931.2	2032.8
12°	1493.3	1490.1	1500.3	1525.6	1561.4	1608.4	1673.0	1752.6	1856.0	1973.1	2088.7
13°	1493.1	1489.2	1500.1	1526.9	1565.8	1615.5	1684.3	1771.5	1886.1	2017.3	2149.1
14°	1493.1	1488.7	1501.1	1529.7	1571.3	1623.4	1696.5	1791.2	1916.8	2063.5	2212.6
15°	1491.5	1470.5	1499.7	1533.0	1576.9	1632.4	1709.3	1812.5	1949.1	2113.4	2280.5
16°	1459.9	1440.4	1470.6	1536.4	1583.0	1642.3	1722.9	1833.4	1983.1	2164.0	2351.9
17°	1436.5	1422.8	1448.1	1530.6	1589.7	1652.4	1737.9	1855.8	2017.9	2218.3	2425.2
18°	1424.1	1419.6	1436.0	1504.9	1597.7	1663.0	1751.0	1878.2	2054.4	2274.9	2499.0
19°	1426.0	1421.8	1437.7	1488.2	1604.9	1670.9	1760.1	1897.0	2091.8	2332.3	2572.6
20°	1429.2	1424.8	1441.3	1479.7	1611.3	1676.2	1771.2	1915.7	2130.3	2390.8	2643.8
21°	1433.4	1429.7	1446.1	1483.5	1598.0	1682.9	1786.8	1937.0	2165.2	2450.6	2712.6
22°	1439.4	1435.1	1452.3	1490.0	1578.8	1695.3	1804.3	1961.8	2200.8	2508.4	2777.7
23°	1445.7	1442.3	1460.1	1497.3	1569.8	1708.2	1822.1	1988.7	2240.2	2566.0	2839.9
24°	1452.5	1449.2	1468.1	1505.6	1567.2	1719.0	1836.5	2015.7	2281.6	2620.8	2898.9
25°	1459.7	1455.8	1475.7	1514.6	1574.4	1727.3	1850.2	2040.2	2325.4	2669.3	2953.9
26°	1467.2	1463.6	1484.0	1524.9	1581.1	1736.0	1865.0	2063.3	2369.9	2713.6	3006.6
27°	1474.6	1471.7	1492.0	1534.5	1586.4	1746.7	1881.3	2088.1	2414.0	2757.7	3057.5
28°	1482.4	1463.5	1500.3	1544.2	1593.0	1755.7	1900.3	2114.8	2455.2	2800.0	3106.1
29°	1458.9	1411.5	1482.1	1553.9	1604.1	1752.9	1919.8	2143.1	2491.6	2841.1	3152.1
30°	1410.0	1383.5	1432.3	1561.9	1616.3	1750.7	1939.2	2172.8	2529.8	2882.3	3195.0
31°	1386.1	1387.0	1408.0	1565.1	1628.8	1750.5	1958.5	2203.6	2567.2	2921.1	3236.1
32°	1390.9	1397.9	1411.9	1528.9	1641.9	1751.1	1973.9	2234.2	2602.7	2958.2	3273.3
33°	1400.7	1409.3	1421.6	1492.0	1653.6	1750.7	1983.8	2264.3	2639.6	2993.9	3305.9
34°	1410.3	1421.1	1431.7	1475.8	1663.1	1760.1	1993.7	2294.3	2674.7	3025.1	3333.9
35°	1420.2	1434.0	1441.8	1482.1	1672.4	1770.5	2009.0	2318.3	2710.4	3052.5	3360.6
36°	1431.0	1445.9	1452.6	1492.2	1679.7	1782.1	2025.4	2338.1	2743.8	3079.7	3385.9
37°	1440.6	1457.1	1463.2	1499.7	1684.0	1795.1	2042.1	2360.5	2776.0	3105.6	3409.5
38°	1450.0	1466.0	1473.3	1506.1	1641.0	1805.2	2061.2	2385.8	2807.1	3131.9	3429.3
39°	1456.8	1412.4	1481.4	1513.0	1607.4	1814.1	2079.8	2410.9	2836.6	3156.6	3446.4
40°	1401.5	1361.0	1432.4	1523.9	1597.3	1826.9	2095.6	2435.6	2861.8	3179.9	3461.2
41°	1351.6	1350.2	1380.0	1535.6	1607.3	1843.9	2109.5	2460.7	2881.2	3203.0	3474.0
42°	1340.1	1357.8	1365.5	1546.1	1619.9	1861.7	2119.4	2485.4	2898.7	3226.1	3483.9
43°	1349.2	1366.3	1374.7	1525.4	1633.3	1879.2	2130.2	2508.5	2917.4	3247.9	3491.8
44°	1359.1	1374.3	1385.3	1470.9	1646.3	1897.4	2150.8	2529.6	2936.8	3267.7	3496.6



REPORT NUMBER: P1436742

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1369.3	1382.3	1395.5	1445.3	1655.6	1911.9	2173.8	2548.3	2957.5	3286.2	3496.6
46°	1379.8	1387.0	1406.1	1450.9	1661.8	1917.5	2197.0	2560.5	2979.2	3302.7	3492.3
47°	1389.7	1331.1	1414.6	1457.1	1669.9	1921.2	2219.7	2570.6	2999.4	3318.3	3483.9
48°	1336.6	1254.6	1370.1	1462.5	1680.7	1905.7	2237.3	2579.3	3018.3	3331.8	3473.9
49°	1261.9	1239.8	1293.9	1469.6	1660.3	1880.0	2242.3	2594.2	3035.3	3340.9	3460.8
50°	1248.8	1246.0	1275.7	1476.7	1608.4	1861.7	2245.8	2612.1	3050.5	3344.9	3444.7
51°	1259.1	1252.8	1285.9	1457.5	1579.2	1853.7	2242.7	2628.0	3061.3	3344.0	3426.2
52°	1270.0	1259.7	1295.5	1380.7	1588.2	1863.0	2243.5	2643.1	3069.6	3340.4	3403.0
53°	1279.7	1262.8	1304.7	1351.1	1600.6	1870.5	2252.4	2655.7	3074.2	3333.1	3377.4
54°	1284.5	1171.8	1310.1	1361.5	1608.8	1877.5	2254.8	2666.0	3072.2	3325.2	3347.4
55°	1202.1	1115.8	1228.1	1373.6	1616.4	1886.6	2256.3	2671.1	3065.3	3313.4	3315.5
56°	1141.1	1111.9	1166.4	1386.2	1618.9	1900.5	2256.6	2668.4	3053.8	3300.2	3280.4
57°	1137.0	1113.8	1159.8	1395.2	1579.4	1906.0	2253.6	2659.3	3038.5	3283.2	3241.1
58°	1138.8	1104.5	1161.2	1330.5	1522.8	1908.7	2252.4	2647.5	3022.5	3259.6	3199.1
59°	1117.5	973.5	1143.6	1272.6	1517.1	1887.6	2249.1	2635.8	3006.1	3232.9	3153.6
60°	1002.2	937.6	1027.3	1272.9	1533.6	1840.9	2233.4	2622.0	2985.7	3201.9	3103.6
61°	979.9	882.5	1002.0	1276.6	1551.4	1818.3	2214.6	2604.4	2960.8	3164.9	3050.4
62°	976.9	827.5	995.8	1234.2	1567.0	1817.8	2203.8	2582.4	2930.5	3121.7	2995.1
63°	920.0	773.0	937.4	1156.7	1534.9	1817.2	2184.4	2553.2	2893.3	3071.1	2937.2
64°	863.2	757.4	879.0	1141.4	1480.0	1812.2	2159.0	2515.0	2848.3	3016.5	2878.5
65°	806.2	691.9	820.1	1131.8	1472.0	1791.3	2123.2	2467.7	2792.9	2956.6	2815.3
66°	717.1	578.7	733.2	1031.3	1472.4	1730.8	2078.5	2411.3	2727.0	2891.8	2748.7
67°	626.6	551.7	639.5	1009.6	1411.7	1691.1	2025.1	2343.1	2655.0	2817.3	2682.4
68°	563.7	385.2	578.4	970.0	1377.6	1692.7	1952.2	2225.4	2563.2	2734.8	2616.8
69°	459.3	318.1	471.9	885.3	1364.7	1689.3	1864.3	2051.6	2435.9	2644.1	2553.3
70°	367.8	219.2	378.4	800.5	1295.5	1675.8	1742.7	1824.1	2276.0	2544.0	2485.7
71°	252.9	120.2	252.7	716.0	1264.6	1607.8	1590.1	1613.7	2075.4	2425.6	2414.9
72°	139.8	22.0	130.7	643.6	1211.5	1520.1	1427.5	1420.9	1862.6	2291.3	2343.9
73°	117.7	0.3	106.0	567.8	1157.3	1429.7	1269.9	1228.8	1654.3	2129.1	2264.4
74°	95.6	0.2	81.5	467.0	1077.2	1330.2	1123.6	1000.4	1447.9	1944.8	2171.6
75°	73.6	0.2	70.7	409.8	987.6	1213.6	902.7	700.8	1201.8	1740.7	2042.1
76°	56.0	0.2	56.3	364.3	861.1	1097.6	681.9	406.0	869.8	1525.2	1868.3
77°	39.4	0.2	44.6	321.1	734.6	930.2	460.9	260.9	518.1	1296.0	1625.7
78°	29.5	0.3	36.1	278.3	608.1	762.8	237.3	119.2	387.6	1015.2	1311.2
79°	29.0	0.3	35.9	231.4	486.5	594.2	154.9	90.9	259.2	686.5	950.5
80°	38.9	0.4	43.3	200.3	377.8	339.8	73.5	77.1	130.7	401.2	591.4
81°	47.6	0.4	44.8	186.1	283.9	246.4	58.9	65.6	111.1	266.3	433.5
82°	42.0	0.5	27.9	173.5	220.3	153.1	48.5	55.2	94.9	133.4	279.4
83°	26.2	0.5	19.8	131.5	165.3	60.3	39.6	45.9	78.3	101.9	125.3
84°	19.2	0.6	11.8	89.6	110.4	50.2	31.8	37.6	62.0	83.9	104.2
85°	12.2	0.6	3.9	48.1	56.1	39.6	25.3	29.3	48.4	65.9	88.5
86°	5.4	0.7	3.5	24.4	31.3	29.5	19.5	21.0	38.9	51.1	73.7
87°	4.0	0.8	3.5	17.2	17.8	21.2	14.3	14.1	29.4	39.4	57.2
88°	2.9	0.9	3.1	10.0	12.4	14.8	10.1	8.2	20.0	28.7	39.8
89°	2.2	0.9	1.9	2.9	7.1	8.4	5.9	3.5	12.2	17.9	28.4



REPORT NUMBER: P1436742

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-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: P1436742

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-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: P1436742

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-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: P1436742

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1631.9	1631.9	1631.9
1°	1656.2	1659.6	1661.2
2°	1685.7	1692.4	1694.9
3°	1718.2	1728.3	1731.7
4°	1754.7	1768.8	1773.0
5°	1794.4	1813.7	1819.8
6°	1838.2	1863.0	1870.3
7°	1886.4	1915.5	1925.0
8°	1938.3	1973.1	1984.7
9°	1994.5	2036.0	2049.3
10°	2053.2	2104.0	2119.5
11°	2118.9	2176.6	2195.3
12°	2188.6	2256.1	2276.5
13°	2263.7	2339.9	2364.0
14°	2343.9	2430.3	2458.2
15°	2428.0	2525.9	2559.2
16°	2513.6	2623.5	2663.3
17°	2600.6	2724.0	2769.2
18°	2688.1	2823.5	2870.9
19°	2772.7	2919.3	2968.3
20°	2854.4	3008.2	3058.0
21°	2931.1	3089.2	3137.1
22°	3002.6	3163.2	3206.2
23°	3071.2	3227.7	3270.0
24°	3134.8	3285.3	3325.4
25°	3193.7	3335.9	3373.7
26°	3247.4	3380.5	3414.9
27°	3298.0	3419.0	3451.2
28°	3341.6	3452.5	3482.0
29°	3381.6	3480.2	3508.0
30°	3416.2	3503.2	3529.6
31°	3447.5	3522.7	3546.6
32°	3474.4	3538.3	3558.8
33°	3497.5	3549.3	3568.1
34°	3515.8	3556.9	3574.0
35°	3530.9	3560.8	3576.3
36°	3542.6	3560.4	3575.3
37°	3551.5	3558.2	3570.7
38°	3556.8	3553.8	3563.8
39°	3558.7	3546.1	3554.6
40°	3557.6	3536.8	3542.6
41°	3554.0	3525.8	3526.7
42°	3547.1	3511.8	3508.9
43°	3537.1	3495.7	3486.6
44°	3524.9	3476.7	3460.5



REPORT NUMBER: P1436742

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	3509.7	3454.7	3431.1
46°	3492.5	3429.6	3396.8
47°	3472.0	3399.7	3358.3
48°	3450.0	3366.8	3318.0
49°	3423.6	3329.8	3272.7
50°	3392.4	3289.2	3222.1
51°	3356.8	3243.5	3167.3
52°	3315.5	3191.7	3106.7
53°	3270.7	3137.3	3044.0
54°	3221.8	3076.9	2977.5
55°	3171.1	3014.4	2908.0
56°	3115.8	2946.2	2836.9
57°	3057.9	2876.9	2765.2
58°	2996.5	2805.2	2691.4
59°	2932.8	2732.6	2615.7
60°	2868.5	2657.6	2535.7
61°	2804.2	2581.5	2453.5
62°	2739.8	2502.8	2367.6
63°	2677.6	2426.7	2283.9
64°	2619.3	2353.2	2203.7
65°	2562.6	2285.4	2139.9
66°	2507.6	2228.4	2092.2
67°	2455.4	2187.0	2065.3
68°	2407.3	2158.3	2035.4
69°	2364.5	2127.5	1968.3
70°	2330.8	2077.1	1838.8
71°	2296.4	1978.6	1639.4
72°	2254.0	1808.9	1435.2
73°	2191.4	1588.8	1217.3
74°	2077.0	1345.9	970.2
75°	1894.7	1089.6	660.0
76°	1662.4	797.3	365.9
77°	1399.1	475.6	282.8
78°	1083.9	357.0	201.6
79°	712.4	241.9	120.4
80°	400.0	126.8	106.5
81°	301.2	110.5	95.3
82°	209.5	97.7	85.0
83°	117.8	86.0	75.5
84°	97.5	74.9	66.4
85°	79.1	64.8	57.8
86°	64.6	55.6	49.5
87°	51.8	46.8	41.3
88°	39.7	39.2	35.6
89°	30.6	31.6	30.1



REPORT NUMBER: P1436742

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-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: P1436742

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-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: P1436742

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)