

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: P1436745

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

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436745
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-T5)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 40% (72W)
OPTICS - TYPE 5
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

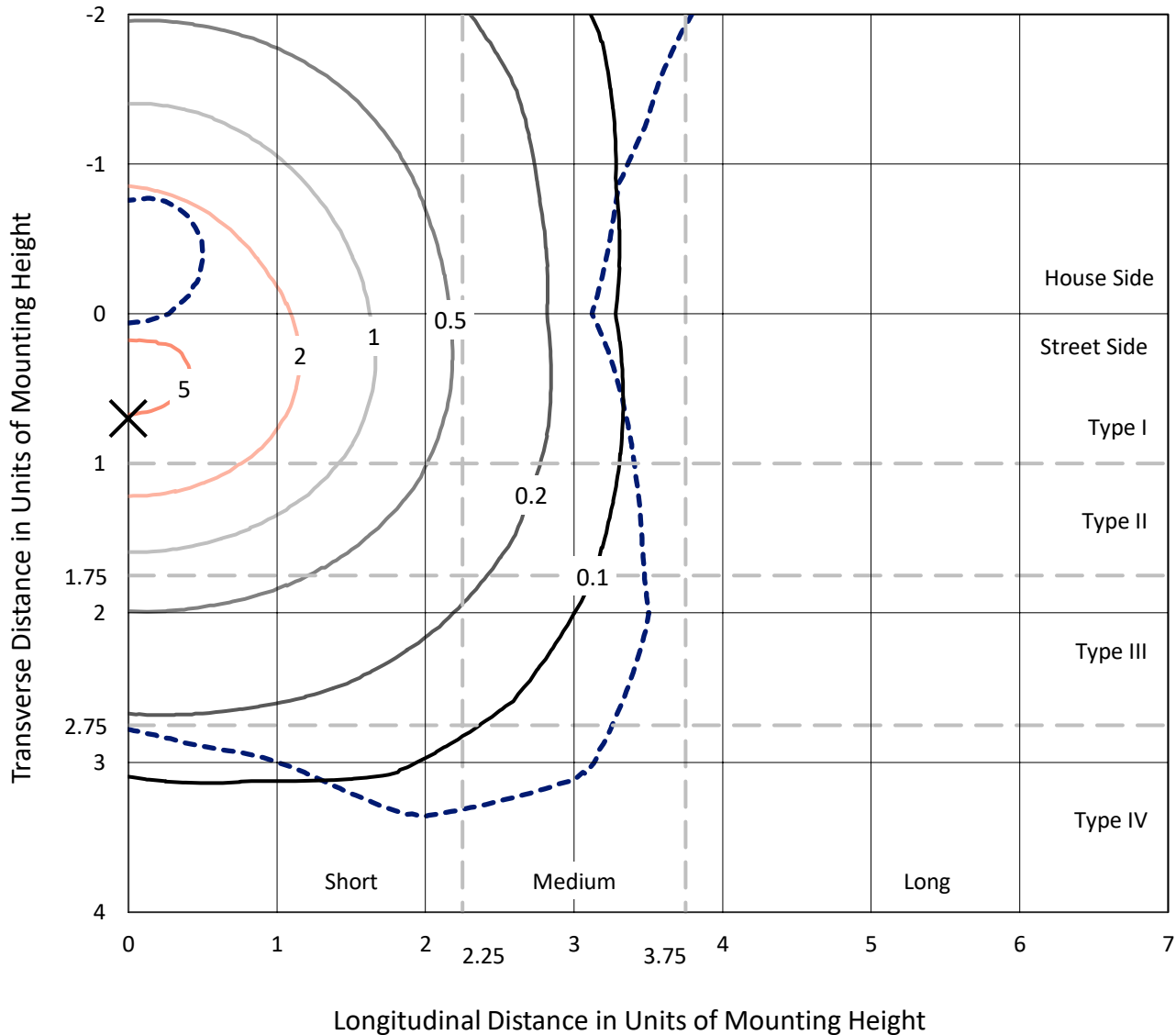
Lumens per Lamp: 28628 (1 lamp)
Luminaire Lumens: 12055.3 lumens
Efficiency: 42.1%
Efficacy: 168.4 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 71.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

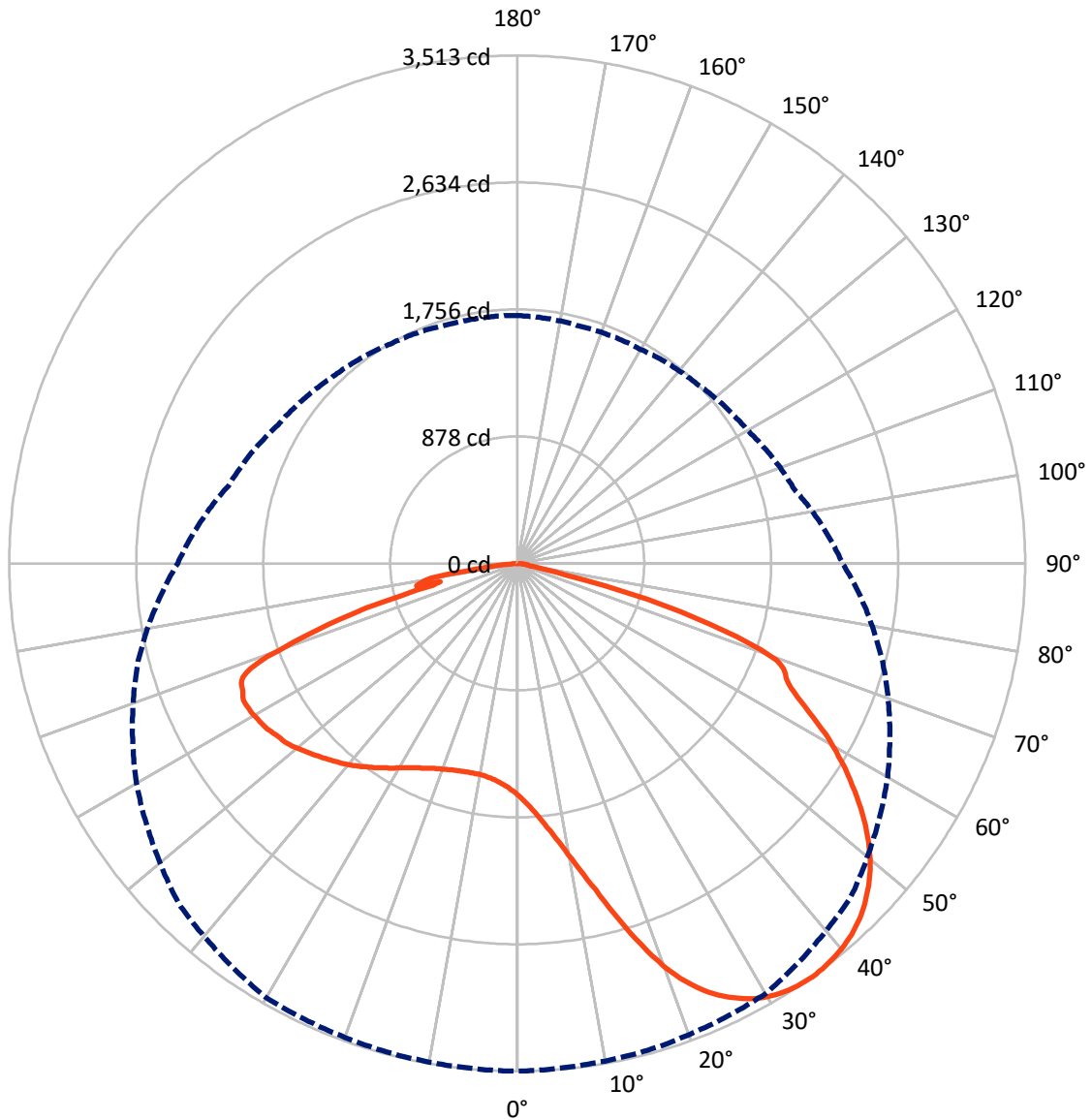
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.3 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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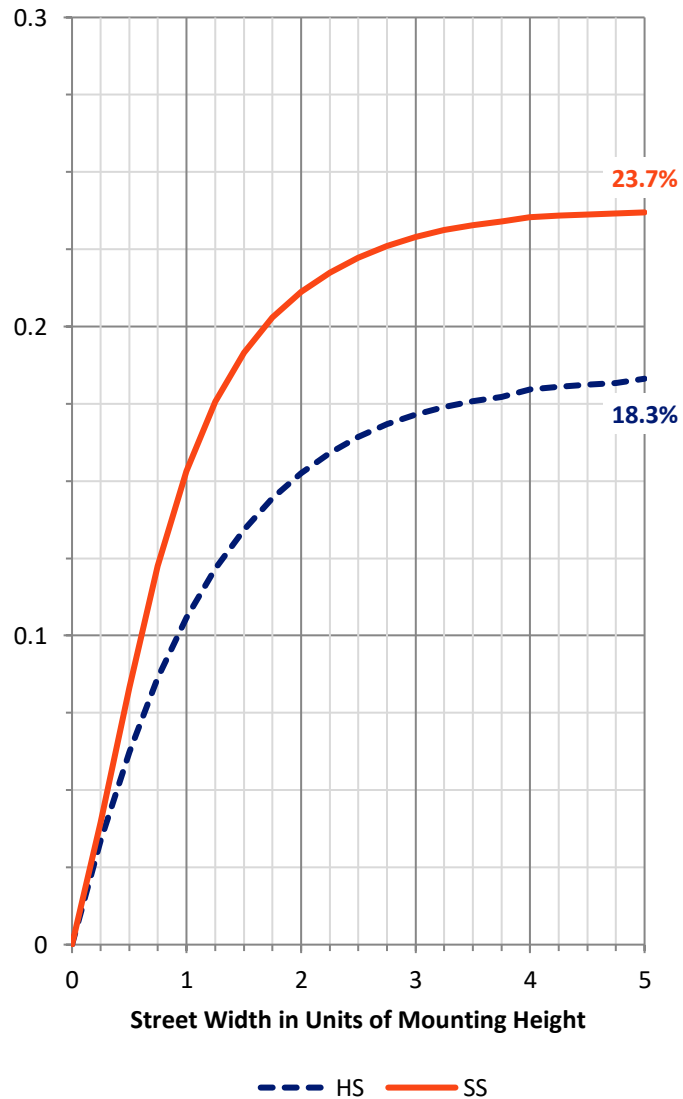
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5277.6	0.0	5277.6
	% Lamp	18.4	0.0	18.4
Street Side	Lumens	6777.7	0.0	6777.7
	% Lamp	23.7	0.0	23.7
Total	Lumens	12055.3	0.0	12055.3
	% Lamp	42.1	0.0	42.1

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	159.7	1.3	0.6
10°-20°	542.0	4.5	1.9
20°-30°	1040.4	8.6	3.6
30°-40°	1567.3	13.0	5.5
40°-50°	2049.7	17.0	7.2
50°-60°	2410.5	20.0	8.4
60°-70°	2514.9	20.9	8.8
70°-80°	1610.1	13.4	5.6
80°-90°	160.7	1.3	0.6
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	12055.3	100.0	42.1
0°-180°	12055.3	100.0	42.1

Coefficient of Utilization



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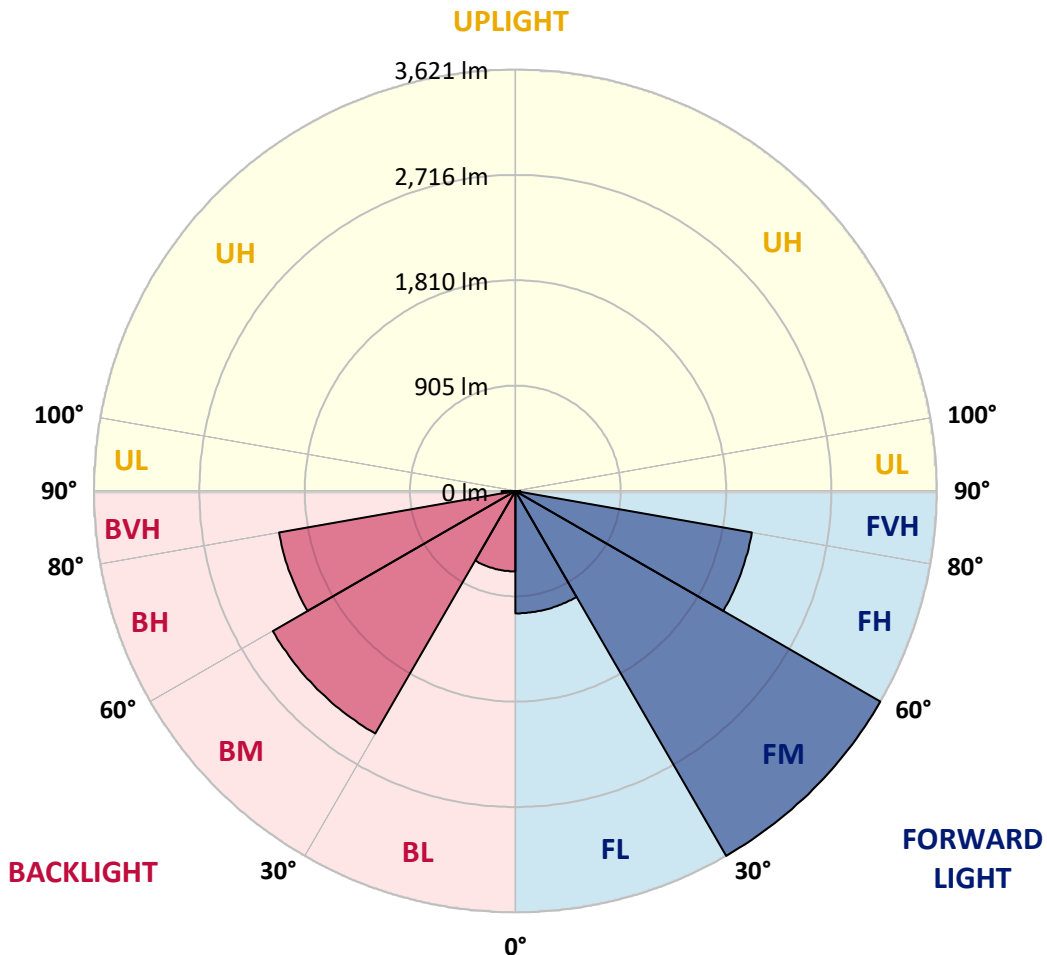
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1051.3	3.7			
FM (30°-60°)	3620.9	12.6			
FH (60°-80°)	2063.1	7.2			G2/5000
FVH (80°-90°)	42.3	0.1			G1/100
BL (0°-30°)	690.8	2.4	B2/1000		
BM (30°-60°)	2406.5	8.4	B2/2500		
BH (60°-80°)	2061.9	7.2	B3/2500		G3/2500
BVH (80°-90°)	118.4	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	16572.7	57.9			

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°	1610.1	1610.1	1610.1	1610.1	1610.1	1610.1	1610.1	1610.1	1610.1	1610.1	1610.1
1°	1637.4	1636.9	1634.7	1630.8	1625.4	1619.6	1607.2	1600.6	1595.4	1590.9	1588.1
2°	1669.0	1667.5	1662.0	1652.5	1640.0	1627.0	1607.7	1595.3	1584.4	1575.5	1569.7
3°	1704.7	1701.8	1691.8	1676.6	1657.9	1637.0	1610.5	1591.7	1575.5	1562.6	1553.5
4°	1744.4	1739.5	1725.2	1703.8	1677.4	1648.5	1614.3	1589.6	1568.4	1552.0	1540.3
5°	1789.0	1782.3	1762.8	1733.5	1699.2	1662.0	1619.5	1588.5	1562.9	1543.0	1529.0
6°	1838.2	1828.7	1804.5	1766.9	1722.9	1676.5	1625.7	1589.0	1558.9	1536.0	1519.6
7°	1891.8	1880.1	1849.9	1804.2	1748.9	1692.9	1634.2	1591.1	1556.3	1530.6	1512.5
8°	1950.4	1935.7	1899.3	1843.3	1776.9	1711.7	1644.2	1595.0	1555.5	1526.1	1506.6
9°	2013.7	1997.6	1952.4	1885.8	1808.5	1731.2	1655.3	1599.5	1556.2	1523.5	1502.2
10°	2082.2	2061.2	2009.6	1932.1	1842.5	1752.7	1668.1	1605.9	1558.0	1523.0	1499.2
11°	2156.6	2133.0	2071.3	1982.0	1878.1	1775.9	1681.7	1613.6	1561.1	1523.7	1497.9
12°	2236.8	2207.7	2136.7	2033.5	1914.7	1801.3	1696.7	1621.9	1565.3	1525.3	1498.8
13°	2321.8	2289.5	2207.8	2088.8	1954.4	1828.1	1712.4	1631.2	1570.3	1528.2	1500.7
14°	2415.8	2378.0	2283.7	2147.9	1996.5	1855.0	1728.4	1640.4	1575.8	1532.1	1502.9
15°	2516.0	2473.0	2363.7	2210.1	2039.7	1882.9	1745.5	1650.3	1582.4	1536.7	1506.2
16°	2619.2	2569.6	2447.3	2276.9	2086.3	1912.8	1763.9	1661.7	1589.3	1541.8	1510.5
17°	2722.1	2667.5	2530.5	2345.3	2134.8	1943.7	1783.0	1673.1	1597.4	1547.3	1515.4
18°	2823.6	2763.1	2614.1	2414.3	2185.6	1975.2	1802.9	1686.0	1606.0	1554.1	1520.0
19°	2919.0	2854.9	2696.5	2481.2	2238.1	2008.2	1823.7	1699.5	1614.7	1561.3	1525.8
20°	3006.8	2941.6	2774.6	2547.9	2291.4	2042.6	1845.6	1713.9	1624.2	1568.9	1532.5
21°	3085.9	3022.0	2850.4	2612.6	2344.2	2078.4	1867.9	1728.8	1634.2	1576.2	1539.6
22°	3154.1	3090.8	2921.4	2675.7	2397.4	2115.0	1891.2	1744.4	1645.6	1584.7	1547.6
23°	3216.0	3157.0	2987.4	2736.0	2450.0	2153.5	1915.4	1760.3	1658.0	1593.9	1556.5
24°	3270.3	3214.1	3048.6	2792.8	2501.5	2192.9	1940.0	1777.1	1670.7	1604.2	1566.0
25°	3317.0	3265.1	3105.3	2848.3	2552.0	2232.8	1965.9	1794.4	1683.8	1615.4	1575.7
26°	3357.3	3310.2	3158.4	2900.2	2600.6	2272.4	1992.3	1812.4	1697.5	1626.8	1586.4
27°	3393.5	3348.5	3205.4	2950.1	2647.9	2312.8	2018.8	1830.6	1711.3	1638.9	1597.5
28°	3424.0	3381.2	3247.8	2997.9	2692.6	2352.8	2046.3	1848.3	1726.0	1652.1	1609.2
29°	3449.4	3409.8	3286.5	3043.3	2735.0	2392.8	2074.4	1866.9	1740.3	1666.4	1621.6
30°	3469.3	3432.6	3321.2	3087.2	2777.0	2431.4	2103.4	1885.8	1755.8	1680.6	1634.3
31°	3485.7	3450.9	3351.5	3127.5	2816.0	2469.7	2132.4	1904.2	1771.9	1695.0	1647.7
32°	3497.6	3465.8	3378.3	3165.1	2853.3	2507.4	2161.7	1923.7	1787.8	1710.0	1662.0
33°	3506.7	3476.7	3401.7	3200.9	2889.3	2544.1	2190.8	1943.8	1804.6	1724.8	1676.9
34°	3510.7	3483.1	3420.3	3233.0	2923.6	2579.8	2220.3	1962.9	1821.6	1740.2	1692.1
35°	3512.6	3486.2	3436.1	3262.6	2957.5	2614.3	2249.6	1982.4	1838.9	1756.1	1708.3
36°	3511.6	3487.1	3448.5	3289.9	2988.5	2647.8	2278.9	2002.0	1856.6	1772.4	1725.2
37°	3506.7	3484.3	3457.4	3314.7	3018.8	2680.1	2307.4	2022.2	1874.6	1789.3	1742.5
38°	3499.5	3479.4	3463.3	3337.0	3047.8	2711.7	2337.0	2042.9	1892.4	1807.0	1760.0
39°	3490.6	3473.2	3465.4	3355.8	3075.8	2742.8	2366.5	2063.5	1910.7	1824.7	1777.5
40°	3478.7	3464.4	3465.3	3373.0	3102.1	2772.8	2396.5	2085.4	1929.6	1842.9	1795.1
41°	3462.5	3452.4	3461.5	3387.4	3126.7	2801.7	2425.0	2108.4	1949.0	1861.3	1813.1
42°	3444.7	3437.5	3455.2	3399.8	3151.0	2830.2	2452.6	2131.5	1968.5	1880.5	1831.5
43°	3422.8	3421.1	3446.6	3408.9	3173.0	2858.4	2479.8	2154.0	1988.0	1900.5	1850.0
44°	3397.3	3402.3	3434.8	3414.2	3193.9	2885.3	2504.7	2177.5	2008.2	1920.5	1869.3

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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3367.7	3378.9	3418.8	3418.2	3214.2	2912.2	2530.3	2202.2	2029.7	1940.8	1888.7
46°	3332.9	3354.1	3402.4	3418.9	3233.5	2938.9	2555.2	2227.8	2051.8	1961.8	1908.7
47°	3295.5	3323.8	3382.3	3416.5	3252.2	2965.9	2579.4	2253.6	2074.3	1982.8	1929.5
48°	3255.5	3290.7	3359.0	3410.2	3268.9	2990.5	2602.0	2279.7	2097.7	2004.3	1950.5
49°	3210.0	3253.1	3333.5	3402.8	3283.4	3014.3	2623.7	2306.1	2121.9	2027.0	1972.1
50°	3160.8	3210.8	3302.7	3390.7	3296.4	3037.8	2644.6	2332.3	2146.1	2049.9	1994.7
51°	3105.5	3164.6	3269.0	3376.1	3307.5	3059.3	2665.7	2358.8	2171.6	2074.6	2017.4
52°	3046.7	3112.2	3230.4	3356.8	3316.4	3079.0	2685.4	2386.4	2197.7	2100.1	2042.0
53°	2984.1	3056.4	3189.4	3333.8	3322.9	3097.0	2704.0	2412.5	2224.2	2125.4	2065.4
54°	2919.3	2994.8	3143.6	3308.4	3325.3	3112.8	2721.8	2437.9	2252.3	2151.8	2090.6
55°	2850.9	2929.1	3092.9	3278.3	3324.0	3125.7	2737.3	2460.9	2280.6	2179.6	2116.4
56°	2778.2	2862.3	3037.7	3244.3	3319.6	3135.4	2751.3	2483.1	2309.0	2208.0	2142.9
57°	2707.5	2792.2	2981.6	3207.5	3309.5	3141.6	2763.8	2503.4	2337.6	2238.1	2170.1
58°	2632.7	2721.1	2921.5	3166.7	3294.2	3142.7	2772.3	2521.8	2366.3	2269.3	2195.7
59°	2558.8	2648.6	2861.1	3121.2	3274.0	3138.3	2777.2	2538.3	2395.1	2302.2	2221.0
60°	2479.3	2575.6	2797.6	3072.3	3248.1	3128.5	2779.7	2552.4	2423.9	2335.5	2245.9
61°	2397.0	2498.8	2734.1	3021.6	3216.3	3114.1	2776.9	2563.7	2452.8	2369.3	2271.1
62°	2310.8	2420.6	2671.2	2967.0	3180.5	3092.1	2769.1	2571.7	2480.6	2402.7	2295.8
63°	2225.9	2341.8	2609.0	2910.0	3140.5	3061.9	2754.6	2576.2	2507.9	2435.6	2319.7
64°	2146.0	2265.3	2547.2	2852.1	3093.3	3023.7	2733.3	2577.2	2534.7	2468.6	2342.5
65°	2081.5	2195.5	2487.0	2792.8	3042.4	2978.3	2706.5	2572.9	2560.3	2501.9	2364.1
66°	2034.1	2138.0	2429.2	2733.8	2985.0	2923.8	2670.0	2562.3	2582.6	2538.7	2383.8
67°	2007.2	2095.9	2376.9	2675.7	2919.6	2862.5	2623.1	2544.6	2601.3	2573.3	2401.9
68°	1979.3	2067.2	2331.3	2618.2	2847.2	2790.6	2540.9	2513.8	2615.3	2606.0	2401.2
69°	1915.5	2039.3	2294.2	2561.0	2766.5	2695.9	2409.0	2452.7	2620.4	2635.4	2391.4
70°	1789.6	1987.9	2264.9	2503.3	2681.9	2563.6	2226.4	2351.2	2617.1	2659.2	2393.1
71°	1598.7	1886.3	2238.4	2448.5	2581.0	2391.8	2003.8	2204.4	2592.3	2674.4	2379.2
72°	1392.7	1720.7	2206.9	2391.8	2457.5	2187.9	1793.4	2034.3	2532.1	2668.3	2351.1
73°	1179.9	1506.5	2156.9	2331.0	2313.9	1979.8	1616.4	1865.7	2436.9	2635.8	2312.7
74°	934.5	1275.8	2059.4	2257.9	2152.8	1777.1	1405.5	1705.7	2314.6	2575.5	2237.0
75°	626.7	1026.8	1887.7	2152.0	1969.9	1554.0	1068.8	1518.2	2177.2	2481.4	2123.6
76°	341.1	728.7	1656.3	1997.6	1779.1	1249.3	732.2	1175.3	2041.4	2328.9	1969.9
77°	223.1	406.7	1407.9	1776.9	1570.9	846.7	398.3	832.4	1888.0	2105.4	1788.0
78°	106.1	299.6	1109.4	1472.2	1307.0	464.1	193.3	491.5	1660.3	1801.3	1564.6
79°	84.5	194.3	731.6	1115.5	967.5	344.4	120.5	239.5	1258.4	1469.3	1313.3
80°	72.8	89.0	386.9	735.9	592.7	232.2	104.2	133.3	856.6	1172.8	1079.7
81°	62.6	75.2	247.1	385.2	423.1	120.0	87.9	111.6	456.2	927.3	979.4
82°	53.5	64.0	110.2	248.1	260.5	101.3	71.7	89.9	219.0	683.4	828.2
83°	45.0	53.6	88.5	112.6	97.9	83.3	60.4	68.2	144.1	511.8	676.9
84°	37.4	44.1	71.6	88.2	78.6	64.5	49.7	55.1	115.6	360.3	524.0
85°	29.7	36.1	54.8	72.8	60.5	49.6	39.4	43.9	94.7	232.4	324.0
86°	22.1	28.2	41.0	58.3	44.5	39.0	29.7	34.1	73.8	166.9	228.9
87°	15.1	20.3	29.7	42.5	32.8	28.5	20.7	25.3	53.9	101.5	133.8
88°	8.7	13.2	18.4	34.2	21.2	18.0	14.4	19.3	35.6	37.5	39.8
89°	3.7	5.8	7.7	25.9	9.6	9.1	8.0	13.3	24.2	25.4	27.0



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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436745

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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436745

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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436745

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1610.1	1610.1	1610.1	1610.1	1610.1	1610.1	1610.1	1610.1	1610.1	1610.1	1610.1
1°	1586.7	1586.5	1587.8	1592.0	1596.2	1602.1	1608.4	1609.8	1616.0	1622.8	1628.1
2°	1566.5	1565.8	1568.8	1574.7	1583.0	1593.0	1605.5	1613.1	1626.8	1640.1	1651.5
3°	1549.0	1547.9	1551.7	1559.7	1571.5	1586.5	1604.3	1618.4	1638.7	1659.5	1678.0
4°	1534.4	1533.0	1537.6	1547.5	1562.4	1581.5	1604.6	1625.1	1652.6	1681.0	1707.1
5°	1522.0	1520.1	1525.6	1537.5	1554.9	1578.3	1606.2	1633.1	1668.7	1705.1	1738.2
6°	1511.6	1509.4	1515.7	1529.0	1549.6	1576.5	1609.2	1642.8	1685.9	1731.0	1773.9
7°	1502.6	1500.6	1507.2	1522.2	1545.4	1576.4	1614.4	1654.5	1705.4	1760.2	1812.6
8°	1496.1	1493.7	1501.1	1517.6	1542.9	1577.6	1620.6	1666.9	1726.2	1791.9	1854.3
9°	1490.6	1488.2	1496.2	1514.5	1541.9	1580.0	1627.8	1680.6	1749.1	1825.7	1898.9
10°	1487.1	1484.4	1493.3	1512.8	1542.4	1583.3	1636.0	1695.8	1773.4	1861.5	1947.2
11°	1485.4	1482.4	1492.0	1513.2	1544.8	1588.0	1646.0	1712.9	1800.6	1900.1	1999.7
12°	1484.8	1482.1	1492.2	1514.9	1548.4	1594.4	1657.1	1730.6	1828.4	1941.3	2054.1
13°	1486.1	1482.6	1493.2	1517.7	1553.0	1601.6	1669.2	1749.7	1857.9	1984.7	2113.6
14°	1487.6	1484.6	1496.0	1521.6	1559.2	1609.8	1681.7	1769.3	1888.6	2030.3	2176.1
15°	1490.3	1487.0	1499.4	1526.4	1566.4	1619.3	1694.8	1789.7	1920.4	2078.6	2243.4
16°	1493.6	1490.2	1503.1	1531.3	1573.5	1629.4	1708.9	1811.5	1953.8	2129.9	2313.8
17°	1497.3	1494.0	1507.7	1537.3	1581.8	1640.4	1723.9	1834.1	1989.0	2183.1	2385.6
18°	1501.9	1498.4	1513.3	1543.4	1590.6	1651.3	1739.0	1857.2	2024.3	2238.9	2458.9
19°	1507.0	1503.9	1518.9	1550.6	1599.4	1663.5	1755.3	1880.9	2061.2	2295.7	2531.3
20°	1513.6	1510.1	1525.8	1558.6	1608.8	1675.6	1772.1	1905.6	2100.8	2352.9	2600.5
21°	1520.7	1517.7	1533.5	1567.2	1618.2	1688.5	1790.1	1931.4	2139.9	2412.6	2667.9
22°	1528.6	1525.4	1542.1	1576.7	1628.7	1702.2	1808.4	1958.0	2182.2	2469.9	2732.5
23°	1537.3	1534.7	1551.6	1586.8	1640.0	1716.4	1826.6	1985.4	2226.0	2526.8	2793.9
24°	1546.7	1545.0	1561.9	1597.9	1651.8	1730.6	1845.5	2013.5	2269.3	2581.0	2851.2
25°	1556.9	1555.5	1573.1	1609.4	1664.7	1745.6	1865.2	2041.4	2313.3	2634.0	2905.8
26°	1568.1	1567.5	1585.0	1621.3	1677.9	1760.7	1884.8	2070.5	2357.8	2683.3	2958.6
27°	1579.4	1580.2	1597.4	1633.7	1691.7	1775.5	1904.8	2100.1	2402.4	2730.9	3007.4
28°	1591.5	1594.6	1610.4	1647.1	1706.0	1791.7	1924.9	2131.1	2446.6	2776.8	3054.9
29°	1604.5	1609.5	1624.1	1660.6	1720.9	1807.8	1945.4	2161.2	2489.3	2820.1	3100.2
30°	1618.5	1625.7	1638.9	1674.5	1735.2	1824.4	1965.7	2191.9	2531.9	2861.1	3142.4
31°	1633.3	1642.1	1654.4	1688.9	1750.7	1841.2	1985.9	2222.6	2572.5	2899.6	3182.0
32°	1648.6	1659.8	1669.9	1704.5	1766.8	1858.6	2006.7	2253.8	2611.5	2936.4	3219.3
33°	1664.6	1677.6	1685.9	1719.9	1782.8	1876.0	2027.1	2285.3	2649.7	2972.8	3255.0
34°	1680.5	1695.6	1701.8	1736.1	1799.6	1893.7	2047.8	2316.5	2684.9	3006.8	3288.1
35°	1696.5	1714.0	1717.8	1752.9	1816.4	1912.1	2068.6	2348.2	2720.2	3040.6	3317.6
36°	1713.0	1732.8	1733.8	1770.1	1833.3	1930.4	2090.7	2380.4	2754.3	3071.0	3345.1
37°	1728.2	1751.1	1750.2	1787.2	1850.8	1949.5	2112.9	2411.3	2786.7	3101.1	3369.8
38°	1745.0	1770.4	1767.4	1805.7	1868.7	1968.0	2135.8	2442.9	2818.8	3129.5	3392.8
39°	1761.8	1789.1	1784.6	1823.7	1886.9	1988.1	2158.8	2473.1	2848.6	3156.5	3412.2
40°	1779.1	1807.2	1802.6	1842.3	1905.9	2007.4	2182.2	2502.7	2877.4	3182.2	3429.2
41°	1797.1	1824.5	1820.5	1861.2	1925.3	2027.3	2205.8	2532.0	2905.1	3206.2	3441.9
42°	1815.0	1841.8	1839.1	1879.7	1945.7	2048.4	2229.8	2559.8	2933.1	3230.3	3451.9
43°	1833.1	1858.6	1858.4	1900.1	1965.6	2070.0	2255.4	2587.1	2960.5	3251.6	3460.3
44°	1852.3	1876.2	1878.2	1920.2	1986.4	2092.9	2281.0	2614.0	2987.4	3271.1	3464.6

REPORT NUMBER: P1436745

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1871.9	1893.6	1898.1	1941.0	2008.0	2114.8	2307.1	2640.4	3013.0	3290.0	3466.7
46°	1892.0	1910.0	1918.5	1961.5	2029.6	2138.3	2332.8	2664.6	3037.6	3306.8	3464.9
47°	1913.1	1926.0	1940.0	1982.3	2052.1	2161.2	2359.1	2686.9	3061.3	3322.5	3460.4
48°	1934.5	1943.2	1962.1	2003.8	2074.8	2185.2	2385.2	2709.0	3083.0	3335.5	3453.3
49°	1956.8	1960.9	1984.1	2025.0	2097.9	2209.6	2410.4	2729.9	3103.6	3347.0	3442.9
50°	1979.5	1978.0	2007.2	2047.2	2122.0	2235.3	2435.8	2749.7	3121.4	3357.3	3430.0
51°	2003.8	1995.8	2030.4	2069.8	2145.6	2260.4	2460.6	2767.6	3138.1	3364.1	3413.1
52°	2027.3	2013.1	2053.7	2093.4	2171.6	2285.6	2484.8	2784.1	3151.7	3368.4	3391.9
53°	2049.1	2026.7	2074.9	2117.0	2197.4	2311.5	2506.8	2798.9	3161.9	3369.2	3367.6
54°	2068.0	2036.4	2094.5	2141.7	2224.7	2337.0	2527.9	2810.3	3169.9	3368.4	3340.5
55°	2085.1	2046.7	2111.6	2166.9	2251.8	2362.8	2547.1	2819.8	3174.0	3362.2	3310.8
56°	2102.8	2059.3	2128.4	2192.9	2281.2	2389.1	2563.5	2827.1	3173.6	3352.5	3276.4
57°	2119.6	2072.7	2145.5	2218.3	2309.8	2415.6	2578.9	2831.0	3168.2	3337.1	3238.2
58°	2136.1	2082.3	2161.8	2245.9	2340.1	2441.0	2591.3	2832.7	3158.1	3317.6	3195.5
59°	2149.5	2089.4	2175.1	2271.6	2371.8	2465.2	2601.2	2831.3	3143.0	3292.9	3149.6
60°	2161.0	2098.0	2186.7	2297.5	2404.1	2489.2	2609.6	2825.8	3123.2	3263.1	3099.3
61°	2172.9	2106.2	2198.7	2321.9	2437.1	2513.5	2615.1	2814.0	3098.8	3227.4	3046.0
62°	2184.5	2111.5	2210.2	2347.5	2468.5	2538.2	2616.8	2796.5	3068.0	3186.2	2989.9
63°	2193.5	2115.6	2220.4	2371.9	2498.8	2560.7	2615.4	2773.9	3029.4	3139.3	2931.7
64°	2201.3	2117.4	2229.4	2395.0	2529.1	2581.7	2610.8	2744.9	2985.2	3088.7	2872.9
65°	2202.0	2101.3	2230.0	2416.5	2559.6	2600.4	2599.5	2707.1	2932.5	3031.1	2811.2
66°	2181.2	2087.6	2207.4	2434.4	2589.7	2614.9	2582.6	2659.6	2871.9	2967.1	2748.8
67°	2169.3	2080.6	2195.2	2448.1	2616.4	2626.6	2555.5	2590.0	2803.7	2897.2	2688.0
68°	2164.5	2054.6	2186.6	2442.7	2641.7	2632.8	2504.9	2471.6	2715.6	2821.4	2626.1
69°	2133.4	1980.5	2152.7	2428.9	2662.7	2628.4	2413.7	2298.1	2589.5	2735.1	2564.8
70°	2072.2	1846.1	2092.3	2427.3	2678.7	2609.7	2270.3	2074.3	2421.5	2636.1	2503.2
71°	1974.9	1647.7	1995.5	2410.1	2681.5	2562.7	2090.0	1844.0	2211.8	2516.2	2437.2
72°	1819.0	1463.0	1840.7	2381.6	2662.8	2478.7	1900.0	1640.8	1988.7	2370.7	2368.5
73°	1626.4	1287.7	1642.2	2337.3	2613.7	2357.3	1719.7	1440.8	1773.3	2202.3	2289.6
74°	1437.5	1092.0	1459.9	2258.0	2533.6	2220.6	1535.0	1187.3	1554.4	2010.9	2197.1
75°	1238.9	831.6	1266.2	2136.0	2412.9	2069.6	1286.3	825.5	1290.6	1800.6	2066.4
76°	1000.0	600.7	1025.6	1974.9	2226.6	1908.6	925.0	467.4	930.1	1580.5	1886.6
77°	769.6	547.2	812.9	1789.8	1973.9	1714.4	566.3	342.4	544.0	1338.6	1638.6
78°	724.1	713.6	789.3	1560.6	1664.0	1410.3	279.4	224.2	402.5	1039.2	1310.2
79°	892.3	678.8	950.2	1295.3	1359.4	980.5	148.7	105.9	267.3	688.2	946.2
80°	1042.8	643.9	812.1	1033.8	1103.4	553.9	123.6	90.3	132.1	388.7	582.3
81°	813.9	605.8	674.1	938.2	847.4	266.0	98.5	77.4	109.6	252.6	420.5
82°	584.9	347.7	533.8	775.6	591.5	157.4	73.4	65.5	93.2	117.3	263.2
83°	333.3	247.2	302.4	613.0	409.2	121.7	61.0	54.7	76.1	89.2	106.0
84°	188.0	146.7	182.6	449.8	248.0	99.8	49.7	44.3	59.4	71.4	83.9
85°	124.8	47.5	146.7	252.2	180.9	78.0	39.6	35.1	45.4	54.1	69.2
86°	61.9	32.2	110.8	201.9	113.7	56.3	30.4	26.0	35.2	39.3	55.2
87°	43.0	16.8	74.9	151.6	47.4	39.7	22.3	17.0	25.1	28.2	38.7
88°	24.1	1.5	39.1	101.3	32.2	27.0	15.3	9.6	15.0	17.2	22.6
89°	5.3	1.0	3.5	51.0	16.9	14.4	8.4	3.6	6.5	6.9	6.6



REPORT NUMBER: P1436745

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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436745

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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436745

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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436745

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1610.1	1610.1	1610.1
1°	1632.8	1636.0	1637.4
2°	1661.4	1667.8	1669.0
3°	1692.4	1701.8	1704.7
4°	1727.2	1741.1	1744.4
5°	1766.2	1784.2	1789.0
6°	1809.4	1831.7	1838.2
7°	1855.5	1884.2	1891.8
8°	1905.5	1940.3	1950.4
9°	1960.7	2000.5	2013.7
10°	2019.2	2067.1	2082.2
11°	2083.0	2140.5	2156.6
12°	2152.2	2217.1	2236.8
13°	2226.4	2300.3	2321.8
14°	2305.0	2390.1	2415.8
15°	2387.0	2483.1	2516.0
16°	2471.3	2580.1	2619.2
17°	2558.5	2679.0	2722.1
18°	2644.0	2777.2	2823.6
19°	2727.2	2870.2	2919.0
20°	2807.5	2958.5	3006.8
21°	2882.7	3038.6	3085.9
22°	2953.1	3110.1	3154.1
23°	3020.3	3173.8	3216.0
24°	3082.6	3231.0	3270.3
25°	3141.1	3280.3	3317.0
26°	3193.6	3324.1	3357.3
27°	3242.5	3361.3	3393.5
28°	3285.7	3393.7	3424.0
29°	3324.9	3421.0	3449.4
30°	3358.2	3444.4	3469.3
31°	3388.7	3462.1	3485.7
32°	3414.5	3477.2	3497.6
33°	3436.6	3487.6	3506.7
34°	3454.6	3494.5	3510.7
35°	3469.7	3497.3	3512.6
36°	3481.3	3497.1	3511.6
37°	3488.6	3494.7	3506.7
38°	3493.4	3489.4	3499.5
39°	3494.9	3482.2	3490.6
40°	3493.8	3472.5	3478.7
41°	3489.5	3460.8	3462.5
42°	3482.5	3446.7	3444.7
43°	3472.7	3431.1	3422.8
44°	3459.7	3411.6	3397.3

REPORT NUMBER: P1436745

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	3445.0	3389.9	3367.7
46°	3427.0	3364.2	3332.9
47°	3406.7	3334.9	3295.5
48°	3383.6	3302.7	3255.5
49°	3357.7	3265.3	3210.0
50°	3328.1	3225.4	3160.8
51°	3294.1	3180.6	3105.5
52°	3256.0	3129.3	3046.7
53°	3213.4	3074.7	2984.1
54°	3168.7	3016.1	2919.3
55°	3120.1	2951.9	2850.9
56°	3066.6	2885.5	2778.2
57°	3009.9	2816.6	2707.5
58°	2949.5	2744.3	2632.7
59°	2888.6	2672.0	2558.8
60°	2827.0	2597.7	2479.3
61°	2763.0	2521.2	2397.0
62°	2700.8	2443.8	2310.8
63°	2639.2	2365.7	2225.9
64°	2579.6	2293.4	2146.0
65°	2522.4	2224.7	2081.5
66°	2468.3	2168.6	2034.1
67°	2416.8	2127.3	2007.2
68°	2370.6	2098.9	1979.3
69°	2330.3	2069.5	1915.5
70°	2299.6	2020.3	1789.6
71°	2268.0	1925.9	1598.7
72°	2227.7	1759.6	1392.7
73°	2165.7	1541.9	1179.9
74°	2053.0	1300.5	934.5
75°	1875.2	1046.7	626.7
76°	1643.0	757.3	341.1
77°	1383.2	435.1	223.1
78°	1058.2	321.3	106.1
79°	678.6	207.5	84.5
80°	362.0	93.7	72.8
81°	237.4	77.6	62.6
82°	114.3	65.9	53.5
83°	88.2	55.3	45.0
84°	70.8	45.7	37.4
85°	53.8	37.4	29.7
86°	40.0	29.1	22.1
87°	28.6	20.8	15.1
88°	17.2	13.2	8.7
89°	6.7	5.6	3.7



REPORT NUMBER: P1436745

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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436745

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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1436745

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)