

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: P1436741

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

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436741
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)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 40% (72W)
OPTICS - TYPE 3
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

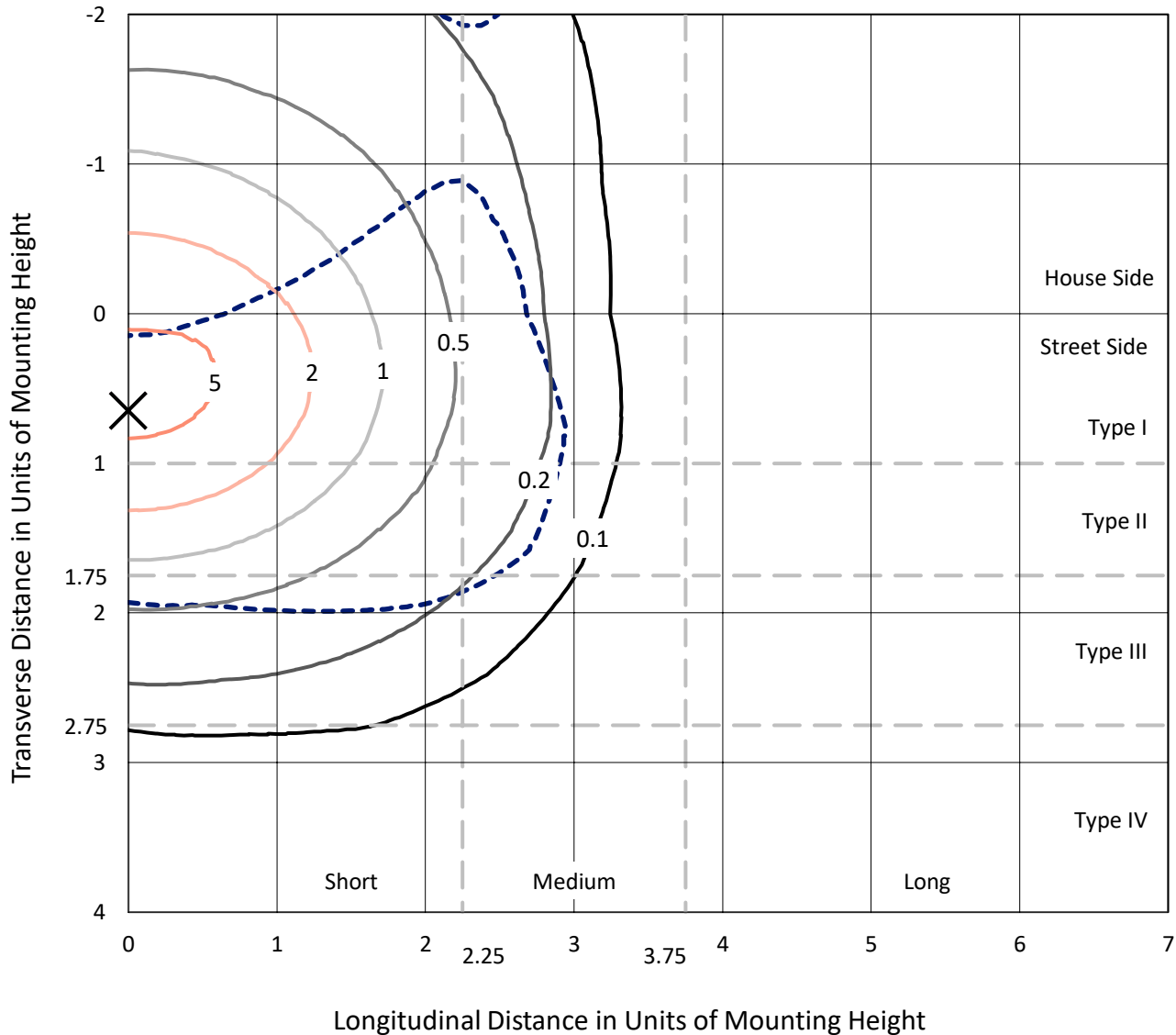
Lumens per Lamp: 27928 (1 lamp)
Luminaire Lumens: 11997.4 lumens
Efficiency: 43.0%
Efficacy: 167.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.35m x L: 0.35m x H: 0.35m)
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (A_{in}): 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

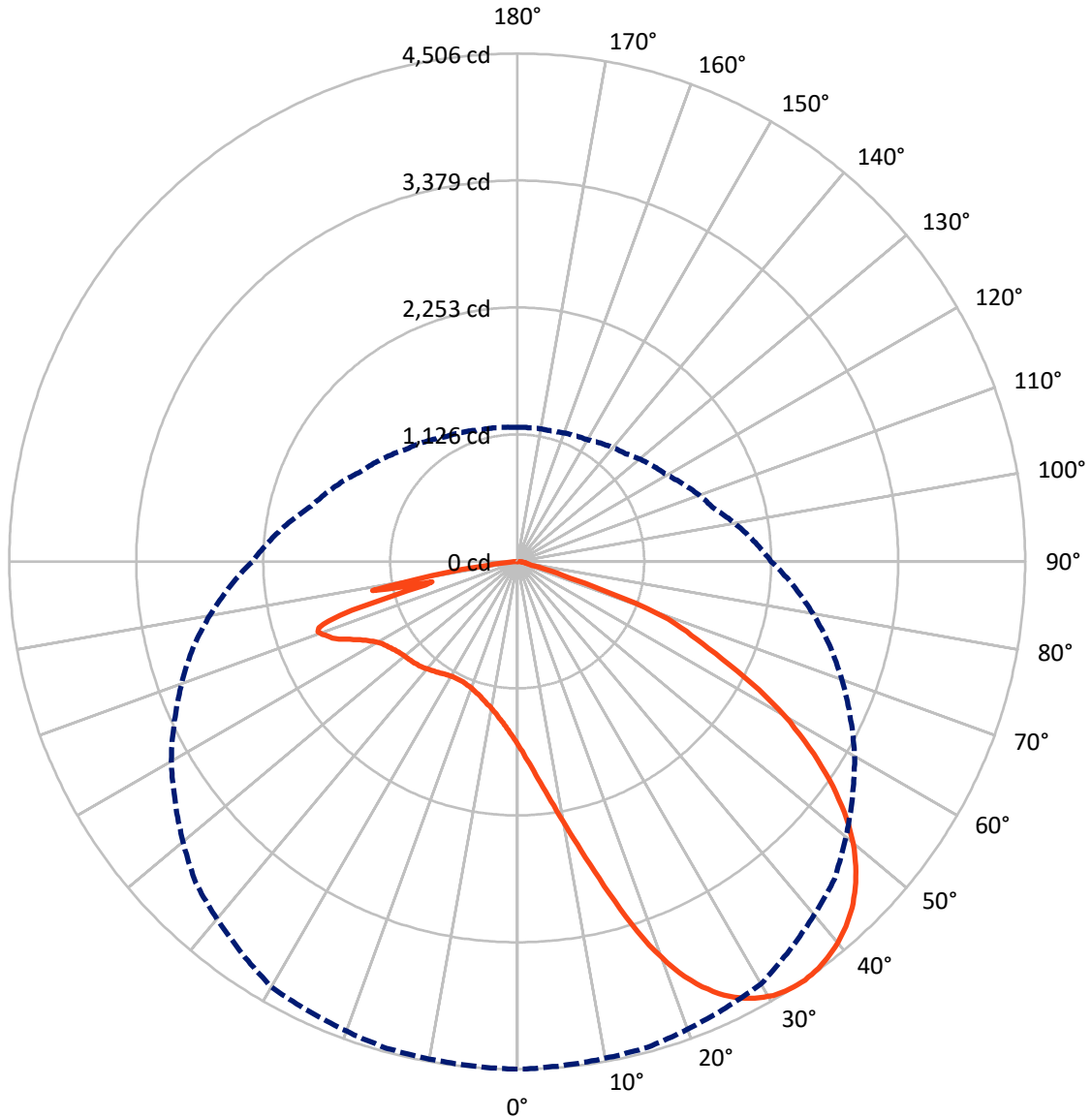
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.9 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 33-Deg Vertical

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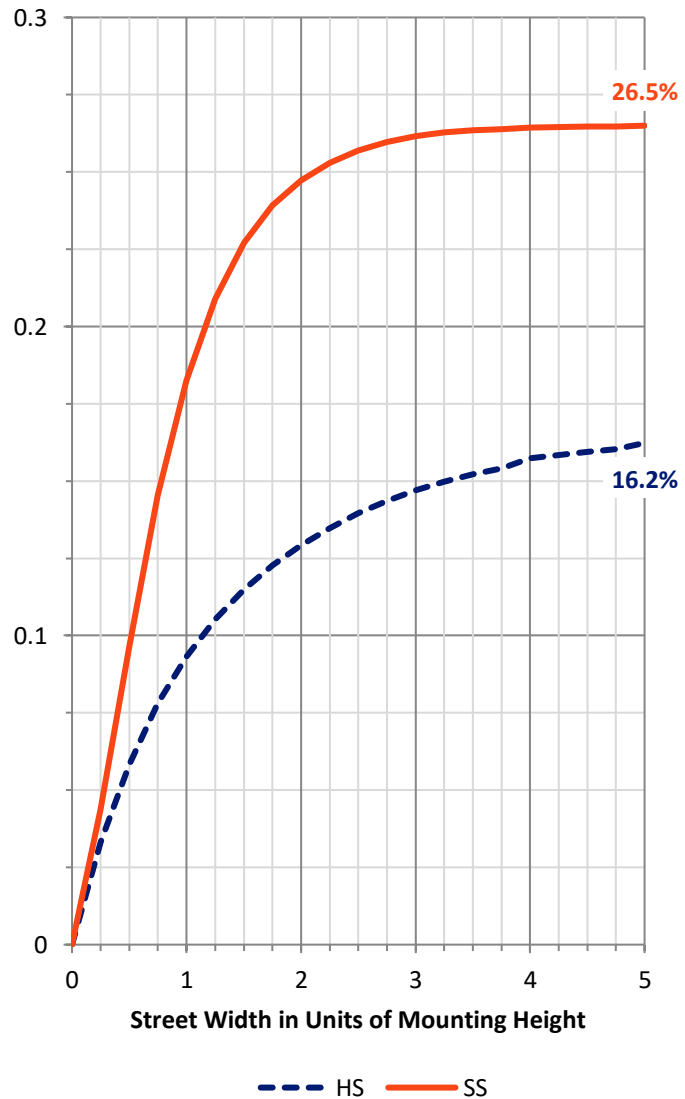
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4590.8	0.0	4590.8
	% Lamp	16.4	0.0	16.4
Street Side	Lumens	7406.6	0.0	7406.6
	% Lamp	26.5	0.0	26.5
Total	Lumens	11997.4	0.0	11997.4
	% Lamp	43.0	0.0	43.0

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	163.6	1.4	0.6
10°-20°	570.3	4.8	2.0
20°-30°	1120.5	9.3	4.0
30°-40°	1677.3	14.0	6.0
40°-50°	2135.6	17.8	7.6
50°-60°	2387.8	19.9	8.5
60°-70°	2306.9	19.2	8.3
70°-80°	1438.7	12.0	5.2
80°-90°	196.7	1.6	0.7
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°	11997.4	100.0	43.0
0°-180°	11997.4	100.0	43.0

Coefficient of Utilization



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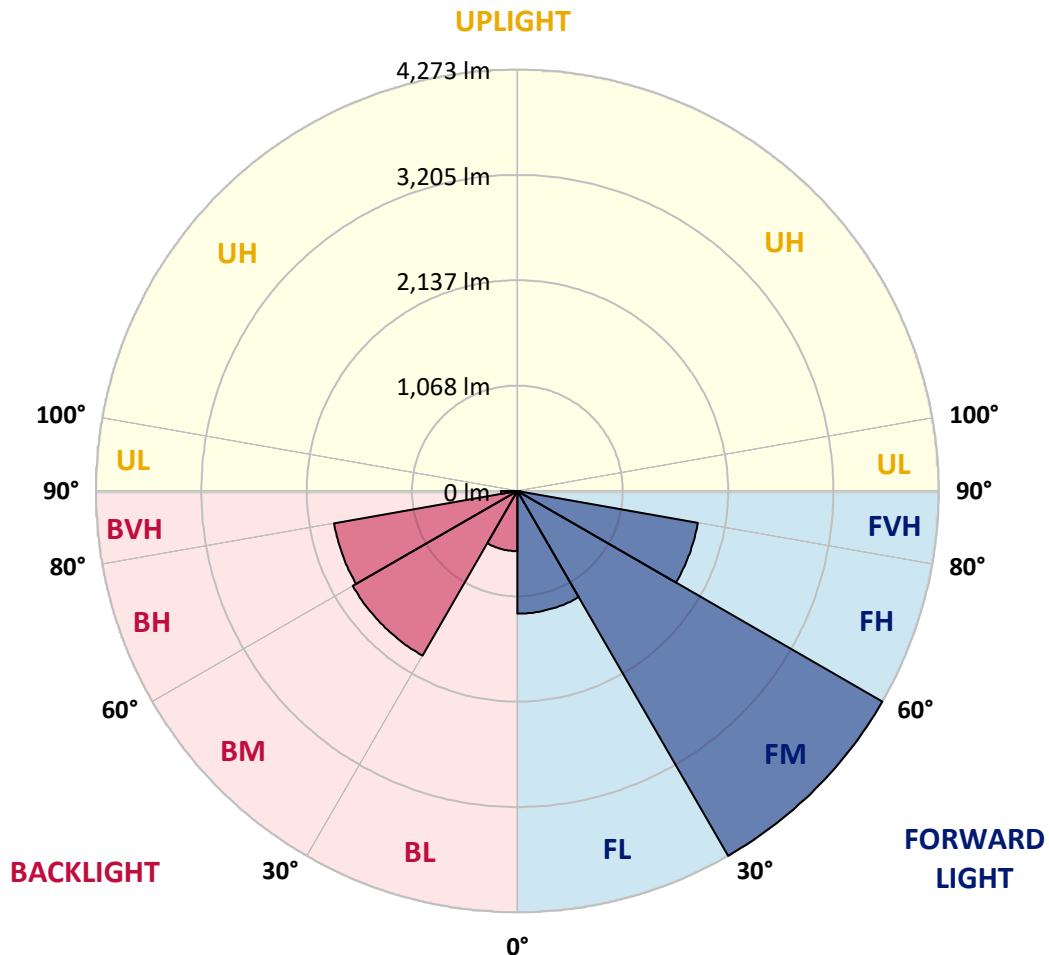
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1244.1	4.5			
FM (30°-60°)	4273.3	15.3			
FH (60°-80°)	1858.0	6.7			G2/5000
FVH (80°-90°)	31.2	0.1			G1/100
BL (0°-30°)	610.3	2.2	B2/1000		
BM (30°-60°)	1927.4	6.9	B2/2500		
BH (60°-80°)	1887.6	6.8	B3/2500		G3/2500
BVH (80°-90°)	165.5	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	15930.6	57.0			

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1637.4	1637.4	1637.4	1637.4	1637.4	1637.4	1637.4	1637.4	1637.4	1637.4	1637.4
1°	1686.2	1684.9	1681.5	1674.5	1665.3	1654.2	1633.3	1621.3	1610.7	1602.2	1597.2
2°	1740.5	1737.5	1728.8	1711.9	1691.6	1667.4	1634.1	1610.6	1590.1	1573.1	1561.6
3°	1800.1	1795.1	1778.4	1752.5	1719.9	1683.0	1637.1	1602.0	1571.5	1547.2	1529.0
4°	1866.1	1858.3	1833.1	1796.4	1751.1	1700.3	1640.7	1594.6	1554.7	1522.8	1500.0
5°	1937.5	1927.3	1893.5	1844.1	1783.7	1718.5	1645.6	1588.4	1539.4	1501.4	1473.8
6°	2016.1	2000.9	1958.8	1896.4	1820.3	1739.3	1651.8	1583.6	1526.0	1481.6	1449.0
7°	2099.4	2081.5	2030.3	1952.5	1859.2	1762.1	1660.9	1581.5	1514.4	1463.5	1426.3
8°	2190.8	2167.5	2106.1	2012.2	1901.4	1787.2	1671.0	1580.7	1504.9	1446.8	1405.9
9°	2290.0	2261.7	2187.7	2076.5	1947.0	1813.9	1682.6	1580.8	1496.6	1431.9	1386.6
10°	2396.1	2361.8	2274.9	2145.2	1995.3	1843.0	1696.2	1582.3	1489.8	1419.0	1368.8
11°	2509.3	2470.7	2368.0	2219.0	2045.6	1873.6	1711.4	1585.5	1483.8	1407.2	1353.7
12°	2632.0	2586.2	2467.0	2295.9	2098.5	1906.5	1727.4	1589.6	1479.2	1396.9	1339.9
13°	2764.0	2711.0	2574.8	2377.7	2155.8	1940.8	1743.8	1594.5	1475.8	1387.6	1327.5
14°	2906.3	2846.7	2690.8	2465.7	2214.6	1976.6	1761.3	1599.4	1472.5	1379.6	1315.6
15°	3058.0	2988.0	2812.4	2557.6	2277.0	2013.6	1779.6	1605.0	1470.2	1372.6	1304.4
16°	3215.5	3137.8	2937.0	2656.4	2343.6	2052.4	1799.7	1611.8	1468.5	1365.9	1294.3
17°	3371.9	3284.8	3062.0	2757.4	2411.5	2092.8	1820.4	1619.3	1468.0	1359.7	1284.8
18°	3526.0	3430.1	3186.4	2858.8	2483.3	2134.3	1842.2	1627.5	1467.6	1354.4	1276.1
19°	3669.9	3568.4	3309.6	2957.1	2558.7	2177.5	1864.7	1636.9	1467.6	1349.7	1268.8
20°	3801.8	3699.1	3427.6	3055.1	2635.0	2222.4	1888.3	1646.9	1467.9	1345.5	1262.8
21°	3919.8	3817.8	3541.5	3152.1	2710.4	2268.8	1912.3	1657.7	1468.9	1341.6	1257.4
22°	4023.4	3924.3	3645.9	3243.7	2784.7	2317.8	1937.2	1668.0	1471.3	1338.6	1252.7
23°	4115.1	4019.4	3744.1	3332.2	2859.0	2367.2	1963.0	1679.0	1473.7	1336.4	1248.9
24°	4194.1	4104.0	3835.4	3415.7	2931.3	2418.3	1989.8	1691.2	1476.7	1335.0	1245.1
25°	4262.5	4178.7	3918.9	3494.3	3001.0	2470.1	2016.2	1703.3	1480.2	1334.6	1242.3
26°	4320.4	4242.3	3994.4	3568.8	3069.1	2522.3	2043.4	1715.7	1484.7	1335.2	1240.0
27°	4369.3	4296.7	4062.8	3640.6	3133.3	2574.7	2071.9	1727.8	1489.9	1335.9	1238.3
28°	4409.7	4344.0	4123.6	3707.8	3194.5	2626.1	2100.9	1740.1	1495.3	1337.4	1237.4
29°	4443.2	4380.9	4177.3	3770.5	3252.1	2676.2	2130.8	1752.5	1501.7	1339.6	1237.5
30°	4469.0	4411.4	4224.4	3829.8	3308.5	2725.4	2160.5	1765.8	1508.6	1342.4	1237.9
31°	4487.1	4435.5	4264.2	3884.3	3359.8	2773.6	2190.9	1779.1	1516.1	1346.1	1239.5
32°	4499.5	4451.8	4297.2	3933.7	3408.9	2820.8	2221.7	1793.2	1524.3	1350.2	1241.9
33°	4505.5	4462.1	4326.4	3980.3	3455.2	2867.0	2252.5	1807.9	1532.9	1354.6	1245.3
34°	4505.5	4466.4	4348.7	4021.9	3498.4	2910.6	2283.0	1822.1	1542.2	1359.7	1249.4
35°	4500.8	4465.6	4365.1	4059.1	3539.1	2952.1	2314.0	1837.5	1551.7	1365.9	1254.5
36°	4490.5	4460.0	4375.4	4092.2	3577.7	2992.7	2344.4	1853.2	1561.8	1372.6	1260.4
37°	4475.5	4450.1	4379.7	4120.6	3614.0	3031.7	2375.1	1869.0	1572.0	1380.4	1267.0
38°	4455.7	4435.9	4380.1	4143.9	3647.4	3068.6	2405.1	1885.6	1583.0	1388.6	1274.2
39°	4432.9	4418.3	4374.9	4163.8	3679.3	3104.4	2436.0	1902.3	1594.3	1397.8	1281.6
40°	4406.3	4396.4	4365.1	4179.5	3708.4	3138.4	2466.3	1920.3	1606.1	1407.8	1289.5
41°	4374.9	4369.8	4350.4	4190.9	3735.6	3170.6	2495.1	1939.1	1618.1	1417.9	1297.4
42°	4338.0	4341.0	4331.1	4198.8	3760.4	3201.6	2523.1	1957.6	1630.9	1428.9	1306.3
43°	4296.7	4306.2	4307.5	4201.4	3783.7	3231.5	2550.1	1976.6	1644.6	1440.7	1315.0
44°	4250.4	4266.4	4280.0	4199.4	3803.9	3259.9	2575.7	1996.6	1658.7	1452.6	1324.0



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	4197.3	4223.2	4246.9	4192.7	3822.1	3287.0	2600.3	2016.7	1673.7	1465.0	1333.1
46°	4137.6	4173.3	4210.0	4182.2	3839.3	3314.5	2625.3	2038.1	1689.8	1477.1	1342.4
47°	4074.6	4117.5	4169.4	4166.8	3853.4	3339.1	2649.1	2059.1	1706.5	1489.6	1352.2
48°	4005.9	4056.0	4123.5	4145.1	3864.8	3361.7	2671.4	2081.7	1723.4	1503.0	1363.0
49°	3930.7	3986.4	4071.9	4120.2	3873.7	3382.1	2691.6	2104.6	1741.8	1517.3	1374.0
50°	3846.7	3909.9	4013.3	4089.0	3878.9	3400.5	2711.4	2127.9	1760.8	1532.0	1386.4
51°	3754.6	3825.3	3949.4	4051.5	3880.5	3416.1	2730.8	2152.4	1780.6	1548.2	1399.4
52°	3655.5	3734.7	3878.1	4006.7	3877.9	3429.1	2748.3	2177.6	1801.4	1564.9	1412.7
53°	3549.9	3635.2	3801.9	3957.2	3870.8	3439.2	2764.2	2202.0	1823.2	1582.6	1426.9
54°	3438.6	3526.4	3716.6	3900.7	3857.4	3447.0	2777.8	2225.4	1846.9	1601.7	1442.0
55°	3321.0	3414.4	3624.9	3838.2	3837.6	3451.5	2789.8	2247.3	1871.5	1622.1	1458.7
56°	3198.4	3293.4	3524.7	3767.9	3811.7	3451.1	2799.1	2267.5	1896.6	1644.6	1476.2
57°	3072.5	3173.3	3420.5	3692.4	3778.3	3444.9	2807.0	2286.5	1922.6	1668.1	1495.7
58°	2941.7	3044.3	3309.7	3608.5	3735.9	3433.7	2811.4	2303.8	1949.3	1695.2	1517.7
59°	2807.8	2914.6	3196.8	3517.3	3686.3	3416.0	2811.2	2319.7	1976.9	1724.2	1542.1
60°	2663.4	2779.4	3078.2	3421.3	3628.8	3391.1	2806.8	2334.6	2005.1	1754.4	1568.8
61°	2510.0	2639.1	2955.9	3317.5	3561.6	3359.5	2797.6	2346.2	2032.7	1787.0	1598.1
62°	2346.8	2491.6	2831.3	3208.5	3489.6	3319.1	2782.7	2353.8	2060.8	1821.8	1629.0
63°	2180.4	2336.4	2704.4	3094.1	3410.6	3269.6	2760.2	2357.2	2088.4	1860.4	1662.7
64°	2015.8	2182.1	2575.5	2976.2	3323.6	3211.0	2729.3	2355.8	2115.4	1900.6	1701.6
65°	1865.1	2028.8	2442.7	2856.3	3229.8	3142.4	2692.0	2349.5	2141.2	1943.3	1745.6
66°	1734.7	1888.2	2309.8	2736.4	3126.2	3065.1	2644.3	2334.7	2164.7	1990.6	1793.1
67°	1625.8	1763.3	2178.9	2617.3	3017.7	2975.7	2583.0	2312.7	2184.7	2039.0	1849.1
68°	1513.7	1651.5	2052.7	2497.2	2897.0	2875.8	2487.9	2277.6	2201.3	2088.8	1913.6
69°	1350.1	1537.8	1934.4	2377.2	2770.5	2758.6	2347.8	2205.4	2209.5	2142.4	1986.3
70°	1108.1	1391.4	1822.7	2256.7	2634.6	2610.7	2161.9	2091.0	2211.7	2198.5	2063.1
71°	785.1	1181.0	1713.4	2137.4	2481.8	2431.8	1934.8	1941.9	2197.4	2256.6	2120.6
72°	489.4	895.5	1591.9	2017.2	2308.4	2219.9	1722.4	1782.4	2159.7	2312.0	2177.0
73°	368.8	589.1	1449.3	1890.6	2114.7	1988.1	1537.3	1647.2	2095.2	2361.5	2251.5
74°	249.4	437.1	1256.2	1745.5	1901.7	1747.7	1312.7	1532.2	2017.0	2389.4	2320.8
75°	130.0	290.2	982.0	1560.8	1674.7	1488.2	993.7	1371.8	1936.3	2401.0	2374.6
76°	111.0	143.2	683.6	1330.7	1439.4	1168.0	674.8	1058.6	1874.6	2369.4	2389.4
77°	96.1	118.2	438.1	1046.3	1193.8	792.0	356.2	745.5	1808.8	2290.2	2348.0
78°	84.1	100.9	336.3	704.2	926.2	455.2	188.2	433.1	1675.5	2126.3	2144.9
79°	74.0	87.2	237.4	379.7	648.6	345.1	126.4	220.7	1384.9	1896.2	1846.2
80°	64.6	75.7	138.5	253.7	397.7	240.7	109.5	134.5	947.2	1621.0	1536.0
81°	56.1	65.3	110.9	129.3	255.6	136.4	92.6	111.5	512.3	1247.8	1412.6
82°	48.3	56.0	93.3	106.8	117.5	115.8	75.8	88.6	244.3	995.9	1361.2
83°	41.2	47.2	78.3	91.2	86.7	94.8	63.7	65.6	159.1	743.9	1060.5
84°	34.1	39.7	63.5	77.6	69.2	71.8	52.2	52.3	129.9	493.0	759.7
85°	27.0	32.2	47.8	64.6	53.5	54.1	41.2	40.9	107.8	310.1	459.5
86°	20.5	24.7	37.1	52.3	39.6	40.3	30.7	31.3	85.7	220.2	266.8
87°	14.2	18.1	26.4	39.0	28.9	29.5	21.1	22.8	63.6	130.4	213.6
88°	8.5	11.9	15.7	23.7	18.2	18.8	14.7	16.1	41.0	42.7	160.4
89°	3.9	5.6	7.1	8.3	8.6	9.2	8.2	9.4	27.8	28.8	107.3



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

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: P1436741

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

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: P1436741

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

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: P1436741

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1637.4	1637.4	1637.4	1637.4	1637.4	1637.4	1637.4	1637.4	1637.4	1637.4	1637.4
1°	1593.5	1593.2	1596.3	1602.2	1610.4	1621.0	1632.3	1636.0	1648.0	1659.0	1669.6
2°	1555.2	1553.5	1558.3	1568.5	1583.6	1602.5	1624.7	1639.9	1664.1	1687.9	1708.9
3°	1519.3	1516.8	1523.0	1537.0	1558.8	1586.4	1618.5	1645.5	1681.8	1718.5	1751.5
4°	1486.9	1484.0	1491.7	1508.8	1536.1	1571.9	1614.2	1652.4	1702.2	1751.9	1797.7
5°	1457.9	1454.0	1462.2	1483.3	1515.9	1559.2	1610.8	1661.0	1723.5	1787.5	1847.5
6°	1430.5	1425.3	1434.9	1459.7	1497.8	1547.9	1609.2	1670.9	1747.5	1826.8	1901.1
7°	1405.0	1399.0	1410.0	1437.3	1480.8	1538.5	1609.3	1682.6	1773.3	1869.1	1959.4
8°	1381.9	1375.3	1386.6	1417.5	1465.9	1530.6	1610.5	1695.7	1800.5	1913.6	2022.3
9°	1360.1	1352.7	1365.5	1398.9	1452.0	1523.7	1612.5	1709.2	1830.3	1962.1	2089.4
10°	1340.6	1332.3	1346.4	1381.9	1439.5	1517.3	1615.9	1725.4	1862.4	2013.1	2159.6
11°	1323.1	1313.9	1329.1	1367.3	1428.9	1512.6	1620.6	1743.2	1896.5	2067.5	2236.1
12°	1306.9	1297.2	1312.9	1354.2	1419.3	1509.1	1626.7	1761.6	1931.6	2124.2	2315.8
13°	1292.2	1281.1	1297.9	1342.2	1411.7	1506.6	1634.1	1781.3	1968.9	2185.2	2403.6
14°	1277.8	1266.1	1284.0	1330.9	1404.9	1505.5	1641.9	1802.2	2008.3	2248.0	2495.3
15°	1264.7	1252.8	1271.2	1320.1	1399.5	1505.5	1649.9	1823.8	2049.0	2315.5	2593.0
16°	1252.6	1239.6	1259.2	1310.2	1393.9	1505.9	1658.8	1846.8	2091.3	2387.4	2695.6
17°	1241.7	1228.2	1248.3	1301.4	1389.0	1507.0	1668.7	1870.3	2135.7	2462.1	2801.0
18°	1231.8	1217.2	1238.3	1293.1	1385.0	1509.0	1679.3	1894.7	2181.7	2539.8	2908.1
19°	1222.7	1207.4	1229.0	1286.4	1380.9	1511.6	1690.9	1920.0	2229.6	2619.5	3013.4
20°	1214.4	1198.6	1220.7	1280.6	1377.4	1514.1	1703.1	1945.9	2278.9	2701.0	3117.1
21°	1207.7	1190.9	1213.9	1275.7	1374.6	1517.3	1715.9	1973.5	2330.0	2783.4	3215.9
22°	1201.5	1184.2	1207.9	1271.8	1373.2	1521.0	1729.2	2001.2	2383.4	2864.8	3308.5
23°	1196.1	1178.9	1202.9	1268.4	1372.2	1525.3	1742.7	2030.3	2439.6	2943.5	3397.4
24°	1191.7	1174.7	1198.9	1265.7	1372.2	1530.2	1756.3	2060.1	2496.7	3019.3	3480.0
25°	1188.6	1171.5	1196.4	1263.6	1372.9	1535.5	1770.1	2090.2	2553.4	3092.7	3558.2
26°	1186.3	1169.4	1194.8	1262.6	1374.1	1541.3	1785.1	2120.8	2610.6	3161.3	3631.9
27°	1184.8	1168.3	1193.7	1261.8	1376.2	1547.4	1799.3	2151.9	2668.1	3226.6	3701.9
28°	1184.2	1168.7	1193.9	1262.1	1379.0	1554.2	1814.5	2184.1	2724.8	3287.2	3767.1
29°	1184.8	1170.5	1195.3	1263.0	1382.6	1561.4	1829.4	2217.0	2780.0	3345.6	3829.1
30°	1186.4	1173.5	1198.1	1264.9	1386.4	1569.6	1845.0	2250.0	2833.3	3400.3	3885.6
31°	1189.0	1177.4	1201.3	1267.7	1390.9	1578.4	1860.2	2282.8	2884.8	3450.5	3938.9
32°	1192.2	1182.5	1205.1	1271.6	1396.6	1587.8	1875.8	2315.7	2933.4	3498.3	3987.0
33°	1196.1	1188.3	1209.3	1276.2	1402.7	1597.3	1891.3	2348.9	2980.1	3543.3	4032.4
34°	1200.6	1194.4	1213.8	1281.2	1409.1	1607.2	1907.6	2382.0	3024.5	3585.7	4072.9
35°	1205.3	1201.5	1218.6	1286.9	1416.4	1617.8	1924.2	2415.7	3066.6	3625.5	4109.5
36°	1209.9	1209.0	1223.7	1293.3	1423.7	1628.7	1942.0	2448.8	3107.4	3662.3	4141.7
37°	1214.9	1216.6	1229.1	1300.6	1431.7	1639.7	1959.6	2481.5	3144.9	3696.7	4169.4
38°	1219.6	1224.5	1235.0	1308.2	1440.5	1651.2	1978.2	2513.7	3181.4	3729.4	4193.9
39°	1224.5	1232.4	1241.0	1316.6	1450.0	1663.5	1997.0	2545.1	3214.8	3759.8	4213.1
40°	1229.9	1240.1	1247.2	1325.6	1460.0	1676.2	2016.6	2576.3	3246.8	3787.6	4228.2
41°	1235.3	1247.8	1253.4	1334.9	1470.4	1689.5	2036.2	2605.1	3277.6	3812.9	4237.7
42°	1240.6	1255.6	1260.1	1344.3	1481.6	1703.8	2056.1	2633.7	3307.4	3836.2	4242.1
43°	1246.4	1263.0	1267.1	1354.3	1493.1	1718.7	2077.2	2661.7	3335.9	3856.3	4243.2
44°	1252.9	1270.3	1274.9	1364.3	1505.3	1734.2	2098.5	2690.3	3362.3	3874.2	4239.9



REPORT NUMBER: P1436741

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1259.9	1276.8	1283.0	1374.6	1518.0	1750.1	2120.2	2717.0	3387.1	3890.0	4230.4
46°	1267.3	1282.2	1291.3	1385.4	1531.5	1766.1	2142.4	2740.9	3408.9	3902.8	4216.1
47°	1275.3	1287.0	1300.4	1396.0	1545.1	1783.7	2164.7	2762.9	3429.1	3912.6	4196.5
48°	1284.3	1292.2	1309.8	1407.0	1560.1	1802.0	2186.8	2783.8	3446.0	3918.7	4172.3
49°	1294.2	1297.4	1320.0	1418.1	1574.7	1821.2	2209.5	2802.9	3460.0	3920.9	4142.7
50°	1305.4	1302.2	1331.2	1430.3	1590.5	1842.5	2232.7	2820.3	3471.1	3919.3	4108.4
51°	1318.2	1307.8	1343.3	1442.9	1607.0	1864.3	2255.8	2835.0	3479.2	3914.1	4067.5
52°	1331.9	1315.2	1356.4	1456.7	1624.8	1886.3	2279.1	2848.4	3484.2	3903.7	4019.9
53°	1345.6	1324.4	1370.3	1471.2	1644.0	1909.2	2299.8	2858.5	3485.9	3888.9	3967.1
54°	1360.3	1333.9	1385.9	1487.4	1665.3	1932.5	2319.9	2866.2	3483.7	3869.4	3908.7
55°	1377.3	1345.0	1402.8	1504.9	1688.1	1956.1	2337.9	2871.8	3476.7	3843.7	3843.9
56°	1395.3	1358.3	1420.4	1523.8	1712.6	1981.0	2354.1	2873.6	3463.1	3811.9	3772.0
57°	1414.0	1373.0	1439.5	1545.4	1738.8	2006.3	2368.6	2872.4	3443.9	3773.0	3694.0
58°	1433.0	1385.7	1459.3	1568.9	1766.3	2031.3	2380.9	2868.1	3419.4	3725.4	3607.5
59°	1451.4	1399.6	1478.1	1594.8	1796.9	2054.1	2390.1	2859.7	3389.9	3672.9	3516.0
60°	1472.1	1420.6	1499.3	1623.5	1828.2	2076.9	2398.1	2845.8	3353.6	3611.2	3417.5
61°	1499.2	1449.3	1527.1	1655.2	1862.0	2100.2	2402.9	2826.1	3310.4	3542.0	3311.9
62°	1530.8	1479.2	1560.1	1689.3	1896.8	2123.1	2403.7	2800.4	3259.5	3466.8	3201.6
63°	1566.4	1514.3	1596.1	1724.5	1934.1	2145.4	2399.7	2767.7	3200.9	3381.8	3088.3
64°	1607.4	1558.4	1639.3	1763.9	1972.6	2166.0	2392.3	2725.7	3134.9	3289.0	2970.2
65°	1655.2	1607.8	1688.1	1809.6	2014.2	2185.3	2378.1	2675.2	3058.2	3190.9	2850.0
66°	1710.6	1664.4	1742.9	1859.3	2056.7	2201.0	2355.7	2612.8	2971.1	3085.4	2729.2
67°	1770.8	1725.4	1801.4	1913.8	2098.5	2215.0	2322.9	2528.8	2875.3	2970.7	2608.4
68°	1835.0	1774.5	1862.5	1976.3	2142.7	2224.4	2263.3	2401.7	2761.1	2848.8	2486.0
69°	1874.6	1806.6	1898.5	2046.5	2192.0	2226.3	2161.6	2225.7	2622.2	2714.6	2365.0
70°	1908.4	1846.9	1930.4	2118.4	2241.2	2220.3	2013.6	2003.7	2448.9	2563.7	2241.4
71°	1956.2	1875.5	1974.9	2172.6	2291.8	2195.1	1840.2	1774.9	2235.7	2389.7	2112.0
72°	1986.8	1855.9	2002.8	2229.7	2338.2	2142.0	1681.7	1562.8	1996.9	2196.8	1980.8
73°	1977.6	1754.2	1994.3	2301.7	2374.9	2059.5	1542.3	1355.7	1748.0	1982.6	1835.8
74°	1914.8	1529.5	1934.1	2365.8	2385.7	1973.2	1389.6	1096.4	1501.5	1746.8	1669.7
75°	1732.8	1170.7	1761.4	2407.2	2367.9	1888.4	1091.1	756.4	1225.0	1497.9	1468.8
76°	1414.7	838.3	1449.6	2412.7	2291.9	1800.8	792.6	429.7	889.1	1252.6	1226.7
77°	1085.4	777.3	1150.2	2361.3	2179.9	1681.5	495.5	320.3	540.1	1009.5	932.9
78°	1042.2	1044.5	1139.1	2143.5	2004.2	1438.4	250.3	216.6	406.4	751.0	606.8
79°	1307.7	1308.6	1398.5	1814.5	1801.4	1049.6	144.1	112.8	278.2	491.6	444.3
80°	1525.3	1036.9	1555.5	1471.7	1519.6	660.8	119.7	95.8	150.1	362.2	283.8
81°	1174.8	765.3	1178.9	1361.8	1197.9	279.7	95.2	81.9	125.0	234.0	123.2
82°	824.3	494.3	802.4	1362.5	876.1	169.2	71.1	69.2	106.5	105.7	103.7
83°	475.1	254.2	431.5	1024.8	555.7	130.7	58.1	57.6	86.3	80.8	89.2
84°	264.4	178.7	254.7	687.1	326.4	107.9	46.8	46.4	66.3	64.2	75.5
85°	190.2	103.1	166.7	357.1	233.7	85.2	36.5	36.7	49.6	48.5	62.5
86°	116.1	29.5	108.2	285.7	140.9	62.5	27.7	27.1	38.3	37.4	50.0
87°	42.4	19.9	50.2	214.2	50.7	43.7	19.9	17.4	27.0	26.3	35.5
88°	28.7	10.3	27.1	142.8	34.2	29.7	13.8	9.7	15.7	15.2	20.9
89°	15.0	0.7	4.1	71.3	17.8	15.7	7.7	3.6	6.6	6.3	6.3



REPORT NUMBER: P1436741

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

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: P1436741

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

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: P1436741

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

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: P1436741

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1637.4	1637.4	1637.4
1°	1677.6	1683.3	1686.2
2°	1726.3	1736.7	1740.5
3°	1777.3	1794.8	1800.1
4°	1834.2	1858.5	1866.1
5°	1895.7	1927.0	1937.5
6°	1962.6	2002.5	2016.1
7°	2035.2	2083.8	2099.4
8°	2111.3	2170.6	2190.8
9°	2196.1	2265.8	2290.0
10°	2284.2	2368.0	2396.1
11°	2380.4	2478.6	2509.3
12°	2484.3	2595.3	2632.0
13°	2594.3	2723.1	2764.0
14°	2713.1	2859.7	2906.3
15°	2835.6	3000.7	3058.0
16°	2962.9	3147.0	3215.5
17°	3092.3	3296.6	3371.9
18°	3222.3	3445.6	3526.0
19°	3345.9	3586.3	3669.9
20°	3467.4	3716.9	3801.8
21°	3577.6	3838.5	3919.8
22°	3682.1	3945.5	4023.4
23°	3782.6	4040.8	4115.1
24°	3874.1	4123.6	4194.1
25°	3958.2	4196.7	4262.5
26°	4035.4	4258.9	4320.4
27°	4103.1	4311.4	4369.3
28°	4163.4	4355.6	4409.7
29°	4217.4	4393.0	4443.2
30°	4262.9	4421.8	4469.0
31°	4302.3	4444.1	4487.1
32°	4334.1	4460.9	4499.5
33°	4359.9	4471.2	4505.5
34°	4380.5	4475.5	4505.5
35°	4395.6	4473.7	4500.8
36°	4404.1	4466.9	4490.5
37°	4407.6	4455.7	4475.5
38°	4405.9	4440.7	4455.7
39°	4399.0	4422.2	4432.9
40°	4387.8	4399.9	4406.3
41°	4371.5	4373.6	4374.9
42°	4350.9	4343.6	4338.0
43°	4325.5	4309.2	4296.7
44°	4296.3	4272.0	4250.4



REPORT NUMBER: P1436741

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	4262.9	4228.7	4197.3
46°	4226.0	4179.8	4137.6
47°	4183.2	4125.5	4074.6
48°	4136.9	4065.4	4005.9
49°	4085.6	3996.5	3930.7
50°	4027.6	3923.0	3846.7
51°	3963.4	3840.1	3754.6
52°	3891.1	3750.1	3655.5
53°	3813.4	3652.4	3549.9
54°	3729.0	3546.4	3438.6
55°	3638.9	3433.8	3321.0
56°	3539.0	3314.5	3198.4
57°	3433.7	3190.3	3072.5
58°	3322.5	3060.8	2941.7
59°	3207.8	2928.5	2807.8
60°	3087.8	2794.8	2663.4
61°	2965.2	2652.5	2510.0
62°	2839.3	2503.9	2346.8
63°	2712.9	2353.5	2180.4
64°	2585.8	2200.1	2015.8
65°	2457.9	2050.2	1865.1
66°	2331.0	1910.4	1734.7
67°	2202.7	1786.2	1625.8
68°	2076.7	1676.0	1513.7
69°	1957.3	1561.0	1350.1
70°	1845.8	1420.6	1108.1
71°	1731.3	1220.7	785.1
72°	1603.0	943.2	489.4
73°	1451.5	636.4	368.8
74°	1240.6	371.0	249.4
75°	966.4	260.7	130.0
76°	683.3	151.4	111.0
77°	444.8	122.2	96.1
78°	342.5	103.9	84.1
79°	240.3	89.6	74.0
80°	138.1	77.6	64.6
81°	111.2	66.9	56.1
82°	92.9	57.4	48.3
83°	77.5	48.5	41.2
84°	62.3	41.0	34.1
85°	46.5	33.2	27.0
86°	35.9	25.4	20.5
87°	25.2	18.4	14.2
88°	14.6	11.8	8.5
89°	6.2	5.4	3.9



REPORT NUMBER: P1436741

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

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: P1436741

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

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: P1436741

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)