

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: P1436743

Luminaire Tested: XAS180-SFPM (4000K-72W-T4)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436743
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-T4)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 40% (72W)
OPTICS - TYPE 4
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

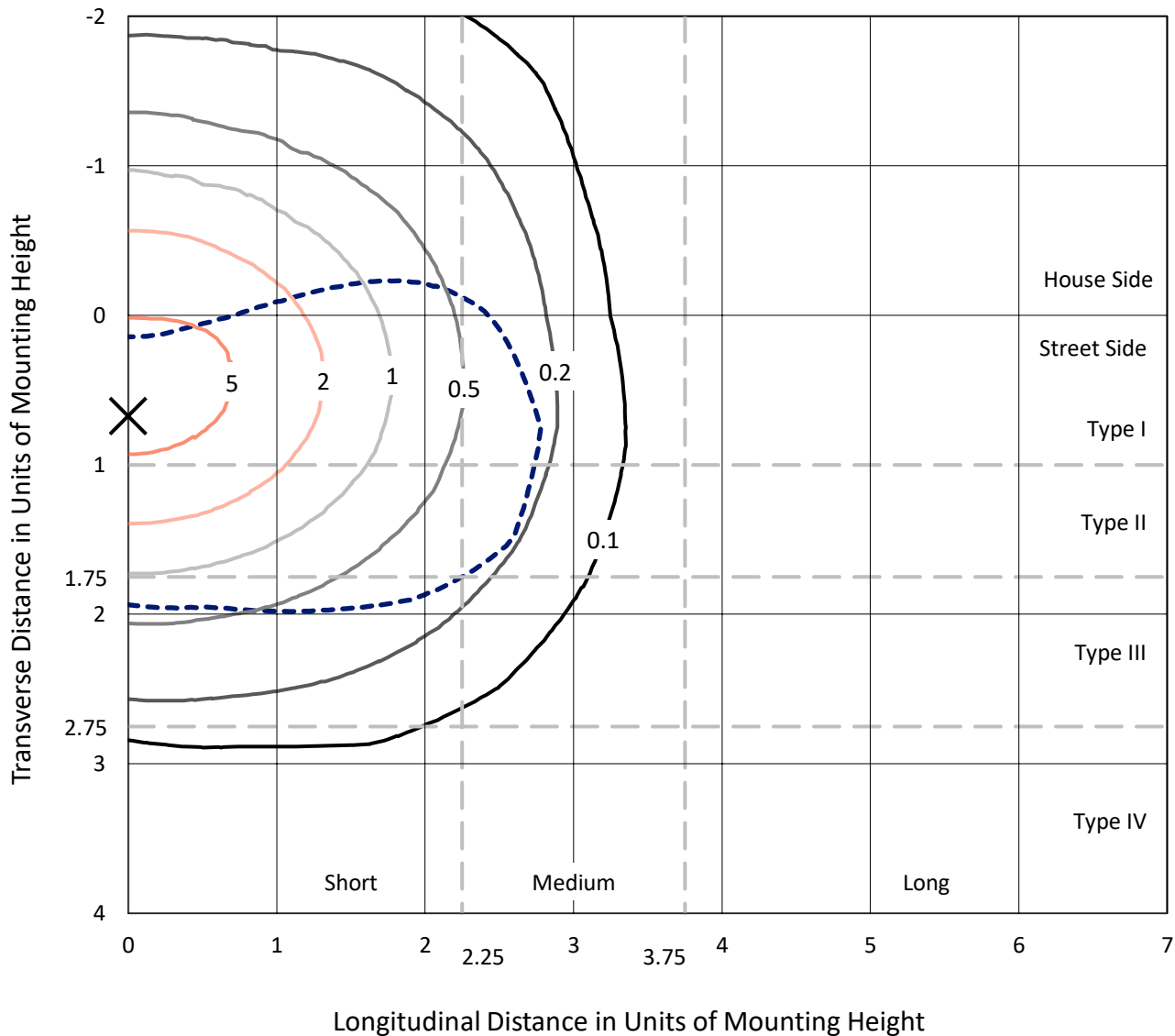
Lumens per Lamp: 24407 (1 lamp)
Luminaire Lumens: 12298.4 lumens
Efficiency: 50.4%
Efficacy: 175.2 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 70.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

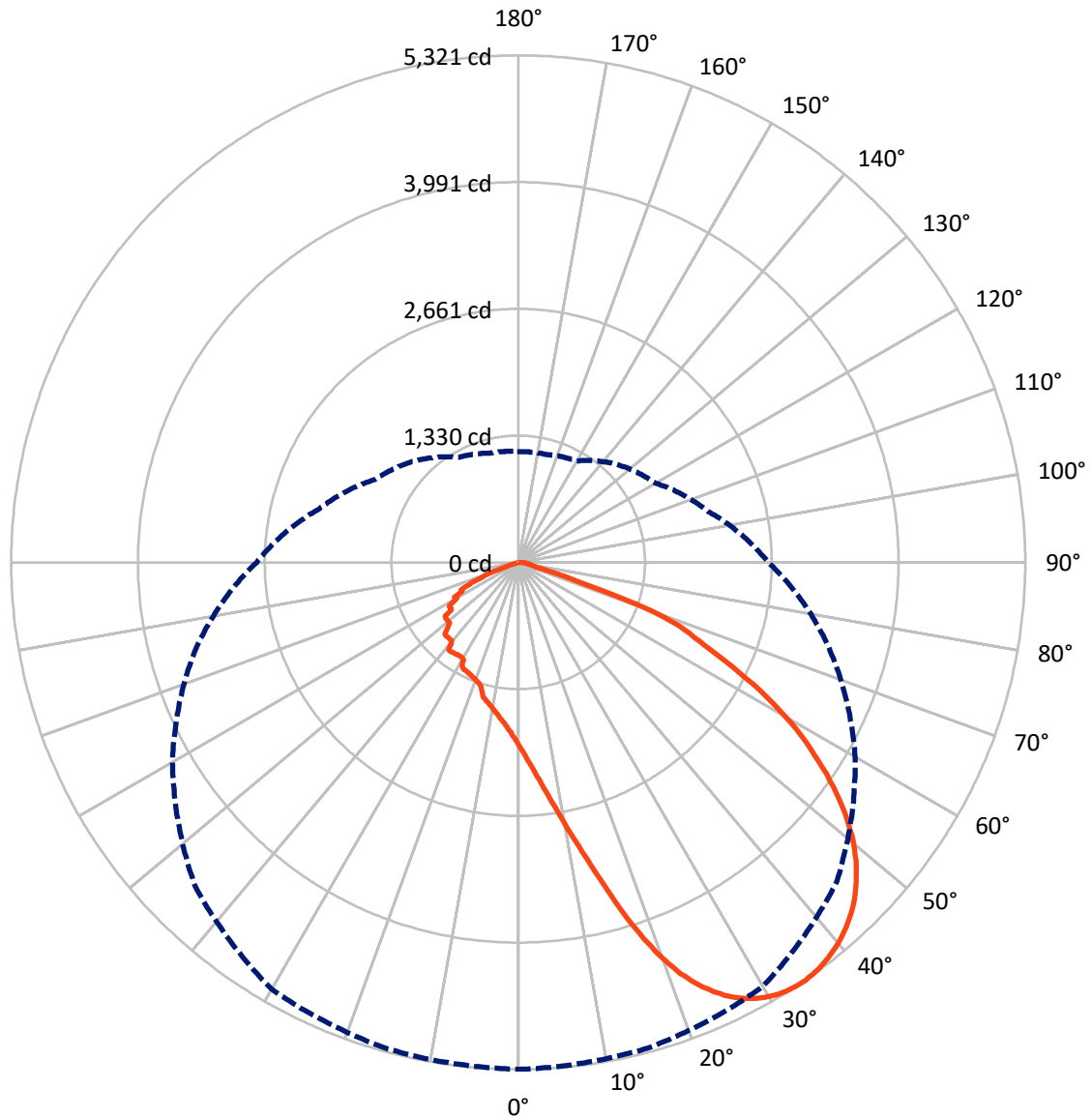
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9.4 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 34-Deg Vertical

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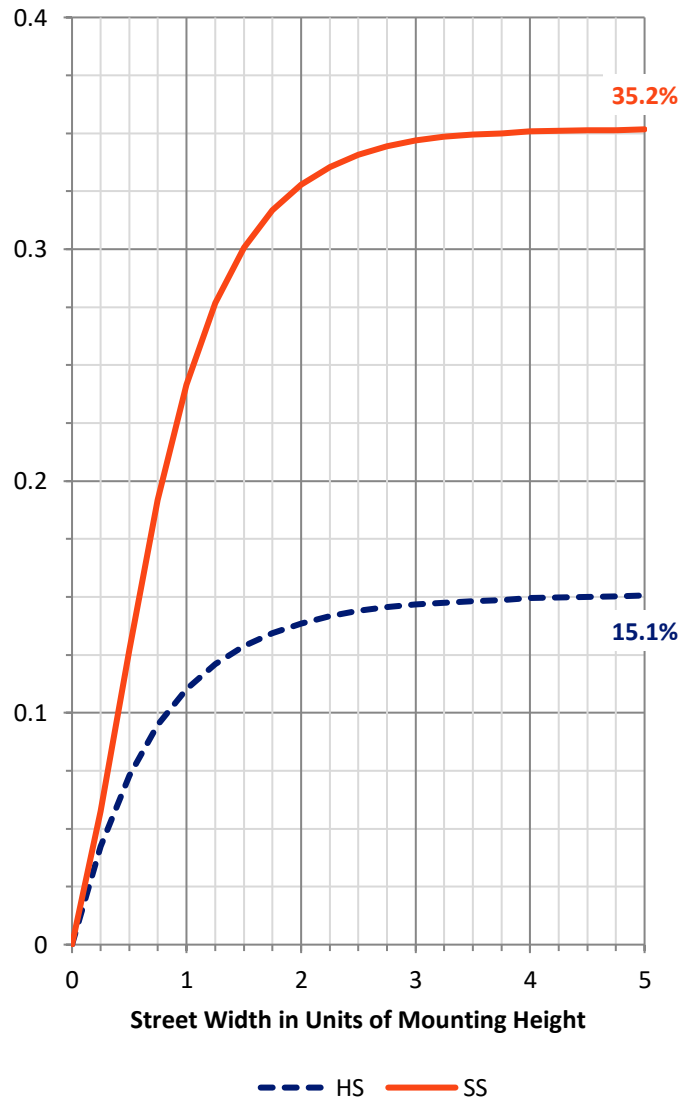
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3698.7	0.0	3698.7
	% Lamp	15.2	0.0	15.2
Street Side	Lumens	8599.7	0.0	8599.7
	% Lamp	35.2	0.0	35.2
Total	Lumens	12298.4	0.0	12298.4
	% Lamp	50.4	0.0	50.4

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	193.2	1.6	0.8
10°-20°	671.0	5.5	2.7
20°-30°	1301.9	10.6	5.3
30°-40°	1913.9	15.6	7.8
40°-50°	2374.9	19.3	9.7
50°-60°	2530.5	20.6	10.4
60°-70°	2199.9	17.9	9.0
70°-80°	1017.7	8.3	4.2
80°-90°	95.6	0.8	0.4
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°	12298.4	100.0	50.4
0°-180°	12298.4	100.0	50.4

Coefficient of Utilization



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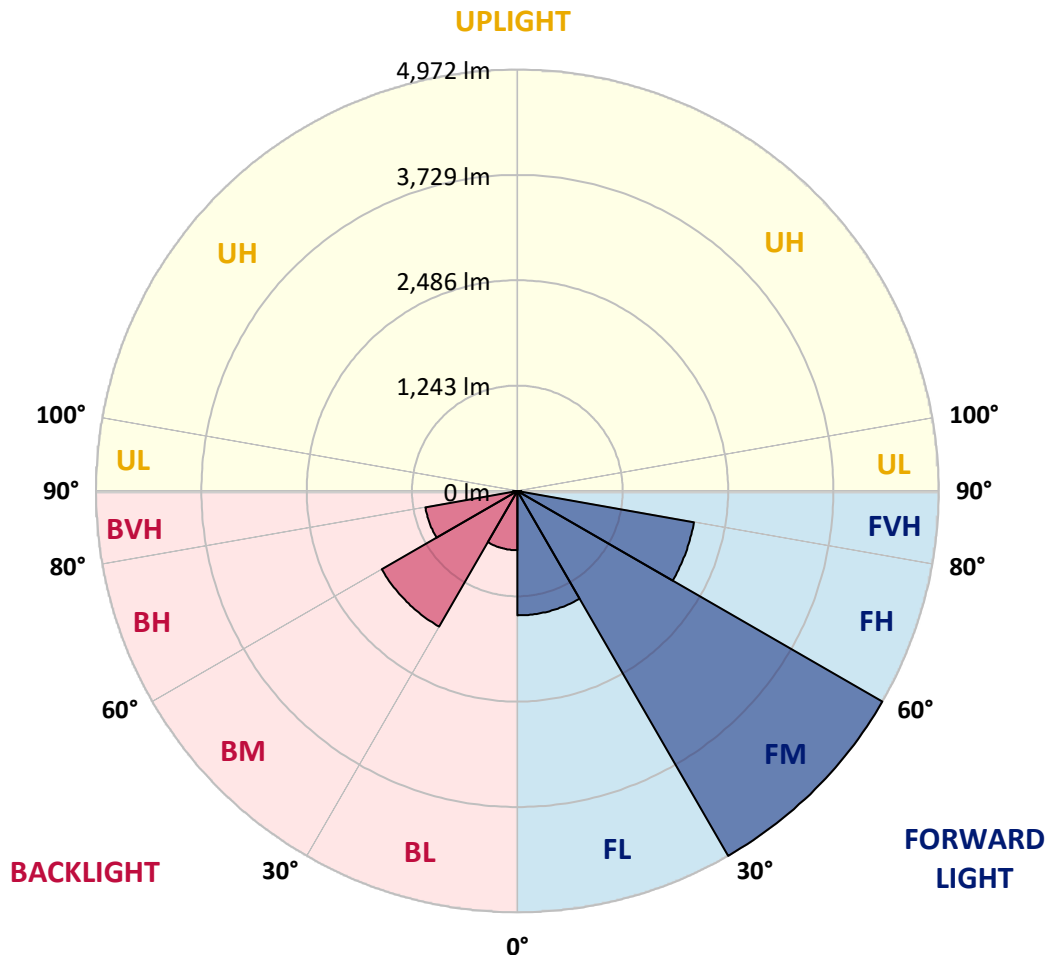
CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1467.8	6.0			
FM (30°-60°)	4971.7	20.4			
FH (60°-80°)	2115.3	8.7			G2/5000
FVH (80°-90°)	44.9	0.2			G1/100
BL (0°-30°)	698.2	2.9	B2/1000		
BM (30°-60°)	1847.5	7.6	B2/2500		
BH (60°-80°)	1102.2	4.5	B3/2500		G3/2500
BVH (80°-90°)	50.7	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	12108.6	49.6			

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°	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7
1°	1993.0	1991.8	1987.0	1977.9	1965.8	1951.7	1926.1	1912.8	1900.9	1891.4	1884.4
2°	2058.4	2055.7	2042.8	2023.1	1996.9	1967.5	1927.0	1899.6	1875.3	1856.1	1840.9
3°	2129.6	2122.5	2102.3	2070.9	2031.6	1986.8	1930.1	1889.3	1853.0	1823.5	1801.7
4°	2207.8	2197.3	2168.7	2124.2	2068.3	2007.4	1934.8	1880.5	1832.9	1794.0	1766.3
5°	2293.1	2279.7	2239.8	2181.7	2108.1	2030.2	1941.1	1872.9	1814.7	1767.9	1735.0
6°	2386.8	2367.4	2318.4	2244.2	2152.8	2055.2	1948.7	1867.4	1797.9	1744.6	1706.2
7°	2486.0	2462.4	2402.1	2311.2	2199.5	2082.9	1959.3	1864.5	1784.3	1723.3	1679.0
8°	2594.4	2567.1	2493.2	2382.8	2250.1	2112.7	1971.9	1863.5	1772.6	1703.9	1654.8
9°	2712.4	2679.7	2590.2	2460.1	2303.9	2144.8	1985.8	1863.4	1763.4	1686.1	1631.8
10°	2835.9	2796.4	2694.1	2540.4	2361.0	2179.6	2001.8	1865.2	1754.7	1671.0	1610.3
11°	2969.9	2924.6	2804.6	2627.2	2421.6	2216.6	2019.4	1868.5	1747.7	1657.1	1590.9
12°	3115.4	3062.1	2921.4	2720.4	2484.8	2255.5	2038.1	1873.0	1742.4	1644.4	1573.5
13°	3270.1	3207.7	3047.9	2817.5	2552.3	2296.8	2058.0	1878.2	1737.9	1632.6	1557.5
14°	3438.3	3368.9	3183.6	2920.6	2622.8	2339.4	2077.8	1883.6	1733.9	1622.0	1542.4
15°	3618.4	3537.4	3327.5	3030.2	2696.7	2383.3	2099.6	1890.0	1730.7	1612.3	1527.3
16°	3804.1	3712.5	3476.5	3146.8	2774.0	2428.7	2122.8	1897.7	1728.3	1603.1	1513.6
17°	3986.8	3886.2	3623.0	3266.7	2855.8	2476.0	2146.6	1905.7	1726.6	1594.5	1499.8
18°	4168.9	4056.8	3770.1	3384.7	2941.8	2525.2	2170.8	1912.8	1725.4	1586.7	1478.6
19°	4338.0	4221.1	3915.1	3501.1	3030.3	2576.0	2187.7	1914.5	1721.9	1579.6	1429.2
20°	4492.9	4373.0	4056.0	3617.4	3118.6	2624.3	2208.8	1919.3	1714.0	1572.6	1394.0
21°	4631.8	4512.2	4188.4	3729.5	3208.3	2668.2	2230.2	1930.1	1708.0	1564.8	1384.7
22°	4752.7	4636.9	4313.1	3837.7	3295.9	2720.2	2258.3	1941.4	1709.0	1536.8	1376.2
23°	4859.6	4750.0	4427.0	3942.0	3382.8	2770.5	2288.0	1951.6	1710.1	1501.2	1368.9
24°	4953.1	4849.2	4534.6	4039.7	3459.2	2828.7	2315.7	1957.7	1707.8	1472.7	1363.5
25°	5034.0	4936.3	4631.7	4133.8	3532.7	2889.6	2339.1	1966.2	1705.4	1468.1	1358.2
26°	5102.3	5011.4	4720.2	4220.3	3605.3	2949.2	2363.8	1974.6	1704.0	1462.5	1354.0
27°	5159.8	5076.6	4802.1	4305.2	3675.3	3007.6	2391.3	1987.7	1707.4	1455.1	1349.5
28°	5207.1	5130.5	4873.2	4384.8	3740.5	3059.4	2419.7	2000.9	1712.3	1449.7	1345.4
29°	5246.4	5174.4	4935.5	4457.8	3804.4	3108.4	2453.1	2014.1	1716.6	1449.6	1342.1
30°	5276.2	5210.6	4990.8	4527.2	3869.4	3159.5	2486.4	2028.2	1710.9	1450.8	1338.9
31°	5299.3	5238.4	5038.4	4590.2	3929.5	3211.1	2521.2	2042.7	1685.4	1452.6	1332.8
32°	5313.4	5258.5	5077.6	4642.4	3985.9	3260.5	2555.6	2055.4	1680.0	1454.3	1324.6
33°	5320.5	5270.6	5111.4	4688.6	4037.2	3312.1	2590.3	2059.3	1659.9	1456.0	1272.9
34°	5321.0	5275.6	5137.6	4730.3	4082.0	3362.6	2623.8	2063.3	1662.1	1456.1	1228.4
35°	5315.0	5275.1	5157.2	4770.1	4122.0	3410.7	2648.5	2073.5	1665.4	1454.9	1225.8
36°	5303.4	5269.1	5168.8	4804.9	4159.4	3456.8	2668.9	2085.3	1669.7	1454.3	1226.8
37°	5285.7	5257.5	5174.4	4834.0	4196.0	3501.0	2692.2	2097.7	1677.1	1456.3	1227.6
38°	5263.6	5240.4	5174.9	4856.3	4231.8	3544.8	2721.1	2111.8	1681.8	1456.8	1226.8
39°	5236.3	5219.7	5169.3	4874.9	4263.5	3584.5	2747.1	2127.0	1682.9	1387.3	1225.9
40°	5205.1	5194.0	5156.7	4889.4	4294.0	3617.6	2775.0	2138.1	1690.2	1355.4	1229.0
41°	5167.8	5162.8	5140.1	4900.7	4320.5	3641.2	2801.9	2148.1	1701.3	1360.0	1232.0
42°	5125.0	5128.0	5117.4	4910.5	4348.6	3664.0	2829.4	2156.9	1712.4	1366.5	1235.4
43°	5076.1	5087.2	5089.2	4913.5	4375.1	3687.5	2855.2	2161.8	1724.2	1373.9	1236.6
44°	5021.0	5041.8	5056.5	4910.1	4398.9	3713.2	2876.8	2176.7	1736.8	1381.8	1196.9



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CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	4958.7	4989.8	5017.4	4899.8	4420.0	3737.9	2893.9	2197.4	1750.0	1388.7	1142.7
46°	4887.4	4930.9	4974.2	4883.7	4439.7	3762.4	2909.4	2218.7	1755.6	1388.5	1144.1
47°	4812.2	4863.6	4925.6	4860.7	4456.6	3785.6	2919.3	2240.8	1754.9	1392.1	1147.4
48°	4733.0	4791.3	4871.2	4831.5	4469.3	3804.9	2926.5	2263.8	1760.9	1400.3	1149.1
49°	4643.2	4708.2	4809.8	4798.3	4476.6	3823.9	2941.8	2283.4	1730.4	1405.5	1147.6
50°	4543.5	4618.9	4740.0	4758.7	4476.9	3841.4	2962.8	2287.6	1703.3	1360.9	1147.8
51°	4435.7	4519.1	4660.9	4711.1	4468.6	3852.7	2983.9	2272.8	1678.2	1306.4	1149.6
52°	4319.6	4410.6	4574.6	4656.3	4456.9	3858.7	3002.9	2286.5	1690.8	1310.6	1098.1
53°	4196.0	4292.8	4478.9	4595.7	4438.3	3861.3	3019.7	2291.0	1702.0	1318.8	1042.4
54°	4063.1	4164.7	4376.2	4526.2	4413.8	3860.7	3034.6	2288.5	1708.1	1329.8	1047.8
55°	3927.6	4032.8	4264.9	4449.4	4381.2	3850.2	3046.8	2302.2	1717.6	1335.8	1055.2
56°	3781.1	3894.3	4144.5	4366.0	4344.5	3831.6	3049.3	2311.1	1733.1	1340.2	1063.7
57°	3635.4	3749.3	4020.8	4273.6	4302.2	3807.9	3046.3	2311.1	1745.5	1338.4	1071.9
58°	3483.7	3600.4	3891.0	4173.6	4251.9	3785.9	3034.2	2319.0	1751.1	1266.6	1076.2
59°	3325.5	3449.2	3754.5	4069.3	4193.0	3762.8	3022.8	2326.5	1762.8	1249.6	991.0
60°	3156.5	3291.2	3614.6	3955.5	4123.4	3734.4	3012.0	2320.9	1715.1	1266.7	998.1
61°	2975.8	3124.3	3468.1	3837.0	4044.2	3699.3	2993.0	2300.9	1688.1	1287.1	1001.1
62°	2787.1	2950.8	3320.2	3711.1	3960.3	3654.6	2971.6	2294.7	1699.1	1308.8	972.0
63°	2589.3	2769.3	3170.2	3579.4	3865.9	3599.6	2942.1	2278.3	1707.4	1325.4	943.2
64°	2397.8	2590.4	3020.2	3445.0	3760.7	3534.6	2901.4	2252.1	1713.7	1263.6	936.9
65°	2224.2	2411.9	2864.6	3306.5	3647.6	3457.6	2851.7	2221.7	1705.4	1270.2	947.4
66°	2071.6	2250.4	2712.7	3165.9	3526.8	3368.0	2786.4	2176.5	1658.7	1286.4	892.0
67°	1946.1	2103.2	2561.7	3026.3	3397.5	3263.6	2717.6	2128.9	1607.2	1275.9	879.1
68°	1811.5	1974.0	2414.7	2882.9	3251.8	3147.0	2614.6	2059.0	1619.7	1244.4	901.4
69°	1613.7	1838.0	2276.5	2743.3	3097.8	3007.0	2458.6	1975.7	1627.2	1253.0	824.6
70°	1323.7	1658.2	2147.6	2602.1	2939.9	2833.6	2233.0	1863.6	1630.5	1219.4	820.9
71°	942.4	1407.2	2018.5	2461.7	2761.1	2627.9	1974.0	1717.2	1597.3	1222.2	710.5
72°	599.8	1065.6	1873.1	2316.0	2562.5	2386.3	1752.1	1554.3	1536.8	1215.3	685.1
73°	461.6	705.4	1698.8	2166.0	2340.7	2124.2	1541.2	1411.6	1476.4	1197.2	635.5
74°	327.7	428.8	1463.4	1996.9	2105.3	1858.0	1247.3	1306.3	1410.8	1207.4	576.0
75°	193.9	316.0	1136.9	1780.4	1849.0	1571.3	953.3	1105.1	1335.9	1182.3	554.7
76°	171.0	206.5	793.6	1513.3	1584.8	1214.3	659.1	903.9	1269.9	1150.0	540.7
77°	153.0	177.3	517.7	1182.4	1310.3	799.0	360.0	702.2	1215.2	1040.1	510.2
78°	138.3	156.6	404.7	789.2	1017.2	459.6	187.8	405.2	1056.5	930.1	460.3
79°	125.2	139.8	296.9	430.4	707.6	318.8	153.6	296.8	897.8	819.0	390.8
80°	113.4	125.3	189.0	297.0	442.3	179.2	119.4	188.4	736.6	668.2	334.7
81°	102.5	112.3	159.8	169.4	290.4	151.3	85.7	81.8	409.0	500.0	302.5
82°	92.3	100.3	138.6	144.9	141.2	129.2	72.3	63.5	299.8	398.3	301.3
83°	82.6	89.0	120.0	126.4	109.6	104.9	60.2	49.0	190.5	315.5	247.5
84°	73.2	78.5	101.5	109.9	89.1	79.6	48.9	38.4	81.7	225.3	184.2
85°	64.2	68.6	82.0	94.1	71.0	60.7	37.8	29.6	71.7	166.7	130.1
86°	55.3	59.2	66.9	78.8	55.3	47.0	27.7	22.5	57.4	108.1	76.3
87°	47.6	50.4	54.2	62.1	43.2	35.5	21.3	17.4	42.6	50.2	46.8
88°	39.9	42.9	44.4	47.7	31.2	23.9	14.8	12.4	32.3	34.2	31.9
89°	32.3	35.4	34.6	33.4	19.3	13.9	8.4	7.3	22.0	18.1	17.0



REPORT NUMBER: P1436743

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

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: P1436743

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

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: P1436743

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

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: P1436743

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7
1°	1881.2	1881.3	1884.1	1891.1	1900.3	1912.3	1925.2	1929.2	1944.6	1959.0	1971.6
2°	1833.6	1832.3	1837.9	1849.8	1867.3	1889.2	1915.3	1933.6	1964.0	1993.5	2019.5
3°	1790.3	1787.4	1794.6	1811.4	1836.9	1869.2	1907.2	1940.4	1985.5	2029.5	2069.1
4°	1751.1	1748.0	1756.0	1776.6	1809.0	1851.5	1901.5	1948.4	2009.1	2068.7	2124.2
5°	1716.5	1712.1	1721.1	1745.8	1784.0	1835.9	1897.6	1958.4	2035.1	2112.1	2183.5
6°	1683.6	1678.2	1689.1	1717.6	1762.4	1821.8	1895.1	1970.1	2063.6	2159.5	2248.1
7°	1653.6	1647.0	1659.1	1691.1	1742.1	1810.3	1894.8	1984.7	2094.0	2209.3	2317.3
8°	1625.9	1618.0	1631.4	1667.4	1723.9	1800.2	1896.0	1999.3	2126.9	2262.3	2391.5
9°	1599.5	1590.5	1605.5	1645.2	1707.9	1791.8	1898.1	2016.0	2162.8	2319.3	2471.4
10°	1575.0	1565.2	1581.7	1624.9	1692.6	1784.4	1901.4	2034.6	2199.9	2379.4	2554.8
11°	1552.4	1541.4	1559.6	1606.6	1679.8	1778.5	1906.3	2055.7	2240.8	2443.6	2644.7
12°	1531.7	1520.0	1538.4	1589.3	1668.3	1773.9	1913.0	2077.5	2282.0	2511.7	2740.0
13°	1512.8	1499.5	1519.5	1573.5	1657.9	1770.8	1920.8	2100.9	2326.3	2583.1	2842.0
14°	1494.6	1479.7	1501.4	1558.8	1649.1	1768.8	1929.4	2124.8	2372.1	2657.3	2950.2
15°	1476.7	1460.4	1483.7	1544.7	1641.0	1768.4	1938.5	2150.4	2420.0	2738.2	3066.2
16°	1456.2	1417.3	1464.0	1531.2	1633.1	1768.5	1947.9	2177.2	2469.8	2821.2	3188.3
17°	1400.2	1368.9	1410.8	1518.0	1626.0	1768.9	1959.2	2204.0	2521.9	2910.3	3311.4
18°	1360.8	1343.7	1370.4	1497.4	1619.8	1770.0	1970.6	2232.0	2575.8	3002.2	3436.1
19°	1346.4	1329.0	1355.1	1452.0	1613.6	1770.2	1975.1	2256.0	2631.4	3095.7	3561.9
20°	1334.0	1315.8	1342.6	1418.0	1607.6	1764.6	1982.9	2278.2	2689.7	3190.4	3683.9
21°	1323.1	1304.8	1331.5	1405.3	1600.5	1760.9	1994.4	2303.3	2742.6	3286.4	3801.0
22°	1314.3	1294.8	1322.7	1397.7	1573.1	1763.5	2009.1	2334.1	2796.3	3382.5	3911.8
23°	1306.7	1286.4	1315.7	1391.1	1540.2	1767.3	2023.8	2367.3	2857.6	3474.6	4014.6
24°	1299.6	1278.6	1309.1	1385.9	1516.1	1771.0	2036.6	2401.3	2918.6	3565.3	4112.8
25°	1293.3	1271.1	1302.8	1381.6	1509.6	1770.0	2045.6	2433.5	2984.7	3643.8	4204.4
26°	1286.9	1265.0	1297.5	1378.2	1506.9	1769.9	2057.3	2460.8	3051.1	3715.8	4291.7
27°	1281.6	1260.0	1292.6	1375.2	1500.7	1770.9	2068.3	2491.3	3118.1	3787.2	4373.9
28°	1277.3	1255.6	1288.6	1372.3	1496.1	1776.9	2084.5	2523.1	3180.8	3855.5	4452.1
29°	1272.9	1236.9	1284.3	1370.0	1495.7	1782.7	2101.0	2558.7	3236.0	3916.6	4523.4
30°	1238.3	1169.6	1255.2	1368.2	1498.0	1778.2	2117.8	2595.8	3291.7	3979.0	4591.0
31°	1179.9	1156.7	1195.9	1362.6	1501.0	1764.0	2134.2	2633.0	3347.2	4038.8	4654.1
32°	1170.3	1157.0	1185.2	1356.2	1504.7	1750.2	2150.1	2670.8	3399.2	4095.3	4711.2
33°	1169.5	1158.6	1184.7	1317.5	1508.5	1736.7	2157.1	2708.2	3450.4	4145.8	4758.9
34°	1170.0	1161.4	1185.3	1271.0	1512.2	1737.3	2164.2	2746.1	3502.0	4190.9	4799.7
35°	1171.0	1165.3	1186.8	1264.6	1512.8	1741.4	2176.1	2778.2	3551.3	4229.7	4835.6
36°	1172.8	1168.7	1189.1	1266.4	1513.1	1746.6	2189.5	2803.0	3597.3	4265.8	4869.5
37°	1173.4	1171.5	1190.6	1268.8	1513.5	1753.2	2204.3	2829.6	3641.0	4301.2	4899.0
38°	1173.6	1174.1	1191.6	1268.5	1513.7	1760.8	2221.0	2859.2	3682.7	4335.8	4923.5
39°	1173.3	1174.3	1192.5	1268.0	1456.9	1764.0	2238.9	2887.9	3722.0	4366.3	4941.2
40°	1170.9	1109.8	1191.1	1270.6	1423.5	1769.6	2255.9	2918.2	3756.2	4394.5	4956.1
41°	1104.7	1076.6	1133.0	1274.7	1424.2	1781.9	2267.5	2947.1	3781.1	4421.1	4965.2
42°	1068.2	1077.1	1090.2	1278.9	1430.5	1794.8	2276.5	2975.0	3801.6	4448.0	4970.3
43°	1067.5	1079.0	1089.7	1281.9	1437.8	1808.4	2282.3	3003.9	3822.9	4470.8	4970.6
44°	1068.4	1080.3	1091.6	1254.8	1446.2	1822.6	2299.8	3031.2	3843.0	4491.9	4966.1

REPORT NUMBER: P1436743

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1069.7	1080.3	1093.8	1193.9	1454.3	1836.1	2321.8	3051.7	3864.2	4508.8	4953.4
46°	1070.9	1078.7	1095.5	1190.9	1456.3	1843.4	2344.6	3067.0	3885.4	4523.7	4932.4
47°	1071.6	1039.9	1096.8	1194.7	1458.4	1844.4	2367.6	3076.6	3903.3	4535.2	4903.5
48°	1036.1	1001.1	1096.7	1196.8	1468.0	1851.6	2390.3	3081.8	3919.5	4541.7	4870.4
49°	1000.6	963.0	1032.5	1194.8	1473.7	1846.4	2412.2	3095.5	3931.1	4543.5	4830.9
50°	965.3	960.8	986.2	1194.6	1443.7	1805.3	2425.9	3112.8	3939.8	4535.9	4787.6
51°	968.9	959.7	989.4	1197.1	1378.1	1780.7	2415.1	3128.3	3944.4	4518.6	4737.7
52°	974.1	959.9	994.3	1158.0	1378.8	1789.2	2408.2	3142.3	3943.6	4496.6	4680.6
53°	979.6	959.6	999.5	1092.6	1389.1	1802.0	2417.0	3153.1	3936.3	4468.4	4616.4
54°	984.1	955.2	976.0	1098.2	1402.2	1808.4	2413.5	3160.3	3924.1	4434.6	4542.9
55°	986.1	864.8	952.4	1106.6	1409.8	1812.6	2411.7	3165.1	3901.8	4395.6	4465.0
56°	900.6	850.7	928.9	1116.6	1416.3	1829.2	2414.8	3159.9	3868.4	4352.5	4378.8
57°	884.9	854.5	909.7	1126.8	1415.3	1841.5	2409.7	3144.8	3832.0	4305.0	4287.9
58°	888.8	858.9	913.8	1134.1	1354.2	1845.4	2409.8	3122.0	3794.6	4247.2	4189.0
59°	894.6	821.1	918.9	1051.2	1333.7	1853.1	2411.0	3099.7	3758.6	4184.2	4083.8
60°	829.6	746.0	860.8	1052.5	1352.4	1813.6	2396.9	3075.3	3717.3	4111.3	3969.0
61°	790.9	754.3	819.3	1058.3	1373.0	1769.1	2366.9	3044.5	3667.2	4029.6	3846.4
62°	800.4	762.1	829.9	1069.5	1394.3	1770.2	2352.9	3008.4	3610.2	3939.9	3722.0
63°	810.3	667.2	838.6	1004.4	1411.3	1771.0	2334.5	2966.4	3544.9	3838.1	3590.4
64°	705.3	658.6	730.6	996.0	1350.1	1771.3	2300.2	2910.1	3469.9	3731.5	3456.9
65°	712.0	666.7	733.8	977.2	1351.4	1759.8	2264.7	2839.6	3383.0	3614.6	3316.7
66°	717.0	556.9	743.2	958.3	1359.9	1716.9	2212.7	2760.7	3279.6	3492.5	3171.9
67°	593.7	538.9	616.2	940.5	1350.6	1650.9	2153.8	2665.9	3167.7	3358.1	3028.5
68°	603.8	416.0	623.4	961.0	1315.7	1655.0	2067.2	2524.1	3033.6	3211.0	2882.8
69°	482.8	375.2	501.6	883.9	1313.6	1654.6	1955.0	2321.6	2873.8	3052.7	2742.7
70°	461.1	256.8	473.4	875.1	1282.0	1650.8	1809.2	2054.4	2675.6	2877.2	2593.6
71°	305.3	138.4	306.3	762.5	1267.9	1611.5	1640.8	1801.5	2438.4	2681.5	2439.9
72°	189.4	21.1	179.2	736.9	1259.0	1539.1	1475.5	1577.1	2170.5	2464.2	2283.6
73°	156.4	0.3	142.6	668.7	1232.3	1464.8	1323.6	1341.1	1894.2	2225.5	2114.5
74°	141.2	0.2	131.5	594.7	1229.8	1390.9	1136.3	1073.8	1621.2	1968.6	1928.5
75°	115.9	0.2	112.5	559.4	1167.1	1311.6	948.8	742.5	1327.8	1688.7	1698.1
76°	90.7	0.2	93.6	539.9	1070.8	1222.5	760.6	431.5	967.6	1410.2	1423.8
77°	65.7	0.2	74.7	508.5	974.4	1071.5	468.7	286.1	593.8	1144.8	1089.9
78°	48.9	0.2	60.3	458.0	877.9	920.5	244.5	142.5	449.4	866.0	717.7
79°	48.2	0.2	60.2	387.6	759.7	766.2	164.1	111.4	309.6	578.0	531.2
80°	65.7	0.3	73.6	338.2	627.0	464.1	85.7	94.2	169.8	430.2	349.6
81°	81.0	0.3	77.3	315.3	474.3	335.1	67.8	80.3	145.3	283.8	167.9
82°	73.0	0.3	47.5	296.7	366.3	206.0	55.1	67.4	124.2	137.5	144.7
83°	45.3	0.4	33.5	247.1	260.9	78.7	44.5	55.6	101.3	107.6	127.0
84°	24.7	0.4	19.5	177.4	188.1	66.6	35.4	45.2	78.9	87.7	110.3
85°	18.4	0.5	5.6	107.7	115.4	52.9	27.7	34.9	60.1	69.4	94.2
86°	12.1	0.5	4.9	39.6	44.4	39.0	21.1	24.5	47.7	53.7	78.6
87°	5.9	0.6	4.9	27.5	22.8	27.9	16.0	16.2	35.4	42.0	61.3
88°	4.1	0.7	4.3	15.4	15.8	19.3	10.9	9.3	23.1	30.4	47.1
89°	2.9	0.8	2.4	3.5	8.7	10.8	5.8	6.5	13.4	18.8	33.0



REPORT NUMBER: P1436743

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

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: P1436743

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

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: P1436743

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

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: P1436743

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1932.7	1932.7	1932.7
1°	1982.1	1989.6	1993.0
2°	2039.3	2053.3	2058.4
3°	2101.0	2121.8	2129.6
4°	2169.3	2198.4	2207.8
5°	2241.6	2280.4	2293.1
6°	2321.9	2370.7	2386.8
7°	2407.5	2465.4	2486.0
8°	2498.6	2569.3	2594.4
9°	2597.4	2682.4	2712.4
10°	2702.1	2801.9	2835.9
11°	2817.1	2932.1	2969.9
12°	2938.0	3071.3	3115.4
13°	3069.3	3222.1	3270.1
14°	3207.0	3381.3	3438.3
15°	3354.8	3550.4	3618.4
16°	3503.3	3722.3	3804.1
17°	3655.8	3899.6	3986.8
18°	3808.5	4074.5	4168.9
19°	3955.4	4239.2	4338.0
20°	4096.3	4394.0	4492.9
21°	4229.1	4535.7	4631.8
22°	4352.0	4660.7	4752.7
23°	4469.1	4774.7	4859.6
24°	4578.4	4872.4	4953.1
25°	4677.3	4958.1	5034.0
26°	4767.0	5030.1	5102.3
27°	4847.9	5092.7	5159.8
28°	4919.5	5145.1	5207.1
29°	4981.6	5188.0	5246.4
30°	5036.0	5222.7	5276.2
31°	5082.2	5250.0	5299.3
32°	5119.9	5270.1	5313.4
33°	5150.2	5281.7	5320.5
34°	5174.9	5286.7	5321.0
35°	5192.5	5285.2	5315.0
36°	5203.1	5277.7	5303.4
37°	5207.1	5265.1	5285.7
38°	5205.6	5247.4	5263.6
39°	5197.5	5225.3	5236.3
40°	5183.9	5199.1	5205.1
41°	5165.8	5168.8	5167.8
42°	5142.1	5134.1	5125.0
43°	5112.4	5094.8	5076.1
44°	5077.1	5048.9	5021.0

REPORT NUMBER: P1436743

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	5038.5	4998.2	4958.7
46°	4994.9	4941.3	4887.4
47°	4945.4	4875.1	4812.2
48°	4891.6	4805.9	4733.0
49°	4830.0	4725.3	4643.2
50°	4761.5	4638.7	4543.5
51°	4683.5	4541.8	4435.7
52°	4596.7	4434.9	4319.6
53°	4500.2	4319.1	4196.0
54°	4397.2	4194.6	4063.1
55°	4288.2	4063.8	3927.6
56°	4168.4	3922.4	3781.1
57°	4044.5	3773.3	3635.4
58°	3914.2	3625.2	3483.7
59°	3777.8	3471.7	3325.5
60°	3635.1	3313.7	3156.5
61°	3489.1	3145.5	2975.8
62°	3340.7	2974.8	2787.1
63°	3193.1	2796.6	2589.3
64°	3047.2	2619.5	2397.8
65°	2898.6	2443.0	2224.2
66°	2748.8	2282.6	2071.6
67°	2599.5	2135.9	1946.1
68°	2452.2	2008.7	1811.5
69°	2312.3	1872.2	1613.7
70°	2180.8	1701.7	1323.7
71°	2045.2	1467.1	942.4
72°	1895.0	1137.0	599.8
73°	1714.9	770.8	461.6
74°	1470.4	470.6	327.7
75°	1152.2	343.0	193.9
76°	820.2	216.0	171.0
77°	549.6	183.5	153.0
78°	429.1	161.5	138.3
79°	312.0	143.7	125.2
80°	194.9	128.4	113.4
81°	162.8	114.9	102.5
82°	140.2	102.8	92.3
83°	120.7	91.2	82.6
84°	102.0	80.6	73.2
85°	82.6	70.1	64.2
86°	67.3	60.5	55.3
87°	54.2	51.2	47.6
88°	44.4	43.4	39.9
89°	34.7	35.7	32.3



REPORT NUMBER: P1436743

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

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: P1436743

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

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: P1436743

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)