

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: P1445009

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

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1445009
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/5/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: XAS180-SFPM (4000K-72W-T3-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 40% (72W)
OPTICS - TYPE 3 WITH HOUSE SIDE SHIELD
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 24407 (1 lamp)
Luminaire Lumens: 10485.1 lumens
Efficiency: 43.0%
Efficacy: 146.2 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

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

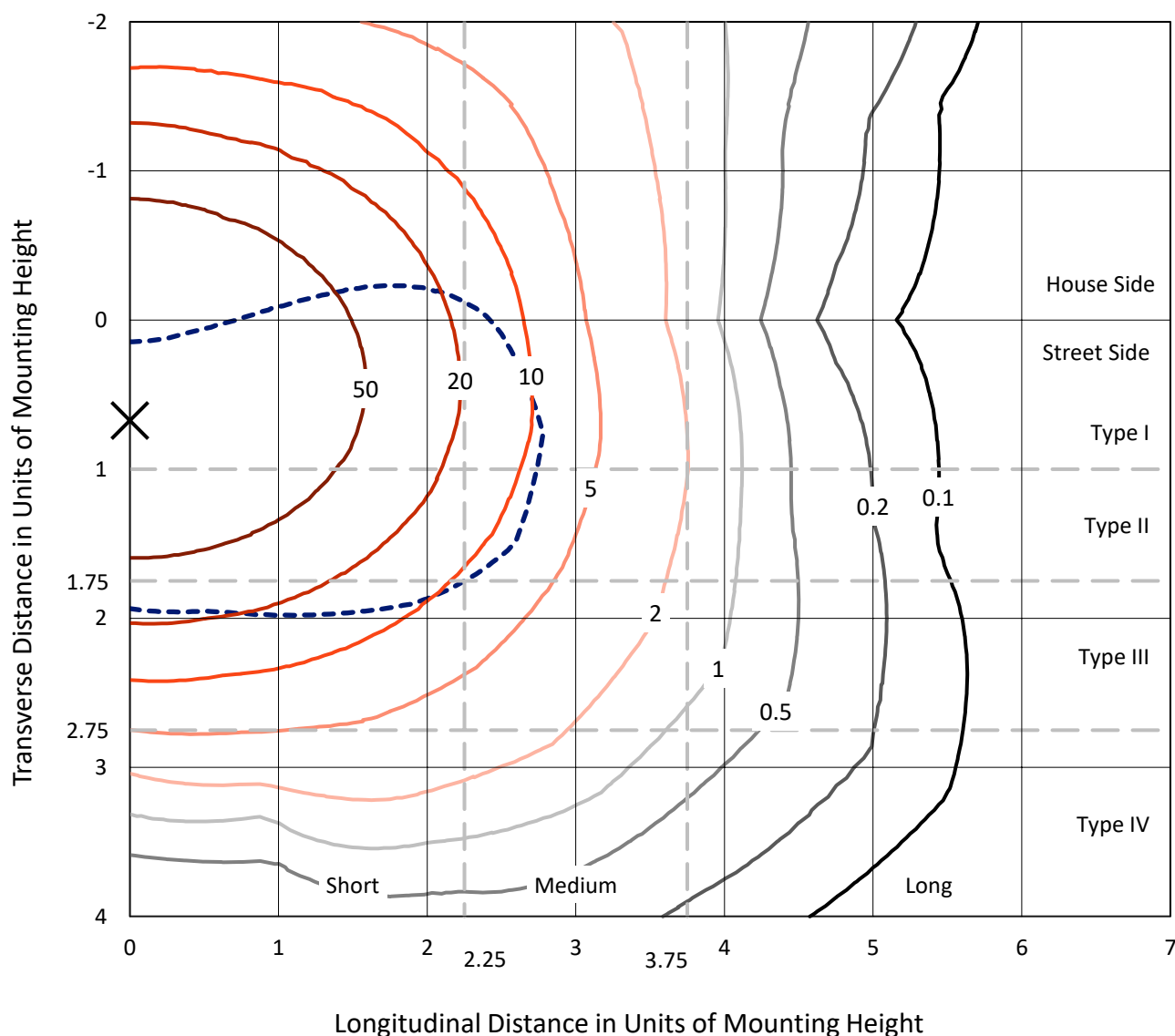
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

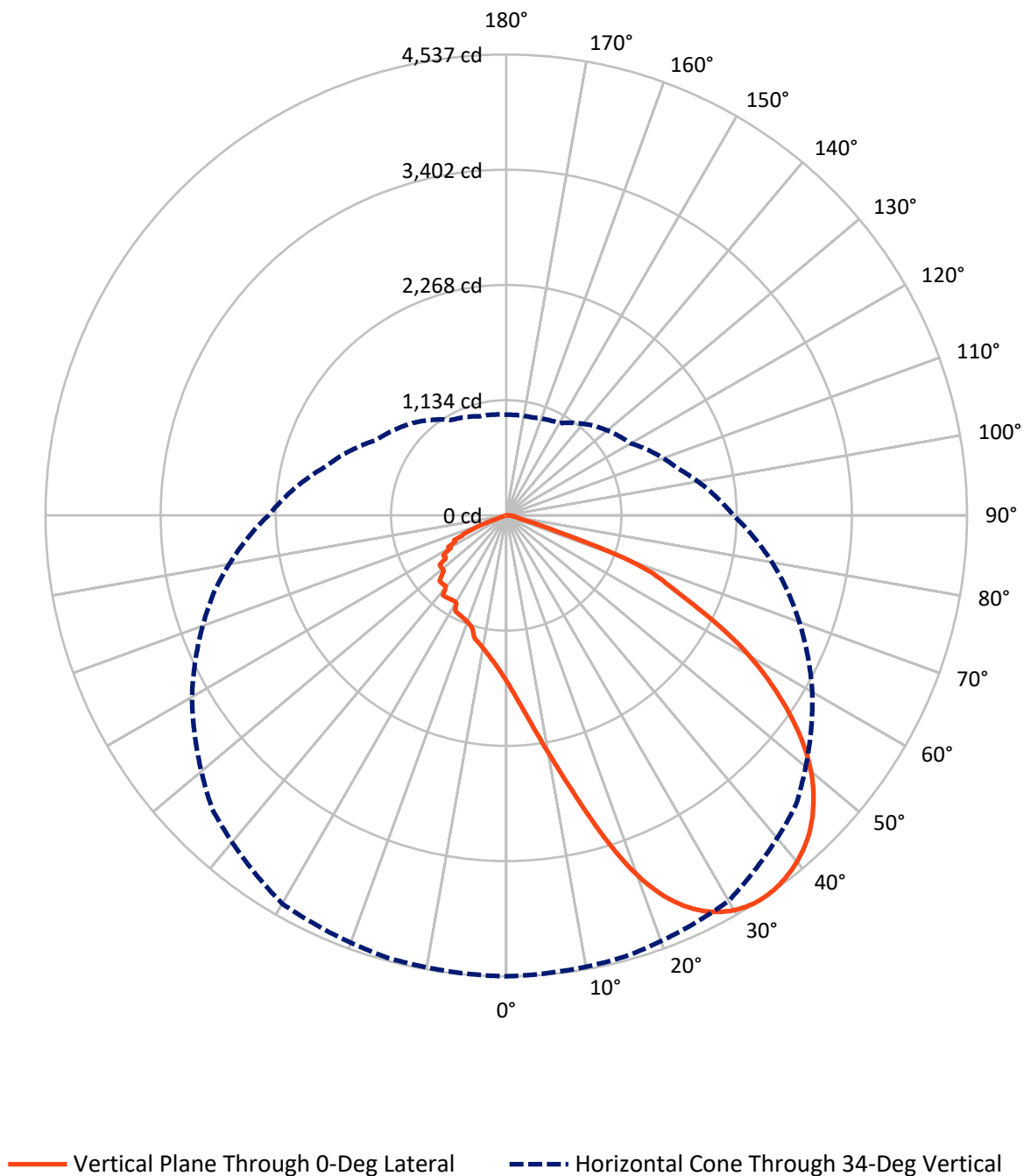


Based on 3 foot mounting height. Maximum calculated value = 355.4 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



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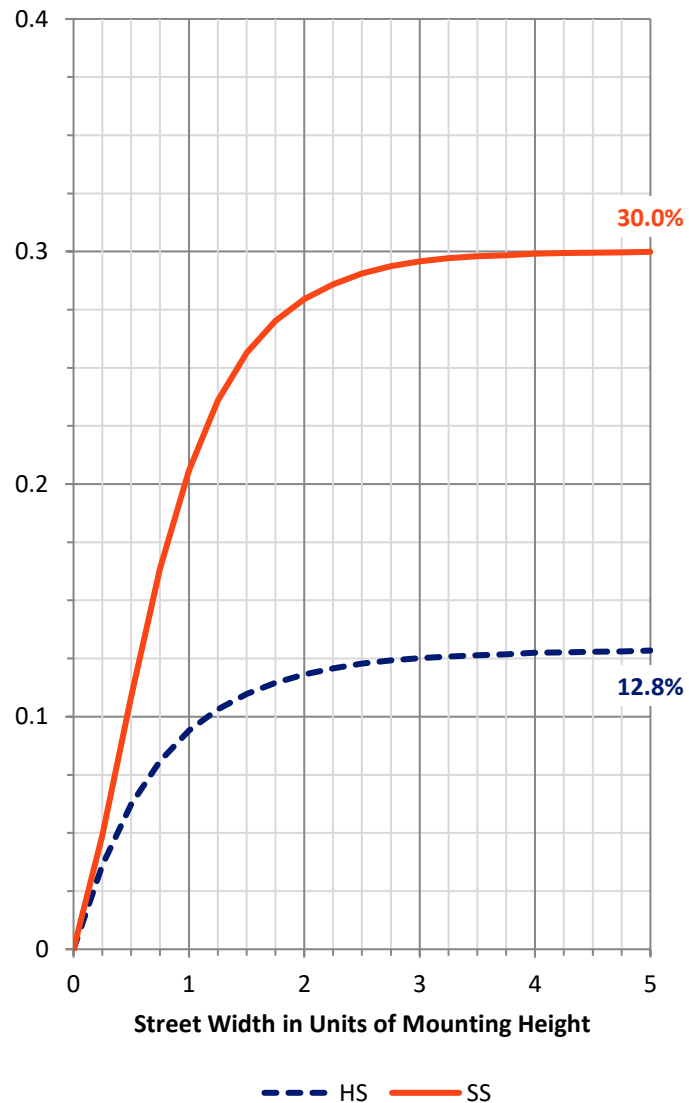
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3153.4	0.0	3153.4
	% Lamp	12.9	0.0	12.9
Street Side	Lumens	7331.7	0.0	7331.7
	% Lamp	30.0	0.0	30.0
Total	Lumens	10485.1	0.0	10485.1
	% Lamp	43.0	0.0	43.0

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	164.7	1.6	0.7
10°-20°	572.1	5.5	2.3
20°-30°	1109.9	10.6	4.5
30°-40°	1631.7	15.6	6.7
40°-50°	2024.7	19.3	8.3
50°-60°	2157.4	20.6	8.8
60°-70°	1875.5	17.9	7.7
70°-80°	867.6	8.3	3.6
80°-90°	81.5	0.8	0.3
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	10485.1	100.0	43.0
0°-180°	10485.1	100.0	43.0

Coefficient of Utilization



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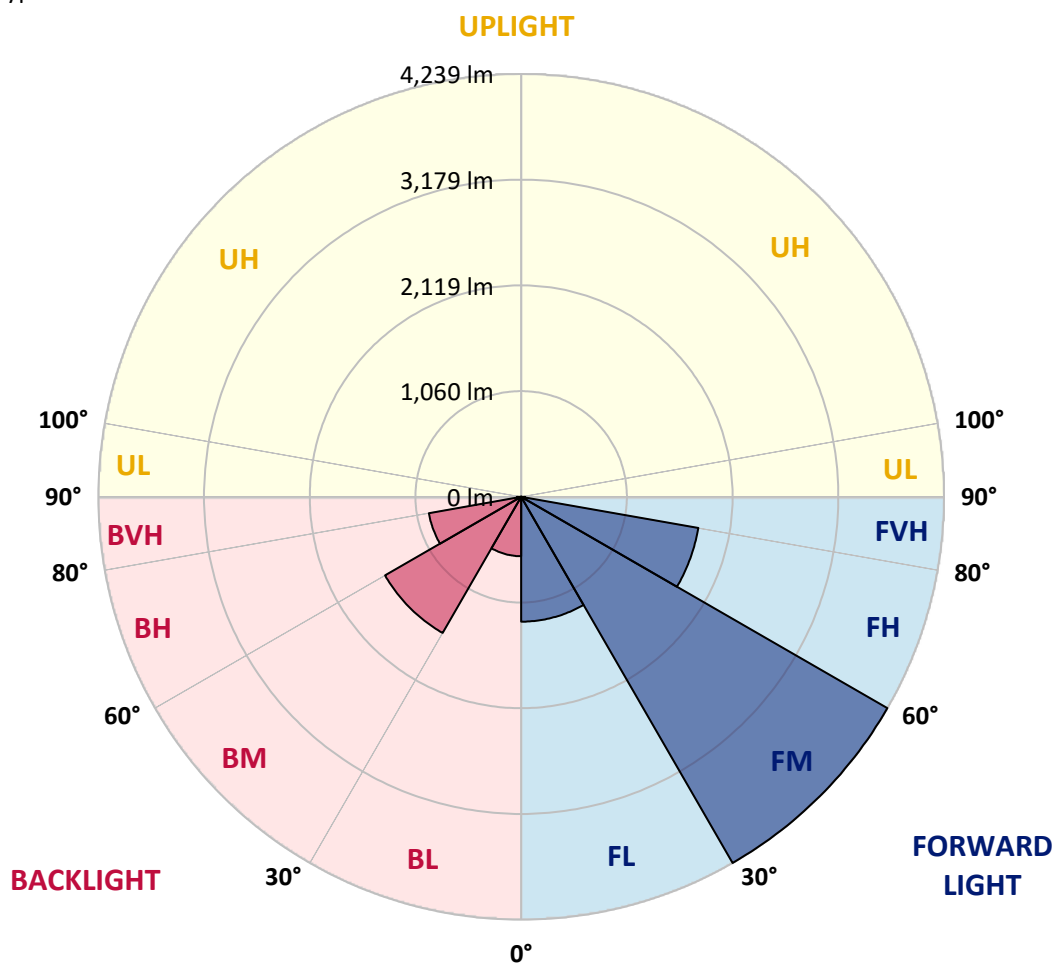
CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1251.4	5.1			
FM	(30°-60°)	4238.7	17.4			
FH	(60°-80°)	1803.4	7.4			G2/5000
FVH	(80°-90°)	38.2	0.2			G1/100
BL	(0°-30°)	595.3	2.4	B2/1000		
BM	(30°-60°)	1575.1	6.5	B2/2500		
BH	(60°-80°)	939.7	3.9	B2/1000		G2/1000
BVH	(80°-90°)	43.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		13921.9	57.0			

BUG Rating: B2-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1647.7	1647.7	1647.7	1647.7	1647.7	1647.7	1647.7	1647.7	1647.7	1647.7	1647.7
1°	1699.2	1698.2	1694.0	1686.3	1676.0	1663.9	1642.1	1630.8	1620.6	1612.5	1606.6
2°	1754.9	1752.6	1741.6	1724.8	1702.5	1677.4	1642.9	1619.5	1598.8	1582.4	1569.5
3°	1815.6	1809.5	1792.4	1765.5	1732.0	1693.8	1645.5	1610.7	1579.8	1554.6	1536.0
4°	1882.2	1873.3	1849.0	1811.0	1763.3	1711.4	1649.5	1603.2	1562.6	1529.5	1505.9
5°	1955.0	1943.5	1909.5	1860.0	1797.3	1730.9	1654.9	1596.7	1547.1	1507.2	1479.2
6°	2034.9	2018.4	1976.5	1913.3	1835.4	1752.2	1661.3	1592.1	1532.8	1487.4	1454.6
7°	2119.4	2099.4	2047.9	1970.4	1875.2	1775.8	1670.4	1589.6	1521.2	1469.2	1431.4
8°	2211.9	2188.6	2125.6	2031.4	1918.3	1801.2	1681.2	1588.7	1511.3	1452.7	1410.8
9°	2312.5	2284.6	2208.3	2097.3	1964.2	1828.5	1693.0	1588.6	1503.4	1437.5	1391.2
10°	2417.7	2384.1	2296.9	2165.9	2012.9	1858.3	1706.7	1590.2	1496.0	1424.6	1372.9
11°	2532.0	2493.4	2391.1	2239.8	2064.6	1889.8	1721.6	1593.0	1490.0	1412.7	1356.3
12°	2656.0	2610.7	2490.6	2319.3	2118.4	1922.9	1737.6	1596.8	1485.5	1402.0	1341.5
13°	2787.9	2734.7	2598.5	2402.0	2176.0	1958.2	1754.6	1601.3	1481.7	1391.9	1327.8
14°	2931.4	2872.1	2714.2	2489.9	2236.1	1994.5	1771.4	1605.9	1478.2	1382.9	1315.0
15°	3084.9	3015.8	2836.9	2583.5	2299.1	2031.9	1790.1	1611.3	1475.5	1374.6	1302.1
16°	3243.2	3165.1	2963.9	2682.9	2365.0	2070.6	1809.8	1617.9	1473.5	1366.7	1290.4
17°	3399.0	3313.2	3088.8	2785.0	2434.7	2111.0	1830.1	1624.7	1472.0	1359.4	1278.7
18°	3554.2	3458.6	3214.2	2885.6	2508.1	2152.8	1850.7	1630.8	1471.0	1352.7	1260.6
19°	3698.4	3598.7	3337.8	2984.9	2583.5	2196.2	1865.1	1632.2	1468.0	1346.7	1218.4
20°	3830.5	3728.3	3457.9	3084.0	2658.8	2237.3	1883.1	1636.3	1461.2	1340.7	1188.5
21°	3948.9	3846.9	3570.9	3179.6	2735.3	2274.8	1901.4	1645.5	1456.2	1334.0	1180.5
22°	4052.0	3953.3	3677.2	3271.8	2809.9	2319.1	1925.3	1655.1	1457.0	1310.2	1173.3
23°	4143.1	4049.6	3774.2	3360.8	2884.0	2362.0	1950.7	1663.8	1458.0	1279.9	1167.1
24°	4222.8	4134.2	3866.0	3444.1	2949.2	2411.7	1974.3	1669.0	1456.0	1255.6	1162.5
25°	4291.8	4208.5	3948.8	3524.3	3011.8	2463.5	1994.2	1676.3	1454.0	1251.7	1158.0
26°	4350.0	4272.5	4024.3	3598.0	3073.8	2514.3	2015.2	1683.4	1452.7	1246.9	1154.4
27°	4399.0	4328.1	4094.1	3670.4	3133.4	2564.1	2038.7	1694.6	1455.6	1240.5	1150.5
28°	4439.4	4374.1	4154.7	3738.3	3189.0	2608.3	2062.9	1705.9	1459.9	1236.0	1147.0
29°	4472.9	4411.4	4207.8	3800.6	3243.5	2650.1	2091.4	1717.1	1463.5	1235.8	1144.2
30°	4498.2	4442.4	4255.0	3859.7	3298.9	2693.7	2119.8	1729.2	1458.6	1236.9	1141.5
31°	4518.0	4466.0	4295.5	3913.4	3350.1	2737.7	2149.4	1741.6	1436.9	1238.4	1136.3
32°	4530.0	4483.2	4329.0	3957.9	3398.2	2779.7	2178.8	1752.4	1432.3	1239.9	1129.3
33°	4536.0	4493.5	4357.8	3997.3	3442.0	2823.8	2208.4	1755.6	1415.2	1241.3	1085.2
34°	4536.5	4497.8	4380.1	4032.9	3480.1	2866.8	2237.0	1759.1	1417.0	1241.4	1047.3
35°	4531.3	4497.4	4396.8	4066.7	3514.2	2907.8	2258.0	1767.8	1419.8	1240.4	1045.1
36°	4521.4	4492.2	4406.7	4096.5	3546.1	2947.2	2275.4	1777.9	1423.5	1239.9	1045.9
37°	4506.4	4482.3	4411.4	4121.3	3577.3	2984.8	2295.3	1788.4	1429.8	1241.6	1046.6
38°	4487.5	4467.7	4411.9	4140.3	3607.8	3022.1	2319.9	1800.5	1433.8	1242.0	1045.9
39°	4464.3	4450.1	4407.2	4156.1	3634.8	3056.0	2342.1	1813.4	1434.8	1182.7	1045.2
40°	4437.7	4428.2	4396.4	4168.5	3660.9	3084.2	2365.9	1822.8	1441.0	1155.6	1047.8
41°	4405.9	4401.6	4382.2	4178.1	3683.5	3104.3	2388.8	1831.4	1450.4	1159.5	1050.3
42°	4369.3	4371.9	4362.9	4186.5	3707.4	3123.8	2412.2	1838.9	1459.9	1165.0	1053.2
43°	4327.7	4337.1	4338.8	4189.0	3730.0	3143.8	2434.2	1843.1	1470.0	1171.3	1054.3
44°	4280.7	4298.5	4310.9	4186.2	3750.3	3165.7	2452.7	1855.8	1480.8	1178.1	1020.4

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

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	4227.6	4254.1	4277.6	4177.4	3768.3	3186.8	2467.2	1873.4	1492.0	1183.9	974.2
46°	4166.8	4203.9	4240.8	4163.7	3785.1	3207.7	2480.4	1891.6	1496.7	1183.8	975.4
47°	4102.7	4146.5	4199.4	4144.0	3799.5	3227.5	2488.9	1910.4	1496.2	1186.9	978.3
48°	4035.2	4084.8	4153.0	4119.2	3810.4	3243.9	2495.1	1930.0	1501.3	1193.9	979.6
49°	3958.6	4014.0	4100.6	4090.8	3816.6	3260.1	2508.0	1946.8	1475.3	1198.3	978.4
50°	3873.6	3937.9	4041.1	4057.1	3816.9	3275.1	2526.0	1950.3	1452.2	1160.3	978.6
51°	3781.7	3852.8	3973.7	4016.5	3809.7	3284.6	2543.9	1937.7	1430.8	1113.8	980.1
52°	3682.7	3760.3	3900.2	3969.7	3799.8	3289.7	2560.2	1949.4	1441.5	1117.4	936.2
53°	3577.3	3659.9	3818.5	3918.1	3783.9	3292.0	2574.5	1953.2	1451.1	1124.4	888.7
54°	3464.0	3550.7	3730.9	3858.9	3763.0	3291.5	2587.2	1951.1	1456.2	1133.7	893.3
55°	3348.5	3438.2	3636.1	3793.4	3735.2	3282.5	2597.6	1962.8	1464.4	1138.9	899.6
56°	3223.6	3320.1	3533.5	3722.3	3703.9	3266.7	2599.7	1970.4	1477.6	1142.6	906.9
57°	3099.4	3196.5	3427.9	3643.5	3667.9	3246.4	2597.2	1970.3	1488.2	1141.0	913.9
58°	2970.1	3069.5	3317.3	3558.2	3625.0	3227.7	2586.9	1977.1	1493.0	1079.9	917.5
59°	2835.2	2940.7	3200.9	3469.3	3574.8	3208.0	2577.1	1983.5	1502.9	1065.3	844.9
60°	2691.1	2805.9	3081.6	3372.3	3515.4	3183.8	2567.9	1978.7	1462.2	1079.9	851.0
61°	2537.1	2663.7	2956.7	3271.2	3447.9	3153.9	2551.7	1961.6	1439.2	1097.3	853.5
62°	2376.2	2515.7	2830.7	3163.9	3376.4	3115.8	2533.5	1956.4	1448.6	1115.9	828.7
63°	2207.5	2361.0	2702.8	3051.7	3295.9	3068.9	2508.3	1942.3	1455.7	1129.9	804.1
64°	2044.3	2208.4	2574.9	2937.1	3206.2	3013.4	2473.6	1920.0	1461.0	1077.3	798.7
65°	1896.2	2056.3	2442.2	2819.0	3109.8	2947.8	2431.2	1894.1	1453.9	1082.9	807.7
66°	1766.1	1918.6	2312.7	2699.1	3006.8	2871.4	2375.6	1855.6	1414.2	1096.7	760.5
67°	1659.2	1793.1	2184.0	2580.1	2896.5	2782.4	2316.9	1815.0	1370.3	1087.8	749.5
68°	1544.4	1683.0	2058.7	2457.9	2772.3	2683.0	2229.1	1755.4	1380.9	1060.9	768.5
69°	1375.8	1567.0	1940.9	2338.8	2641.0	2563.7	2096.1	1684.4	1387.3	1068.2	703.0
70°	1128.6	1413.7	1831.0	2218.4	2506.4	2415.8	1903.7	1588.8	1390.1	1039.6	699.8
71°	803.5	1199.7	1720.8	2098.8	2354.0	2240.5	1683.0	1464.0	1361.8	1042.0	605.7
72°	511.4	908.5	1597.0	1974.5	2184.7	2034.5	1493.8	1325.1	1310.2	1036.1	584.1
73°	393.6	601.4	1448.4	1846.7	1995.6	1811.0	1314.0	1203.5	1258.7	1020.7	541.8
74°	279.4	365.6	1247.7	1702.5	1794.9	1584.1	1063.4	1113.7	1202.8	1029.4	491.1
75°	165.3	269.4	969.3	1517.9	1576.4	1339.6	812.7	942.1	1138.9	1008.0	472.9
76°	145.8	176.0	676.6	1290.1	1351.1	1035.2	561.9	770.6	1082.7	980.5	460.9
77°	130.4	151.2	441.4	1008.0	1117.1	681.2	306.9	598.6	1036.0	886.7	435.0
78°	117.9	133.5	345.1	672.8	867.3	391.8	160.1	345.5	900.7	792.9	392.4
79°	106.8	119.2	253.1	366.9	603.2	271.8	131.0	253.0	765.4	698.3	333.2
80°	96.7	106.9	161.1	253.2	377.1	152.8	101.8	160.6	628.0	569.7	285.4
81°	87.4	95.8	136.2	144.4	247.5	129.0	73.0	69.7	348.7	426.3	257.9
82°	78.7	85.5	118.2	123.5	120.4	110.2	61.6	54.1	255.6	339.6	256.9
83°	70.4	75.9	102.3	107.8	93.5	89.4	51.3	41.8	162.4	269.0	211.0
84°	62.4	66.9	86.6	93.7	76.0	67.8	41.7	32.7	69.6	192.1	157.0
85°	54.8	58.5	69.9	80.2	60.5	51.8	32.2	25.3	61.1	142.1	110.9
86°	47.1	50.5	57.0	67.1	47.1	40.1	23.7	19.2	49.0	92.2	65.1
87°	40.6	42.9	46.2	52.9	36.8	30.2	18.2	14.9	36.3	42.8	39.9
88°	34.1	36.6	37.8	40.7	26.6	20.4	12.7	10.6	27.5	29.1	27.2
89°	27.5	30.2	29.5	28.4	16.4	11.9	7.2	6.3	18.8	15.5	14.5

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CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445009

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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1445009
CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-HSS)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445009

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1647.7	1647.7	1647.7	1647.7	1647.7	1647.7	1647.7	1647.7	1647.7	1647.7	1647.7
1°	1603.9	1604.0	1606.3	1612.2	1620.1	1630.3	1641.4	1644.8	1657.9	1670.2	1680.9
2°	1563.2	1562.1	1566.9	1577.0	1592.0	1610.6	1632.9	1648.5	1674.5	1699.5	1721.7
3°	1526.3	1523.8	1530.0	1544.3	1566.1	1593.6	1626.0	1654.3	1692.8	1730.3	1764.1
4°	1492.9	1490.3	1497.1	1514.7	1542.3	1578.5	1621.1	1661.1	1712.9	1763.7	1811.0
5°	1463.4	1459.7	1467.3	1488.4	1521.0	1565.2	1617.8	1669.6	1735.1	1800.7	1861.5
6°	1435.3	1430.8	1440.1	1464.3	1502.5	1553.2	1615.7	1679.7	1759.3	1841.1	1916.7
7°	1409.8	1404.2	1414.5	1441.8	1485.2	1543.4	1615.4	1692.1	1785.3	1883.5	1975.6
8°	1386.2	1379.5	1390.9	1421.6	1469.8	1534.7	1616.4	1704.5	1813.3	1928.7	2038.9
9°	1363.7	1356.0	1368.8	1402.6	1456.0	1527.6	1618.3	1718.8	1843.9	1977.3	2107.0
10°	1342.8	1334.4	1348.5	1385.3	1443.0	1521.3	1621.1	1734.6	1875.5	2028.6	2178.1
11°	1323.5	1314.1	1329.6	1369.7	1432.2	1516.3	1625.3	1752.6	1910.4	2083.3	2254.8
12°	1305.8	1295.9	1311.5	1355.0	1422.3	1512.3	1630.9	1771.2	1945.6	2141.4	2336.0
13°	1289.7	1278.4	1295.5	1341.5	1413.5	1509.7	1637.6	1791.2	1983.3	2202.2	2423.0
14°	1274.2	1261.5	1280.0	1328.9	1405.9	1508.0	1644.9	1811.5	2022.3	2265.5	2515.2
15°	1259.0	1245.1	1264.9	1316.9	1399.0	1507.6	1652.7	1833.4	2063.2	2334.5	2614.1
16°	1241.5	1208.3	1248.1	1305.5	1392.3	1507.8	1660.7	1856.2	2105.7	2405.3	2718.2
17°	1193.8	1167.1	1202.8	1294.2	1386.2	1508.1	1670.4	1879.0	2150.1	2481.2	2823.2
18°	1160.2	1145.6	1168.3	1276.7	1381.0	1509.1	1680.0	1902.9	2196.1	2559.6	2929.5
19°	1147.9	1133.1	1155.3	1237.9	1375.7	1509.2	1683.9	1923.4	2243.4	2639.2	3036.8
20°	1137.3	1121.8	1144.6	1208.9	1370.6	1504.4	1690.6	1942.3	2293.1	2720.0	3140.8
21°	1128.1	1112.4	1135.2	1198.1	1364.5	1501.2	1700.4	1963.7	2338.3	2801.9	3240.6
22°	1120.5	1103.9	1127.7	1191.6	1341.1	1503.5	1712.9	1989.9	2384.0	2883.8	3335.1
23°	1114.1	1096.7	1121.7	1186.0	1313.1	1506.7	1725.4	2018.3	2436.2	2962.3	3422.7
24°	1108.0	1090.1	1116.1	1181.5	1292.6	1509.9	1736.3	2047.2	2488.3	3039.6	3506.4
25°	1102.6	1083.7	1110.7	1177.9	1287.0	1509.1	1744.0	2074.7	2544.6	3106.6	3584.5
26°	1097.2	1078.5	1106.2	1175.0	1284.7	1508.9	1754.0	2097.9	2601.2	3167.9	3658.9
27°	1092.7	1074.2	1102.0	1172.5	1279.4	1509.8	1763.4	2124.0	2658.3	3228.8	3729.0
28°	1089.0	1070.4	1098.6	1170.0	1275.5	1514.9	1777.1	2151.1	2711.8	3287.0	3795.6
29°	1085.2	1054.6	1095.0	1168.0	1275.1	1519.9	1791.3	2181.4	2758.9	3339.2	3856.4
30°	1055.7	997.2	1070.1	1166.5	1277.2	1516.0	1805.6	2213.0	2806.3	3392.3	3914.1
31°	1005.9	986.1	1019.5	1161.7	1279.7	1503.9	1819.5	2244.8	2853.7	3443.3	3967.9
32°	997.7	986.4	1010.5	1156.2	1282.9	1492.1	1833.1	2277.0	2898.1	3491.4	4016.6
33°	997.0	987.8	1010.0	1123.2	1286.1	1480.7	1839.0	2308.9	2941.7	3534.6	4057.2
34°	997.5	990.2	1010.5	1083.6	1289.2	1481.1	1845.1	2341.2	2985.7	3573.0	4092.0
35°	998.3	993.5	1011.8	1078.2	1289.8	1484.7	1855.2	2368.6	3027.7	3606.1	4122.6
36°	999.9	996.3	1013.8	1079.6	1290.0	1489.0	1866.7	2389.8	3066.9	3636.9	4151.5
37°	1000.4	998.8	1015.1	1081.7	1290.3	1494.7	1879.3	2412.4	3104.1	3667.1	4176.7
38°	1000.6	1001.0	1015.9	1081.4	1290.5	1501.2	1893.5	2437.7	3139.7	3696.5	4197.6
39°	1000.3	1001.2	1016.7	1081.0	1242.1	1503.9	1908.8	2462.1	3173.2	3722.5	4212.6
40°	998.3	946.2	1015.5	1083.3	1213.6	1508.7	1923.3	2487.9	3202.4	3746.5	4225.4
41°	941.8	917.9	966.0	1086.7	1214.2	1519.2	1933.2	2512.6	3223.6	3769.2	4233.1
42°	910.7	918.3	929.5	1090.3	1219.6	1530.2	1940.9	2536.4	3241.1	3792.2	4237.5
43°	910.1	919.9	929.1	1092.9	1225.8	1541.8	1945.8	2561.0	3259.2	3811.7	4237.7
44°	910.9	921.0	930.7	1069.8	1233.0	1553.9	1960.7	2584.3	3276.3	3829.6	4233.9

REPORT NUMBER: P1445009

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

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	912.0	921.0	932.5	1017.9	1239.9	1565.4	1979.5	2601.7	3294.4	3844.0	4223.1
46°	913.0	919.7	934.0	1015.3	1241.6	1571.6	1998.9	2614.8	3312.5	3856.7	4205.2
47°	913.6	886.6	935.1	1018.6	1243.4	1572.4	2018.5	2622.9	3327.8	3866.6	4180.5
48°	883.3	853.5	935.0	1020.3	1251.6	1578.6	2037.8	2627.4	3341.6	3872.1	4152.3
49°	853.1	821.0	880.3	1018.6	1256.4	1574.1	2056.6	2639.1	3351.5	3873.6	4118.6
50°	823.0	819.1	840.8	1018.5	1230.8	1539.1	2068.3	2653.9	3358.9	3867.2	4081.7
51°	826.1	818.2	843.5	1020.6	1174.9	1518.1	2059.0	2667.0	3362.9	3852.4	4039.2
52°	830.5	818.4	847.7	987.3	1175.5	1525.4	2053.1	2679.0	3362.2	3833.6	3990.5
53°	835.2	818.1	852.1	931.5	1184.3	1536.3	2060.6	2688.2	3355.9	3809.6	3935.8
54°	839.0	814.4	832.1	936.2	1195.4	1541.8	2057.6	2694.3	3345.6	3780.8	3873.1
55°	840.7	737.3	812.0	943.4	1201.9	1545.4	2056.1	2698.4	3326.5	3747.5	3806.7
56°	767.8	725.3	791.9	951.9	1207.4	1559.5	2058.7	2694.0	3298.0	3710.8	3733.2
57°	754.4	728.5	775.5	960.6	1206.6	1570.0	2054.4	2681.1	3267.0	3670.2	3655.7
58°	757.8	732.3	779.1	966.9	1154.5	1573.3	2054.5	2661.6	3235.1	3621.0	3571.4
59°	762.7	700.0	783.4	896.3	1137.1	1579.9	2055.5	2642.7	3204.4	3567.3	3481.6
60°	707.3	636.0	733.9	897.3	1153.0	1546.2	2043.5	2621.9	3169.3	3505.1	3383.8
61°	674.3	643.1	698.5	902.3	1170.6	1508.2	2018.0	2595.6	3126.5	3435.5	3279.3
62°	682.4	649.7	707.5	911.8	1188.7	1509.2	2006.0	2564.8	3077.9	3359.0	3173.2
63°	690.9	568.9	715.0	856.3	1203.2	1509.9	1990.3	2529.0	3022.2	3272.2	3061.0
64°	601.3	561.5	622.9	849.2	1151.0	1510.2	1961.0	2481.0	2958.3	3181.3	2947.2
65°	607.1	568.4	625.6	833.1	1152.2	1500.3	1930.8	2420.9	2884.2	3081.7	2827.7
66°	611.3	474.8	633.6	817.0	1159.4	1463.7	1886.5	2353.7	2796.0	2977.6	2704.3
67°	506.1	459.4	525.3	801.9	1151.5	1407.5	1836.2	2272.8	2700.7	2863.0	2582.0
68°	514.7	354.6	531.4	819.3	1121.7	1411.0	1762.4	2152.0	2586.3	2737.6	2457.7
69°	411.6	319.9	427.6	753.5	1119.9	1410.6	1666.8	1979.3	2450.1	2602.6	2338.3
70°	393.1	218.9	403.6	746.1	1093.0	1407.4	1542.5	1751.5	2281.1	2453.0	2211.2
71°	260.3	118.0	261.2	650.1	1081.0	1373.9	1398.9	1535.9	2078.9	2286.1	2080.2
72°	161.5	18.0	152.8	628.3	1073.3	1312.2	1257.9	1344.6	1850.5	2100.9	1946.9
73°	133.3	0.2	121.6	570.1	1050.6	1248.8	1128.5	1143.4	1614.9	1897.4	1802.7
74°	120.3	0.2	112.1	507.0	1048.5	1185.8	968.7	915.5	1382.2	1678.4	1644.2
75°	98.8	0.2	96.0	476.9	995.0	1118.2	808.9	633.0	1132.0	1439.7	1447.7
76°	77.3	0.2	79.8	460.3	912.9	1042.2	648.5	367.9	824.9	1202.2	1213.8
77°	56.0	0.2	63.7	433.5	830.7	913.5	399.6	243.9	506.3	976.0	929.2
78°	41.7	0.2	51.4	390.5	748.4	784.8	208.4	121.5	383.2	738.3	611.9
79°	41.1	0.2	51.4	330.5	647.7	653.2	139.9	95.0	264.0	492.8	452.9
80°	56.0	0.2	62.8	288.3	534.5	395.7	73.0	80.3	144.8	366.7	298.0
81°	69.1	0.2	65.9	268.8	404.4	285.7	57.8	68.4	123.9	242.0	143.1
82°	62.3	0.3	40.5	253.0	312.3	175.7	47.0	57.4	105.9	117.2	123.4
83°	38.6	0.3	28.6	210.7	222.4	67.1	37.9	47.4	86.4	91.7	108.3
84°	21.1	0.4	16.6	151.2	160.4	56.8	30.2	38.6	67.2	74.7	94.0
85°	15.7	0.4	4.7	91.8	98.3	45.1	23.6	29.7	51.3	59.2	80.3
86°	10.3	0.5	4.2	33.8	37.8	33.2	18.0	20.9	40.7	45.8	67.0
87°	5.1	0.5	4.2	23.5	19.4	23.8	13.6	13.8	30.2	35.8	52.3
88°	3.5	0.6	3.6	13.1	13.4	16.5	9.3	8.0	19.7	25.9	40.2
89°	2.5	0.6	2.0	3.0	7.5	9.2	4.9	5.5	11.4	16.0	28.1

REPORT NUMBER: P1445009

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

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445009

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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1445009
CATALOG NUMBER: XAS180-SFPM (4000K-72W-T3-HSS)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445009

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1647.7	1647.7	1647.7
1°	1689.9	1696.2	1699.2
2°	1738.6	1750.6	1754.9
3°	1791.2	1809.0	1815.6
4°	1849.5	1874.3	1882.2
5°	1911.1	1944.1	1955.0
6°	1979.6	2021.1	2034.9
7°	2052.5	2101.9	2119.4
8°	2130.2	2190.5	2211.9
9°	2214.4	2286.9	2312.5
10°	2303.7	2388.8	2417.7
11°	2401.7	2499.8	2532.0
12°	2504.8	2618.4	2656.0
13°	2616.8	2747.0	2787.9
14°	2734.2	2882.7	2931.4
15°	2860.2	3026.9	3084.9
16°	2986.8	3173.5	3243.2
17°	3116.8	3324.7	3399.0
18°	3247.0	3473.7	3554.2
19°	3372.2	3614.2	3698.4
20°	3492.3	3746.1	3830.5
21°	3605.5	3866.9	3948.9
22°	3710.3	3973.5	4052.0
23°	3810.2	4070.7	4143.1
24°	3903.3	4154.0	4222.8
25°	3987.7	4227.0	4291.8
26°	4064.1	4288.5	4350.0
27°	4133.1	4341.9	4399.0
28°	4194.2	4386.5	4439.4
29°	4247.1	4423.0	4472.9
30°	4293.5	4452.7	4498.2
31°	4332.8	4475.9	4518.0
32°	4365.1	4493.1	4530.0
33°	4390.8	4503.0	4536.0
34°	4411.9	4507.2	4536.5
35°	4426.9	4506.0	4531.3
36°	4435.9	4499.5	4521.4
37°	4439.4	4488.8	4506.4
38°	4438.1	4473.7	4487.5
39°	4431.2	4454.8	4464.3
40°	4419.6	4432.5	4437.7
41°	4404.1	4406.7	4405.9
42°	4384.0	4377.1	4369.3
43°	4358.6	4343.6	4327.7
44°	4328.5	4304.5	4280.7

REPORT NUMBER: P1445009

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	4295.6	4261.3	4227.6
46°	4258.5	4212.7	4166.8
47°	4216.2	4156.3	4102.7
48°	4170.4	4097.3	4035.2
49°	4117.9	4028.6	3958.6
50°	4059.5	3954.8	3873.6
51°	3992.9	3872.2	3781.7
52°	3919.0	3781.0	3682.7
53°	3836.7	3682.3	3577.3
54°	3748.9	3576.1	3464.0
55°	3655.9	3464.6	3348.5
56°	3553.8	3344.0	3223.6
57°	3448.2	3217.0	3099.4
58°	3337.0	3090.7	2970.1
59°	3220.8	2959.8	2835.2
60°	3099.1	2825.1	2691.1
61°	2974.6	2681.8	2537.1
62°	2848.2	2536.2	2376.2
63°	2722.3	2384.3	2207.5
64°	2597.9	2233.3	2044.3
65°	2471.2	2082.8	1896.2
66°	2343.5	1946.1	1766.1
67°	2216.2	1821.0	1659.2
68°	2090.7	1712.5	1544.4
69°	1971.3	1596.1	1375.8
70°	1859.3	1450.8	1128.6
71°	1743.7	1250.7	803.5
72°	1615.6	969.3	511.4
73°	1462.0	657.1	393.6
74°	1253.6	401.2	279.4
75°	982.3	292.4	165.3
76°	699.2	184.2	145.8
77°	468.6	156.5	130.4
78°	365.9	137.7	117.9
79°	266.0	122.5	106.8
80°	166.2	109.5	96.7
81°	138.8	98.0	87.4
82°	119.5	87.6	78.7
83°	102.9	77.8	70.4
84°	87.0	68.7	62.4
85°	70.4	59.8	54.8
86°	57.3	51.6	47.1
87°	46.2	43.6	40.6
88°	37.9	37.0	34.1
89°	29.6	30.4	27.5

REPORT NUMBER: P1445009

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

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445009

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

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445009

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

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)