

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: P1445017

Luminaire Tested: XAS180-SFPM (5000K-108W-T4-HSS)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1445017
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 (5000K-108W-T4-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 60% (108W)
OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 24748 (1 lamp)
Luminaire Lumens: 15647.2 lumens
Efficiency: 63.2%
Efficacy: 145.3 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

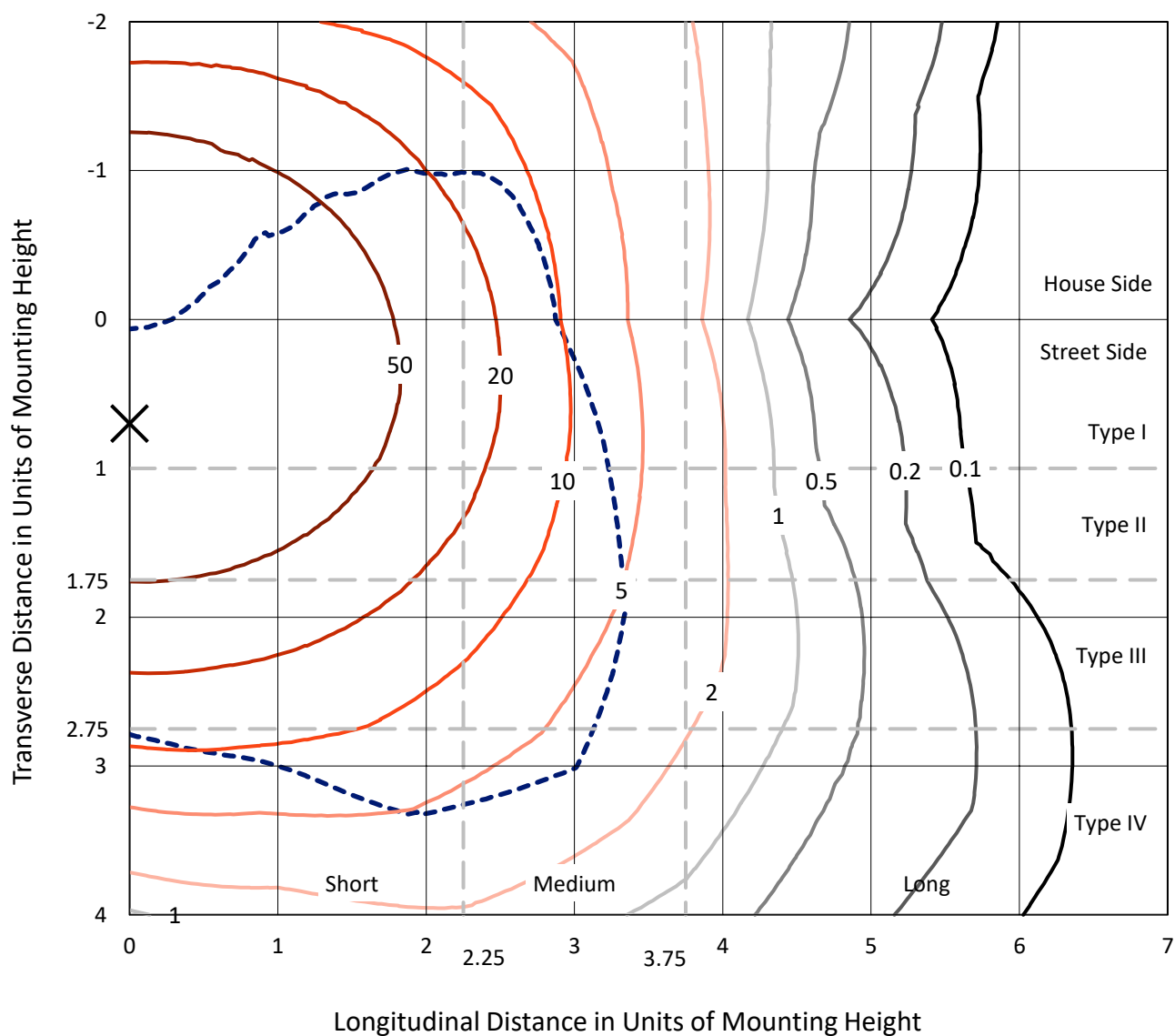
Input Watts (W): 107.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

REPORT NUMBER: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

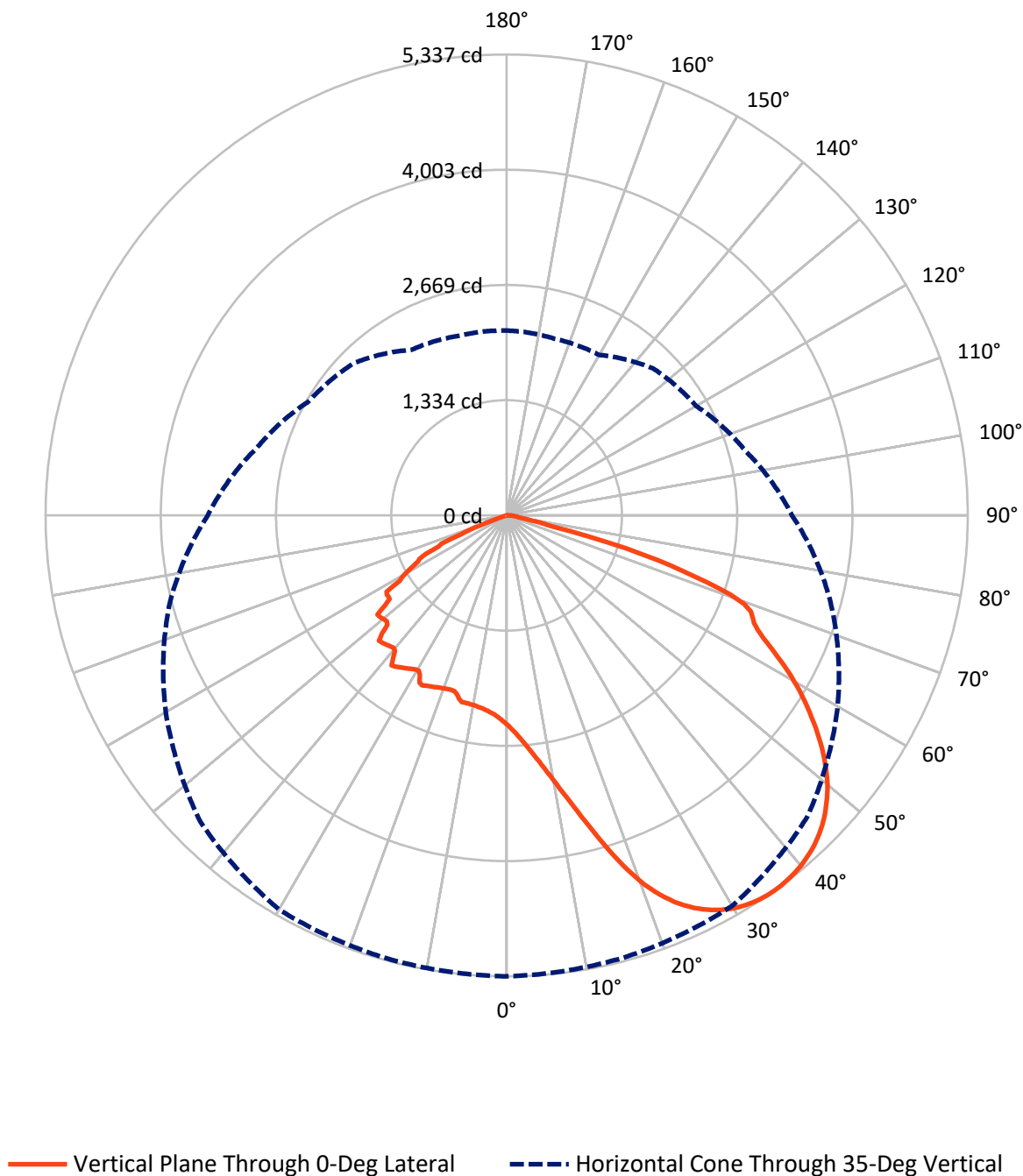


Based on 3 foot mounting height. Maximum calculated value = 422.2 fc
Type IV - Short - Full Cutoff

REPORT NUMBER: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

Luminous Intensity Polar Plot



REPORT NUMBER: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

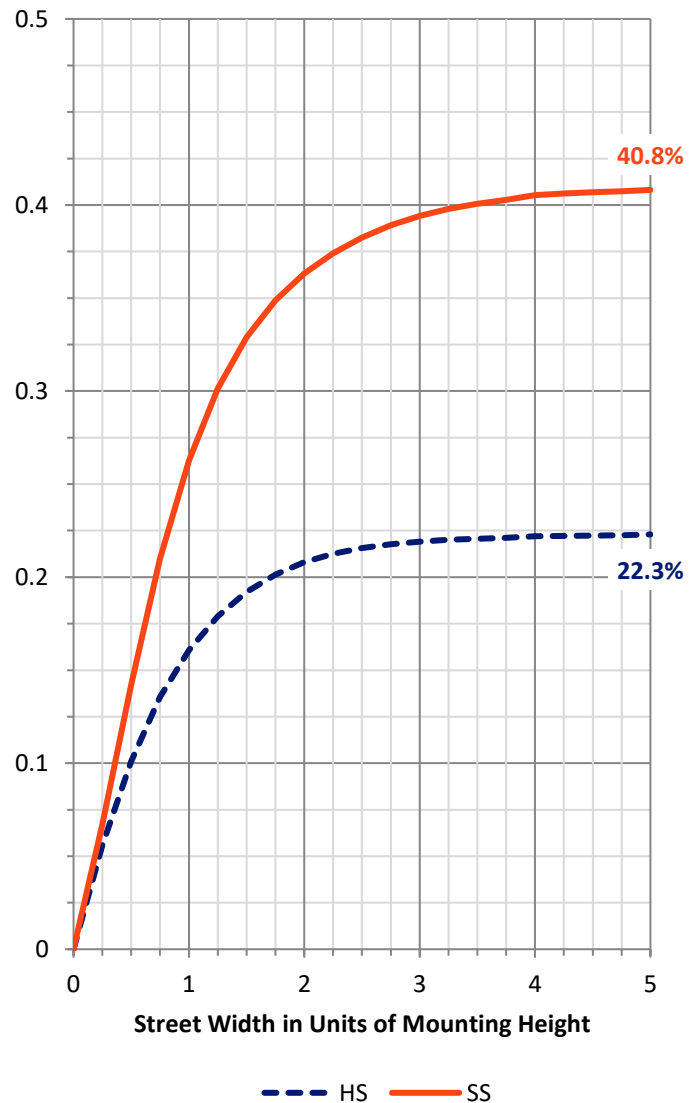
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5543.3	0.0	5543.3
	% Lamp	22.4	0.0	22.4
Street Side	Lumens	10104.0	0.0	10104.0
	% Lamp	40.8	0.0	40.8
Total	Lumens	15647.2	0.0	15647.2
	% Lamp	63.2	0.0	63.2

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	241.6	1.5	1.0
10°-20°	816.2	5.2	3.3
20°-30°	1543.3	9.9	6.2
30°-40°	2269.0	14.5	9.2
40°-50°	2866.1	18.3	11.6
50°-60°	3173.6	20.3	12.8
60°-70°	2985.9	19.1	12.1
70°-80°	1627.4	10.4	6.6
80°-90°	124.2	0.8	0.5
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°	15647.2	100.0	63.2
0°-180°	15647.2	100.0	63.2

Coefficient of Utilization



REPORT NUMBER: P1445017

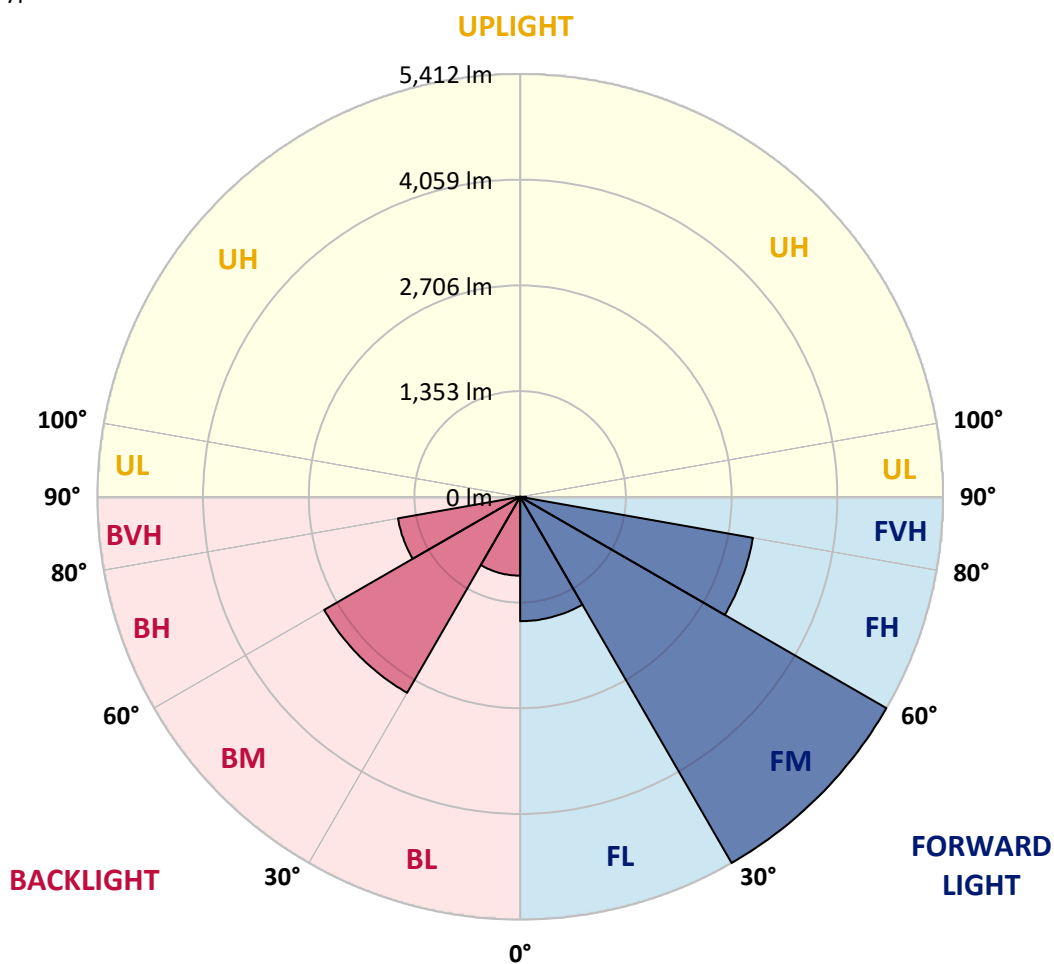
CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1592.0	6.4			
FM	(30°-60°)	5412.0	21.9			
FH	(60°-80°)	3024.9	12.2			G2/5000
FVH	(80°-90°)	75.1	0.3			G1/100
BL	(0°-30°)	1009.1	4.1	B3/2500		
BM	(30°-60°)	2896.7	11.7	B3/5000		
BH	(60°-80°)	1588.4	6.4	B3/2500		G3/2500
BVH	(80°-90°)	49.1	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		9100.8	36.8			

BUG Rating: B3-U0-G3

Type IV Short



REPORT NUMBER: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2435.3	2435.3	2435.3	2435.3	2435.3	2435.3	2435.3	2435.3	2435.3	2435.3	2435.3
1°	2479.1	2478.1	2475.2	2469.0	2459.4	2449.5	2429.3	2419.9	2412.3	2405.1	2400.3
2°	2529.3	2526.5	2518.2	2503.2	2483.3	2461.7	2430.4	2411.0	2393.9	2380.2	2370.3
3°	2584.3	2580.2	2564.8	2540.6	2510.6	2477.7	2435.1	2405.0	2379.3	2359.1	2343.9
4°	2645.9	2638.5	2615.9	2582.8	2541.4	2496.8	2441.3	2401.9	2367.8	2341.0	2321.8
5°	2715.7	2704.9	2674.8	2629.1	2575.2	2517.3	2449.4	2400.1	2359.0	2326.4	2304.6
6°	2791.0	2777.0	2738.9	2681.3	2612.4	2540.0	2459.4	2400.2	2351.8	2315.6	2290.4
7°	2872.7	2855.0	2809.5	2739.1	2653.1	2566.2	2471.8	2403.1	2347.0	2307.3	2279.2
8°	2961.8	2940.4	2884.0	2799.8	2697.1	2594.4	2487.9	2408.8	2345.8	2300.7	2270.3
9°	3058.3	3031.8	2965.3	2865.1	2746.2	2625.3	2505.4	2415.6	2346.5	2296.6	2263.0
10°	3162.9	3131.6	3053.2	2935.7	2797.7	2658.3	2524.0	2424.3	2349.7	2295.5	2257.5
11°	3276.0	3239.3	3146.8	3010.8	2852.2	2695.3	2545.3	2435.3	2354.0	2296.2	2254.7
12°	3397.3	3354.3	3246.6	3090.0	2909.4	2733.1	2568.0	2447.3	2360.4	2298.3	2254.1
13°	3527.9	3477.9	3353.3	3176.3	2970.2	2774.1	2591.8	2460.6	2367.7	2301.7	2255.4
14°	3668.5	3613.0	3469.3	3265.7	3033.6	2816.0	2616.0	2474.0	2375.1	2306.4	2256.5
15°	3819.2	3753.1	3592.1	3362.2	3100.2	2857.6	2641.4	2489.1	2384.6	2311.9	2259.6
16°	3974.5	3902.9	3717.8	3462.2	3171.1	2902.9	2669.2	2504.8	2394.9	2317.4	2262.7
17°	4132.5	4051.1	3844.5	3565.3	3244.7	2949.5	2697.4	2521.9	2406.0	2324.1	2250.6
18°	4284.3	4194.2	3969.9	3668.7	3322.5	2998.0	2725.5	2535.8	2417.8	2332.2	2211.3
19°	4429.7	4333.2	4095.0	3771.0	3401.7	3046.7	2744.9	2545.9	2424.0	2340.7	2183.5
20°	4563.5	4464.9	4214.3	3871.9	3480.8	3093.0	2769.5	2558.6	2427.9	2347.1	2167.8
21°	4681.6	4582.9	4329.0	3970.6	3562.1	3135.7	2796.8	2580.2	2434.4	2317.0	2174.3
22°	4784.7	4692.9	4435.9	4065.5	3642.0	3184.7	2831.2	2601.2	2449.4	2292.3	2182.0
23°	4879.9	4790.2	4536.2	4155.6	3721.4	3235.5	2866.0	2620.0	2463.5	2277.7	2191.2
24°	4962.5	4877.4	4630.3	4242.9	3790.2	3292.1	2898.0	2635.3	2473.0	2267.9	2202.0
25°	5034.7	4955.3	4716.1	4326.0	3855.8	3352.2	2926.8	2654.0	2483.4	2278.2	2213.0
26°	5096.2	5022.7	4794.7	4405.6	3923.0	3411.2	2958.0	2674.5	2495.5	2283.7	2225.9
27°	5150.3	5082.2	4866.6	4483.1	3987.4	3468.1	2991.4	2699.4	2513.2	2290.3	2238.2
28°	5196.3	5132.7	4933.3	4555.4	4049.9	3517.6	3027.9	2725.3	2523.7	2299.8	2250.1
29°	5235.2	5175.8	4991.6	4622.8	4111.3	3568.5	3068.3	2750.8	2509.9	2316.5	2263.4
30°	5267.3	5211.6	5045.4	4689.0	4173.2	3620.2	3109.5	2777.2	2510.8	2333.2	2274.2
31°	5292.8	5241.3	5091.7	4749.1	4231.6	3671.3	3151.7	2803.1	2503.5	2350.7	2277.5
32°	5311.0	5263.0	5130.8	4799.2	4287.0	3723.7	3194.1	2822.7	2509.4	2367.4	2210.4
33°	5324.8	5279.4	5166.7	4846.3	4337.3	3777.0	3236.0	2833.2	2504.3	2381.1	2154.5
34°	5333.7	5290.1	5195.2	4888.0	4382.1	3829.5	3275.0	2845.7	2518.2	2392.7	2132.8
35°	5337.0	5295.4	5220.4	4927.1	4424.3	3881.3	3302.9	2866.3	2532.8	2403.3	2144.8
36°	5335.5	5297.8	5238.6	4964.6	4465.8	3930.2	3328.0	2888.0	2550.3	2415.5	2157.2
37°	5328.7	5294.1	5252.7	4998.3	4505.5	3977.7	3358.2	2910.7	2567.5	2412.7	2166.8
38°	5318.3	5288.0	5261.8	5027.5	4543.8	4024.4	3395.2	2935.6	2579.5	2346.6	2175.0
39°	5304.6	5277.6	5267.0	5053.4	4580.8	4068.3	3430.1	2957.3	2590.7	2294.3	2187.4
40°	5286.8	5264.9	5265.2	5075.5	4616.5	4103.1	3465.5	2976.9	2610.1	2280.6	2203.5
41°	5263.0	5247.3	5261.2	5096.1	4651.0	4132.1	3500.9	2995.1	2634.0	2297.8	2219.3
42°	5236.5	5226.5	5251.2	5114.1	4684.7	4158.6	3536.3	3009.0	2657.5	2316.2	2232.9
43°	5203.2	5202.0	5237.8	5128.0	4718.5	4189.4	3566.1	3023.5	2681.4	2335.6	2185.7
44°	5164.2	5172.6	5220.6	5135.8	4750.3	4221.7	3593.5	3050.3	2706.3	2353.5	2109.8

REPORT NUMBER: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	5120.3	5139.6	5197.6	5138.2	4779.4	4255.8	3617.2	3082.6	2725.4	2365.3	2078.3
46°	5069.2	5100.9	5171.7	5134.9	4808.4	4289.1	3635.1	3115.5	2731.5	2373.1	2089.8
47°	5011.7	5055.5	5142.8	5126.2	4836.0	4321.5	3650.9	3145.8	2732.0	2386.1	2099.5
48°	4951.5	5004.7	5107.9	5113.0	4859.5	4351.6	3665.5	3162.6	2688.0	2401.6	2107.3
49°	4884.0	4947.5	5066.9	5097.1	4877.7	4383.4	3689.5	3173.4	2651.4	2353.5	2118.3
50°	4808.5	4883.7	5020.4	5075.9	4889.3	4410.8	3718.2	3180.3	2638.5	2279.0	2130.0
51°	4726.7	4812.7	4964.9	5049.8	4895.8	4433.5	3746.8	3176.1	2628.8	2247.0	2088.9
52°	4636.3	4735.2	4904.4	5017.2	4898.6	4452.8	3774.0	3197.8	2647.3	2264.1	1975.7
53°	4542.7	4649.5	4837.8	4979.5	4895.4	4470.1	3799.9	3210.4	2658.7	2282.1	1939.8
54°	4443.4	4556.4	4764.0	4938.5	4890.8	4478.6	3823.3	3217.8	2671.2	2295.0	1956.4
55°	4339.7	4459.0	4683.4	4890.2	4879.3	4479.0	3839.1	3233.0	2691.7	2306.8	1974.9
56°	4233.6	4357.2	4601.0	4836.3	4865.6	4476.3	3846.5	3242.0	2714.2	2310.3	1993.1
57°	4126.6	4253.6	4512.4	4779.7	4847.0	4465.4	3845.3	3246.4	2725.8	2230.7	2008.3
58°	4016.4	4144.6	4420.9	4717.2	4821.7	4458.1	3838.2	3254.8	2734.9	2158.4	1906.4
59°	3903.6	4038.5	4327.1	4649.4	4789.4	4449.5	3834.6	3254.7	2689.7	2156.1	1827.0
60°	3784.1	3928.0	4230.2	4577.9	4747.2	4434.4	3827.5	3240.7	2633.3	2181.7	1832.0
61°	3661.4	3813.5	4131.0	4501.6	4696.9	4412.1	3812.4	3222.7	2616.9	2209.6	1838.3
62°	3533.2	3696.9	4034.8	4420.1	4638.3	4380.2	3793.8	3213.3	2624.5	2236.7	1764.2
63°	3408.3	3578.8	3940.2	4336.6	4573.9	4336.4	3761.7	3188.2	2631.4	2182.3	1659.6
64°	3288.6	3465.1	3849.5	4250.1	4498.3	4279.1	3718.2	3158.6	2630.0	2114.2	1638.3
65°	3193.4	3360.5	3759.8	4160.0	4415.8	4210.6	3665.1	3114.8	2601.6	2113.4	1618.3
66°	3122.2	3276.9	3674.1	4070.2	4323.8	4125.4	3601.5	3056.5	2510.6	2126.5	1478.6
67°	3082.1	3214.4	3597.2	3979.0	4219.8	4028.7	3528.4	2981.3	2473.0	2039.5	1456.0
68°	3037.5	3172.0	3528.8	3887.3	4100.1	3918.1	3404.2	2900.9	2487.4	1991.4	1364.0
69°	2937.3	3126.1	3472.4	3797.5	3971.3	3767.9	3201.4	2807.0	2494.4	1984.8	1272.1
70°	2744.1	3043.5	3427.0	3707.4	3841.4	3566.7	2917.7	2670.2	2488.7	1888.4	1179.7
71°	2446.5	2884.2	3384.2	3617.6	3685.4	3313.0	2603.9	2483.3	2408.2	1858.0	1031.8
72°	2141.8	2627.0	3332.1	3522.7	3505.2	3023.8	2320.3	2263.3	2309.3	1787.3	924.6
73°	1816.7	2301.0	3248.8	3428.8	3297.5	2727.0	2061.4	2047.9	2199.1	1731.1	824.5
74°	1447.8	1951.2	3091.5	3315.9	3063.1	2441.6	1758.3	1857.1	2071.0	1631.8	696.7
75°	984.9	1571.5	2821.7	3157.7	2799.7	2115.1	1338.6	1648.5	1907.0	1532.1	621.8
76°	546.0	1115.1	2473.2	2926.3	2523.8	1673.1	918.8	1323.3	1760.0	1358.0	556.4
77°	422.0	637.2	2100.4	2595.0	2217.5	1104.4	499.4	995.6	1615.0	1184.0	490.3
78°	300.8	485.6	1649.7	2140.6	1837.3	614.5	240.5	574.5	1335.7	1009.2	421.7
79°	179.6	335.0	1082.4	1608.8	1339.8	407.2	180.9	416.7	1056.5	796.5	349.9
80°	159.0	184.4	589.7	1058.8	825.7	207.9	121.6	258.9	776.1	606.6	295.7
81°	142.2	159.9	447.2	553.1	601.0	172.3	103.1	101.6	417.7	446.1	266.0
82°	126.9	141.4	309.5	366.7	380.2	147.1	87.4	80.9	306.9	356.2	262.6
83°	112.6	124.5	171.8	192.0	159.5	120.6	72.9	64.1	196.2	282.3	215.9
84°	99.2	108.7	143.3	157.1	129.3	93.9	59.5	50.9	88.5	217.1	166.0
85°	86.2	94.2	116.5	133.2	102.6	73.6	46.5	40.1	75.8	151.9	116.2
86°	73.8	80.9	95.0	111.0	79.0	59.2	34.7	30.8	59.8	87.1	66.7
87°	61.6	68.2	76.4	86.5	60.9	45.0	24.0	22.7	44.1	49.3	41.5
88°	53.2	57.3	59.4	59.8	44.2	30.8	16.9	16.1	30.6	33.8	28.5
89°	44.9	46.5	45.7	42.6	27.7	18.7	9.7	9.5	17.1	18.3	15.5



REPORT NUMBER: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

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

REPORT NUMBER: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-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: P1445017
CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-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: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2435.3	2435.3	2435.3	2435.3	2435.3	2435.3	2435.3	2435.3	2435.3	2435.3	2435.3
1°	2397.8	2398.0	2400.7	2406.0	2413.5	2421.0	2431.7	2433.4	2444.2	2454.9	2464.5
2°	2364.8	2364.6	2368.8	2378.4	2390.9	2407.5	2426.6	2438.7	2460.6	2481.6	2501.0
3°	2336.1	2335.0	2340.5	2352.7	2371.7	2395.1	2423.7	2446.5	2478.8	2512.1	2541.5
4°	2311.5	2310.3	2317.2	2332.3	2355.9	2386.8	2423.6	2456.2	2500.8	2545.8	2586.4
5°	2293.1	2291.1	2298.3	2316.2	2343.0	2380.1	2425.3	2468.7	2525.0	2582.6	2635.6
6°	2277.1	2274.1	2283.0	2303.6	2333.7	2375.5	2429.4	2483.5	2552.1	2623.2	2688.6
7°	2263.4	2260.1	2269.8	2292.8	2328.0	2374.8	2436.2	2501.1	2581.8	2667.7	2749.0
8°	2253.0	2249.1	2259.2	2285.4	2324.2	2376.3	2445.1	2519.9	2614.1	2716.7	2812.9
9°	2243.6	2240.0	2251.2	2280.0	2322.5	2379.5	2454.9	2540.0	2649.0	2768.4	2881.9
10°	2236.9	2232.2	2245.1	2277.1	2322.8	2384.1	2466.4	2563.1	2686.2	2823.5	2955.3
11°	2231.7	2226.8	2241.4	2275.9	2325.4	2391.5	2480.4	2589.2	2728.0	2882.0	3033.6
12°	2228.5	2223.7	2238.9	2276.7	2330.1	2400.2	2496.7	2615.4	2769.8	2944.5	3117.0
13°	2228.1	2222.4	2238.7	2278.7	2336.8	2410.9	2513.6	2643.7	2814.7	3010.5	3207.1
14°	2228.3	2221.6	2240.2	2282.9	2344.9	2422.6	2531.8	2673.0	2860.5	3079.5	3301.9
15°	2225.8	2194.4	2238.1	2287.8	2353.3	2436.1	2550.8	2704.9	2908.8	3153.9	3403.2
16°	2178.6	2149.6	2194.7	2292.9	2362.4	2450.9	2571.2	2736.1	2959.5	3229.4	3509.8
17°	2143.7	2123.2	2161.0	2284.2	2372.4	2466.0	2593.5	2769.5	3011.3	3310.4	3619.2
18°	2125.3	2118.5	2143.0	2245.8	2384.3	2481.8	2613.1	2802.9	3065.9	3395.0	3729.4
19°	2128.0	2121.7	2145.6	2220.9	2395.0	2493.5	2626.7	2830.9	3121.7	3480.5	3839.2
20°	2132.8	2126.3	2150.9	2208.2	2404.7	2501.5	2643.2	2858.8	3179.1	3567.8	3945.4
21°	2139.1	2133.6	2158.0	2213.9	2384.8	2511.5	2666.5	2890.7	3231.2	3657.0	4048.2
22°	2148.0	2141.6	2167.3	2223.6	2356.0	2530.0	2692.6	2927.6	3284.3	3743.3	4145.3
23°	2157.4	2152.3	2178.9	2234.5	2342.7	2549.3	2719.2	2967.8	3343.1	3829.3	4238.1
24°	2167.6	2162.6	2190.8	2246.9	2338.7	2565.3	2740.7	3008.1	3405.0	3911.1	4326.1
25°	2178.3	2172.5	2202.3	2260.3	2349.5	2577.7	2761.1	3044.7	3470.3	3983.4	4408.2
26°	2189.5	2184.2	2214.6	2275.7	2359.5	2590.6	2783.2	3079.2	3536.7	4049.5	4486.9
27°	2200.6	2196.3	2226.6	2289.9	2367.4	2606.6	2807.5	3116.1	3602.4	4115.4	4562.8
28°	2212.3	2184.1	2238.9	2304.5	2377.4	2620.1	2835.9	3156.0	3664.0	4178.6	4635.3
29°	2177.2	2106.4	2211.8	2318.9	2393.8	2615.9	2865.0	3198.2	3718.2	4239.9	4703.9
30°	2104.2	2064.7	2137.4	2330.9	2412.1	2612.6	2894.0	3242.5	3775.3	4301.3	4768.0
31°	2068.6	2069.9	2101.2	2335.7	2430.8	2612.4	2922.7	3288.4	3831.1	4359.2	4829.3
32°	2075.6	2086.1	2107.0	2281.6	2450.2	2613.2	2945.7	3334.2	3884.2	4414.6	4884.8
33°	2090.2	2103.1	2121.5	2226.6	2467.7	2612.7	2960.4	3379.1	3939.1	4467.9	4933.5
34°	2104.6	2120.7	2136.5	2202.4	2481.9	2626.7	2975.3	3423.8	3991.6	4514.4	4975.3
35°	2119.4	2140.1	2151.6	2211.8	2495.7	2642.1	2998.1	3459.7	4044.8	4555.4	5015.1
36°	2135.6	2157.8	2167.7	2226.9	2506.7	2659.5	3022.6	3489.2	4094.6	4595.9	5052.8
37°	2149.9	2174.5	2183.6	2238.1	2513.1	2678.9	3047.5	3522.7	4142.7	4634.6	5088.1
38°	2163.8	2187.8	2198.7	2247.6	2448.9	2694.0	3075.9	3560.4	4189.1	4673.8	5117.7
39°	2174.0	2107.8	2210.8	2257.9	2398.7	2707.2	3103.8	3597.9	4233.2	4710.8	5143.2
40°	2091.5	2031.1	2137.6	2274.2	2383.7	2726.3	3127.3	3634.8	4270.7	4745.4	5165.2
41°	2017.0	2014.9	2059.4	2291.6	2398.6	2751.7	3148.1	3672.2	4299.7	4780.0	5184.4
42°	1999.8	2026.3	2037.8	2307.4	2417.4	2778.2	3162.8	3709.0	4325.8	4814.4	5199.1
43°	2013.4	2039.0	2051.6	2276.4	2437.5	2804.4	3178.9	3743.5	4353.8	4847.0	5210.9
44°	2028.3	2050.9	2067.4	2195.1	2456.9	2831.5	3209.7	3775.0	4382.7	4876.5	5218.0

REPORT NUMBER: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2043.5	2062.8	2082.6	2156.8	2470.7	2853.2	3244.1	3802.8	4413.6	4904.1	5218.0
46°	2059.1	2069.9	2098.3	2165.3	2480.0	2861.5	3278.6	3821.2	4446.0	4928.7	5211.7
47°	2073.9	1986.5	2111.1	2174.5	2492.0	2867.0	3312.6	3836.2	4476.1	4952.0	5199.1
48°	1994.6	1872.3	2044.7	2182.5	2508.1	2843.9	3338.8	3849.1	4504.3	4972.1	5184.1
49°	1883.2	1850.2	1931.0	2193.2	2477.8	2805.5	3346.2	3871.4	4529.6	4985.7	5164.6
50°	1863.6	1859.4	1903.7	2203.7	2400.2	2778.3	3351.5	3898.1	4552.3	4991.7	5140.7
51°	1879.0	1869.7	1919.0	2175.0	2356.7	2766.3	3346.9	3921.9	4568.5	4990.3	5113.0
52°	1895.2	1879.8	1933.4	2060.5	2370.1	2780.2	3348.0	3944.4	4580.8	4985.0	5078.4
53°	1909.7	1884.4	1947.1	2016.3	2388.7	2791.4	3361.4	3963.2	4587.7	4974.0	5040.2
54°	1916.9	1748.8	1955.1	2031.8	2400.8	2801.9	3364.9	3978.6	4584.7	4962.3	4995.4
55°	1794.0	1665.2	1832.8	2049.8	2412.2	2815.4	3367.2	3986.1	4574.5	4944.7	4947.8
56°	1702.9	1659.3	1740.6	2068.6	2416.0	2836.2	3367.5	3982.1	4557.3	4925.0	4895.4
57°	1696.9	1662.2	1730.9	2082.1	2357.0	2844.3	3363.2	3968.5	4534.5	4899.6	4836.8
58°	1699.5	1648.3	1732.9	1985.5	2272.6	2848.4	3361.3	3950.9	4510.5	4864.3	4774.1
59°	1667.6	1452.7	1706.7	1899.2	2264.1	2816.9	3356.3	3933.5	4486.1	4824.6	4706.2
60°	1495.5	1399.3	1533.0	1899.6	2288.7	2747.3	3332.9	3912.9	4455.6	4778.2	4631.7
61°	1462.3	1317.1	1495.4	1905.1	2315.1	2713.5	3304.9	3886.6	4418.5	4723.1	4552.3
62°	1457.9	1234.9	1486.1	1841.8	2338.5	2712.7	3288.8	3853.8	4373.3	4658.5	4469.7
63°	1373.0	1153.6	1398.9	1726.3	2290.5	2711.9	3259.9	3810.2	4317.8	4583.0	4383.3
64°	1288.2	1130.2	1311.7	1703.4	2208.7	2704.4	3221.9	3753.2	4250.7	4501.6	4295.8
65°	1203.1	1032.6	1223.9	1689.1	2196.7	2673.3	3168.6	3682.6	4167.9	4412.3	4201.3
66°	1070.2	863.5	1094.1	1539.1	2197.3	2582.9	3101.8	3598.4	4069.5	4315.5	4102.0
67°	935.1	823.3	954.3	1506.7	2106.7	2523.7	3022.1	3496.7	3962.2	4204.3	4003.1
68°	841.2	574.9	863.2	1447.6	2055.9	2526.1	2913.3	3321.0	3825.1	4081.3	3905.1
69°	685.4	474.7	704.2	1321.1	2036.6	2521.0	2782.2	3061.7	3635.2	3945.9	3810.4
70°	548.9	327.1	564.7	1194.6	1933.3	2500.9	2600.7	2722.1	3396.5	3796.5	3709.5
71°	377.5	179.4	377.1	1068.5	1887.2	2399.4	2373.0	2408.2	3097.2	3619.7	3603.8
72°	208.6	32.9	195.0	960.4	1807.9	2268.5	2130.3	2120.5	2779.6	3419.3	3497.8
73°	175.6	0.4	158.2	847.4	1727.1	2133.6	1895.1	1833.8	2468.7	3177.3	3379.3
74°	142.7	0.3	121.6	696.9	1607.5	1985.2	1676.7	1492.9	2160.7	2902.3	3240.7
75°	109.8	0.3	105.5	611.5	1473.9	1811.2	1347.2	1045.9	1793.5	2597.6	3047.4
76°	83.5	0.3	84.1	543.6	1285.1	1638.0	1017.6	605.9	1298.0	2276.1	2788.1
77°	58.8	0.4	66.6	479.2	1096.2	1388.1	687.8	389.3	773.1	1934.0	2426.1
78°	44.0	0.4	53.9	415.3	907.5	1138.3	354.1	177.9	578.5	1515.1	1956.8
79°	43.3	0.5	53.5	345.3	726.0	886.7	231.2	135.7	386.8	1024.5	1418.5
80°	58.0	0.5	64.6	298.9	563.9	507.0	109.7	115.1	195.1	598.7	882.6
81°	71.0	0.6	66.8	277.8	423.7	367.7	88.0	97.9	165.9	397.4	646.9
82°	62.7	0.7	41.7	258.9	328.7	228.4	72.4	82.4	141.7	199.1	416.9
83°	39.1	0.8	29.6	196.3	246.8	89.9	59.1	68.5	116.9	152.1	187.0
84°	28.7	0.9	17.6	133.7	164.8	74.9	47.5	56.1	92.5	125.3	155.5
85°	18.2	1.0	5.8	71.7	83.8	59.1	37.8	43.7	72.2	98.3	132.1
86°	8.0	1.1	5.2	36.4	46.6	44.0	29.1	31.3	58.0	76.3	110.0
87°	5.9	1.2	5.2	25.7	26.6	31.6	21.4	21.0	43.9	58.8	85.4
88°	4.3	1.3	4.6	14.9	18.6	22.1	15.1	12.3	29.8	42.8	59.4
89°	3.3	1.4	2.9	4.3	10.5	12.5	8.8	5.2	18.2	26.7	42.4

REPORT NUMBER: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-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: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-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: P1445017
CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-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: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2435.3	2435.3	2435.3
1°	2471.6	2476.7	2479.1
2°	2515.7	2525.7	2529.3
3°	2564.2	2579.2	2584.3
4°	2618.6	2639.6	2645.9
5°	2677.8	2706.7	2715.7
6°	2743.2	2780.2	2791.0
7°	2815.1	2858.6	2872.7
8°	2892.6	2944.6	2961.8
9°	2976.4	3038.4	3058.3
10°	3064.1	3139.9	3162.9
11°	3162.2	3248.2	3276.0
12°	3266.1	3366.9	3397.3
13°	3378.2	3491.8	3527.9
14°	3497.9	3626.8	3668.5
15°	3623.4	3769.5	3819.2
16°	3751.1	3915.2	3974.5
17°	3880.9	4065.0	4132.5
18°	4011.5	4213.6	4284.3
19°	4137.7	4356.6	4429.7
20°	4259.8	4489.3	4563.5
21°	4374.2	4610.2	4681.6
22°	4480.8	4720.5	4784.7
23°	4583.2	4816.8	4879.9
24°	4678.1	4902.8	4962.5
25°	4766.0	4978.3	5034.7
26°	4846.2	5044.8	5096.2
27°	4921.7	5102.3	5150.3
28°	4986.8	5152.3	5196.3
29°	5046.5	5193.7	5235.2
30°	5098.1	5228.0	5267.3
31°	5144.8	5257.0	5292.8
32°	5185.0	5280.3	5311.0
33°	5219.5	5296.7	5324.8
34°	5246.8	5308.1	5333.7
35°	5269.2	5313.9	5337.0
36°	5286.8	5313.3	5335.5
37°	5300.0	5310.0	5328.7
38°	5307.9	5303.5	5318.3
39°	5310.7	5291.9	5304.6
40°	5309.1	5278.1	5286.8
41°	5303.7	5261.6	5263.0
42°	5293.5	5240.8	5236.5
43°	5278.5	5216.8	5203.2
44°	5260.4	5188.4	5164.2

REPORT NUMBER: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	5237.6	5155.6	5120.3
46°	5212.0	5118.1	5069.2
47°	5181.4	5073.4	5011.7
48°	5148.5	5024.4	4951.5
49°	5109.1	4969.2	4884.0
50°	5062.6	4908.5	4808.5
51°	5009.5	4840.3	4726.7
52°	4947.8	4763.1	4636.3
53°	4881.0	4681.9	4542.7
54°	4808.0	4591.7	4443.4
55°	4732.3	4498.5	4339.7
56°	4649.8	4396.7	4233.6
57°	4563.4	4293.2	4126.6
58°	4471.8	4186.3	4016.4
59°	4376.7	4078.0	3903.6
60°	4280.7	3966.1	3784.1
61°	4184.8	3852.4	3661.4
62°	4088.6	3734.9	3533.2
63°	3995.9	3621.5	3408.3
64°	3908.8	3511.8	3288.6
65°	3824.2	3410.6	3193.4
66°	3742.2	3325.5	3122.2
67°	3664.3	3263.8	3082.1
68°	3592.4	3220.9	3037.5
69°	3528.6	3174.9	2937.3
70°	3478.4	3099.7	2744.1
71°	3427.0	2952.8	2446.5
72°	3363.7	2699.4	2141.8
73°	3270.4	2371.0	1816.7
74°	3099.6	2008.6	1447.8
75°	2827.5	1626.0	984.9
76°	2480.9	1189.8	546.0
77°	2087.9	709.7	422.0
78°	1617.6	532.7	300.8
79°	1063.2	361.0	179.6
80°	596.9	189.2	159.0
81°	449.4	164.9	142.2
82°	312.6	145.7	126.9
83°	175.7	128.3	112.6
84°	145.5	111.8	99.2
85°	118.0	96.7	86.2
86°	96.4	82.9	73.8
87°	77.3	69.8	61.6
88°	59.2	58.5	53.2
89°	45.7	47.1	44.9

REPORT NUMBER: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-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: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-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: P1445017

CATALOG NUMBER: XAS180-SFPM (5000K-108W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)