

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: P1436755

Luminaire Tested: XAS180-SFPM (5000K-144W-T4)

Issue Date: 3/25/2026

Test Information

Test Method: LM-79-2024
Report Number: P1436755
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 (5000K-144W-T4)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 80% (144W)
OPTICS - TYPE 4
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

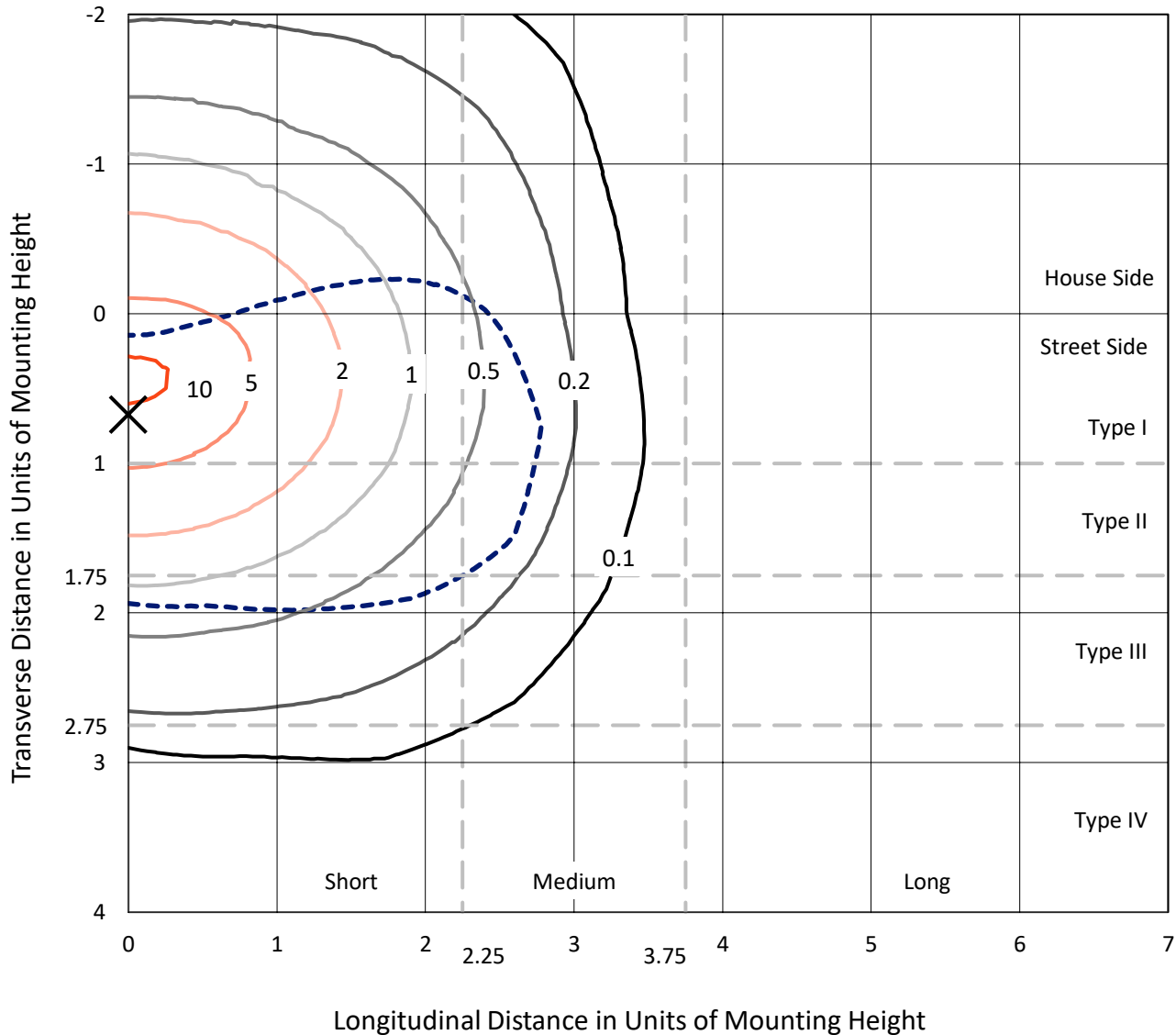
Lumens per Lamp: 24407 (1 lamp)
Luminaire Lumens: 23131.5 lumens
Efficiency: 94.8%
Efficacy: 161.5 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 143.2
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

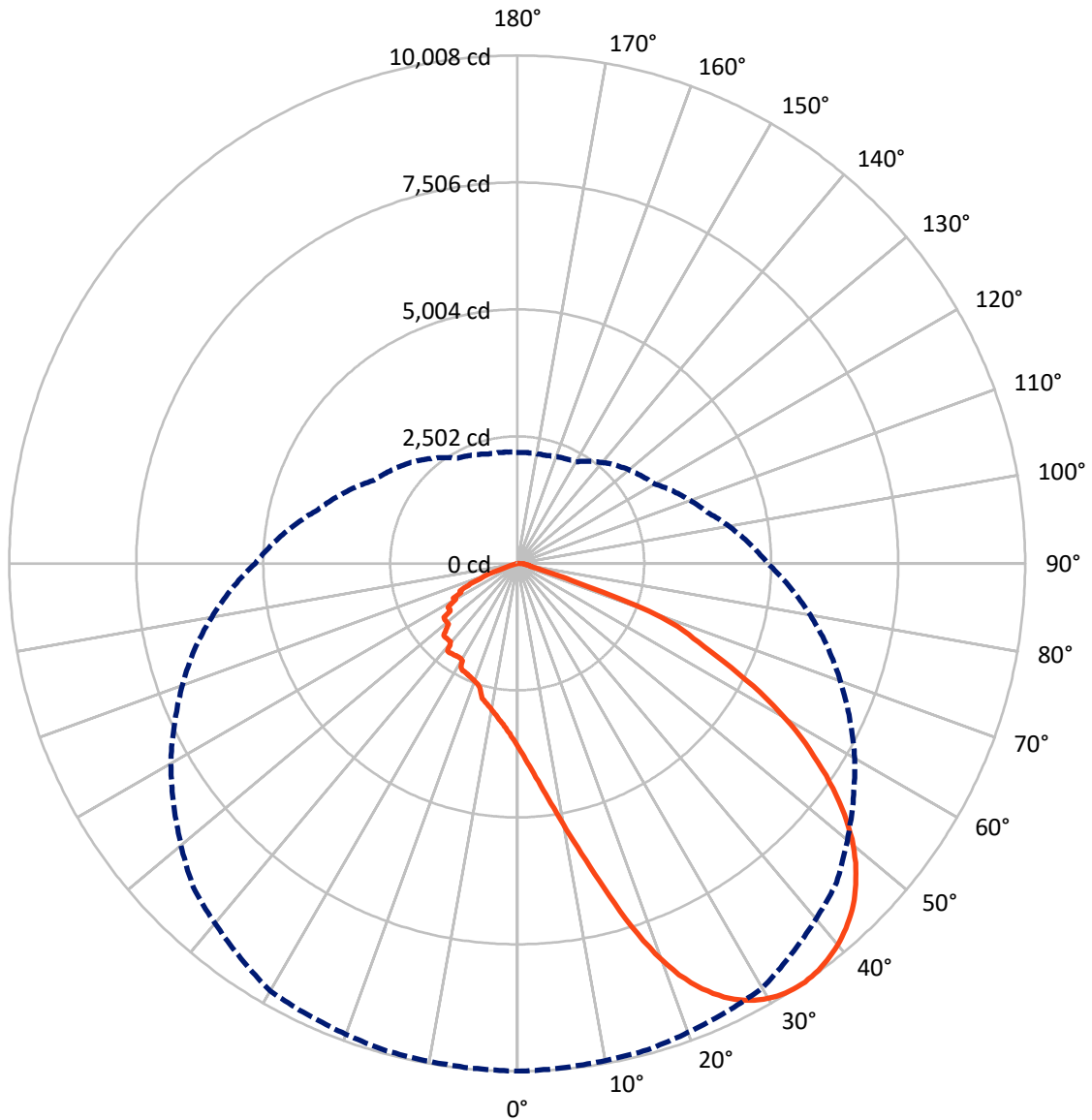
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.3 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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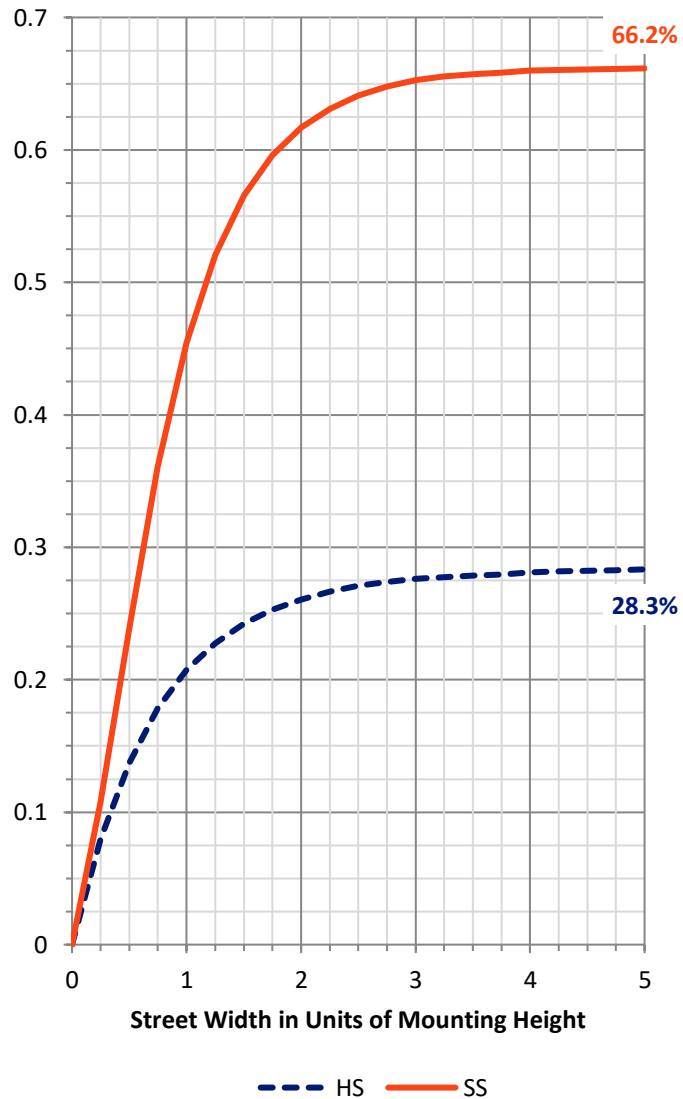
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6956.7	0.0	6956.7
	% Lamp	28.5	0.0	28.5
Street Side	Lumens	16174.7	0.0	16174.7
	% Lamp	66.3	0.0	66.3
Total	Lumens	23131.5	0.0	23131.5
	% Lamp	94.8	0.0	94.8

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	363.3	1.6	1.5
10°-20°	1262.0	5.5	5.2
20°-30°	2448.6	10.6	10.0
30°-40°	3599.8	15.6	14.7
40°-50°	4466.8	19.3	18.3
50°-60°	4759.4	20.6	19.5
60°-70°	4137.6	17.9	17.0
70°-80°	1914.1	8.3	7.8
80°-90°	179.8	0.8	0.7
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	23131.5	100.0	94.8
0°-180°	23131.5	100.0	94.8

Coefficient of Utilization



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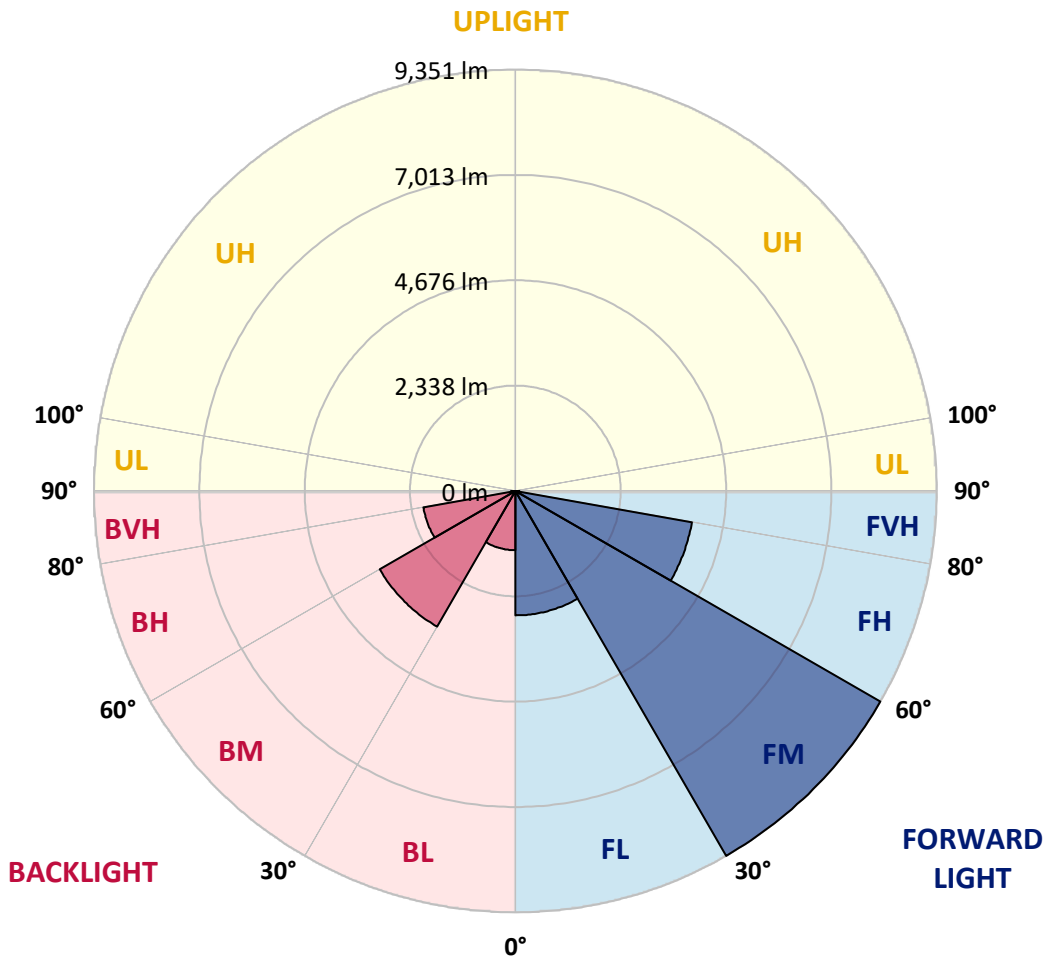
CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2760.7	11.3			
FM (30°-60°)	9351.1	38.3			
FH (60°-80°)	3978.6	16.3			G2/5000
FVH (80°-90°)	84.4	0.3			G1/100
BL (0°-30°)	1313.3	5.4	B3/2500		
BM (30°-60°)	3474.9	14.2	B3/5000		
BH (60°-80°)	2073.1	8.5	B3/2500		G3/2500
BVH (80°-90°)	95.4	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	1275.5	5.2			

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°	3635.1	3635.1	3635.1	3635.1	3635.1	3635.1	3635.1	3635.1	3635.1	3635.1	3635.1
1°	3748.6	3746.4	3737.3	3720.2	3697.4	3670.8	3622.7	3597.8	3575.3	3557.4	3544.3
2°	3871.6	3866.5	3842.2	3805.1	3755.9	3700.6	3624.4	3572.8	3527.2	3491.0	3462.5
3°	4005.4	3992.0	3954.2	3895.0	3821.1	3736.8	3630.3	3553.5	3485.3	3429.7	3388.7
4°	4152.5	4132.8	4079.0	3995.2	3890.1	3775.6	3639.0	3536.9	3447.4	3374.2	3322.2
5°	4312.9	4287.7	4212.7	4103.4	3965.0	3818.5	3650.8	3522.6	3413.2	3325.1	3263.2
6°	4489.2	4452.8	4360.5	4221.1	4049.1	3865.5	3665.2	3512.3	3381.6	3281.4	3209.1
7°	4675.7	4631.5	4517.9	4347.0	4136.9	3917.7	3685.2	3506.9	3356.0	3241.3	3157.9
8°	4879.7	4828.3	4689.3	4481.6	4232.1	3973.7	3708.9	3505.0	3334.0	3204.7	3112.3
9°	5101.7	5040.1	4871.7	4627.0	4333.3	4034.0	3735.0	3504.7	3316.7	3171.4	3069.2
10°	5333.8	5259.6	5067.2	4778.2	4440.8	4099.6	3765.1	3508.2	3300.4	3142.9	3028.8
11°	5585.9	5500.8	5275.1	4941.4	4554.7	4169.2	3798.1	3514.4	3287.2	3116.7	2992.3
12°	5859.5	5759.4	5494.7	5116.6	4673.5	4242.2	3833.4	3522.8	3277.2	3092.9	2959.6
13°	6150.6	6033.2	5732.6	5299.2	4800.5	4320.0	3870.8	3532.7	3268.7	3070.7	2929.3
14°	6467.0	6336.3	5987.9	5493.1	4933.0	4400.1	3908.0	3542.8	3261.1	3050.8	2901.0
15°	6805.6	6653.3	6258.5	5699.5	5072.2	4482.6	3949.1	3554.8	3255.2	3032.4	2872.6
16°	7154.9	6982.6	6538.9	5918.8	5217.5	4568.1	3992.6	3569.3	3250.7	3015.1	2846.9
17°	7498.5	7309.4	6814.3	6144.1	5371.4	4657.0	4037.4	3584.4	3247.5	2999.1	2820.9
18°	7841.1	7630.2	7091.0	6366.1	5533.1	4749.5	4082.9	3597.7	3245.2	2984.3	2781.1
19°	8159.2	7939.2	7363.7	6585.1	5699.6	4845.1	4114.7	3600.9	3238.6	2971.0	2688.0
20°	8450.5	8225.1	7628.7	6803.7	5865.6	4935.9	4154.5	3610.0	3223.7	2957.8	2622.0
21°	8711.8	8486.7	7877.8	7014.6	6034.4	5018.5	4194.7	3630.3	3212.5	2943.1	2604.4
22°	8939.2	8721.4	8112.4	7218.1	6199.1	5116.2	4247.5	3651.4	3214.4	2890.6	2588.3
23°	9140.3	8934.1	8326.5	7414.4	6362.5	5210.9	4303.4	3670.7	3216.5	2823.6	2574.8
24°	9316.0	9120.7	8528.9	7598.0	6506.3	5320.5	4355.6	3682.1	3212.1	2770.0	2564.6
25°	9468.2	9284.4	8711.5	7775.1	6644.5	5434.8	4399.5	3698.1	3207.7	2761.3	2554.6
26°	9596.7	9425.6	8878.0	7937.7	6781.1	5547.0	4445.9	3713.9	3204.9	2750.8	2546.7
27°	9704.7	9548.4	9032.1	8097.4	6912.6	5656.8	4497.7	3738.6	3211.3	2736.8	2538.2
28°	9793.8	9649.8	9165.9	8247.2	7035.3	5754.3	4551.1	3763.3	3220.7	2726.7	2530.4
29°	9867.8	9732.2	9283.0	8384.6	7155.5	5846.4	4613.8	3788.2	3228.7	2726.4	2524.3
30°	9923.7	9800.5	9387.0	8515.0	7277.7	5942.6	4676.6	3814.8	3217.9	2728.7	2518.3
31°	9967.3	9852.6	9476.4	8633.5	7390.8	6039.7	4742.0	3842.1	3170.0	2732.1	2506.7
32°	9993.8	9890.5	9550.3	8731.6	7496.9	6132.5	4806.7	3866.0	3159.8	2735.3	2491.4
33°	10007.1	9913.2	9613.8	8818.6	7593.4	6229.6	4872.0	3873.2	3122.0	2738.5	2394.2
34°	10008.0	9922.7	9663.0	8897.1	7677.7	6324.6	4935.0	3880.9	3126.2	2738.7	2310.5
35°	9996.7	9921.8	9700.0	8971.8	7752.8	6415.1	4981.5	3900.0	3132.3	2736.5	2305.5
36°	9974.9	9910.4	9721.8	9037.4	7823.2	6501.8	5019.8	3922.2	3140.4	2735.3	2307.3
37°	9941.7	9888.6	9732.2	9092.0	7892.0	6584.8	5063.6	3945.5	3154.4	2739.1	2309.0
38°	9900.0	9856.4	9733.2	9134.0	7959.3	6667.2	5118.0	3972.0	3163.1	2740.1	2307.3
39°	9848.8	9817.5	9722.8	9168.9	8018.9	6742.0	5166.9	4000.6	3165.3	2609.3	2305.8
40°	9790.0	9769.2	9699.1	9196.2	8076.4	6804.2	5219.4	4021.4	3179.1	2549.3	2311.6
41°	9719.9	9710.4	9667.8	9217.5	8126.2	6848.5	5269.9	4040.3	3199.8	2558.0	2317.2
42°	9639.4	9645.0	9625.1	9235.9	8179.1	6891.5	5321.6	4056.8	3220.8	2570.2	2323.5
43°	9547.4	9568.3	9572.1	9241.5	8228.9	6935.7	5370.2	4066.0	3242.9	2584.1	2325.9
44°	9443.8	9483.0	9510.5	9235.2	8273.7	6984.0	5410.9	4094.1	3266.7	2599.1	2251.1



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CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	9326.6	9385.1	9437.0	9215.8	8313.4	7030.4	5443.0	4133.0	3291.6	2611.9	2149.3
46°	9192.4	9274.4	9355.8	9185.6	8350.4	7076.5	5472.2	4173.1	3302.0	2611.7	2151.9
47°	9051.0	9147.8	9264.3	9142.2	8382.3	7120.2	5490.8	4214.6	3300.8	2618.4	2158.2
48°	8902.1	9011.7	9162.0	9087.4	8406.2	7156.4	5504.4	4257.9	3312.0	2633.8	2161.2
49°	8733.2	8855.4	9046.6	9024.9	8419.8	7192.1	5533.0	4294.8	3254.7	2643.5	2158.5
50°	8545.7	8687.5	8915.2	8950.5	8420.5	7225.2	5572.6	4302.7	3203.7	2559.7	2158.8
51°	8342.9	8499.7	8766.4	8861.0	8404.7	7246.3	5612.3	4274.8	3156.5	2457.2	2162.2
52°	8124.5	8295.8	8604.2	8757.8	8382.9	7257.6	5648.1	4300.6	3180.1	2465.1	2065.3
53°	7892.0	8074.2	8424.1	8643.9	8347.8	7262.5	5679.6	4309.0	3201.2	2480.5	1960.7
54°	7642.1	7833.3	8230.9	8513.2	8301.6	7261.5	5707.7	4304.4	3212.6	2501.2	1970.7
55°	7387.3	7585.2	8021.7	8368.6	8240.3	7241.6	5730.5	4330.2	3230.6	2512.5	1984.7
56°	7111.8	7324.6	7795.3	8211.8	8171.3	7206.7	5735.4	4346.9	3259.7	2520.8	2000.7
57°	6837.6	7051.9	7562.5	8038.0	8091.8	7162.1	5729.7	4346.8	3283.1	2517.3	2016.1
58°	6552.4	6771.8	7318.4	7849.9	7997.2	7120.8	5706.9	4361.7	3293.6	2382.3	2024.2
59°	6254.8	6487.5	7061.6	7653.8	7886.4	7077.4	5685.4	4375.9	3315.6	2350.3	1864.0
60°	5936.9	6190.3	6798.4	7439.7	7755.5	7023.8	5665.1	4365.2	3225.9	2382.5	1877.4
61°	5597.1	5876.4	6522.9	7216.8	7606.6	6957.9	5629.3	4327.6	3175.0	2420.8	1882.9
62°	5242.2	5550.0	6244.9	6980.0	7448.7	6873.8	5589.2	4316.1	3195.7	2461.7	1828.3
63°	4870.1	5208.7	5962.7	6732.4	7271.3	6770.3	5533.7	4285.1	3211.4	2492.8	1774.0
64°	4510.0	4872.1	5680.6	6479.5	7073.3	6648.0	5457.1	4235.8	3223.1	2376.6	1762.1
65°	4183.4	4536.5	5387.8	6219.0	6860.5	6503.2	5363.6	4178.6	3207.6	2389.0	1781.9
66°	3896.3	4232.7	5102.1	5954.6	6633.3	6334.6	5240.8	4093.7	3119.8	2419.5	1677.7
67°	3660.4	3955.7	4818.2	5692.0	6390.2	6138.4	5111.5	4004.2	3023.0	2399.8	1653.4
68°	3407.1	3712.8	4541.7	5422.3	6116.1	5919.0	4917.7	3872.6	3046.5	2340.5	1695.4
69°	3035.2	3456.9	4281.8	5159.7	5826.5	5655.8	4624.4	3716.0	3060.5	2356.6	1551.0
70°	2489.8	3118.9	4039.4	4894.2	5529.5	5329.6	4199.9	3505.1	3066.8	2293.5	1543.9
71°	1772.5	2646.7	3796.4	4630.1	5193.2	4942.8	3712.8	3229.8	3004.3	2298.8	1336.3
72°	1128.2	2004.3	3523.1	4356.0	4819.8	4488.4	3295.4	2923.4	2890.5	2285.7	1288.6
73°	868.2	1326.7	3195.3	4074.0	4402.5	3995.3	2898.8	2655.1	2776.9	2251.8	1195.4
74°	616.4	806.5	2752.5	3755.9	3959.8	3494.7	2345.9	2456.9	2653.5	2270.9	1083.3
75°	364.6	594.3	2138.4	3348.7	3477.7	2955.4	1793.0	2078.5	2512.6	2223.8	1043.4
76°	321.6	388.3	1492.6	2846.2	2980.7	2283.8	1239.7	1700.0	2388.6	2163.0	1016.9
77°	287.7	333.5	973.7	2223.8	2464.6	1502.8	677.1	1320.7	2285.6	1956.2	959.7
78°	260.0	294.5	761.2	1484.3	1913.3	864.4	353.2	762.1	1987.1	1749.3	865.7
79°	235.5	263.0	558.3	809.4	1330.8	599.7	288.9	558.3	1688.7	1540.4	735.0
80°	213.3	235.7	355.5	558.7	831.9	337.1	224.6	354.4	1385.5	1256.8	629.6
81°	192.8	211.3	300.6	318.6	546.1	284.5	161.1	153.8	769.3	940.4	569.0
82°	173.7	188.7	260.7	272.5	265.6	243.1	135.9	119.5	563.8	749.2	566.8
83°	155.4	167.4	225.6	237.8	206.2	197.3	113.3	92.2	358.4	593.5	465.5
84°	137.7	147.6	191.0	206.6	167.6	149.6	91.9	72.2	153.6	423.7	346.4
85°	120.8	129.0	154.3	177.0	133.5	114.2	71.1	55.8	134.9	313.6	244.7
86°	104.0	111.4	125.8	148.1	104.0	88.5	52.2	42.3	108.0	203.4	143.6
87°	89.5	94.7	101.9	116.7	81.3	66.7	40.0	32.8	80.1	94.5	88.1
88°	75.1	80.7	83.4	89.7	58.8	44.9	27.9	23.3	60.8	64.3	60.0
89°	60.7	66.6	65.1	62.7	36.2	26.2	15.8	13.8	41.4	34.1	32.0



REPORT NUMBER: P1436755

CATALOG NUMBER: XAS180-SFPM (5000K-144W-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: P1436755

CATALOG NUMBER: XAS180-SFPM (5000K-144W-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: P1436755

CATALOG NUMBER: XAS180-SFPM (5000K-144W-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: P1436755

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3635.1	3635.1	3635.1	3635.1	3635.1	3635.1	3635.1	3635.1	3635.1	3635.1	3635.1
1°	3538.3	3538.5	3543.7	3556.8	3574.2	3596.7	3621.1	3628.6	3657.6	3684.7	3708.4
2°	3448.7	3446.2	3456.7	3479.1	3512.1	3553.2	3602.3	3636.8	3694.1	3749.4	3798.4
3°	3367.3	3361.8	3375.3	3406.9	3454.9	3515.7	3587.2	3649.5	3734.5	3817.3	3891.8
4°	3293.5	3287.8	3302.8	3341.6	3402.5	3482.3	3576.4	3664.7	3778.8	3890.9	3995.3
5°	3228.4	3220.2	3237.2	3283.6	3355.4	3453.1	3569.1	3683.4	3827.8	3972.6	4106.8
6°	3166.6	3156.5	3177.0	3230.5	3314.8	3426.5	3564.4	3705.5	3881.3	4061.8	4228.4
7°	3110.2	3097.8	3120.5	3180.8	3276.6	3405.0	3563.8	3732.9	3938.6	4155.3	4358.4
8°	3058.0	3043.3	3068.5	3136.1	3242.5	3385.9	3566.0	3760.3	4000.5	4255.0	4498.1
9°	3008.5	2991.4	3019.7	3094.3	3212.2	3370.0	3570.1	3791.9	4067.9	4362.2	4648.3
10°	2962.3	2943.9	2974.9	3056.2	3183.5	3356.3	3576.3	3826.8	4137.7	4475.3	4805.3
11°	2919.8	2899.1	2933.3	3021.8	3159.5	3345.1	3585.5	3866.5	4214.6	4596.0	4974.3
12°	2880.8	2858.8	2893.4	2989.2	3137.7	3336.4	3598.1	3907.5	4292.2	4724.1	5153.5
13°	2845.3	2820.3	2858.0	2959.5	3118.3	3330.7	3612.7	3951.6	4375.5	4858.3	5345.5
14°	2811.1	2783.1	2823.9	2931.8	3101.6	3326.9	3629.0	3996.5	4461.5	4997.9	5548.9
15°	2777.5	2746.8	2790.6	2905.3	3086.5	3326.1	3646.0	4044.6	4551.7	5150.2	5767.1
16°	2738.8	2665.7	2753.5	2880.1	3071.7	3326.3	3663.7	4094.9	4645.4	5306.3	5996.8
17°	2633.6	2574.8	2653.5	2855.2	3058.2	3327.0	3685.1	4145.4	4743.4	5473.8	6228.3
18°	2559.5	2527.3	2577.4	2816.5	3046.7	3329.2	3706.4	4198.1	4844.8	5646.8	6462.9
19°	2532.4	2499.7	2548.7	2731.0	3035.0	3329.5	3714.9	4243.3	4949.3	5822.5	6699.5
20°	2509.1	2474.8	2525.2	2667.0	3023.6	3318.9	3729.6	4285.0	5058.9	6000.7	6928.9
21°	2488.6	2454.1	2504.4	2643.1	3010.4	3311.9	3751.2	4332.3	5158.5	6181.3	7149.2
22°	2472.1	2435.3	2487.9	2628.8	2958.7	3317.0	3778.9	4390.1	5259.5	6362.0	7357.6
23°	2457.7	2419.5	2474.6	2616.4	2896.8	3324.0	3806.5	4452.5	5374.7	6535.2	7550.9
24°	2444.4	2404.9	2462.2	2606.6	2851.6	3331.1	3830.5	4516.5	5489.5	6705.8	7735.6
25°	2432.5	2390.8	2450.4	2598.6	2839.3	3329.2	3847.5	4577.1	5613.8	6853.5	7907.9
26°	2420.5	2379.4	2440.4	2592.2	2834.2	3328.9	3869.5	4628.3	5738.6	6988.8	8072.1
27°	2410.5	2369.8	2431.2	2586.6	2822.5	3330.8	3890.2	4685.8	5864.6	7123.1	8226.6
28°	2402.4	2361.6	2423.7	2581.1	2814.0	3342.2	3920.6	4745.7	5982.6	7251.6	8373.7
29°	2394.1	2326.5	2415.7	2576.8	2813.1	3353.1	3951.7	4812.5	6086.5	7366.6	8507.8
30°	2329.0	2199.9	2360.9	2573.4	2817.6	3344.5	3983.3	4882.2	6191.1	7483.9	8635.0
31°	2219.2	2175.5	2249.2	2562.8	2823.1	3317.8	4014.1	4952.3	6295.6	7596.3	8753.7
32°	2201.1	2176.2	2229.2	2550.8	2830.2	3291.8	4044.0	5023.4	6393.5	7702.6	8861.1
33°	2199.6	2179.1	2228.3	2478.0	2837.2	3266.5	4057.1	5093.8	6489.8	7797.7	8950.7
34°	2200.5	2184.5	2229.3	2390.6	2844.1	3267.6	4070.5	5165.0	6586.8	7882.5	9027.5
35°	2202.4	2191.7	2232.2	2378.6	2845.4	3275.4	4092.9	5225.4	6679.4	7955.5	9095.0
36°	2205.8	2198.1	2236.5	2381.8	2845.9	3285.0	4118.1	5272.1	6766.0	8023.4	9158.9
37°	2207.1	2203.5	2239.4	2386.4	2846.6	3297.5	4146.0	5322.1	6848.1	8090.0	9214.4
38°	2207.5	2208.4	2241.3	2385.8	2847.1	3311.8	4177.3	5377.8	6926.6	8154.9	9260.5
39°	2206.8	2208.7	2242.9	2384.9	2740.2	3317.9	4211.0	5431.7	7000.5	8212.4	9293.6
40°	2202.3	2087.4	2240.2	2389.8	2677.4	3328.3	4243.0	5488.7	7064.9	8265.3	9321.7
41°	2077.8	2025.0	2131.1	2397.5	2678.7	3351.5	4264.9	5543.1	7111.8	8315.4	9338.7
42°	2009.1	2026.0	2050.5	2405.4	2690.5	3375.7	4281.8	5595.6	7150.3	8366.0	9348.4
43°	2007.9	2029.4	2049.7	2411.1	2704.3	3401.4	4292.7	5649.9	7190.3	8409.0	9349.0
44°	2009.6	2031.9	2053.2	2360.1	2720.2	3428.0	4325.5	5701.3	7228.0	8448.5	9340.5

REPORT NUMBER: P1436755

CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2012.0	2031.9	2057.2	2245.6	2735.3	3453.5	4366.9	5739.7	7267.9	8480.4	9316.7
46°	2014.2	2028.9	2060.5	2239.9	2739.1	3467.1	4409.8	5768.5	7307.8	8508.4	9277.1
47°	2015.5	1955.9	2062.9	2247.1	2743.0	3469.0	4453.1	5786.6	7341.5	8530.1	9222.7
48°	1948.7	1882.9	2062.7	2251.0	2761.1	3482.5	4495.7	5796.4	7372.0	8542.3	9160.6
49°	1882.0	1811.2	1942.0	2247.3	2771.7	3472.8	4537.1	5822.1	7393.9	8545.7	9086.3
50°	1815.6	1807.1	1854.9	2246.9	2715.3	3395.4	4562.8	5854.8	7410.2	8531.5	9004.9
51°	1822.4	1805.1	1860.9	2251.5	2592.0	3349.2	4542.5	5883.8	7418.9	8498.9	8910.9
52°	1832.2	1805.4	1870.1	2178.1	2593.4	3365.3	4529.4	5910.2	7417.4	8457.4	8803.5
53°	1842.6	1804.9	1879.9	2055.0	2612.7	3389.4	4546.0	5930.6	7403.6	8404.4	8682.8
54°	1850.9	1796.6	1835.7	2065.5	2637.2	3401.4	4539.4	5944.1	7380.7	8340.9	8544.5
55°	1854.7	1626.6	1791.3	2081.3	2651.7	3409.3	4536.1	5953.1	7338.6	8267.4	8398.0
56°	1694.0	1600.1	1747.1	2100.1	2663.8	3440.4	4541.8	5943.4	7275.8	8186.5	8236.0
57°	1664.3	1607.3	1710.9	2119.3	2661.9	3463.6	4532.2	5914.9	7207.4	8097.0	8065.0
58°	1671.7	1615.5	1718.7	2133.1	2547.0	3470.9	4532.5	5871.9	7137.2	7988.4	7878.9
59°	1682.6	1544.3	1728.4	1977.2	2508.5	3485.5	4534.7	5830.1	7069.4	7869.9	7681.0
60°	1560.4	1403.2	1619.1	1979.5	2543.7	3411.1	4508.2	5784.2	6991.8	7732.8	7465.2
61°	1487.6	1418.8	1541.0	1990.5	2582.5	3327.4	4451.9	5726.3	6897.5	7579.1	7234.6
62°	1505.5	1433.3	1560.9	2011.7	2622.5	3329.6	4425.5	5658.3	6790.3	7410.3	7000.5
63°	1524.1	1255.0	1577.3	1889.2	2654.4	3331.1	4390.8	5579.4	6667.5	7218.9	6753.0
64°	1326.6	1238.8	1374.1	1873.4	2539.3	3331.6	4326.3	5473.4	6526.3	7018.3	6502.0
65°	1339.2	1253.9	1380.2	1837.9	2541.8	3309.9	4259.6	5340.8	6362.9	6798.5	6238.2
66°	1348.5	1047.4	1397.8	1802.5	2557.8	3229.2	4161.8	5192.5	6168.4	6568.9	5966.0
67°	1116.6	1013.5	1159.0	1769.0	2540.3	3105.0	4051.0	5014.2	5958.0	6316.1	5696.1
68°	1135.6	782.4	1172.4	1807.4	2474.6	3112.8	3888.1	4747.6	5705.7	6039.4	5422.1
69°	908.0	705.7	943.4	1662.4	2470.6	3112.1	3677.1	4366.7	5405.3	5741.6	5158.7
70°	867.2	483.0	890.4	1645.9	2411.2	3104.9	3402.9	3864.0	5032.3	5411.5	4878.2
71°	574.2	260.2	576.2	1434.2	2384.8	3030.9	3086.1	3388.3	4586.3	5043.5	4589.1
72°	356.3	39.7	337.1	1386.1	2367.9	2894.8	2775.1	2966.3	4082.3	4634.8	4295.2
73°	294.1	0.5	268.2	1257.6	2317.8	2755.0	2489.6	2522.4	3562.7	4185.9	3977.1
74°	265.5	0.4	247.3	1118.6	2313.1	2616.1	2137.1	2019.6	3049.3	3702.7	3627.2
75°	218.0	0.4	211.7	1052.1	2195.1	2466.8	1784.6	1396.5	2497.4	3176.1	3193.8
76°	170.5	0.4	176.1	1015.4	2013.9	2299.3	1430.6	811.7	1819.8	2652.3	2677.9
77°	123.5	0.4	140.6	956.4	1832.7	2015.3	881.6	538.0	1116.9	2153.2	2050.0
78°	91.9	0.4	113.3	861.4	1651.1	1731.4	459.8	268.1	845.3	1628.9	1349.9
79°	90.7	0.4	113.3	729.1	1428.9	1441.1	308.7	209.5	582.3	1087.1	999.2
80°	123.7	0.5	138.5	636.1	1179.3	873.0	161.1	177.1	319.3	809.1	657.5
81°	152.4	0.5	145.5	593.1	892.1	630.2	127.5	151.0	273.4	533.8	315.8
82°	137.3	0.6	89.4	558.1	688.9	387.5	103.7	126.7	233.6	258.6	272.2
83°	85.2	0.7	63.0	464.8	490.7	148.1	83.7	104.5	190.6	202.3	238.9
84°	46.5	0.8	36.7	333.6	353.8	125.2	66.5	85.0	148.3	164.9	207.4
85°	34.6	0.9	10.5	202.5	217.0	99.5	52.1	65.6	113.1	130.6	177.2
86°	22.8	1.0	9.2	74.6	83.4	73.3	39.6	46.1	89.8	101.0	147.8
87°	11.2	1.1	9.2	51.8	42.8	52.5	30.0	30.4	66.6	79.0	115.3
88°	7.6	1.3	8.0	29.0	29.6	36.4	20.5	17.6	43.4	57.2	88.6
89°	5.5	1.4	4.4	6.6	16.5	20.3	10.9	12.2	25.2	35.3	62.1



REPORT NUMBER: P1436755

CATALOG NUMBER: XAS180-SFPM (5000K-144W-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: P1436755

CATALOG NUMBER: XAS180-SFPM (5000K-144W-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: P1436755
CATALOG NUMBER: XAS180-SFPM (5000K-144W-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: P1436755
CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	3635.1	3635.1	3635.1
1°	3728.1	3742.1	3748.6
2°	3835.7	3862.0	3871.6
3°	3951.7	3990.8	4005.4
4°	4080.2	4134.8	4152.5
5°	4216.2	4289.0	4312.9
6°	4367.2	4458.9	4489.2
7°	4528.2	4637.1	4675.7
8°	4699.5	4832.6	4879.7
9°	4885.3	5045.1	5101.7
10°	5082.2	5269.9	5333.8
11°	5298.6	5514.9	5585.9
12°	5525.9	5776.6	5859.5
13°	5772.9	6060.4	6150.6
14°	6031.9	6359.6	6467.0
15°	6309.9	6677.7	6805.6
16°	6589.2	7001.2	7154.9
17°	6876.1	7334.7	7498.5
18°	7163.2	7663.5	7841.1
19°	7439.5	7973.3	8159.2
20°	7704.5	8264.5	8450.5
21°	7954.3	8531.0	8711.8
22°	8185.4	8766.1	8939.2
23°	8405.8	8980.6	9140.3
24°	8611.3	9164.3	9316.0
25°	8797.4	9325.4	9468.2
26°	8966.0	9460.9	9596.7
27°	9118.2	9578.7	9704.7
28°	9252.9	9677.3	9793.8
29°	9369.7	9757.8	9867.8
30°	9472.0	9823.2	9923.7
31°	9558.8	9874.4	9967.3
32°	9629.9	9912.3	9993.8
33°	9686.7	9934.1	10007.1
34°	9733.2	9943.6	10008.0
35°	9766.4	9940.7	9996.7
36°	9786.3	9926.5	9974.9
37°	9793.8	9902.8	9941.7
38°	9791.0	9869.7	9900.0
39°	9775.8	9828.0	9848.8
40°	9750.2	9778.7	9790.0
41°	9716.1	9721.8	9719.9
42°	9671.6	9656.4	9639.4
43°	9615.7	9582.5	9547.4
44°	9549.3	9496.2	9443.8

REPORT NUMBER: P1436755
CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	9476.7	9400.9	9326.6
46°	9394.7	9293.8	9192.4
47°	9301.5	9169.4	9051.0
48°	9200.4	9039.2	8902.1
49°	9084.6	8887.5	8733.2
50°	8955.8	8724.8	8545.7
51°	8809.0	8542.5	8342.9
52°	8645.8	8341.3	8124.5
53°	8464.3	8123.7	7892.0
54°	8270.5	7889.4	7642.1
55°	8065.5	7643.3	7387.3
56°	7840.2	7377.4	7111.8
57°	7607.1	7097.1	6837.6
58°	7362.0	6818.5	6552.4
59°	7105.4	6529.8	6254.8
60°	6837.0	6232.6	5936.9
61°	6562.5	5916.3	5597.1
62°	6283.4	5595.2	5242.2
63°	6005.8	5260.1	4870.1
64°	5731.4	4926.9	4510.0
65°	5451.8	4595.0	4183.4
66°	5170.1	4293.3	3896.3
67°	4889.3	4017.3	3660.4
68°	4612.3	3778.0	3407.1
69°	4349.0	3521.3	3035.2
70°	4101.8	3200.7	2489.8
71°	3846.7	2759.3	1772.5
72°	3564.1	2138.5	1128.2
73°	3225.4	1449.7	868.2
74°	2765.6	885.2	616.4
75°	2167.2	645.1	364.6
76°	1542.6	406.3	321.6
77°	1033.8	345.2	287.7
78°	807.1	303.8	260.0
79°	586.9	270.3	235.5
80°	366.6	241.5	213.3
81°	306.1	216.2	192.8
82°	263.7	193.3	173.7
83°	227.1	171.5	155.4
84°	191.9	151.6	137.7
85°	155.3	131.9	120.8
86°	126.5	113.8	104.0
87°	102.0	96.3	89.5
88°	83.5	81.7	75.1
89°	65.3	67.1	60.7



REPORT NUMBER: P1436755
CATALOG NUMBER: XAS180-SFPM (5000K-144W-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: P1436755

CATALOG NUMBER: XAS180-SFPM (5000K-144W-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: P1436755
CATALOG NUMBER: XAS180-SFPM (5000K-144W-T4)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)