Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P1436738

Luminaire Tested: XAS180-SFPM (4000K-180W-T4-HSS)

Issue Date: 3/25/2026

Test Information

Test Method:	LM-79-2024
Report Number:	P1436738
	TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ( )
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	3/25/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	LUMARK
Catalog Number:	XAS180-SFPM (4000K-180W-T4-HSS)
Description:	XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
	LUMEN OUTPUT - 100% (180W)
	OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source:	4000K CCT, 80 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	28062 (1 lamp)
Luminaire Lumens:	24376.9 lumens
Efficiency:	86.9%
Efficacy:	142.9 lumens/watt
Luminous Opening:	Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification:	Type V - Short - Full Cutoff
BUG Rating:	B4 - U0 - G2
Input Watts (W):	170.6
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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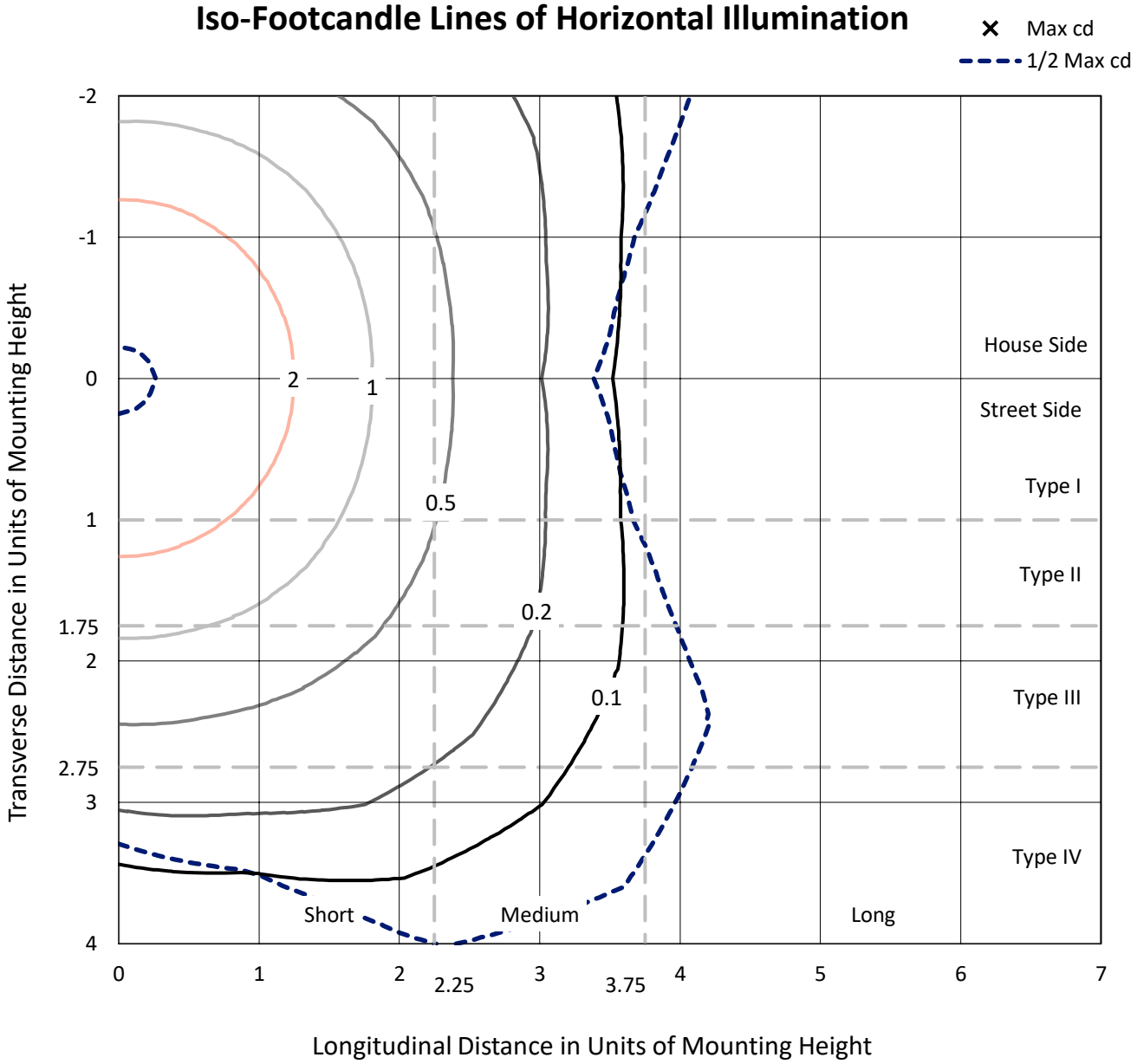
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 5 fc
Type V - Short - Full Cutoff

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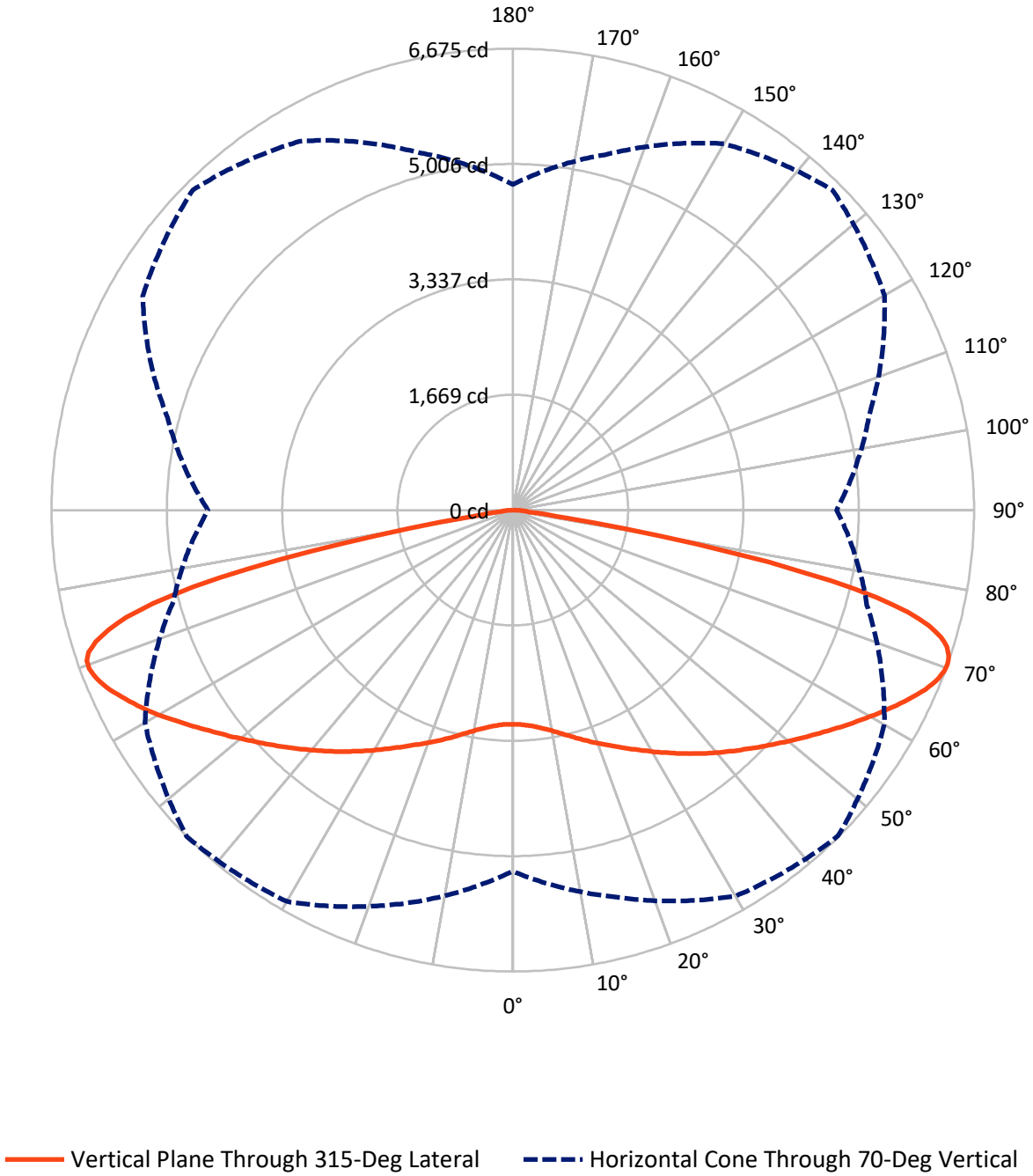
Luminous Intensity Polar Plot



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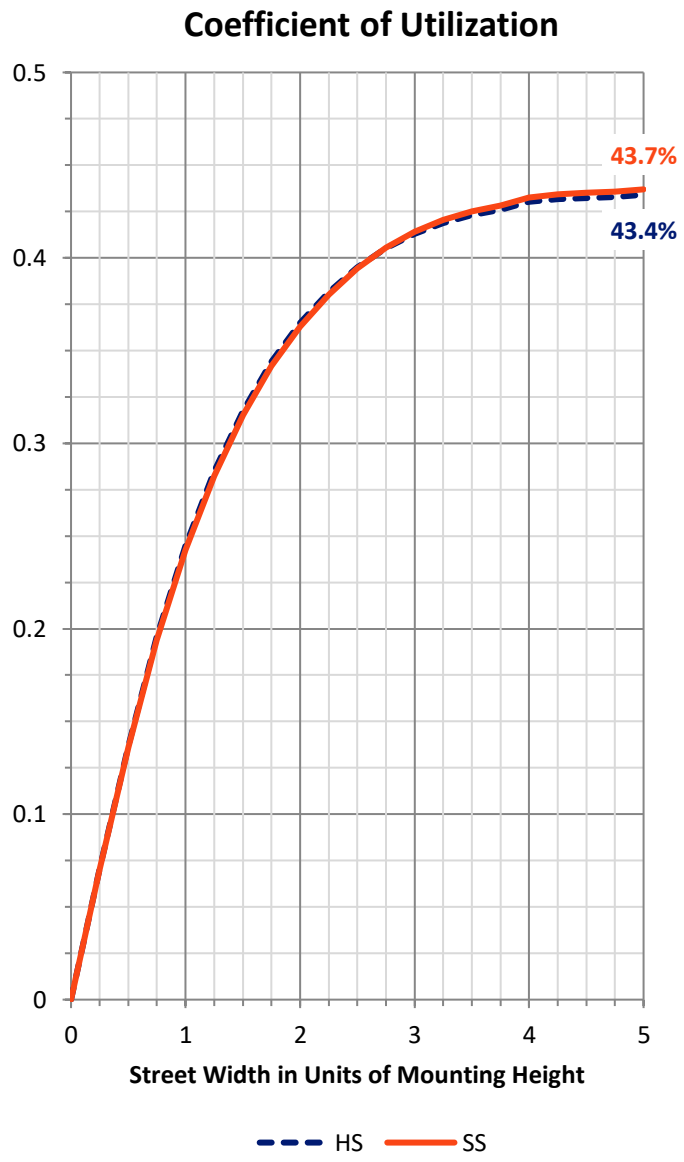
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12130.3	0.0	12130.3
	% Lamp	43.2	0.0	43.2
Street Side	Lumens	12246.6	0.0	12246.6
	% Lamp	43.6	0.0	43.6
Total	Lumens	24376.9	0.0	24376.9
	% Lamp	86.9	0.0	86.9

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	302.6	1.2	1.1
10°-20°	968.5	4.0	3.5
20°-30°	1761.0	7.2	6.3
30°-40°	2697.2	11.1	9.6
40°-50°	3759.4	15.4	13.4
50°-60°	4920.4	20.2	17.5
60°-70°	5880.3	24.1	21.0
70°-80°	3896.0	16.0	13.9
80°-90°	191.5	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°	24376.9	100.0	86.9
0°-180°	24376.9	100.0	86.9



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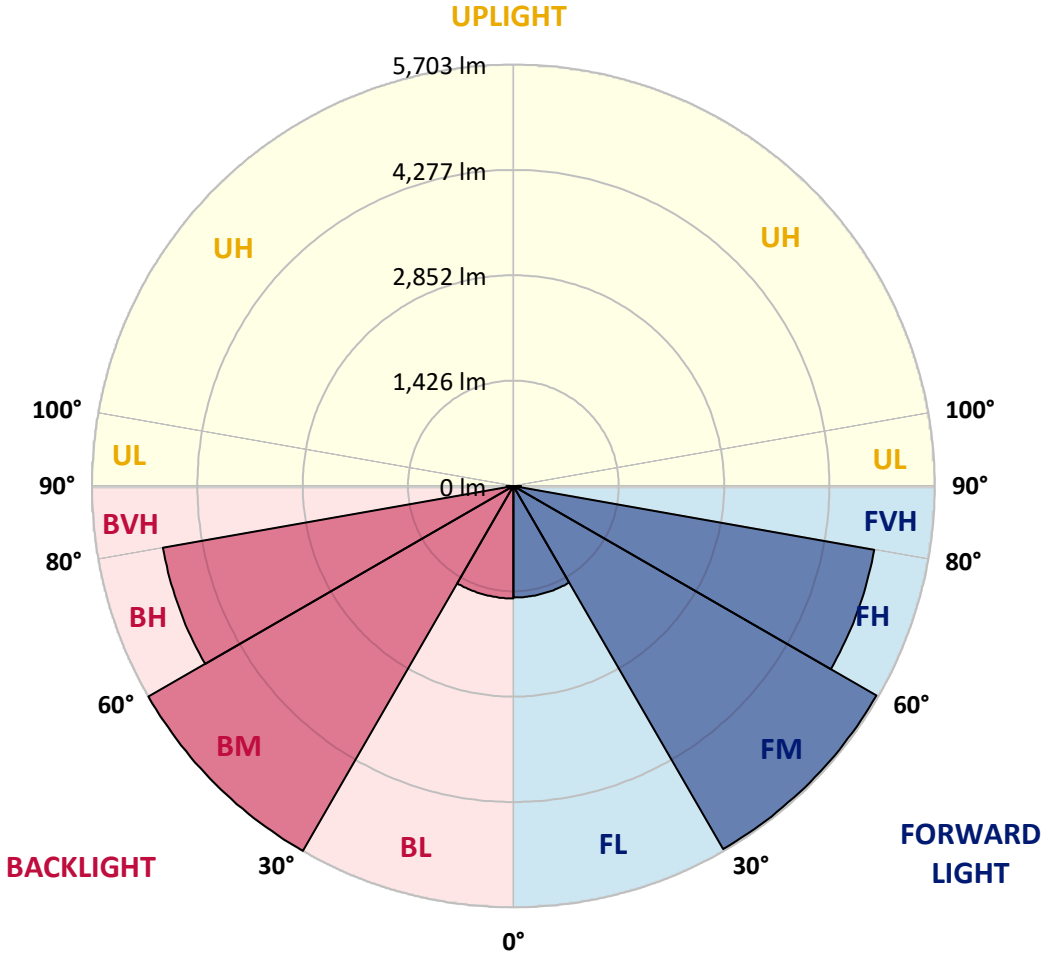
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1510.2	5.4			
FM	(30°-60°)	5674.0	20.2			
FH	(60°-80°)	4959.7	17.7			G2/5000
FVH	(80°-90°)	102.7	0.4			G2/225
BL	(0°-30°)	1521.9	5.4	B3/2500		
BM	(30°-60°)	5703.0	20.3	B4/8500		
BH	(60°-80°)	4816.6	17.2	B4/5000		G2/5000
BVH	(80°-90°)	88.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		3685.1	13.1			

BUG Rating: B4-U0-G2
Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	3098.6	3098.6	3098.6	3098.6	3098.6	3098.6	3098.6	3098.6	3098.6	3098.6	3098.6
1°	3100.1	3099.5	3100.1	3099.5	3099.6	3099.2	3097.0	3097.2	3097.2	3098.4	3099.0
2°	3105.0	3103.8	3103.5	3102.7	3101.5	3100.4	3098.5	3098.5	3099.0	3100.5	3102.2
3°	3113.1	3111.1	3109.9	3107.9	3107.2	3105.6	3103.6	3103.3	3103.8	3105.8	3108.3
4°	3124.7	3122.2	3119.8	3117.8	3115.8	3113.7	3111.5	3111.3	3112.1	3114.7	3117.8
5°	3137.9	3134.8	3132.2	3128.8	3125.8	3124.0	3121.1	3122.3	3124.3	3127.2	3130.5
6°	3152.8	3149.0	3147.3	3143.4	3138.7	3135.8	3132.9	3133.9	3137.0	3142.2	3146.5
7°	3169.3	3165.4	3164.3	3160.0	3155.4	3151.0	3147.5	3149.0	3151.9	3159.7	3165.5
8°	3188.4	3184.2	3182.3	3178.7	3173.6	3168.8	3166.4	3168.1	3171.5	3178.6	3187.0
9°	3209.2	3205.4	3202.6	3199.1	3194.7	3188.8	3185.3	3187.9	3194.1	3201.5	3209.9
10°	3232.0	3228.2	3225.8	3222.1	3218.2	3211.4	3208.3	3210.9	3218.5	3227.5	3234.8
11°	3257.0	3252.6	3251.6	3248.1	3243.0	3236.4	3232.3	3236.7	3244.9	3256.2	3262.6
12°	3282.5	3276.8	3277.6	3275.6	3269.9	3263.0	3258.0	3263.7	3273.3	3285.9	3293.3
13°	3307.2	3301.8	3305.2	3305.5	3298.3	3291.6	3284.6	3291.6	3304.2	3317.2	3326.1
14°	3334.6	3328.4	3332.8	3335.5	3328.6	3320.6	3312.5	3321.3	3334.6	3350.8	3359.2
15°	3361.4	3355.7	3361.3	3367.2	3359.8	3350.3	3342.4	3350.7	3367.4	3385.1	3392.3
16°	3390.7	3386.2	3390.9	3398.6	3392.7	3382.2	3374.4	3382.5	3401.2	3420.5	3427.6
17°	3422.1	3418.0	3423.4	3431.4	3427.2	3414.7	3406.5	3415.1	3437.2	3454.7	3462.7
18°	3454.8	3449.1	3456.1	3464.2	3461.2	3448.5	3440.4	3449.7	3472.8	3490.2	3496.6
19°	3488.4	3482.2	3490.3	3498.3	3496.8	3483.9	3475.5	3486.3	3509.6	3526.5	3530.6
20°	3524.9	3517.6	3525.0	3533.0	3533.1	3521.2	3513.0	3524.7	3547.5	3562.7	3564.7
21°	3562.1	3554.7	3559.9	3568.8	3570.7	3559.0	3550.6	3564.3	3585.9	3597.7	3600.3
22°	3601.4	3593.4	3597.1	3605.0	3610.8	3598.6	3591.3	3605.5	3626.8	3636.2	3637.8
23°	3643.0	3634.6	3635.3	3643.7	3651.4	3640.2	3632.7	3648.9	3668.0	3674.8	3677.5
24°	3686.8	3677.3	3675.0	3683.3	3692.6	3682.5	3676.5	3693.1	3711.1	3715.1	3718.3
25°	3732.5	3721.4	3716.5	3725.5	3736.3	3726.6	3722.5	3739.3	3753.7	3756.9	3758.7
26°	3780.1	3766.8	3759.8	3768.1	3779.9	3770.0	3769.2	3785.8	3797.6	3799.5	3800.2
27°	3829.1	3813.2	3803.2	3812.6	3823.3	3814.5	3816.7	3833.1	3842.0	3843.9	3843.1
28°	3880.3	3860.3	3847.9	3857.8	3867.7	3860.1	3866.0	3879.7	3888.3	3889.9	3886.3
29°	3932.6	3907.8	3894.5	3905.2	3912.1	3906.1	3917.7	3927.3	3934.5	3937.6	3931.7
30°	3985.9	3955.3	3942.1	3953.1	3957.7	3953.7	3970.7	3975.9	3981.6	3985.7	3977.3
31°	4040.2	4004.1	3991.5	4002.7	4003.4	3999.9	4024.2	4024.0	4029.2	4035.3	4025.2
32°	4094.0	4053.0	4040.7	4052.8	4049.6	4049.6	4076.8	4073.9	4078.0	4085.6	4073.3
33°	4147.8	4103.2	4092.5	4102.1	4098.6	4097.6	4130.9	4122.1	4127.7	4135.9	4122.9
34°	4201.9	4153.2	4143.2	4152.7	4147.2	4144.6	4183.7	4170.2	4177.7	4185.4	4172.7
35°	4259.2	4202.8	4195.4	4203.9	4196.8	4191.9	4238.2	4217.9	4228.2	4237.1	4225.0
36°	4315.6	4254.0	4248.8	4256.2	4248.3	4241.0	4292.3	4267.0	4281.3	4289.5	4278.7
37°	4372.3	4305.7	4303.2	4309.7	4300.1	4288.4	4346.0	4316.7	4333.9	4342.7	4333.4
38°	4429.7	4359.4	4357.8	4363.0	4351.6	4338.0	4401.5	4365.5	4385.2	4396.0	4387.8
39°	4486.0	4413.2	4411.9	4417.0	4403.4	4389.5	4457.8	4416.0	4438.5	4448.8	4441.1
40°	4541.8	4469.3	4465.9	4471.9	4456.0	4441.4	4513.8	4467.8	4492.1	4504.0	4496.7
41°	4596.6	4526.4	4521.8	4526.6	4510.4	4495.2	4569.6	4522.2	4545.1	4559.1	4549.8
42°	4653.9	4584.8	4579.0	4583.9	4565.1	4549.9	4623.3	4577.0	4599.9	4616.5	4608.0
43°	4709.5	4645.7	4637.0	4641.9	4621.9	4606.9	4675.4	4634.2	4655.2	4674.6	4665.7
44°	4763.9	4708.3	4695.7	4700.6	4678.7	4665.5	4725.6	4692.8	4710.4	4731.8	4724.6

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CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	4818.4	4770.6	4755.9	4758.7	4736.4	4726.7	4774.6	4752.2	4766.9	4790.9	4785.4
46°	4873.1	4836.6	4818.2	4819.4	4796.9	4789.8	4824.2	4814.3	4824.2	4851.1	4847.0
47°	4929.7	4906.4	4883.0	4882.8	4859.4	4855.0	4875.6	4876.6	4885.0	4913.9	4912.2
48°	4987.2	4975.2	4948.4	4947.4	4921.6	4921.3	4923.8	4941.4	4947.9	4975.7	4978.2
49°	5046.7	5047.7	5017.3	5014.1	4986.0	4988.1	4971.7	5005.3	5011.4	5039.8	5043.1
50°	5107.4	5118.2	5086.4	5081.2	5049.9	5055.7	5019.8	5069.0	5074.3	5107.4	5111.1
51°	5169.6	5191.3	5157.5	5149.8	5117.9	5122.0	5070.1	5131.6	5139.8	5175.8	5182.7
52°	5233.6	5265.9	5232.3	5223.2	5186.9	5187.6	5121.7	5196.1	5207.2	5247.9	5253.7
53°	5297.6	5339.1	5308.6	5295.7	5255.6	5250.9	5170.8	5259.4	5274.4	5318.4	5326.2
54°	5361.7	5412.1	5386.0	5373.2	5325.5	5312.6	5219.7	5320.0	5344.1	5390.7	5399.0
55°	5423.1	5478.9	5465.1	5449.6	5394.7	5370.5	5267.6	5374.9	5414.3	5468.6	5475.3
56°	5480.9	5545.2	5546.1	5530.1	5466.0	5425.2	5313.6	5430.1	5484.4	5547.0	5553.7
57°	5535.6	5607.4	5627.1	5614.6	5536.4	5475.7	5354.7	5479.7	5553.9	5627.1	5629.8
58°	5586.8	5666.2	5709.7	5700.2	5606.0	5520.7	5389.8	5523.9	5623.5	5709.9	5702.8
59°	5633.1	5720.9	5794.3	5786.9	5676.0	5558.1	5422.6	5564.8	5691.5	5794.4	5773.2
60°	5674.6	5770.3	5877.2	5877.2	5743.1	5589.8	5448.3	5599.5	5756.4	5879.8	5841.0
61°	5708.5	5815.0	5957.6	5967.0	5809.7	5618.1	5468.4	5629.7	5823.6	5963.8	5909.2
62°	5735.0	5852.4	6036.4	6059.4	5873.9	5638.4	5479.7	5651.7	5885.9	6046.9	5974.6
63°	5758.4	5886.2	6113.3	6152.5	5939.8	5649.0	5480.3	5668.8	5948.6	6123.5	6035.8
64°	5779.2	5913.6	6183.4	6244.6	6001.5	5651.3	5471.5	5679.2	6010.9	6197.7	6093.4
65°	5799.5	5936.8	6251.4	6335.3	6060.5	5650.3	5456.2	5681.1	6068.6	6273.5	6143.7
66°	5811.2	5959.0	6311.8	6422.2	6111.7	5639.0	5433.4	5672.8	6120.4	6349.5	6190.7
67°	5811.2	5974.4	6363.4	6502.8	6154.0	5618.6	5395.9	5655.0	6162.9	6419.7	6228.6
68°	5757.7	5971.3	6407.5	6573.7	6183.3	5585.3	5280.8	5618.4	6196.7	6475.4	6204.4
69°	5586.1	5926.1	6436.1	6626.9	6200.4	5493.8	5039.3	5526.9	6213.2	6519.5	6147.6
70°	*5224.4*	*5795.8*	*6446.8*	*6660.7*	*6207.0*	*5304.4*	*4686.6*	*5341.4*	*6210.6*	*6544.8*	*6117.1*
71°	4652.3	5501.6	6431.8	6674.7	6165.0	5010.4	4250.1	5049.9	6160.8	6540.7	6032.5
72°	4056.2	5020.7	6380.6	6654.9	6057.4	4634.9	3851.8	4667.7	6030.5	6473.2	5890.7
73°	3424.5	4394.0	6255.9	6585.4	5873.3	4231.5	3544.6	4255.3	5812.5	6327.1	5712.4
74°	2694.1	3710.3	5982.0	6437.2	5615.7	3864.8	3158.8	3875.9	5528.1	6104.7	5418.0
75°	1783.8	2965.4	5480.6	6173.7	5277.4	3456.8	2413.7	3475.2	5166.4	5808.3	4979.3
76°	922.4	2081.1	4804.0	5750.3	4877.2	2843.9	1668.5	2890.4	4767.6	5370.5	4380.6
77°	667.4	1119.5	4071.1	5131.0	4385.7	1913.9	924.4	2093.1	4292.6	4752.6	3638.6
78°	426.6	804.8	3181.9	4222.1	3702.2	992.0	398.0	1296.0	3634.4	3930.2	2749.3
79°	185.7	501.1	2064.1	3217.4	2746.9	717.2	313.5	504.4	2711.2	2974.1	1859.8
80°	154.3	197.5	1053.2	2095.1	1663.2	449.8	229.0	389.6	1787.9	2012.0	973.6
81°	132.0	162.7	761.7	1060.3	817.0	182.3	146.2	274.7	873.4	1059.8	447.3
82°	112.4	137.4	482.0	762.4	602.3	155.1	124.9	160.0	388.9	428.6	341.3
83°	94.3	114.7	202.3	484.8	394.2	131.3	105.7	134.9	305.6	334.5	235.2
84°	77.9	94.1	158.5	207.2	186.1	109.3	87.6	111.9	222.3	240.4	130.0
85°	61.6	77.0	121.0	170.8	141.4	89.4	70.5	91.1	139.8	146.8	94.0
86°	45.2	59.9	90.7	137.4	103.8	71.8	54.6	72.3	100.3	115.0	63.0
87°	30.5	42.9	66.1	101.0	76.3	54.2	38.9	54.7	72.4	81.7	39.2
88°	17.5	27.8	41.4	80.9	49.1	36.7	27.2	38.9	50.1	50.9	27.8
89°	7.1	11.9	16.7	61.4	21.9	19.7	15.4	26.9	34.5	35.2	16.4

REPORT NUMBER: P1436738
CATALOG NUMBER: XAS180-SFPM (4000K-180W-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: P1436738
CATALOG NUMBER: XAS180-SFPM (4000K-180W-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: P1436738
CATALOG NUMBER: XAS180-SFPM (4000K-180W-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: P1436738
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3098.6	3098.6	3098.6	3098.6	3098.6	3098.6	3098.6	3098.6	3098.6	3098.6	*3098.6*
1°	3099.6	3100.2	3100.8	3101.8	3102.3	3102.8	3103.1	3101.1	3100.7	3100.4	*3100.9*
2°	3103.4	3105.1	3105.6	3107.4	3108.4	3108.7	3109.1	3107.3	3107.5	3106.7	*3106.9*
3°	3109.9	3112.6	3114.4	3116.1	3117.7	3118.3	3119.4	3116.9	3117.0	3116.3	*3116.8*
4°	3120.7	3123.8	3126.0	3128.0	3129.9	3130.8	3131.8	3129.9	3129.3	3128.7	*3128.3*
5°	3133.9	3138.1	3140.5	3143.5	3145.0	3146.0	3146.3	3144.1	3143.9	3143.1	*3142.6*
6°	3150.8	3155.0	3158.7	3162.0	3163.4	3163.4	3163.6	3161.0	3161.1	3160.6	*3160.0*
7°	3170.7	3174.6	3179.2	3182.9	3184.3	3185.2	3186.2	3182.7	3182.2	3181.0	*3180.5*
8°	3192.3	3196.9	3202.0	3206.6	3208.8	3210.6	3209.7	3205.7	3204.8	3203.6	*3201.9*
9°	3215.7	3220.9	3227.1	3233.2	3236.6	3237.3	3235.3	3229.4	3229.5	3229.1	*3227.4*
10°	3241.7	3248.0	3255.0	3262.4	3266.5	3266.5	3263.0	3257.2	3256.7	3257.4	*3253.9*
11°	3270.4	3277.2	3285.4	3294.4	3299.0	3298.3	3294.0	3287.7	3287.7	3288.3	*3283.8*
12°	3300.2	3307.2	3317.4	3328.1	3333.7	3332.2	3327.1	3319.5	3320.5	3320.4	*3315.2*
13°	3330.7	3337.7	3349.1	3364.4	3371.0	3369.0	3361.2	3353.8	3355.0	3355.0	*3348.6*
14°	3363.0	3369.4	3382.7	3400.3	3409.5	3406.7	3398.1	3389.1	3390.9	3392.0	*3383.6*
15°	3395.4	3401.2	3416.7	3437.6	3449.6	3446.4	3435.7	3425.9	3428.5	3430.5	*3419.3*
16°	3428.6	3434.5	3451.0	3474.7	3490.3	3488.8	3474.9	3463.7	3466.9	3469.1	*3455.6*
17°	3462.1	3467.8	3486.1	3512.1	3531.4	3529.9	3516.3	3503.9	3506.3	3508.7	*3493.4*
18°	3496.6	3502.2	3522.0	3548.9	3572.0	3572.9	3558.1	3543.9	3548.0	3549.5	*3531.7*
19°	3531.4	3539.0	3557.6	3586.6	3613.7	3615.5	3600.1	3585.5	3589.9	3590.5	*3568.8*
20°	3567.0	3575.8	3595.3	3626.9	3654.4	3659.6	3644.0	3629.0	3633.7	3632.9	*3607.9*
21°	3604.6	3613.8	3634.3	3666.5	3696.2	3705.0	3690.5	3673.9	3677.6	3676.3	*3646.7*
22°	3643.8	3653.4	3674.8	3708.3	3740.5	3750.9	3737.7	3719.6	3724.2	3720.2	*3688.5*
23°	3682.6	3694.3	3717.8	3752.2	3784.7	3798.9	3783.9	3767.4	3772.3	3764.6	*3731.5*
24°	3724.8	3737.7	3761.5	3796.6	3830.9	3846.0	3832.0	3816.2	3820.2	3809.2	*3773.4*
25°	3766.2	3781.4	3806.1	3841.3	3877.7	3893.6	3882.3	3866.1	3868.4	3855.6	*3816.8*
26°	3810.2	3828.7	3852.2	3888.3	3925.5	3941.5	3931.9	3918.4	3916.5	3901.5	*3863.0*
27°	3854.1	3875.7	3898.3	3934.9	3972.8	3988.9	3981.4	3970.3	3965.1	3947.7	*3908.6*
28°	3898.8	3927.4	3945.6	3983.0	4023.8	4038.9	4032.3	4025.3	4014.8	3995.5	*3957.0*
29°	3945.0	3978.9	3994.2	4032.7	4073.5	4088.0	4083.8	4080.1	4064.6	4044.9	*4007.7*
30°	3992.7	4033.1	4043.7	4081.8	4124.4	4137.7	4134.7	4134.9	4113.8	4093.1	*4059.0*
31°	4041.7	4087.8	4093.9	4131.1	4173.0	4187.7	4184.5	4191.1	4163.7	4141.7	*4110.5*
32°	4090.7	4143.0	4144.3	4180.9	4224.7	4239.6	4236.2	4246.8	4212.0	4190.2	*4162.2*
33°	4141.1	4199.1	4194.8	4233.0	4276.2	4292.0	4287.4	4302.8	4262.2	4241.9	*4216.2*
34°	4191.4	4255.1	4244.6	4286.0	4329.4	4344.0	4339.3	4359.8	4312.0	4293.2	*4270.1*
35°	4240.7	4313.6	4296.7	4340.0	4382.7	4396.8	4390.3	4416.7	4363.3	4346.7	*4326.8*
36°	4291.6	4372.3	4349.3	4394.4	4435.4	4448.3	4441.9	4474.4	4414.5	4400.2	*4382.3*
37°	4341.5	4430.7	4402.5	4449.2	4488.9	4500.6	4495.6	4532.5	4467.3	4454.8	*4438.1*
38°	4394.1	4488.7	4457.2	4504.9	4543.9	4554.5	4548.9	4590.1	4520.4	4509.9	*4495.1*
39°	4447.8	4547.2	4512.3	4561.7	4600.3	4608.1	4604.3	4646.9	4574.0	4566.0	*4551.1*
40°	4503.9	4601.9	4570.1	4619.7	4656.4	4663.8	4659.6	4701.6	4629.0	4623.2	*4608.6*
41°	4562.3	4657.1	4628.4	4678.0	4714.8	4718.8	4715.1	4754.3	4685.5	4681.0	*4665.9*
42°	4619.9	4710.8	4689.3	4735.6	4772.4	4775.9	4772.2	4806.8	4744.8	4740.0	*4725.7*
43°	4679.8	4763.8	4750.6	4794.2	4832.6	4836.1	4832.4	4859.9	4805.8	4798.4	*4783.8*
44°	4741.5	4816.9	4813.5	4854.8	4893.5	4896.1	4893.1	4914.9	4868.5	4857.4	*4844.5*

REPORT NUMBER: P1436738
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	4804.4	4871.0	4877.3	4918.0	4956.4	4957.1	4957.5	4968.1	4932.5	4918.5	4905.5
46°	4869.8	4923.7	4943.9	4979.9	5019.8	5018.0	5021.5	5016.4	4999.5	4980.7	4968.3
47°	4938.5	4975.3	5011.5	5042.5	5084.0	5079.2	5085.5	5064.5	5063.6	5043.4	5033.7
48°	5008.0	5029.5	5081.4	5107.4	5148.9	5142.0	5148.3	5113.7	5128.5	5106.5	5100.2
49°	5077.9	5087.7	5153.2	5172.6	5216.3	5205.2	5210.6	5164.0	5192.2	5170.5	5167.4
50°	5151.3	5144.9	5226.1	5241.2	5283.3	5269.5	5271.6	5215.0	5255.2	5236.9	5235.8
51°	5228.4	5203.8	5299.0	5310.1	5352.6	5332.8	5332.3	5261.0	5316.2	5303.1	5306.0
52°	5302.0	5259.6	5369.9	5379.1	5423.1	5396.3	5390.2	5307.8	5375.5	5369.2	5377.8
53°	5368.1	5306.0	5435.8	5450.8	5495.5	5459.8	5444.0	5351.4	5428.7	5433.4	5450.2
54°	5425.4	5340.3	5495.5	5523.6	5568.9	5525.3	5493.8	5390.3	5479.3	5501.7	5526.2
55°	5477.6	5375.7	5547.1	5596.9	5643.9	5588.4	5540.5	5427.4	5525.4	5567.0	5605.2
56°	5530.7	5415.6	5597.7	5673.7	5720.2	5649.9	5582.2	5460.9	5567.1	5631.3	5686.5
57°	5581.0	5457.4	5647.3	5748.5	5796.6	5712.0	5618.9	5488.8	5602.4	5693.4	5764.9
58°	5628.4	5486.7	5695.3	5825.3	5874.3	5773.2	5650.1	5515.9	5631.8	5755.5	5847.4
59°	5664.8	5507.2	5730.7	5897.7	5955.5	5831.2	5676.4	5538.5	5656.2	5815.1	5929.2
60°	5694.6	5532.6	5760.4	5965.8	6035.3	5887.6	5700.3	5555.7	5676.8	5874.5	6012.7
61°	5723.6	5557.7	5789.2	6035.2	6116.0	5944.1	5719.3	5562.7	5696.6	5932.0	6096.8
62°	5751.0	5578.1	5815.7	6100.9	6189.6	6002.2	5732.0	5564.6	5708.0	5986.9	6182.1
63°	5775.9	5594.8	5840.7	6161.4	6256.4	6054.5	5737.3	5562.9	5710.8	6037.9	6266.5
64°	5798.1	5598.1	5861.7	6216.8	6319.5	6104.8	5740.1	5549.0	5707.4	6084.5	6351.2
65°	5794.9	5545.5	5853.8	6265.7	6381.0	6148.7	5731.6	5524.6	5694.6	6123.9	6430.9
66°	5723.4	5499.1	5775.2	6303.9	6439.5	6183.6	5716.7	5489.6	5674.8	6157.3	6506.7
67°	5677.7	5470.4	5726.2	6325.5	6485.2	6212.9	5687.3	5404.7	5640.0	6181.6	6571.4
68°	5650.2	5377.4	5684.1	6282.3	6521.0	6231.8	5615.1	5203.1	5557.7	6195.5	6625.3
69°	5539.1	5133.7	5561.6	6209.6	6544.6	6226.0	5458.0	4861.7	5381.1	6186.6	6662.8
70°	5330.6	4707.7	5359.0	6161.6	6547.9	6184.8	5172.7	4411.0	5083.1	6147.5	6674.8
71°	5012.3	4095.3	5039.1	6056.9	6516.4	6081.7	4782.3	3960.7	4675.8	6040.6	6652.1
72°	4525.7	3540.3	4544.4	5905.6	6416.7	5889.8	4339.5	3584.5	4231.5	5863.1	6589.6
73°	3930.8	2973.1	3941.6	5698.8	6235.3	5600.3	3911.1	3218.9	3808.9	5592.1	6461.6
74°	3314.6	2228.4	3327.2	5380.6	5975.3	5247.1	3504.6	2720.2	3397.4	5242.9	6250.9
75°	2522.8	1483.7	2538.5	4899.6	5628.4	4818.3	2995.8	1940.0	2865.0	4812.7	5910.2
76°	1731.1	750.6	1749.8	4258.7	5117.2	4350.9	2201.1	1099.7	2074.2	4318.1	5420.4
77°	946.2	550.4	968.0	3515.5	4420.9	3786.8	1406.5	789.5	1159.7	3722.2	4716.4
78°	399.3	350.3	418.6	2632.1	3514.3	2999.7	623.0	490.0	840.4	2922.6	3774.5
79°	311.2	154.9	324.7	1748.6	2565.5	2178.6	289.0	190.5	521.3	1937.5	2710.3
80°	223.2	127.7	230.8	872.0	1616.8	1357.6	241.4	159.3	202.3	1063.5	1640.9
81°	135.4	106.4	138.3	391.9	683.6	538.4	193.7	136.2	166.4	768.6	773.0
82°	110.5	87.3	112.8	303.7	294.5	284.6	146.5	115.7	141.1	491.5	499.3
83°	88.1	69.3	90.3	215.4	243.3	231.1	123.4	97.0	118.8	214.4	242.1
84°	68.0	53.6	69.4	127.9	192.0	177.6	102.7	80.5	98.1	165.7	195.4
85°	49.5	38.2	50.5	91.1	140.8	124.1	83.0	64.0	80.6	124.2	162.1
86°	35.1	26.4	35.6	60.2	109.7	89.2	65.1	47.6	63.1	90.6	129.9
87°	20.7	14.5	20.6	43.4	77.0	64.4	48.6	32.5	45.6	65.6	91.5
88°	6.2	2.9	5.6	26.6	52.5	44.3	33.5	19.0	30.5	40.7	73.5
89°	4.5	2.6	4.2	9.8	28.1	24.2	18.4	7.6	13.8	15.7	55.8

REPORT NUMBER: P1436738
CATALOG NUMBER: XAS180-SFPM (4000K-180W-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: P1436738
CATALOG NUMBER: XAS180-SFPM (4000K-180W-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: P1436738
CATALOG NUMBER: XAS180-SFPM (4000K-180W-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: P1436738
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	3098.6	3098.6	3098.6
1°	3101.0	3100.1	3100.1
2°	3106.6	3106.0	3105.0
3°	3115.7	3114.9	3113.1
4°	3127.9	3126.4	3124.7
5°	3141.8	3140.0	3137.9
6°	3158.1	3156.2	3152.8
7°	3176.2	3173.6	3169.3
8°	3197.0	3192.5	3188.4
9°	3220.7	3214.7	3209.2
10°	3246.5	3239.0	3232.0
11°	3274.2	3265.2	3257.0
12°	3303.9	3292.3	3282.5
13°	3335.5	3319.7	3307.2
14°	3366.6	3347.9	3334.6
15°	3398.1	3376.9	3361.4
16°	3431.6	3407.5	3390.7
17°	3465.0	3440.3	3422.1
18°	3500.2	3473.6	3454.8
19°	3536.4	3507.8	3488.4
20°	3571.5	3542.2	3524.9
21°	3609.1	3579.7	3562.1
22°	3648.5	3618.6	3601.4
23°	3689.6	3659.1	3643.0
24°	3731.7	3700.9	3686.8
25°	3773.9	3745.1	3732.5
26°	3819.6	3790.3	3780.1
27°	3866.7	3836.7	3829.1
28°	3913.9	3883.6	3880.3
29°	3964.0	3931.7	3932.6
30°	4015.2	3980.2	3985.9
31°	4066.5	4031.4	4040.2
32°	4118.0	4082.3	4094.0
33°	4170.2	4134.1	4147.8
34°	4222.6	4184.1	4201.9
35°	4277.0	4235.5	4259.2
36°	4333.6	4286.5	4315.6
37°	4388.3	4340.2	4372.3
38°	4445.4	4394.9	4429.7
39°	4501.1	4449.6	4486.0
40°	4559.8	4507.1	4541.8
41°	4617.8	4565.5	4596.6
42°	4677.7	4626.7	4653.9
43°	4738.1	4689.0	4709.5
44°	4798.8	4750.8	4763.9

REPORT NUMBER: P1436738
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	4861.0	4817.7	4818.4
46°	4924.7	4883.9	4873.1
47°	4989.5	4954.0	4929.7
48°	5056.9	5025.4	4987.2
49°	5125.8	5099.9	5046.7
50°	5196.8	5174.2	5107.4
51°	5269.3	5250.9	5169.6
52°	5344.1	5326.2	5233.6
53°	5421.7	5401.7	5297.6
54°	5497.5	5475.9	5361.7
55°	5576.9	5549.4	5423.1
56°	5658.5	5617.8	5480.9
57°	5738.6	5680.7	5535.6
58°	5821.6	5738.6	5586.8
59°	5902.1	5792.2	5633.1
60°	5982.6	5840.9	5674.6
61°	6063.1	5882.4	5708.5
62°	6141.5	5919.6	5735.0
63°	6217.0	5951.0	5758.4
64°	6292.3	5981.0	5779.2
65°	6361.6	6007.9	5799.5
66°	6426.2	6033.4	5811.2
67°	6478.6	6049.9	5811.2
68°	6518.7	6047.9	5757.7
69°	6538.1	6006.1	5586.1
70°	*6537.6*	*5883.8*	*5224.4*
71°	6507.3	5615.5	4652.3
72°	6431.5	5136.0	4056.2
73°	6272.1	4501.1	3424.5
74°	5957.0	3786.5	2694.1
75°	5436.5	3038.2	1783.8
76°	4767.5	2176.9	922.4
77°	3996.5	1206.8	667.4
78°	3041.5	870.2	426.6
79°	1922.2	535.8	185.7
80°	988.5	201.4	154.3
81°	709.2	169.4	132.0
82°	453.8	143.2	112.4
83°	198.3	119.0	94.3
84°	156.8	97.7	77.9
85°	118.7	79.7	61.6
86°	89.1	61.8	45.2
87°	64.2	43.9	30.5
88°	39.4	27.9	17.5
89°	14.5	11.4	7.1

REPORT NUMBER: P1436738
CATALOG NUMBER: XAS180-SFPM (4000K-180W-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: P1436738
CATALOG NUMBER: XAS180-SFPM (4000K-180W-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: P1436738
CATALOG NUMBER: XAS180-SFPM (4000K-180W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)