

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: LUMARK

Report Number: P973040

Luminaire Tested: **WP-6984-80W-3000K**

Issue Date: 03/12/2025



**Test Information**

Test Method: LM-79-08  
Report Number: P973040  
Test Lab: LEADING TESTING LABORATORIES  
Issue Date: 03/12/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: WP-6984-80W-3000K  
Description: LUMARK WALL PACK SQUARE LED 70CRI CCT SELECTIVE FIXTURE OPERATING @80W-3000K  
Light Source: 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

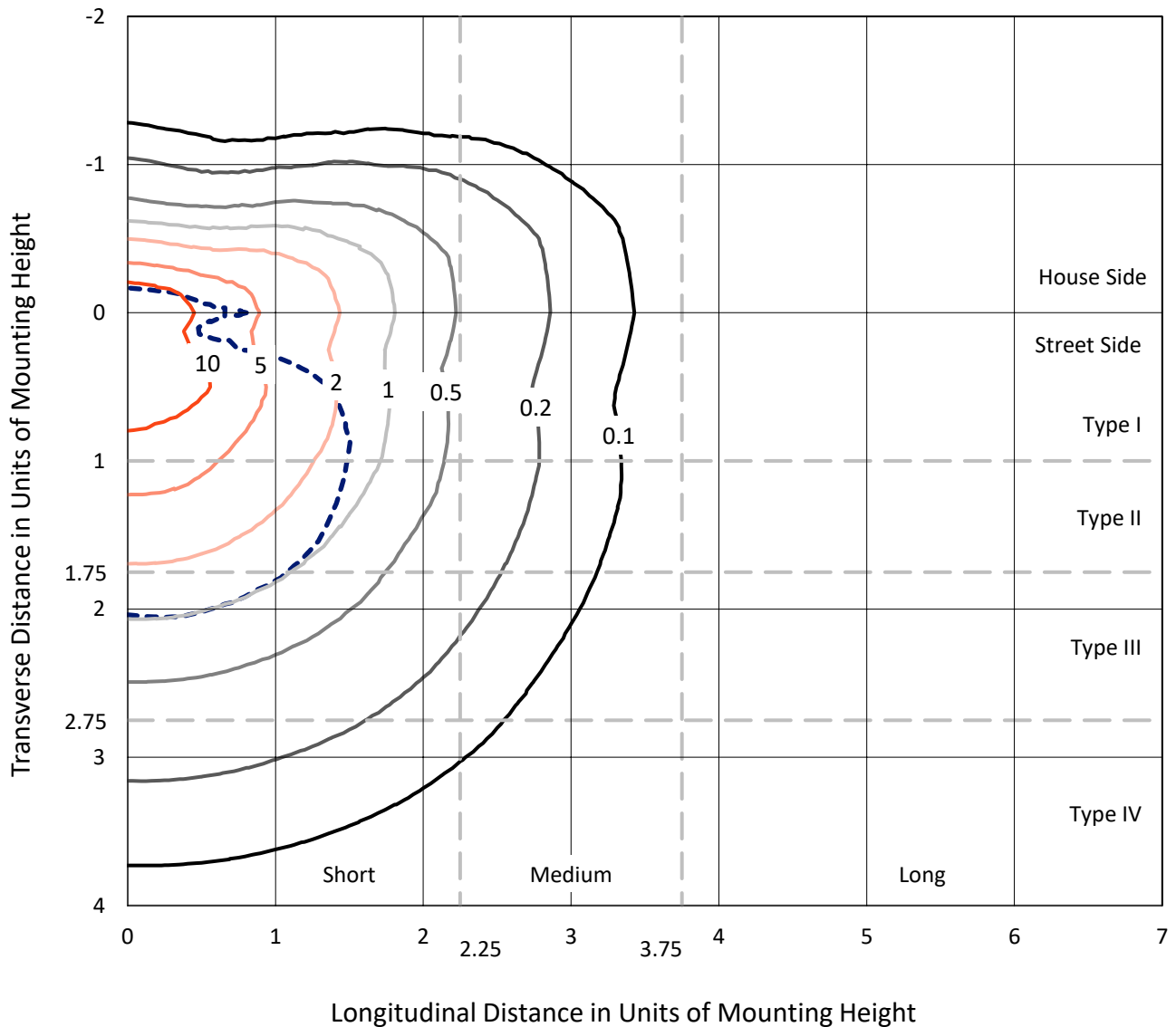
Lumens per Lamp: N/A  
Luminaire Lumens: 10288.3 lumens  
Efficiency: N/A  
Efficacy: 128.6 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.96' x L: 0.25' x H: 0.67')  
IES Classification: Type III - Short  
BUG Rating: B2 - U3 - G2

Input Watts (W): 80  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

### Iso-Footcandle Lines of Horizontal Illumination

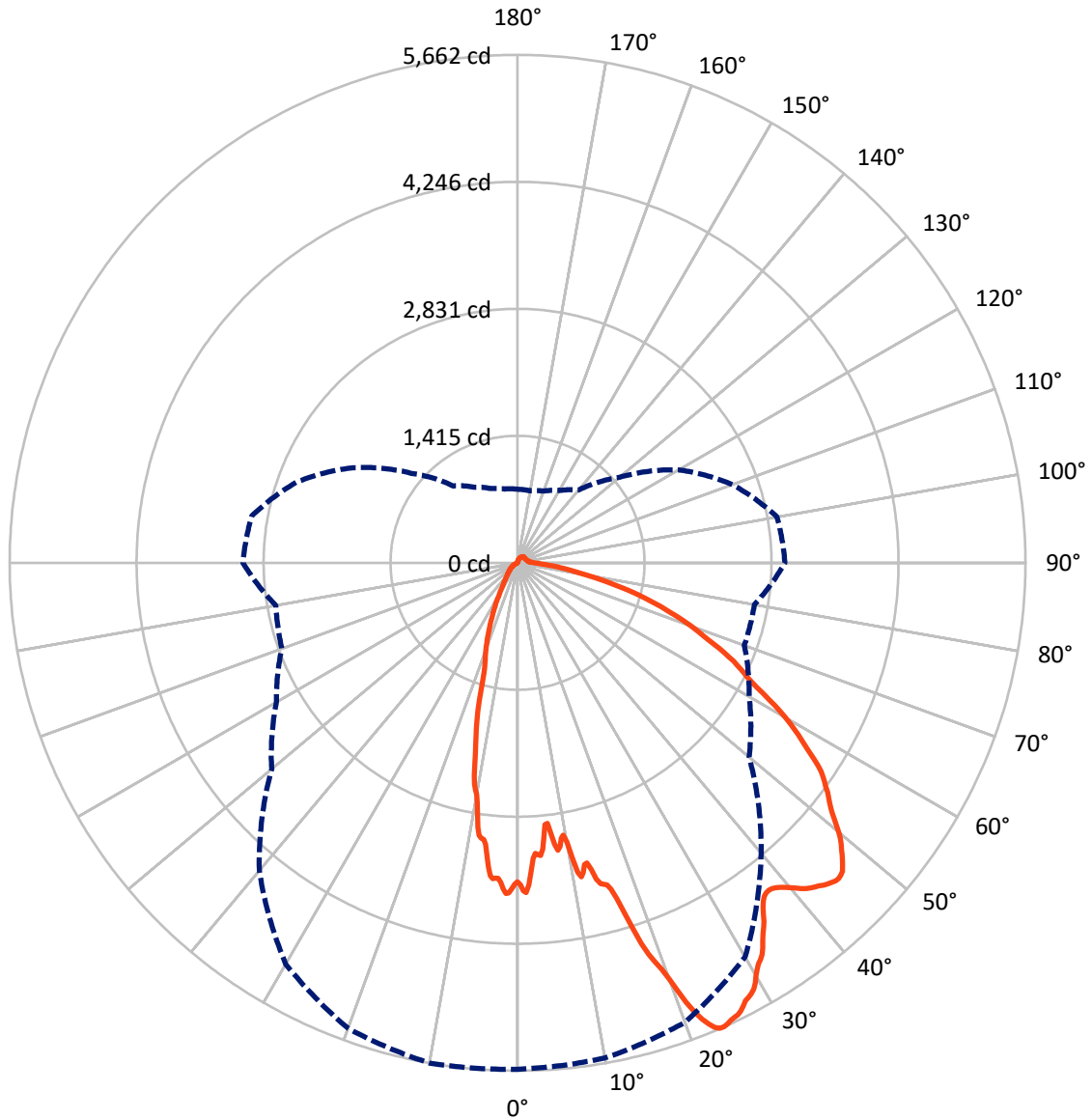
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 19.6 fc  
 Type III - Short - N/A

REPORT NUMBER: P973040  
CATALOG NUMBER: WP-6984-80W-3000K

### Luminous Intensity Polar Plot



— Vertical Plane Through 350-Deg Lateral    - - - Horizontal Cone Through 23.5-Deg Vertical

REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

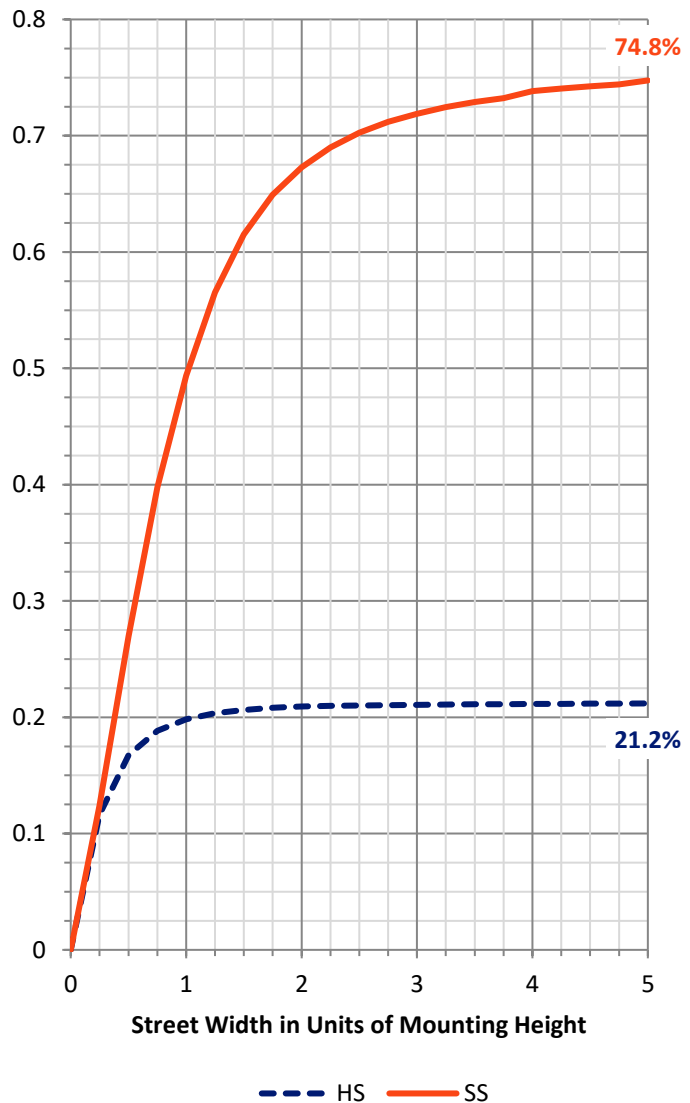
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2205.1	52.3	2257.4
	% Fixture	21.4	0.5	21.9
<b>Street Side</b>	Lumens	7774.5	256.4	8031.0
	% Fixture	75.6	2.5	78.1
<b>Total</b>	Lumens	9979.6	308.7	10288.3
	% Fixture	97.0	3.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	315.6	3.1
10°-20°	833.4	8.1
20°-30°	1307.2	12.7
30°-40°	1578.3	15.3
40°-50°	1797.7	17.5
50°-60°	1785.6	17.4
60°-70°	1366.8	13.3
70°-80°	761.8	7.4
80°-90°	233.3	2.3
90°-100°	69.4	0.7
100°-110°	56.2	0.5
110°-120°	51.6	0.5
120°-130°	46.5	0.5
130°-140°	40.2	0.4
140°-150°	27.8	0.3
150°-160°	13.3	0.1
160°-170°	3.2	0.0
170°-180°	0.4	0.0
0°-90°	9979.6	97.0
0°-180°	10288.3	100.0

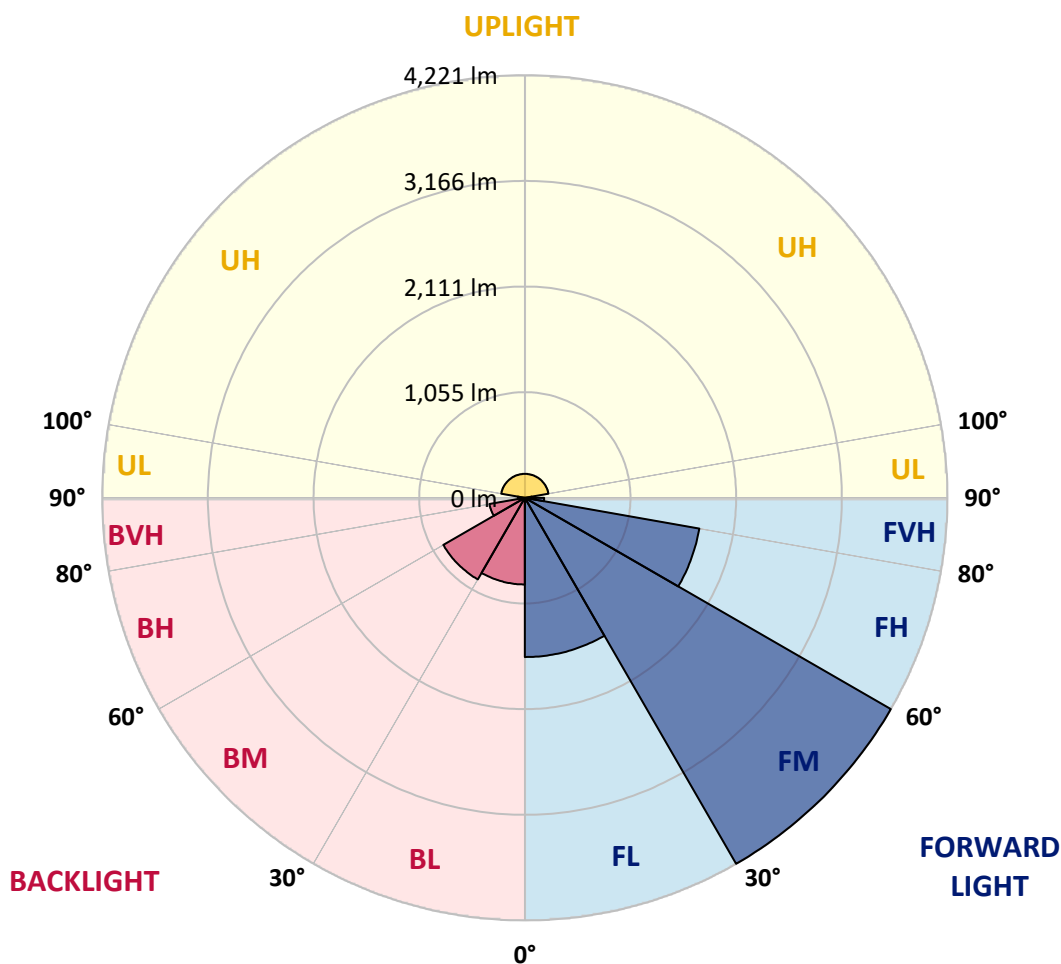


REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1590.8	15.5			
FM (30°-60°)	4221.1	41.0			
FH (60°-80°)	1770.2	17.2			G1/1800
FVH (80°-90°)	192.5	1.9			G2/225
BL (0°-30°)	865.4	8.4	B2/1000		
BM (30°-60°)	940.5	9.1	B1/1000		
BH (60°-80°)	358.5	3.5	B1/500		G1/500
BVH (80°-90°)	40.7	0.4			G1/100
UL (90°-100°)	69.4	0.7		U3/500	
UH (100°-180°)	239.3	2.3		U3/500	

**BUG Rating: B2-U3-G2**  
 Type III Short





REPORT NUMBER: P973040

CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5
0.5°	3645.7	3644.2	3644.0	3645.0	3643.6	3636.1	3627.3	3616.8	3604.9	3593.4	3582.4
1°	3609.7	3613.3	3627.4	3642.0	3658.0	3662.3	3655.4	3640.9	3612.6	3589.7	3570.9
1.5°	3480.7	3491.1	3516.0	3558.1	3603.5	3640.0	3660.7	3653.3	3617.6	3582.3	3554.8
2°	3318.3	3329.6	3364.1	3422.5	3495.9	3570.5	3639.9	3658.5	3628.9	3575.0	3539.9
2.5°	3223.4	3229.9	3245.5	3288.4	3367.1	3475.2	3586.9	3647.5	3635.4	3572.3	3529.6
3°	3221.0	3215.2	3212.7	3220.0	3263.4	3369.0	3512.8	3623.5	3631.4	3563.0	3517.3
3.5°	3245.2	3238.8	3231.3	3213.8	3216.1	3275.5	3428.2	3583.4	3623.1	3552.0	3503.1
4°	3211.5	3221.5	3233.4	3229.6	3207.1	3220.7	3344.1	3534.0	3613.6	3546.9	3496.7
4.5°	3082.7	3110.7	3163.6	3221.5	3216.0	3198.0	3270.3	3479.4	3602.6	3533.0	3488.6
5°	2933.9	2955.8	3022.6	3137.8	3214.5	3192.5	3213.5	3415.1	3583.4	3519.8	3486.0
5.5°	2882.2	2881.5	2898.7	3004.6	3155.0	3201.1	3181.3	3353.5	3564.2	3506.2	3478.8
6°	2956.3	2928.2	2881.8	2894.7	3047.2	3191.8	3159.6	3291.4	3543.1	3492.3	3477.6
6.5°	3097.0	3058.3	2963.8	2875.3	2929.5	3144.8	3155.3	3233.8	3522.4	3479.4	3472.1
7°	3198.4	3180.9	3095.1	2940.8	2863.2	3062.9	3157.3	3185.7	3490.7	3465.7	3467.8
7.5°	3185.3	3194.7	3191.5	3055.9	2866.8	2955.9	3156.8	3148.2	3454.6	3446.4	3458.2
8°	3089.5	3106.2	3166.8	3159.0	2929.0	2869.1	3135.1	3118.0	3424.2	3429.2	3445.6
8.5°	3035.7	3027.4	3071.3	3174.0	3039.5	2820.8	3089.5	3097.1	3388.0	3407.5	3436.9
9°	3097.2	3046.8	3003.7	3104.5	3128.5	2819.4	3019.3	3080.5	3346.9	3394.1	3425.9
9.5°	3270.0	3203.7	3043.8	3016.1	3155.3	2874.9	2934.5	3072.7	3305.2	3384.5	3412.2
10°	3456.5	3392.3	3189.9	2986.5	3104.0	2965.0	2850.0	3068.4	3267.3	3371.0	3403.5
10.5°	3540.3	3512.5	3381.2	3059.4	3015.6	3045.2	2790.6	3065.1	3227.8	3362.1	3392.2
11°	3501.3	3505.9	3495.1	3222.4	2956.0	3092.9	2759.6	3057.2	3192.3	3357.3	3382.9
11.5°	3413.5	3424.2	3484.3	3385.5	2960.8	3084.2	2767.9	3042.1	3160.5	3349.0	3376.1
12°	3395.6	3369.0	3401.8	3472.9	3055.8	3031.7	2807.9	3015.0	3131.0	3341.7	3367.4
12.5°	3482.1	3421.8	3337.0	3454.3	3201.5	2958.6	2864.6	2969.4	3094.9	3335.3	3358.8
13°	3602.5	3540.3	3373.8	3368.5	3340.4	2907.1	2937.8	2923.9	3062.0	3323.8	3346.6
13.5°	3663.3	3621.2	3479.6	3296.6	3415.3	2902.5	2999.4	2865.4	3030.5	3308.0	3331.8
14°	3672.2	3636.6	3566.1	3316.6	3400.3	2957.6	3035.1	2810.2	2999.4	3289.6	3314.4
14.5°	3680.0	3622.7	3588.1	3409.5	3327.2	3074.6	3034.2	2757.5	2971.4	3272.6	3297.6
15°	3730.0	3643.2	3566.0	3490.9	3246.0	3203.2	3003.6	2712.3	2944.4	3260.0	3277.7
15.5°	3864.3	3744.4	3560.1	3522.4	3224.2	3311.9	2953.8	2680.1	2919.7	3242.5	3260.8
16°	4046.6	3907.2	3624.9	3499.4	3282.1	3364.0	2893.0	2662.7	2898.9	3226.8	3242.4
16.5°	4244.2	4104.9	3758.9	3468.9	3372.7	3354.7	2844.9	2664.1	2883.2	3210.1	3222.4
17°	4414.6	4285.8	3931.8	3487.9	3434.9	3297.3	2825.9	2681.0	2869.9	3193.8	3204.8
17.5°	4545.2	4414.2	4104.3	3570.8	3444.7	3223.2	2843.4	2705.7	2858.4	3178.8	3187.3
18°	4646.1	4526.1	4249.9	3710.4	3412.4	3165.8	2895.6	2742.4	2847.1	3161.2	3169.4
18.5°	4748.8	4622.6	4358.2	3867.8	3384.6	3163.1	2985.9	2786.2	2834.2	3145.1	3152.3
19°	4879.3	4727.2	4448.9	4008.8	3390.4	3212.0	3075.7	2821.8	2826.7	3127.4	3135.6
19.5°	5044.4	4868.5	4532.6	4126.5	3454.0	3280.9	3161.3	2854.5	2813.5	3108.8	3118.8
20°	5215.1	5041.1	4634.0	4219.0	3557.5	3323.3	3213.8	2868.6	2803.1	3091.2	3098.0
20.5°	5357.0	5211.5	4782.7	4312.3	3683.0	3326.6	3226.9	2868.9	2790.1	3072.2	3077.3
21°	5465.6	5338.8	4942.6	4398.2	3809.8	3297.8	3196.5	2855.1	2773.5	3056.7	3055.3
21.5°	5547.8	5448.5	5105.9	4490.6	3914.3	3260.3	3140.7	2829.6	2756.0	3040.0	3033.4
22°	5609.1	5534.4	5247.8	4614.5	4000.5	3234.3	3072.9	2791.1	2737.9	3024.1	3010.1



REPORT NUMBER: P973040

CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
22.5°	5639.4	5576.2	5351.9	4763.2	4078.5	3245.3	3012.4	2750.8	2720.3	3008.2	2986.9
23°	5650.6	5597.5	5419.2	4921.5	4150.3	3292.9	2976.3	2717.0	2700.6	2994.2	2963.0
23.5°	5644.4	5604.3	5451.3	5071.0	4223.5	3368.6	2980.5	2689.2	2680.3	2979.8	2937.7
24°	5625.1	5601.4	5482.2	5184.6	4296.8	3458.9	3011.6	2675.3	2657.9	2966.2	2914.7
24.5°	5606.2	5583.9	5503.2	5254.8	4386.0	3552.1	3057.1	2675.5	2633.4	2948.9	2891.6
25°	5577.5	5549.9	5504.1	5283.2	4503.9	3639.2	3092.9	2688.7	2612.0	2936.0	2868.8
25.5°	5547.4	5513.4	5478.3	5298.5	4640.0	3711.8	3108.8	2720.5	2586.7	2920.9	2847.8
26°	5512.8	5484.2	5429.2	5329.8	4773.0	3772.1	3097.9	2760.8	2566.9	2906.7	2828.6
26.5°	5489.5	5462.4	5384.2	5348.7	4886.7	3824.9	3071.0	2812.4	2548.5	2895.3	2808.4
27°	5471.8	5437.0	5360.0	5342.8	4958.9	3876.5	3039.5	2862.2	2534.6	2884.8	2788.8
27.5°	5431.9	5407.1	5337.0	5299.9	4976.4	3925.8	3018.9	2898.3	2522.4	2875.7	2771.2
28°	5384.2	5368.4	5320.2	5243.1	4971.8	3974.6	3015.8	2921.4	2511.4	2866.5	2753.4
28.5°	5329.2	5324.6	5293.3	5181.8	4972.4	4037.6	3032.4	2929.3	2504.2	2858.1	2738.6
29°	5277.3	5274.1	5258.1	5150.2	5002.7	4117.0	3068.3	2922.4	2497.7	2848.7	2724.7
29.5°	5223.8	5226.2	5218.2	5131.2	5031.6	4212.3	3118.0	2902.9	2494.1	2841.0	2712.5
30°	5182.0	5181.7	5167.1	5110.1	5024.6	4306.0	3170.6	2877.3	2495.3	2833.4	2699.4
30.5°	5138.0	5150.6	5125.3	5083.7	4978.2	4390.3	3224.4	2846.1	2497.6	2827.5	2687.6
31°	5090.2	5102.9	5094.9	5044.0	4901.6	4450.9	3278.1	2816.2	2502.6	2822.1	2675.8
31.5°	5038.1	5045.3	5071.0	5004.1	4838.6	4476.2	3321.8	2794.4	2507.3	2816.0	2665.2
32°	4981.9	4991.8	5028.0	4956.5	4802.1	4479.8	3355.2	2783.2	2513.7	2810.8	2655.0
32.5°	4937.7	4955.3	4960.8	4909.7	4787.0	4476.5	3385.7	2783.6	2520.1	2805.7	2646.5
33°	4887.5	4928.6	4901.7	4879.0	4767.0	4479.4	3410.8	2794.3	2529.7	2800.8	2637.0
33.5°	4816.7	4877.8	4863.7	4855.3	4736.2	4493.3	3439.0	2811.4	2537.9	2796.9	2625.6
34°	4731.8	4792.0	4847.6	4821.1	4701.3	4509.9	3473.8	2830.5	2545.6	2793.7	2612.5
34.5°	4663.1	4708.3	4815.2	4762.6	4669.3	4511.1	3507.1	2844.2	2550.1	2791.5	2600.7
35°	4617.0	4641.0	4747.6	4693.5	4632.2	4488.4	3542.4	2848.2	2553.2	2787.7	2590.7
35.5°	4589.2	4594.4	4654.6	4632.3	4593.4	4445.5	3585.7	2847.6	2554.6	2784.5	2581.3
36°	4574.9	4568.0	4579.2	4607.9	4548.7	4399.0	3629.6	2837.4	2550.9	2780.4	2570.2
36.5°	4578.3	4567.9	4529.3	4593.7	4512.0	4364.1	3675.2	2823.8	2546.5	2777.7	2560.4
37°	4595.5	4579.7	4497.5	4543.9	4489.8	4337.5	3715.8	2812.2	2540.6	2772.1	2550.4
37.5°	4615.6	4600.5	4480.7	4466.2	4462.5	4315.7	3748.9	2802.8	2532.8	2766.7	2541.0
38°	4646.2	4630.6	4475.4	4381.6	4428.7	4292.6	3774.0	2795.8	2524.2	2758.1	2528.5
38.5°	4677.2	4664.5	4480.8	4325.3	4376.1	4265.1	3789.6	2794.5	2513.8	2748.8	2517.3
39°	4713.8	4703.9	4490.7	4287.3	4326.9	4230.8	3793.8	2797.3	2503.9	2737.1	2504.3
39.5°	4749.6	4742.3	4514.0	4257.1	4295.0	4200.9	3794.1	2802.7	2492.0	2727.5	2490.5
40°	4785.4	4775.4	4542.9	4232.3	4281.6	4175.0	3794.2	2812.5	2482.1	2717.9	2478.0
40.5°	4819.5	4805.7	4570.5	4213.0	4261.6	4150.8	3794.3	2820.1	2474.7	2710.9	2467.5
41°	4848.7	4836.5	4596.1	4204.4	4221.5	4125.0	3792.2	2826.9	2467.8	2705.1	2458.0
41.5°	4877.3	4861.2	4620.2	4199.3	4169.6	4099.7	3787.1	2834.3	2464.7	2699.4	2449.0
42°	4893.4	4890.2	4644.8	4202.5	4121.8	4076.9	3772.2	2842.3	2461.6	2695.7	2441.7
42.5°	4921.0	4909.4	4667.2	4210.6	4086.3	4055.3	3755.1	2848.1	2460.7	2689.9	2433.8
43°	4951.2	4936.4	4697.3	4220.3	4059.2	4032.7	3731.2	2855.1	2460.9	2686.3	2426.8
43.5°	4974.1	4957.4	4721.6	4229.1	4036.1	4007.7	3704.0	2859.7	2462.9	2684.3	2422.7
44°	4990.3	4973.7	4743.4	4233.5	4014.9	3976.5	3679.7	2860.7	2466.2	2681.6	2417.9
44.5°	4986.6	4988.3	4756.4	4243.9	3999.8	3946.7	3658.1	2862.5	2471.6	2678.2	2416.3





REPORT NUMBER: P973040

CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
45°	4979.6	4980.6	4767.0	4250.0	3987.8	3923.3	3642.4	2861.5	2477.7	2674.7	2414.5
45.5°	4949.7	4977.3	4768.6	4252.5	3975.1	3900.0	3625.9	2863.4	2479.6	2671.9	2408.0
46°	4919.0	4950.7	4762.3	4253.6	3966.4	3881.0	3611.1	2867.7	2480.1	2665.5	2403.0
46.5°	4864.9	4916.6	4754.4	4250.1	3959.7	3860.4	3597.8	2872.3	2478.5	2658.6	2395.8
47°	4818.9	4864.5	4729.8	4245.4	3954.0	3832.7	3585.2	2876.0	2471.3	2651.7	2387.9
47.5°	4767.1	4815.4	4702.4	4232.6	3948.5	3798.9	3571.3	2881.1	2462.9	2643.2	2380.9
48°	4732.5	4783.7	4657.4	4212.7	3937.9	3767.4	3555.2	2882.7	2451.5	2633.8	2374.0
48.5°	4690.2	4753.1	4619.1	4193.6	3922.0	3736.7	3537.0	2881.3	2438.8	2625.1	2364.1
49°	4634.6	4711.8	4571.6	4173.7	3904.9	3706.2	3516.3	2883.2	2426.4	2615.9	2352.4
49.5°	4570.4	4660.3	4538.6	4149.4	3889.1	3675.3	3496.1	2881.1	2409.2	2604.9	2343.1
50°	4506.7	4589.7	4503.3	4121.5	3867.5	3648.1	3477.4	2881.6	2391.9	2592.5	2331.4
50.5°	4456.4	4527.1	4460.9	4088.4	3847.1	3619.8	3460.6	2881.4	2373.2	2580.9	2320.2
51°	4413.8	4462.6	4403.2	4055.3	3822.6	3587.4	3439.6	2875.5	2352.4	2566.9	2307.8
51.5°	4376.9	4413.1	4351.0	4017.2	3793.5	3554.3	3417.2	2869.2	2329.6	2551.6	2294.6
52°	4339.1	4380.6	4296.7	3981.4	3760.4	3521.9	3393.1	2861.5	2307.4	2534.7	2277.8
52.5°	4305.1	4350.8	4241.3	3944.9	3725.4	3488.1	3369.0	2850.4	2283.6	2520.9	2259.5
53°	4258.3	4315.0	4200.5	3913.5	3689.8	3449.9	3342.6	2836.8	2258.0	2501.6	2241.0
53.5°	4211.3	4261.7	4169.8	3883.1	3651.7	3410.8	3312.7	2823.2	2233.4	2479.2	2222.4
54°	4169.0	4212.0	4148.2	3841.1	3617.3	3374.0	3282.2	2806.2	2207.4	2456.9	2205.9
54.5°	4121.3	4159.1	4111.6	3804.5	3584.4	3335.4	3246.3	2787.9	2181.3	2426.1	2186.0
55°	4060.4	4100.7	4054.2	3771.6	3548.2	3299.3	3207.7	2764.9	2150.8	2395.0	2160.7
55.5°	3986.3	4029.5	3993.2	3739.7	3513.1	3261.0	3168.8	2732.1	2121.1	2365.2	2135.8
56°	3909.4	3955.6	3939.5	3708.7	3472.0	3223.5	3129.7	2695.1	2092.9	2333.8	2111.3
56.5°	3823.3	3872.4	3879.6	3674.3	3435.9	3185.9	3089.3	2655.5	2063.1	2300.6	2087.4
57°	3754.3	3791.1	3806.9	3629.6	3403.1	3151.9	3043.1	2613.4	2031.8	2266.8	2066.5
57.5°	3691.0	3726.8	3734.3	3577.4	3373.4	3116.5	2995.6	2575.1	2001.2	2230.8	2044.4
58°	3622.4	3672.8	3659.9	3519.0	3342.4	3083.5	2946.0	2537.8	1970.6	2195.7	2021.9
58.5°	3556.3	3615.6	3590.0	3457.2	3307.6	3049.6	2895.8	2498.8	1937.6	2159.7	2002.4
59°	3481.2	3552.2	3523.7	3396.2	3259.2	3012.9	2847.7	2454.0	1906.0	2125.9	1983.4
59.5°	3395.8	3476.8	3461.2	3334.6	3203.8	2974.7	2801.2	2410.2	1876.0	2088.7	1956.7
60°	3296.5	3390.0	3398.2	3279.6	3147.4	2934.0	2752.2	2366.7	1843.8	2049.6	1931.3
60.5°	3200.6	3291.7	3325.2	3223.5	3089.6	2886.8	2702.8	2322.2	1811.4	2011.9	1901.2
61°	3105.6	3196.2	3240.9	3169.0	3035.3	2839.3	2651.8	2276.2	1777.6	1973.7	1870.8
61.5°	3016.9	3102.3	3154.7	3109.1	2979.0	2792.7	2604.1	2231.6	1745.6	1939.0	1846.9
62°	2940.9	3021.4	3068.0	3047.7	2917.8	2742.8	2554.5	2185.5	1714.6	1904.3	1823.0
62.5°	2873.6	2948.6	2982.8	2973.7	2860.2	2682.9	2507.9	2138.5	1683.7	1867.2	1790.1
63°	2825.3	2883.6	2904.7	2901.3	2806.8	2625.8	2461.9	2092.9	1654.7	1829.6	1760.2
63.5°	2780.0	2828.1	2834.2	2830.0	2749.4	2568.4	2416.9	2050.5	1622.1	1792.9	1727.8
64°	2730.3	2781.3	2768.1	2758.4	2688.0	2508.5	2368.5	2007.5	1588.5	1754.1	1695.2
64.5°	2676.4	2733.8	2709.8	2689.9	2625.5	2443.7	2322.0	1967.5	1555.0	1717.0	1660.4
65°	2622.9	2679.1	2662.7	2632.1	2564.7	2381.2	2276.4	1926.6	1519.1	1678.5	1624.6
65.5°	2550.0	2606.5	2607.3	2575.1	2505.9	2317.5	2229.2	1882.6	1485.1	1640.3	1591.4
66°	2467.7	2532.7	2548.3	2520.0	2447.5	2254.8	2178.2	1836.3	1449.8	1605.1	1556.8
66.5°	2388.7	2448.8	2476.3	2467.6	2390.5	2192.9	2119.2	1792.2	1417.1	1569.3	1520.3
67°	2315.0	2365.0	2408.2	2410.1	2334.8	2136.0	2057.2	1748.5	1382.5	1533.6	1481.2



REPORT NUMBER: P973040

CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
67.5°	2246.8	2292.3	2335.7	2344.7	2276.6	2082.3	1993.0	1704.1	1347.9	1495.4	1449.8
68°	2185.6	2228.4	2260.4	2278.0	2217.8	2026.0	1932.5	1661.1	1314.0	1458.3	1412.8
68.5°	2126.0	2161.3	2184.5	2210.7	2160.0	1974.1	1867.2	1615.5	1280.7	1422.6	1376.9
69°	2070.6	2096.7	2115.4	2142.5	2099.7	1924.3	1804.1	1573.7	1245.1	1386.2	1338.5
69.5°	2009.1	2039.5	2048.9	2071.9	2035.9	1874.3	1740.4	1531.1	1206.8	1345.7	1298.6
70°	1940.7	1972.3	1983.5	2006.7	1971.4	1817.3	1679.3	1487.8	1170.0	1306.7	1264.6
70.5°	1873.5	1906.4	1921.9	1944.0	1908.2	1759.5	1624.1	1444.4	1131.9	1267.9	1222.7
71°	1808.3	1840.6	1858.4	1883.4	1841.6	1702.7	1566.7	1401.8	1096.1	1226.8	1183.7
71.5°	1743.2	1772.6	1790.6	1817.2	1774.0	1642.0	1511.9	1363.2	1062.3	1189.3	1142.5
72°	1684.6	1713.5	1722.8	1751.1	1710.5	1581.9	1458.7	1322.3	1028.5	1151.3	1100.8
72.5°	1626.2	1653.6	1664.3	1686.4	1648.8	1520.8	1404.0	1281.4	994.6	1113.6	1062.7
73°	1562.3	1595.9	1607.0	1624.1	1585.0	1461.5	1351.8	1244.0	962.0	1075.7	1024.2
73.5°	1497.7	1532.7	1545.4	1559.9	1524.2	1403.8	1302.8	1203.6	928.0	1038.5	984.8
74°	1434.6	1469.2	1480.6	1497.1	1464.4	1346.0	1258.0	1159.2	892.6	1001.5	946.4
74.5°	1361.5	1395.7	1416.4	1433.9	1404.0	1290.6	1213.3	1107.3	859.1	961.3	910.3
75°	1290.5	1319.5	1346.9	1370.6	1346.6	1237.2	1169.4	1057.8	825.8	924.5	874.4
75.5°	1220.7	1249.3	1280.2	1307.3	1289.3	1185.3	1123.0	1006.9	787.3	883.7	837.1
76°	1150.7	1179.9	1212.3	1240.3	1230.4	1130.6	1075.0	952.0	748.7	843.2	800.5
76.5°	1084.2	1112.5	1145.4	1175.4	1172.3	1077.2	1024.8	897.3	709.4	803.7	766.5
77°	1021.3	1049.5	1084.0	1112.9	1114.4	1026.1	975.3	848.4	674.8	765.9	731.0
77.5°	958.8	988.0	1022.3	1050.9	1053.7	976.3	924.7	800.1	640.8	725.7	696.1
78°	899.5	925.9	963.5	990.3	997.4	924.2	872.9	755.6	605.2	686.8	659.4
78.5°	844.2	869.7	904.7	932.3	940.6	873.0	823.8	711.5	572.9	646.8	624.9
79°	790.9	815.4	844.5	875.6	882.9	824.4	781.3	672.0	541.2	608.4	591.2
79.5°	736.5	760.7	789.1	818.6	825.7	775.8	739.8	632.8	509.5	571.3	568.1
80°	690.9	711.7	735.9	764.4	772.1	727.3	697.3	596.7	477.9	536.2	534.4
80.5°	646.0	667.0	683.3	711.2	720.8	683.9	658.4	562.3	446.2	501.2	500.1
81°	603.9	621.1	636.3	659.8	671.5	641.2	618.5	528.3	414.5	466.1	465.7
81.5°	567.0	580.9	591.6	612.3	622.6	596.8	577.5	494.4	386.5	431.1	431.3
82°	531.1	544.0	552.3	568.7	575.6	551.3	539.2	460.5	359.1	396.1	397.7
82.5°	495.2	507.2	515.7	531.7	537.8	513.6	501.0	426.5	331.2	364.8	366.0
83°	459.3	470.4	479.2	495.1	500.2	475.8	462.8	394.1	302.9	333.8	336.6
83.5°	423.4	433.6	442.7	458.5	462.6	438.1	424.6	365.1	276.5	303.8	310.4
84°	387.5	396.8	406.1	421.9	425.1	400.3	386.4	336.8	251.5	273.8	283.5
84.5°	357.5	367.0	374.4	385.4	387.5	369.0	354.2	308.0	227.7	244.9	256.3
85°	328.8	338.7	345.0	355.0	357.7	340.7	324.0	281.8	204.7	217.0	230.2
85.5°	304.2	313.6	318.4	327.6	331.3	314.8	295.3	256.4	184.1	191.8	206.3
86°	281.8	290.1	294.3	302.7	306.7	291.2	270.4	232.8	165.8	167.5	183.8
86.5°	261.3	268.9	272.1	279.7	283.9	269.8	247.7	210.1	147.3	144.3	161.8
87°	243.1	250.6	252.8	258.4	262.6	250.1	228.3	189.4	130.3	123.7	141.9
87.5°	227.4	233.6	235.8	240.0	243.7	232.5	210.8	173.3	115.8	105.3	123.5
88°	212.9	217.3	220.0	222.5	226.0	216.4	194.2	157.9	104.1	89.0	106.8
88.5°	200.7	204.4	205.8	207.7	210.4	201.7	180.5	145.7	94.3	75.2	93.9
89°	189.7	192.6	193.3	194.5	195.9	188.6	168.4	134.8	86.4	64.7	83.6
89.5°	179.7	182.0	181.8	182.1	183.0	177.1	157.6	126.1	79.7	56.0	75.6



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
90°	171.3	172.7	171.7	171.3	171.6	166.6	148.1	118.2	74.3	51.4	68.9
90.5°	163.7	165.0	163.4	162.4	162.1	157.9	139.7	112.0	70.2	46.7	63.2
91°	157.1	158.1	155.8	154.1	153.4	149.3	132.2	106.8	66.9	42.1	58.8
91.5°	151.7	152.6	149.6	146.9	145.3	141.1	126.1	102.4	64.0	37.5	56.6
92°	146.7	147.2	143.5	139.9	137.0	134.4	120.9	98.8	61.7	35.1	54.6
92.5°	141.0	141.6	137.2	132.9	130.8	128.7	116.6	95.7	59.8	33.5	52.6
93°	135.8	136.2	131.5	127.3	125.7	123.6	112.6	93.0	58.5	32.5	50.6
93.5°	132.2	132.4	127.5	123.4	121.3	119.2	109.3	90.7	57.7	31.9	48.5
94°	129.5	129.7	124.3	119.8	117.3	115.3	106.3	88.7	56.9	31.6	47.9
94.5°	127.4	127.5	121.8	116.8	113.7	111.9	103.6	86.7	56.1	31.4	47.4
95°	125.7	125.8	119.8	114.2	110.6	108.9	101.1	85.0	55.3	31.3	46.6
95.5°	124.0	124.2	117.9	112.2	108.2	106.3	99.0	83.4	54.6	31.2	46.1
96°	122.2	122.4	116.4	110.4	106.1	103.9	97.0	81.9	54.1	31.0	45.9
96.5°	121.0	121.2	115.1	108.8	104.0	101.8	95.0	80.5	53.8	31.2	45.8
97°	120.2	120.4	114.1	107.4	102.3	99.9	93.2	79.3	53.7	31.5	45.5
97.5°	119.5	119.6	113.3	106.4	100.9	98.0	91.5	78.2	53.7	31.9	45.2
98°	118.7	118.8	112.5	105.4	99.5	96.3	89.8	77.3	53.8	32.3	44.9
98.5°	117.8	118.1	111.9	104.4	98.3	94.8	88.4	76.5	54.0	32.7	44.6
99°	117.2	117.4	111.2	103.5	97.2	93.4	87.2	76.0	54.1	33.1	44.2
99.5°	116.5	116.6	110.5	102.7	96.3	92.1	86.1	75.5	54.3	33.5	43.8
100°	115.6	115.8	109.8	102.1	95.4	91.0	85.2	75.2	54.5	33.9	43.4
100.5°	114.6	115.0	109.2	101.3	94.5	90.1	84.3	74.9	54.8	34.4	43.1
101°	113.7	114.2	108.2	100.2	93.8	89.3	83.7	74.7	55.0	34.9	42.8
101.5°	111.7	112.4	106.9	99.5	93.4	88.8	83.2	74.6	55.3	35.3	42.6
102°	110.0	111.0	106.0	99.3	93.3	88.3	82.8	74.5	55.6	35.9	42.4
102.5°	109.2	110.3	106.0	99.4	93.1	87.9	82.3	74.4	56.1	36.4	42.4
103°	109.5	110.7	106.3	99.4	93.0	87.6	81.8	74.4	56.5	37.0	42.3
103.5°	109.4	110.8	106.3	99.3	92.7	87.2	81.4	74.3	57.0	37.5	42.4
104°	108.9	110.4	105.9	99.0	92.5	86.9	81.0	74.3	57.5	38.1	42.5
104.5°	108.2	109.8	105.6	98.8	92.2	86.6	80.6	74.3	58.0	38.7	42.6
105°	107.6	109.3	105.2	98.5	92.1	86.3	80.3	74.3	58.5	39.3	42.8
105.5°	106.9	108.7	104.8	98.3	92.0	86.0	80.0	74.2	59.0	39.8	43.0
106°	106.3	108.2	104.4	98.2	91.9	85.8	79.7	74.1	59.4	40.3	43.3
106.5°	105.8	107.7	104.0	98.0	91.7	85.5	79.4	74.0	59.8	40.9	43.6
107°	105.4	107.2	103.7	97.8	91.5	85.2	79.1	74.0	60.1	41.4	43.8
107.5°	105.0	106.7	103.3	97.4	91.3	84.9	78.7	73.9	60.5	41.9	44.1
108°	104.5	106.1	102.8	97.0	91.2	84.6	78.5	73.9	61.0	42.4	44.4
108.5°	103.8	105.3	102.3	96.6	90.8	84.3	78.3	74.0	61.5	42.9	44.7
109°	103.0	104.6	101.7	96.3	90.6	84.0	78.1	74.1	61.9	43.3	45.0
109.5°	102.2	103.8	101.0	95.8	90.3	83.8	78.0	74.3	62.4	43.8	45.2
110°	101.3	102.8	100.5	95.4	90.1	83.6	77.9	74.5	62.9	44.3	45.5
110.5°	100.3	102.0	99.8	95.0	89.8	83.4	77.7	74.7	63.3	44.7	45.8
111°	99.5	101.3	99.2	94.5	89.6	83.2	77.6	74.9	63.8	45.2	46.0
111.5°	98.6	100.4	98.6	94.1	89.2	83.1	77.6	75.1	64.2	45.6	46.3
112°	97.8	99.6	98.0	93.7	88.9	82.9	77.5	75.3	64.6	46.1	46.5



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
112.5°	96.9	98.8	97.4	93.2	88.5	82.8	77.5	75.5	65.0	46.5	46.7
113°	96.2	98.1	96.8	92.7	88.2	82.7	77.6	75.7	65.4	46.9	46.9
113.5°	95.5	97.5	96.2	92.1	88.0	82.6	77.6	75.9	65.7	47.2	47.2
114°	94.9	97.0	95.6	91.7	87.8	82.5	77.5	76.1	66.0	47.5	47.4
114.5°	94.3	96.4	95.0	91.3	87.7	82.5	77.5	76.3	66.3	47.8	47.5
115°	93.7	95.8	94.4	91.0	87.5	82.3	77.5	76.4	66.6	48.1	47.7
115.5°	93.1	95.1	93.8	90.8	87.2	82.2	77.5	76.6	66.9	48.4	47.8
116°	92.5	94.4	93.3	90.6	87.2	82.1	77.5	76.7	67.1	48.6	48.0
116.5°	92.0	93.9	93.0	90.4	87.1	82.1	77.5	76.8	67.4	48.8	48.1
117°	91.6	93.5	92.8	90.2	86.9	82.0	77.5	76.9	67.5	48.9	48.2
117.5°	91.3	93.1	92.5	90.0	86.8	81.9	77.6	76.9	67.7	49.0	48.2
118°	91.2	92.8	92.3	90.0	86.6	81.8	77.5	76.9	67.7	49.0	48.3
118.5°	91.0	92.6	92.2	89.9	86.5	81.8	77.5	76.9	67.7	48.9	48.3
119°	90.9	92.4	92.1	89.9	86.4	81.8	77.5	76.9	67.6	48.8	48.4
119.5°	90.9	92.3	92.1	89.7	86.2	81.7	77.6	76.9	67.5	48.7	48.5
120°	91.0	92.3	92.2	89.7	86.2	81.7	77.6	76.9	67.4	48.5	48.6
120.5°	91.1	92.4	92.3	89.6	86.0	81.7	77.6	76.9	67.3	48.4	48.7
121°	91.3	92.4	92.2	89.6	86.0	81.7	77.7	76.9	67.2	48.2	48.7
121.5°	91.4	92.4	92.2	89.5	85.9	81.8	77.8	76.9	67.0	48.1	48.7
122°	91.5	92.5	92.3	89.4	85.9	81.8	77.9	77.0	66.8	47.8	48.7
122.5°	91.6	92.7	92.3	89.5	85.9	81.9	78.0	77.0	66.5	47.5	48.6
123°	91.8	92.8	92.4	89.5	85.9	82.0	78.1	77.0	66.2	47.2	48.6
123.5°	92.0	92.9	92.5	89.4	85.9	82.2	78.3	77.0	65.9	46.9	48.5
124°	92.1	93.1	92.6	89.4	85.9	82.4	78.5	77.1	65.6	46.6	48.4
124.5°	92.4	93.3	92.8	89.3	86.0	82.5	78.6	77.1	65.3	46.4	48.4
125°	92.6	93.5	93.0	89.2	86.0	82.7	78.8	77.2	64.9	46.1	48.2
125.5°	92.8	93.7	93.0	89.2	86.1	82.9	79.1	77.4	64.6	45.8	48.1
126°	93.0	93.9	93.1	89.1	86.2	83.1	79.5	77.5	64.3	45.5	48.0
126.5°	93.3	94.0	93.2	89.0	86.3	83.4	79.7	77.7	64.1	45.3	48.0
127°	93.3	94.2	93.3	89.0	86.5	83.6	80.1	77.9	63.9	45.1	47.9
127.5°	93.3	94.3	93.4	88.9	86.6	83.9	80.4	78.1	63.7	45.0	47.9
128°	93.4	94.4	93.5	88.8	86.8	84.1	80.8	78.3	63.6	44.9	48.0
128.5°	93.4	94.5	93.5	88.8	86.9	84.4	81.2	78.6	63.4	44.9	48.0
129°	93.4	94.6	93.5	88.7	87.0	84.6	81.7	78.9	63.3	44.9	48.1
129.5°	93.4	94.6	93.5	88.6	87.1	84.9	82.1	79.1	63.3	45.0	48.3
130°	93.3	94.5	93.6	88.6	87.3	85.0	82.5	79.4	63.2	45.0	48.4
130.5°	93.2	94.5	93.6	88.5	87.3	85.2	83.0	79.7	63.2	45.2	48.6
131°	93.1	94.5	93.6	88.4	87.4	85.4	83.4	80.0	63.3	45.3	48.7
131.5°	93.0	94.4	93.6	88.2	87.5	85.6	83.9	80.3	63.3	45.4	48.9
132°	92.9	94.3	93.6	88.1	87.4	85.7	84.3	80.6	63.3	45.6	49.0
132.5°	92.6	94.2	93.4	87.9	87.4	85.8	84.7	80.8	63.4	45.8	49.2
133°	92.3	93.9	93.3	87.7	87.2	85.9	85.1	81.1	63.4	46.0	49.3
133.5°	91.9	93.7	93.0	87.4	87.0	86.0	85.4	81.3	63.4	46.2	49.4
134°	91.4	93.4	92.8	87.2	86.7	86.0	85.7	81.5	63.4	46.3	49.5
134.5°	90.9	93.0	92.5	86.9	86.4	85.9	85.8	81.6	63.4	46.5	49.6



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
135°	90.2	92.6	92.2	86.6	86.0	85.9	86.0	81.7	63.4	46.6	49.6
135.5°	89.6	92.2	91.8	86.3	85.6	85.9	86.1	81.8	63.3	46.7	49.7
136°	88.9	91.7	91.4	86.0	85.1	85.8	86.1	81.8	63.3	46.8	49.7
136.5°	88.1	91.1	90.9	85.7	84.6	85.6	86.1	81.8	63.2	46.9	49.7
137°	87.3	90.5	90.4	85.3	84.1	85.4	86.0	81.8	63.0	47.0	49.7
137.5°	86.5	89.8	89.8	84.9	83.4	85.2	85.9	81.7	62.9	47.1	49.7
138°	85.5	89.0	89.3	84.5	82.8	84.8	85.7	81.4	62.7	47.2	49.6
138.5°	84.6	88.3	88.7	83.4	82.1	84.4	85.3	81.2	62.5	47.2	49.5
139°	83.7	87.5	88.0	82.8	81.5	83.9	84.9	80.8	62.2	47.2	49.3
139.5°	83.0	86.8	87.2	82.4	80.9	83.4	84.5	80.5	61.9	47.2	49.1
140°	82.1	86.0	86.4	82.0	80.2	82.8	84.0	80.0	61.5	47.1	48.9
140.5°	81.4	85.0	85.2	81.5	79.6	82.1	83.4	79.4	61.1	47.0	48.6
141°	80.4	83.9	83.9	81.1	79.0	81.4	82.6	78.8	60.5	46.9	48.2
141.5°	79.3	82.9	83.1	80.6	78.4	80.5	81.8	78.1	60.0	46.7	47.8
142°	78.1	81.3	82.3	80.1	77.7	79.7	81.0	77.2	59.4	46.4	47.3
142.5°	75.7	80.2	81.6	79.5	77.0	78.8	80.1	76.3	58.7	46.1	46.9
143°	74.9	79.4	80.7	78.9	76.3	77.8	79.1	75.4	58.0	45.7	46.3
143.5°	74.4	78.6	80.0	78.2	75.7	76.7	78.1	74.3	57.2	45.4	45.7
144°	73.8	77.8	79.2	77.6	75.0	75.6	77.0	73.2	56.4	44.9	45.1
144.5°	73.2	76.9	78.4	76.8	74.3	74.6	75.8	72.0	55.5	44.4	44.5
145°	72.7	76.0	77.6	76.1	73.5	73.5	74.6	70.7	54.5	43.8	43.7
145.5°	72.0	75.1	76.7	75.2	72.9	72.4	73.4	69.4	53.5	43.2	43.0
146°	71.3	74.2	75.8	74.3	71.9	71.2	72.1	68.0	52.5	42.6	42.2
146.5°	70.6	73.3	74.9	73.4	71.0	70.1	70.7	66.6	51.4	41.9	41.4
147°	69.8	72.3	74.0	72.3	70.0	68.9	69.3	65.1	50.2	41.2	40.5
147.5°	69.1	71.3	73.0	71.4	69.1	67.7	67.9	63.5	49.1	40.4	39.6
148°	68.3	70.2	71.9	70.3	68.0	66.6	66.4	61.9	47.9	39.6	38.8
148.5°	67.6	69.2	70.8	69.2	66.9	65.4	65.0	60.2	46.6	38.8	37.8
149°	66.7	68.1	69.8	68.0	65.9	64.2	63.4	58.5	45.3	37.9	36.8
149.5°	65.8	67.0	68.6	66.8	64.6	62.9	61.8	56.8	44.0	37.0	35.9
150°	65.0	65.8	67.5	65.6	63.5	61.7	60.1	55.1	42.6	36.0	34.9
150.5°	64.1	64.7	66.3	64.3	62.2	60.3	58.5	53.5	41.3	35.1	33.8
151°	63.1	63.5	65.1	63.1	61.0	59.0	56.9	51.8	40.0	34.1	32.8
151.5°	62.1	62.3	63.6	61.8	59.7	58.3	55.3	50.2	38.6	33.1	31.8
152°	61.0	61.0	62.2	60.5	58.4	56.9	53.6	48.3	37.2	32.1	30.8
152.5°	60.0	59.7	60.8	59.2	57.1	55.5	52.0	46.5	35.8	31.0	29.8
153°	58.8	58.4	59.4	57.5	55.8	54.0	50.4	44.7	34.5	30.0	28.7
153.5°	58.3	57.3	58.2	56.3	54.5	52.6	48.5	42.8	33.1	29.0	27.7
154°	57.2	56.1	56.9	55.2	53.2	51.1	46.6	41.0	31.8	28.0	26.7
154.5°	56.1	55.0	55.6	54.1	51.9	49.7	44.8	39.3	30.5	26.9	25.6
155°	54.9	53.8	54.3	53.0	50.5	48.1	42.9	37.5	29.2	25.9	24.6
155.5°	53.8	52.7	53.0	51.6	48.9	46.3	41.0	35.7	27.9	24.9	23.6
156°	52.6	51.4	51.7	50.1	47.5	44.3	39.2	34.0	26.7	23.9	22.7
156.5°	51.4	50.1	50.2	48.6	46.1	42.3	37.3	32.3	25.4	22.9	21.7
157°	50.2	48.9	48.7	47.1	44.6	40.4	35.4	30.7	24.2	21.9	20.7



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
157.5°	49.0	47.6	47.2	45.6	43.1	38.5	33.6	29.1	23.0	20.9	19.8
158°	47.7	46.2	45.7	44.0	41.6	36.5	31.8	27.5	21.9	20.0	18.9
158.5°	46.4	44.8	44.1	42.6	40.1	34.5	29.9	26.0	20.7	19.0	18.0
159°	45.0	43.4	42.7	41.1	38.1	32.5	28.0	24.5	19.6	18.1	17.1
159.5°	43.6	42.0	41.2	39.6	35.8	30.6	26.2	23.0	18.5	17.2	16.2
160°	42.2	40.7	39.7	38.1	33.7	28.7	24.7	21.6	17.5	16.3	15.4
160.5°	40.8	39.3	38.3	36.5	31.5	26.8	23.2	20.2	16.5	15.5	14.6
161°	39.5	38.0	36.9	34.8	29.4	24.9	21.6	18.9	15.5	14.6	13.8
161.5°	38.2	36.7	35.5	32.4	27.1	23.1	20.2	17.6	14.5	13.7	13.0
162°	36.8	35.3	34.0	30.0	25.1	21.2	18.8	16.3	13.5	12.9	12.2
162.5°	35.3	33.9	31.9	27.6	23.0	19.3	17.4	15.1	12.6	12.1	11.4
163°	33.8	32.3	29.4	25.4	21.0	17.4	16.1	14.0	11.7	11.3	10.7
163.5°	31.3	29.7	26.9	23.2	19.1	15.5	14.8	12.9	10.9	10.6	10.0
164°	28.6	27.1	24.5	21.2	17.3	14.2	13.6	11.9	10.1	9.9	9.4
164.5°	25.9	24.6	22.2	19.2	15.5	13.0	12.4	10.9	9.3	9.2	8.7
165°	23.3	22.2	20.0	17.3	13.6	11.9	11.4	10.0	8.6	8.6	8.1
165.5°	20.8	19.9	17.9	15.5	11.7	10.8	10.3	9.1	7.9	7.9	7.6
166°	18.5	17.8	16.1	13.7	9.9	9.8	9.4	8.3	7.3	7.4	7.0
166.5°	16.4	15.8	14.2	11.9	9.1	8.9	8.5	7.5	6.7	6.8	6.5
167°	14.5	13.9	12.3	10.1	8.6	8.1	7.6	6.8	6.1	6.3	6.0
167.5°	12.5	12.0	10.4	8.1	8.0	7.3	6.8	6.1	5.6	5.8	5.6
168°	10.4	10.1	8.4	7.4	7.4	6.8	6.1	5.6	5.1	5.3	5.2
168.5°	8.2	7.9	6.7	6.9	6.9	6.3	5.7	5.0	4.6	4.8	4.7
169°	6.3	6.3	6.2	6.5	6.4	6.0	5.3	4.5	4.1	4.3	4.3
169.5°	5.9	6.0	5.9	6.0	6.0	5.6	4.9	4.0	3.7	3.9	3.9
170°	5.7	5.7	5.6	5.7	5.7	5.2	4.5	3.8	3.5	3.7	3.9
170.5°	5.4	5.3	5.3	5.4	5.3	4.9	4.3	3.7	3.5	3.7	3.9
171°	5.1	5.0	5.0	5.1	5.0	4.6	4.2	3.6	3.6	3.7	3.9
171.5°	4.9	4.8	4.8	4.7	4.6	4.4	4.0	3.6	3.6	3.8	4.0
172°	4.6	4.6	4.6	4.5	4.4	4.2	3.9	3.6	3.7	3.8	4.0
172.5°	4.4	4.5	4.4	4.3	4.2	4.1	3.8	3.6	3.7	3.9	4.1
173°	4.3	4.3	4.3	4.1	4.1	4.0	3.8	3.6	3.8	4.0	4.2
173.5°	4.2	4.2	4.1	4.0	4.0	3.9	3.8	3.7	3.9	4.1	4.3
174°	4.0	4.0	4.0	3.9	3.8	3.8	3.7	3.7	3.9	4.1	4.3
174.5°	3.9	3.9	3.8	3.7	3.7	3.7	3.7	3.8	3.9	4.1	4.3
175°	3.8	3.8	3.6	3.6	3.6	3.6	3.6	3.8	4.0	4.2	4.3
175.5°	3.7	3.7	3.6	3.5	3.5	3.6	3.6	3.8	4.0	4.2	4.4
176°	3.6	3.5	3.5	3.5	3.5	3.5	3.7	3.8	4.0	4.2	4.4
176.5°	3.5	3.5	3.5	3.4	3.4	3.5	3.7	3.8	4.0	4.2	4.4
177°	3.5	3.5	3.4	3.4	3.4	3.5	3.7	3.8	4.0	4.2	4.4
177.5°	3.5	3.5	3.4	3.4	3.4	3.5	3.6	3.8	4.0	4.1	4.3
178°	3.5	3.5	3.5	3.4	3.4	3.5	3.6	3.8	3.9	4.1	4.3
178.5°	3.6	3.6	3.5	3.4	3.4	3.5	3.6	3.8	3.9	4.1	4.3
179°	3.6	3.6	3.5	3.5	3.5	3.5	3.7	3.8	3.9	4.1	4.2
179.5°	3.7	3.6	3.6	3.5	3.5	3.6	3.7	3.8	3.9	4.0	4.2



REPORT NUMBER: P973040  
CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
180°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7





REPORT NUMBER: P973040

CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5
0.5°	3571.7	3563.0	3556.8	3554.9	3556.8	3555.5	3555.6	3531.7	3530.8	3533.0	3537.4
1°	3559.0	3551.8	3556.0	3562.5	3572.3	3579.3	3582.0	3526.9	3525.5	3524.6	3523.3
1.5°	3542.3	3548.5	3570.6	3596.0	3619.0	3631.9	3633.2	3572.7	3568.2	3561.9	3554.9
2°	3540.1	3564.8	3600.1	3634.7	3660.1	3673.8	3681.0	3626.0	3619.2	3611.8	3600.8
2.5°	3539.2	3587.0	3635.0	3666.4	3684.9	3687.1	3687.0	3652.1	3646.0	3644.2	3638.5
3°	3547.2	3607.1	3652.6	3676.0	3671.8	3651.7	3639.3	3631.5	3632.0	3642.7	3647.5
3.5°	3554.2	3623.6	3658.5	3649.7	3614.0	3579.4	3565.6	3557.8	3564.3	3582.7	3623.0
4°	3565.7	3628.6	3641.1	3590.1	3540.1	3523.8	3525.6	3499.8	3498.7	3514.5	3554.7
4.5°	3571.6	3625.3	3602.4	3525.2	3504.1	3508.8	3523.3	3485.7	3480.8	3483.5	3499.4
5°	3575.8	3609.1	3539.0	3483.9	3494.8	3518.5	3531.4	3501.0	3489.8	3480.1	3475.7
5.5°	3571.3	3580.1	3483.8	3468.0	3497.6	3506.7	3498.7	3485.9	3485.2	3485.3	3479.7
6°	3563.6	3535.9	3452.4	3464.7	3477.8	3441.9	3401.2	3411.5	3420.1	3457.9	3483.2
6.5°	3555.6	3485.9	3433.0	3453.2	3416.5	3328.5	3270.5	3288.8	3307.8	3375.9	3449.4
7°	3542.7	3441.9	3424.3	3415.8	3311.7	3201.1	3158.0	3166.8	3184.3	3255.5	3375.0
7.5°	3521.3	3409.8	3406.7	3342.2	3191.4	3109.6	3106.0	3092.6	3092.1	3139.2	3262.3
8°	3490.5	3385.9	3379.7	3248.6	3100.5	3077.4	3097.7	3079.4	3071.1	3069.8	3148.8
8.5°	3463.3	3360.0	3329.2	3145.1	3047.6	3066.7	3068.2	3066.0	3067.3	3055.4	3071.6
9°	3424.6	3339.6	3266.1	3061.2	3030.9	3028.5	2982.3	2992.6	3012.6	3044.6	3052.3
9.5°	3393.1	3317.5	3185.7	3009.3	3010.0	2936.2	2848.0	2874.5	2903.0	2991.7	3049.3
10°	3363.2	3289.5	3103.0	2980.4	2945.5	2805.9	2712.2	2726.1	2760.8	2875.2	3023.5
10.5°	3334.5	3257.1	3031.2	2959.9	2844.4	2677.6	2620.1	2622.0	2636.5	2734.0	2954.3
11°	3314.7	3215.2	2970.3	2920.2	2729.2	2590.0	2571.7	2567.4	2569.2	2615.2	2824.3
11.5°	3294.3	3167.7	2924.3	2848.2	2619.0	2539.0	2514.2	2520.7	2527.7	2554.0	2690.6
12°	3276.4	3117.3	2898.0	2759.0	2538.8	2485.6	2422.0	2435.7	2464.0	2517.7	2592.8
12.5°	3258.6	3060.6	2872.0	2666.1	2492.6	2399.5	2298.8	2314.5	2358.7	2464.1	2541.3
13°	3243.1	3008.1	2836.4	2567.2	2433.4	2282.9	2170.4	2177.3	2223.3	2367.5	2509.9
13.5°	3222.2	2961.9	2789.0	2493.4	2355.6	2160.4	2069.1	2067.7	2101.5	2239.9	2461.8
14°	3196.8	2919.8	2728.6	2440.8	2259.0	2057.9	1987.3	1986.5	2009.0	2111.1	2374.4
14.5°	3170.5	2881.5	2656.1	2383.6	2146.8	1972.0	1904.0	1911.6	1936.3	2015.6	2254.0
15°	3137.7	2849.5	2585.7	2321.0	2045.0	1894.8	1814.0	1818.1	1856.1	1943.7	2124.6
15.5°	3101.5	2819.3	2513.2	2247.9	1960.0	1810.3	1706.7	1705.4	1760.3	1873.7	2020.8
16°	3067.1	2789.4	2448.0	2159.9	1884.8	1713.6	1585.2	1585.4	1641.9	1788.3	1944.9
16.5°	3030.5	2755.1	2397.1	2067.5	1807.0	1602.9	1464.0	1465.2	1516.3	1686.5	1886.7
17°	2996.0	2712.3	2345.3	1986.7	1726.1	1491.4	1362.9	1360.1	1398.7	1558.3	1814.1
17.5°	2963.0	2667.6	2289.7	1906.0	1632.8	1381.9	1279.9	1309.0	1342.3	1437.5	1723.2
18°	2927.9	2621.0	2236.5	1829.7	1524.3	1291.0	1220.4	1257.8	1286.0	1336.0	1615.3
18.5°	2894.3	2564.8	2175.0	1759.4	1426.2	1223.5	1174.7	1206.7	1229.6	1281.6	1501.4
19°	2860.0	2513.9	2104.7	1687.4	1332.1	1171.5	1136.5	1155.5	1173.2	1227.2	1389.4
19.5°	2820.7	2458.0	2032.3	1606.3	1249.0	1128.8	1101.3	1104.4	1117.4	1172.8	1331.4
20°	2783.3	2398.2	1956.6	1525.9	1187.1	1094.2	1067.1	1069.9	1081.3	1118.8	1273.5
20.5°	2748.0	2338.5	1874.1	1434.7	1135.0	1058.2	1030.1	1035.1	1046.6	1084.9	1215.5
21°	2707.4	2288.8	1804.0	1347.2	1094.4	1024.6	994.8	998.6	1011.1	1051.3	1157.5
21.5°	2670.8	2235.8	1736.2	1271.9	1059.7	991.0	959.0	962.1	975.3	1016.1	1100.6
22°	2638.5	2190.9	1670.0	1199.8	1026.4	955.8	921.0	925.2	939.0	982.3	1067.7





REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
22.5°	2603.6	2153.0	1614.1	1143.0	994.0	920.9	885.0	889.5	903.0	948.9	1035.9
23°	2575.9	2115.6	1554.2	1098.6	962.8	886.9	850.7	853.6	868.6	914.4	1004.9
23.5°	2547.5	2072.1	1482.3	1058.1	930.3	851.0	815.0	820.0	835.5	881.8	974.2
24°	2521.0	2027.8	1415.7	1025.3	897.3	818.2	780.9	785.5	800.3	848.5	943.6
24.5°	2492.4	1975.7	1347.4	995.6	867.2	787.2	749.2	752.7	768.1	816.1	913.5
25°	2464.2	1914.0	1275.1	965.5	834.6	753.9	715.3	720.0	736.2	785.5	883.1
25.5°	2435.3	1854.3	1214.5	936.3	802.4	721.2	682.6	687.0	703.2	754.4	852.7
26°	2405.7	1788.5	1162.9	910.2	774.3	692.1	653.0	655.7	672.2	724.0	823.4
26.5°	2376.0	1727.6	1111.6	882.3	744.5	661.7	621.4	625.9	642.2	693.8	795.4
27°	2340.8	1675.3	1073.0	854.2	714.5	631.8	591.7	594.9	610.3	664.2	766.2
27.5°	2304.3	1625.0	1038.0	827.7	687.0	602.7	572.8	565.0	580.6	634.2	737.7
28°	2266.3	1579.1	1006.1	801.3	659.1	576.5	543.7	537.2	552.8	606.4	709.3
28.5°	2227.9	1537.4	978.1	773.9	630.4	550.6	514.0	509.8	524.5	578.1	682.0
29°	2192.9	1496.5	954.0	749.1	605.1	524.7	484.4	482.8	496.7	551.1	654.7
29.5°	2161.4	1456.1	928.0	723.4	579.6	498.8	454.7	458.4	471.4	526.1	628.3
30°	2128.5	1416.1	905.0	697.4	555.5	473.0	431.0	435.0	446.9	501.3	602.2
30.5°	2102.4	1372.1	882.5	674.1	531.5	447.1	409.9	413.2	424.4	476.6	577.0
31°	2079.8	1328.8	857.5	649.9	507.4	424.2	388.7	392.5	403.1	454.3	552.5
31.5°	2057.8	1291.3	834.9	625.1	483.4	402.4	368.8	373.2	382.2	432.9	529.8
32°	2042.9	1251.4	813.2	603.5	459.3	383.5	351.8	355.4	363.3	412.3	508.0
32.5°	2026.1	1215.6	790.6	580.7	438.4	364.2	334.6	339.2	345.7	392.8	486.6
33°	2008.4	1186.2	771.3	560.2	418.1	346.0	318.6	323.8	329.0	374.6	466.2
33.5°	1991.1	1156.7	752.9	539.7	399.9	329.8	304.5	309.7	314.0	357.1	446.8
34°	1972.0	1132.1	731.9	519.2	382.2	314.3	291.4	296.5	299.2	340.2	428.1
34.5°	1949.4	1111.9	713.0	498.7	364.8	299.1	279.0	284.0	285.6	324.3	410.4
35°	1929.0	1093.7	695.6	478.1	349.2	286.0	268.3	272.8	273.6	309.8	393.3
35.5°	1906.3	1077.5	676.9	459.6	334.3	273.6	258.0	262.3	262.5	295.7	375.5
36°	1882.1	1065.2	660.3	441.1	319.2	261.7	248.2	252.7	252.0	283.0	359.3
36.5°	1860.3	1051.8	644.5	425.1	305.5	251.1	239.5	243.8	242.9	270.9	344.0
37°	1837.8	1039.4	627.0	408.6	292.8	241.1	231.0	234.9	234.1	259.9	328.7
37.5°	1817.3	1028.9	611.7	393.2	279.8	232.0	222.7	226.8	225.8	249.6	314.1
38°	1798.3	1016.2	597.2	379.0	268.3	223.6	215.1	219.0	218.1	240.1	300.5
38.5°	1781.2	1004.4	581.4	365.6	257.4	215.8	207.8	211.4	210.6	231.3	287.6
39°	1765.7	994.3	567.9	352.3	246.7	208.3	200.7	204.6	203.6	223.5	276.0
39.5°	1751.9	982.8	554.5	340.5	236.9	201.4	194.2	197.7	197.0	215.3	264.3
40°	1736.4	970.9	541.1	328.3	227.8	194.8	188.0	191.7	190.9	207.9	253.7
40.5°	1720.6	961.5	527.7	316.9	218.9	188.3	181.6	185.7	184.8	201.0	244.0
41°	1707.5	949.8	514.3	307.0	211.1	182.5	176.3	180.2	179.2	194.1	234.6
41.5°	1693.6	938.2	501.1	297.1	203.9	176.9	171.1	174.9	174.0	187.7	226.0
42°	1679.1	928.0	489.3	286.8	196.2	171.3	165.9	169.8	169.0	181.9	218.2
42.5°	1667.3	916.7	478.4	278.2	189.7	166.3	161.2	164.9	164.1	176.3	210.6
43°	1654.1	906.8	466.5	269.7	183.7	161.4	156.5	160.2	159.3	171.0	203.4
43.5°	1639.8	896.8	455.1	260.9	177.4	156.6	151.7	155.6	154.6	165.8	196.6
44°	1627.9	886.3	444.8	252.9	171.8	152.1	147.3	151.1	150.1	160.9	190.3
44.5°	1616.5	876.2	433.6	245.7	166.6	147.7	143.3	146.9	145.7	156.3	184.1



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
45°	1603.9	866.0	423.2	238.3	161.4	143.4	139.1	143.0	141.5	151.6	178.3
45.5°	1593.0	855.2	413.7	231.5	156.6	139.3	135.3	139.1	137.5	147.0	172.7
46°	1582.8	846.2	403.1	224.5	152.3	135.5	131.6	135.5	134.1	142.7	167.5
46.5°	1570.9	838.4	393.9	218.1	147.8	131.7	127.9	132.1	130.7	138.3	162.3
47°	1560.7	829.2	385.4	212.0	143.6	128.0	124.4	128.8	127.3	134.8	157.6
47.5°	1549.9	821.5	376.6	206.0	139.6	124.4	120.9	125.5	124.0	131.3	153.0
48°	1537.2	814.5	369.0	200.1	135.8	120.9	117.5	122.1	120.6	127.7	148.7
48.5°	1525.7	805.6	361.3	194.9	132.0	117.5	114.3	118.6	117.3	124.2	144.2
49°	1510.9	796.1	353.3	189.7	128.4	114.2	110.9	115.3	114.2	120.7	140.1
49.5°	1494.5	788.1	346.3	184.7	124.8	110.9	107.4	112.0	110.9	117.4	136.2
50°	1481.1	777.8	339.6	180.2	121.3	107.8	104.2	108.6	107.7	114.1	132.6
50.5°	1467.4	765.4	332.4	176.0	118.0	104.8	101.1	105.5	104.5	111.0	129.0
51°	1451.3	753.3	325.9	171.6	114.5	101.7	98.0	102.2	101.5	107.9	125.5
51.5°	1439.0	740.9	320.2	167.7	111.3	98.7	95.0	99.1	98.6	104.8	121.9
52°	1424.8	728.0	313.8	163.8	108.2	96.0	92.2	96.3	95.8	101.8	118.5
52.5°	1409.0	717.3	308.6	160.0	105.0	93.2	89.6	93.4	93.0	98.7	115.1
53°	1395.1	706.2	303.4	156.3	102.0	90.3	87.0	90.6	90.2	95.7	112.0
53.5°	1377.3	693.6	297.4	152.8	99.2	87.8	84.6	87.8	87.6	92.8	108.9
54°	1358.7	681.2	292.2	149.1	96.2	85.0	82.0	85.3	84.9	89.9	105.9
54.5°	1340.6	668.8	287.2	145.7	93.4	82.5	79.6	82.8	82.5	87.1	103.1
55°	1324.3	657.6	281.8	142.3	90.8	80.1	77.2	80.3	80.0	84.5	100.4
55.5°	1308.7	646.5	277.1	138.9	88.1	77.6	74.9	77.9	77.5	81.6	97.6
56°	1294.3	634.3	272.5	135.6	85.5	75.1	72.6	75.6	75.1	78.9	95.0
56.5°	1280.4	622.6	267.7	132.3	83.0	72.7	70.5	73.3	72.8	76.2	92.3
57°	1266.9	611.3	262.5	128.9	80.4	70.3	68.4	71.3	70.5	73.5	89.5
57.5°	1256.0	601.3	257.8	125.9	77.9	68.0	66.3	69.2	68.4	70.9	86.7
58°	1242.8	591.0	251.9	122.7	75.4	65.8	64.1	66.9	66.3	68.3	83.9
58.5°	1229.9	582.1	246.4	119.5	72.8	63.5	61.7	64.5	63.9	65.9	81.3
59°	1218.3	573.4	241.2	116.3	70.2	61.3	59.1	62.1	61.6	63.7	78.5
59.5°	1206.7	563.4	235.7	113.2	67.7	59.0	56.3	59.6	59.1	61.4	75.7
60°	1197.0	553.4	230.3	110.0	65.2	56.3	53.4	56.4	56.3	58.9	73.0
60.5°	1188.4	543.3	224.7	106.9	62.8	53.6	50.5	52.7	53.0	56.3	70.3
61°	1175.1	533.3	218.7	103.9	60.6	50.9	47.6	49.2	49.4	53.7	67.8
61.5°	1156.2	524.5	213.4	100.6	58.0	48.1	44.8	46.5	46.2	50.7	65.3
62°	1139.8	514.6	208.8	97.5	55.7	45.4	41.4	43.0	43.5	47.4	62.8
62.5°	1124.7	503.9	204.1	94.5	53.3	42.6	36.7	35.9	39.6	44.1	60.2
63°	1110.4	492.4	199.2	91.3	51.0	39.5	27.8	28.7	31.6	41.2	57.4
63.5°	1094.1	479.8	194.1	88.4	48.7	35.3	18.0	21.5	23.7	36.3	54.5
64°	1075.7	466.5	188.1	85.4	46.1	27.9	8.1	14.4	15.8	29.1	51.7
64.5°	1055.9	453.8	182.3	82.4	43.4	18.6	6.3	7.2	7.9	21.8	48.7
65°	1032.1	439.5	176.2	79.4	40.5	9.4	4.8	0.2	0.3	14.5	45.4
65.5°	1010.2	425.9	169.6	76.5	36.3	2.4	3.3	0.1	0.1	7.2	40.8
66°	986.4	412.8	164.1	73.3	29.4	1.7	1.7	0.1	0.1	0.2	33.7
66.5°	962.6	397.4	159.5	70.3	21.8	1.2	0.2	0.1	0.1	0.2	25.7
67°	939.6	384.8	154.9	67.5	15.1	0.7	0.1	0.1	0.1	0.1	18.4



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
67.5°	912.1	372.5	149.8	64.2	11.6	0.2	0.1	0.1	0.1	0.1	15.6
68°	883.9	358.5	144.4	59.9	10.8	0.1	0.1	0.1	0.1	0.1	15.1
68.5°	859.3	346.4	138.5	56.0	10.5	0.1	0.1	0.1	0.1	0.2	14.8
69°	832.6	334.8	133.1	52.0	10.2	0.1	0.1	0.1	0.1	0.2	14.5
69.5°	805.0	322.4	127.8	48.1	10.0	0.1	0.1	0.1	0.1	0.2	14.3
70°	776.9	311.0	121.8	44.1	9.8	0.1	0.1	0.2	0.2	0.2	14.1
70.5°	749.6	299.8	116.2	40.1	9.7	0.1	0.1	0.2	0.2	0.2	13.8
71°	720.4	287.9	110.4	39.1	9.5	0.1	0.1	0.2	0.2	0.2	13.6
71.5°	689.5	275.5	102.9	38.2	9.4	0.2	0.1	0.2	0.2	0.2	13.5
72°	660.6	263.3	95.9	37.3	9.3	0.2	0.2	0.2	0.2	0.2	13.3
72.5°	631.2	249.8	90.1	36.5	9.1	0.2	0.2	0.2	0.2	0.2	13.0
73°	603.5	236.3	85.9	35.7	9.0	0.2	0.2	0.2	0.2	0.2	12.9
73.5°	576.2	225.4	82.7	34.9	8.9	0.2	0.2	0.2	0.2	0.2	12.7
74°	553.7	215.2	79.9	34.2	8.8	0.2	0.2	0.2	0.2	0.2	12.5
74.5°	531.3	206.1	76.9	33.5	8.7	0.2	0.2	0.2	0.2	0.2	12.3
75°	508.9	199.1	74.2	32.7	8.6	0.2	0.2	0.2	0.2	0.2	12.0
75.5°	486.5	192.5	71.7	32.0	8.5	0.2	0.2	0.2	0.2	0.3	11.8
76°	464.0	185.2	69.1	31.2	8.4	0.2	0.2	0.3	0.3	0.3	11.6
76.5°	444.3	178.3	66.7	30.4	8.2	0.2	0.2	0.3	0.3	0.3	11.4
77°	426.0	172.3	64.6	29.6	8.1	0.2	0.2	0.3	0.3	0.3	11.2
77.5°	407.5	165.3	62.3	28.8	7.9	0.2	0.2	0.3	0.3	0.3	10.9
78°	388.9	158.3	60.1	28.0	7.8	0.2	0.2	0.3	0.3	0.3	10.7
78.5°	369.9	150.7	57.8	27.2	7.6	0.2	0.2	0.3	0.3	0.3	10.5
79°	350.7	144.1	56.1	26.4	7.5	0.2	0.2	0.3	0.3	0.3	10.2
79.5°	331.8	138.0	54.5	25.6	7.3	0.2	0.2	0.3	0.3	0.3	10.0
80°	314.9	132.5	52.9	24.8	7.1	0.2	0.2	0.3	0.3	0.3	9.8
80.5°	297.6	126.9	51.3	23.9	6.9	0.2	0.2	0.3	0.3	0.3	9.6
81°	280.4	121.3	49.4	23.1	6.8	0.2	0.2	0.3	0.3	0.3	9.3
81.5°	263.5	115.6	47.5	22.2	6.6	0.3	0.2	0.3	0.3	0.4	9.1
82°	246.4	109.1	45.4	21.4	6.4	0.3	0.3	0.4	0.4	0.4	8.9
82.5°	230.6	102.0	43.3	20.5	6.3	0.3	0.3	0.4	0.4	0.4	8.7
83°	215.2	95.1	41.2	19.7	6.1	0.3	0.3	0.4	0.4	0.4	8.5
83.5°	199.1	89.1	39.1	18.9	6.0	0.3	0.3	0.4	0.4	0.4	8.3
84°	182.1	83.1	37.0	18.1	5.8	0.3	0.3	0.4	0.4	0.4	8.1
84.5°	166.8	77.0	35.0	17.3	5.6	0.3	0.3	0.5	0.5	0.5	7.9
85°	153.3	71.4	33.0	16.6	5.5	0.3	0.3	0.5	0.5	0.5	7.7
85.5°	140.7	66.3	31.2	15.9	5.3	0.3	0.3	0.5	0.5	0.5	7.5
86°	128.4	61.3	29.6	15.2	5.2	0.4	0.3	0.5	0.5	0.5	7.3
86.5°	116.5	56.9	28.0	14.6	5.1	0.4	0.4	0.5	0.5	0.5	7.1
87°	105.9	53.3	26.5	14.0	4.9	0.4	0.4	0.6	0.6	0.6	6.9
87.5°	96.4	49.6	25.2	13.4	4.8	0.4	0.4	0.6	0.6	0.6	6.7
88°	87.4	46.0	23.9	12.9	4.7	0.4	0.4	0.6	0.6	0.6	6.5
88.5°	79.8	42.4	22.8	12.5	4.6	0.4	0.4	0.6	0.6	0.6	6.3
89°	72.7	39.6	21.8	12.0	4.5	0.5	0.5	0.7	0.7	0.7	6.1
89.5°	66.8	37.1	20.8	11.6	4.3	0.5	0.5	0.7	0.7	0.7	5.9



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
90°	61.7	34.9	19.9	11.1	4.2	0.5	0.5	0.7	0.7	0.7	5.7
90.5°	56.9	33.0	19.1	10.7	4.1	0.5	0.5	0.8	0.8	0.8	5.6
91°	54.0	31.4	18.3	10.3	4.0	0.5	0.5	0.8	0.8	0.8	5.5
91.5°	51.3	30.0	17.6	9.9	3.9	0.6	0.6	0.8	0.8	0.8	5.3
92°	48.5	28.8	17.0	9.7	3.8	0.6	0.6	0.8	0.8	0.8	5.2
92.5°	45.8	27.8	16.5	9.4	3.7	0.6	0.6	0.9	0.9	0.9	5.1
93°	44.0	27.0	16.1	9.2	3.6	0.6	0.6	0.9	0.9	0.9	4.9
93.5°	42.6	26.4	15.8	9.0	3.5	0.6	0.6	0.9	0.9	0.9	4.8
94°	41.4	26.1	15.4	8.7	3.4	0.7	0.7	1.0	1.0	1.0	4.7
94.5°	40.6	25.7	15.1	8.5	3.3	0.7	0.7	1.0	1.0	1.0	4.6
95°	40.0	25.4	14.8	8.3	3.3	0.7	0.7	1.0	1.0	1.0	4.5
95.5°	39.5	25.1	14.5	8.2	3.2	0.7	0.7	1.0	1.1	1.1	4.5
96°	39.1	24.9	14.2	8.1	3.1	0.8	0.8	1.1	1.1	1.1	4.4
96.5°	38.7	24.5	14.0	7.9	3.0	0.8	0.8	1.1	1.1	1.1	4.3
97°	38.3	24.3	13.8	7.8	3.0	0.8	0.8	1.1	1.1	1.1	4.2
97.5°	37.8	24.0	13.6	7.7	2.9	0.8	0.8	1.2	1.2	1.2	4.2
98°	37.3	23.7	13.4	7.6	2.9	0.9	0.9	1.2	1.2	1.2	4.1
98.5°	36.7	23.4	13.2	7.4	2.8	0.9	0.9	1.2	1.2	1.2	4.1
99°	36.1	23.0	12.9	7.3	2.8	0.9	0.9	1.3	1.3	1.3	4.0
99.5°	35.5	22.6	12.8	7.2	2.7	0.9	0.9	1.3	1.3	1.3	3.9
100°	35.0	22.3	12.6	7.1	2.7	1.0	1.0	1.3	1.3	1.3	3.8
100.5°	34.4	21.9	12.4	7.1	2.7	1.0	1.0	1.4	1.4	1.4	3.8
101°	33.9	21.4	12.3	7.0	2.7	1.0	1.0	1.4	1.4	1.4	3.7
101.5°	33.4	21.1	12.1	6.9	2.6	1.0	1.1	1.4	1.4	1.4	3.7
102°	32.9	20.8	12.0	6.8	2.6	1.1	1.1	1.5	1.5	1.5	3.6
102.5°	32.5	20.4	11.9	6.8	2.6	1.1	1.1	1.5	1.5	1.5	3.5
103°	32.1	20.2	11.8	6.7	2.6	1.1	1.1	1.6	1.5	1.5	3.5
103.5°	31.8	19.9	11.7	6.6	2.5	1.1	1.2	1.6	1.6	1.6	3.4
104°	31.6	19.7	11.6	6.6	2.5	1.2	1.2	1.6	1.6	1.6	3.3
104.5°	31.4	19.5	11.5	6.5	2.5	1.2	1.2	1.7	1.7	1.7	3.3
105°	31.2	19.3	11.4	6.5	2.5	1.2	1.3	1.7	1.7	1.7	3.3
105.5°	31.1	19.2	11.2	6.4	2.5	1.3	1.3	1.8	1.8	1.7	3.3
106°	31.1	19.1	11.2	6.3	2.5	1.3	1.3	1.8	1.8	1.8	3.3
106.5°	31.0	19.1	11.0	6.2	2.4	1.3	1.4	1.9	1.9	1.8	3.3
107°	31.0	19.1	10.9	6.1	2.4	1.4	1.4	1.9	1.9	1.9	3.3
107.5°	31.0	19.0	10.8	6.0	2.4	1.4	1.4	1.9	1.9	1.9	3.3
108°	31.0	19.0	10.7	6.0	2.4	1.4	1.5	2.0	2.0	1.9	3.3
108.5°	31.0	19.0	10.7	5.9	2.4	1.5	1.5	2.0	2.0	2.0	3.3
109°	31.1	19.0	10.6	5.8	2.4	1.5	1.5	2.1	2.0	2.0	3.3
109.5°	31.1	19.0	10.6	5.7	2.5	1.5	1.6	2.1	2.1	2.0	3.3
110°	31.1	19.0	10.6	5.7	2.5	1.6	1.6	2.1	2.1	2.1	3.3
110.5°	31.2	18.9	10.6	5.6	2.5	1.6	1.6	2.2	2.1	2.1	3.3
111°	31.2	18.9	10.6	5.6	2.5	1.6	1.7	2.2	2.2	2.1	3.3
111.5°	31.2	18.9	10.6	5.5	2.6	1.7	1.7	2.2	2.2	2.2	3.3
112°	31.2	18.8	10.7	5.5	2.6	1.7	1.8	2.3	2.2	2.2	3.3



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
112.5°	31.3	18.8	10.7	5.5	2.6	1.8	1.8	2.3	2.3	2.2	3.3
113°	31.3	18.7	10.7	5.5	2.7	1.8	1.9	2.3	2.3	2.2	3.4
113.5°	31.3	18.7	10.7	5.5	2.7	1.9	1.9	2.3	2.3	2.3	3.4
114°	31.3	18.6	10.7	5.5	2.8	1.9	1.9	2.4	2.3	2.3	3.4
114.5°	31.3	18.6	10.6	5.6	2.8	2.0	2.0	2.4	2.4	2.3	3.4
115°	31.3	18.6	10.6	5.6	2.8	2.0	2.0	2.4	2.4	2.4	3.4
115.5°	31.4	18.5	10.6	5.7	2.9	2.0	2.1	2.5	2.4	2.4	3.5
116°	31.4	18.5	10.5	5.8	3.0	2.1	2.1	2.5	2.5	2.4	3.5
116.5°	31.4	18.4	10.5	5.9	3.0	2.1	2.2	2.5	2.5	2.4	3.5
117°	31.5	18.4	10.4	6.0	3.1	2.2	2.2	2.5	2.5	2.5	3.5
117.5°	31.6	18.4	10.4	6.0	3.2	2.2	2.3	2.6	2.5	2.5	3.6
118°	31.7	18.4	10.4	6.1	3.2	2.3	2.3	2.6	2.6	2.5	3.6
118.5°	31.7	18.3	10.4	6.2	3.3	2.4	2.4	2.6	2.6	2.6	3.6
119°	31.8	18.3	10.4	6.3	3.4	2.4	2.4	2.7	2.6	2.6	3.6
119.5°	31.8	18.3	10.4	6.3	3.4	2.5	2.5	2.7	2.7	2.6	3.6
120°	31.8	18.2	10.4	6.4	3.5	2.5	2.6	2.7	2.7	2.7	3.7
120.5°	31.9	18.2	10.4	6.4	3.5	2.6	2.6	2.8	2.7	2.7	3.7
121°	31.9	18.2	10.5	6.5	3.6	2.6	2.7	2.8	2.8	2.7	3.7
121.5°	31.9	18.2	10.5	6.6	3.6	2.7	2.7	2.8	2.8	2.8	3.8
122°	31.9	18.2	10.5	6.6	3.6	2.7	2.8	2.9	2.8	2.8	3.8
122.5°	31.9	18.3	10.6	6.7	3.7	2.8	2.8	2.9	2.9	2.8	3.8
123°	32.0	18.3	10.6	6.7	3.7	2.9	2.9	2.9	2.9	2.9	3.9
123.5°	32.0	18.4	10.7	6.8	3.8	2.9	2.9	3.0	2.9	2.9	3.9
124°	32.0	18.4	10.8	6.8	3.8	3.0	3.0	3.0	3.0	2.9	4.0
124.5°	32.1	18.5	10.8	6.9	3.8	3.0	3.0	3.0	3.0	3.0	4.0
125°	32.1	18.6	10.9	6.9	3.9	3.0	3.1	3.1	3.1	3.0	4.1
125.5°	32.2	18.7	11.0	7.0	3.9	3.1	3.1	3.1	3.1	3.1	4.2
126°	32.3	18.8	11.1	7.0	3.9	3.1	3.2	3.2	3.2	3.1	4.2
126.5°	32.5	18.9	11.2	7.0	3.9	3.2	3.2	3.3	3.2	3.2	4.3
127°	32.7	19.1	11.2	7.1	4.0	3.2	3.3	3.3	3.3	3.2	4.4
127.5°	32.9	19.2	11.3	7.1	4.0	3.3	3.3	3.4	3.3	3.3	4.4
128°	33.1	19.3	11.4	7.1	4.0	3.3	3.4	3.4	3.4	3.3	4.5
128.5°	33.3	19.5	11.5	7.2	4.1	3.4	3.4	3.5	3.5	3.4	4.5
129°	33.5	19.6	11.6	7.2	4.1	3.4	3.5	3.5	3.5	3.4	4.6
129.5°	33.8	19.8	11.6	7.2	4.1	3.4	3.5	3.6	3.6	3.5	4.6
130°	34.1	19.9	11.7	7.2	4.1	3.5	3.5	3.6	3.6	3.5	4.6
130.5°	34.3	20.1	11.8	7.3	4.2	3.5	3.6	3.7	3.7	3.6	4.7
131°	34.6	20.2	11.9	7.3	4.2	3.6	3.6	3.8	3.7	3.7	4.7
131.5°	34.9	20.4	12.0	7.3	4.2	3.6	3.7	3.8	3.8	3.7	4.7
132°	35.1	20.5	12.1	7.4	4.3	3.7	3.7	3.9	3.8	3.8	4.8
132.5°	35.4	20.7	12.1	7.4	4.3	3.7	3.8	3.9	3.9	3.8	4.8
133°	35.6	20.8	12.2	7.4	4.3	3.7	3.8	4.0	4.0	3.9	4.8
133.5°	35.9	20.9	12.3	7.4	4.3	3.8	3.8	4.0	4.0	3.9	4.9
134°	36.1	21.1	12.3	7.5	4.4	3.8	3.9	4.1	4.1	4.0	4.9
134.5°	36.4	21.2	12.4	7.5	4.4	3.8	3.9	4.2	4.1	4.1	4.9



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
135°	36.6	21.3	12.4	7.5	4.4	3.9	3.9	4.2	4.2	4.1	5.0
135.5°	36.8	21.3	12.5	7.5	4.4	3.9	4.0	4.3	4.2	4.2	5.0
136°	37.0	21.4	12.5	7.5	4.4	3.9	4.0	4.3	4.3	4.2	5.0
136.5°	37.2	21.5	12.5	7.5	4.4	3.9	4.0	4.4	4.3	4.3	5.0
137°	37.3	21.5	12.5	7.5	4.4	4.0	4.1	4.4	4.4	4.3	5.1
137.5°	37.5	21.6	12.6	7.5	4.5	4.0	4.1	4.4	4.4	4.4	5.1
138°	37.6	21.6	12.6	7.5	4.5	4.0	4.1	4.5	4.5	4.4	5.1
138.5°	37.7	21.6	12.6	7.5	4.5	4.1	4.2	4.5	4.5	4.4	5.1
139°	37.8	21.6	12.6	7.5	4.5	4.1	4.2	4.6	4.6	4.5	5.1
139.5°	37.8	21.6	12.6	7.5	4.5	4.1	4.2	4.6	4.6	4.5	5.2
140°	37.8	21.6	12.5	7.4	4.5	4.2	4.2	4.6	4.6	4.6	5.2
140.5°	37.8	21.6	12.5	7.4	4.5	4.2	4.3	4.7	4.7	4.6	5.2
141°	37.7	21.5	12.5	7.4	4.5	4.2	4.3	4.7	4.7	4.6	5.2
141.5°	37.6	21.5	12.4	7.4	4.5	4.2	4.3	4.8	4.7	4.7	5.2
142°	37.5	21.4	12.3	7.3	4.5	4.2	4.3	4.8	4.8	4.7	5.2
142.5°	37.3	21.3	12.3	7.3	4.5	4.2	4.3	4.8	4.8	4.7	5.2
143°	37.1	21.2	12.2	7.2	4.5	4.2	4.3	4.8	4.8	4.8	5.2
143.5°	36.9	21.1	12.1	7.2	4.5	4.3	4.3	4.9	4.9	4.8	5.2
144°	36.6	21.0	12.0	7.1	4.5	4.3	4.4	4.9	4.9	4.8	5.2
144.5°	36.3	20.9	11.9	7.1	4.5	4.3	4.4	4.9	4.9	4.9	5.2
145°	35.9	20.8	11.9	7.0	4.5	4.3	4.4	4.9	4.9	4.9	5.2
145.5°	35.5	20.7	11.8	7.0	4.5	4.3	4.4	4.9	4.9	4.9	5.2
146°	35.0	20.5	11.7	6.9	4.5	4.3	4.4	4.9	4.9	4.9	5.2
146.5°	34.5	20.4	11.6	6.9	4.5	4.3	4.4	4.9	5.0	4.9	5.2
147°	34.0	20.2	11.4	6.8	4.5	4.3	4.4	4.9	5.0	4.9	5.1
147.5°	33.5	20.0	11.3	6.7	4.4	4.3	4.4	4.9	5.0	4.9	5.1
148°	32.8	19.8	11.2	6.7	4.4	4.4	4.4	4.9	5.0	4.9	5.1
148.5°	32.2	19.6	11.1	6.6	4.4	4.4	4.5	4.9	5.0	4.9	5.1
149°	31.5	19.4	11.0	6.6	4.4	4.4	4.5	4.9	4.9	4.9	5.0
149.5°	30.8	19.1	10.9	6.5	4.4	4.4	4.5	4.9	4.9	4.9	5.0
150°	30.1	18.8	10.7	6.4	4.4	4.4	4.5	4.9	4.9	4.9	4.9
150.5°	29.3	18.6	10.6	6.3	4.4	4.4	4.5	4.9	4.9	4.9	4.9
151°	28.5	18.3	10.5	6.3	4.4	4.4	4.5	4.9	4.9	4.9	4.9
151.5°	27.7	18.0	10.3	6.2	4.3	4.4	4.5	4.9	4.9	4.9	4.8
152°	26.9	17.6	10.2	6.1	4.3	4.4	4.5	4.9	4.9	4.9	4.8
152.5°	26.1	17.3	10.0	6.0	4.3	4.4	4.5	4.9	4.9	4.8	4.8
153°	25.2	16.9	9.9	5.9	4.3	4.4	4.5	4.8	4.8	4.8	4.7
153.5°	24.4	16.6	9.7	5.8	4.3	4.4	4.5	4.8	4.8	4.8	4.7
154°	23.5	16.2	9.5	5.7	4.2	4.4	4.5	4.8	4.8	4.8	4.7
154.5°	22.7	15.8	9.4	5.6	4.2	4.4	4.5	4.8	4.8	4.8	4.6
155°	21.8	15.3	9.2	5.5	4.2	4.4	4.5	4.8	4.7	4.7	4.6
155.5°	21.0	14.9	9.0	5.4	4.2	4.4	4.5	4.7	4.7	4.7	4.6
156°	20.1	14.5	8.8	5.3	4.2	4.4	4.5	4.7	4.7	4.7	4.6
156.5°	19.3	14.0	8.6	5.2	4.2	4.4	4.5	4.7	4.7	4.7	4.5
157°	18.4	13.6	8.4	5.1	4.2	4.4	4.6	4.7	4.7	4.6	4.5



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
157.5°	17.6	13.1	8.2	5.0	4.2	4.5	4.6	4.7	4.6	4.6	4.5
158°	16.8	12.6	8.0	4.8	4.3	4.5	4.6	4.6	4.6	4.6	4.5
158.5°	16.0	12.1	7.7	4.7	4.3	4.5	4.6	4.6	4.6	4.6	4.5
159°	15.2	11.6	7.5	4.6	4.3	4.5	4.6	4.6	4.6	4.6	4.4
159.5°	14.5	11.1	7.2	4.5	4.3	4.5	4.6	4.6	4.6	4.6	4.4
160°	13.7	10.7	7.0	4.4	4.3	4.6	4.7	4.6	4.6	4.5	4.4
160.5°	13.0	10.1	6.7	4.3	4.3	4.6	4.7	4.6	4.6	4.5	4.4
161°	12.2	9.6	6.4	4.3	4.3	4.6	4.7	4.6	4.5	4.5	4.4
161.5°	11.5	9.1	6.1	4.3	4.3	4.6	4.7	4.5	4.5	4.5	4.4
162°	10.8	8.6	5.9	4.2	4.3	4.6	4.7	4.5	4.5	4.5	4.3
162.5°	10.1	8.1	5.6	4.1	4.3	4.5	4.7	4.5	4.5	4.4	4.3
163°	9.5	7.7	5.3	4.1	4.3	4.5	4.7	4.5	4.4	4.4	4.3
163.5°	8.9	7.2	5.0	4.1	4.3	4.6	4.7	4.4	4.4	4.4	4.3
164°	8.3	6.8	4.8	4.1	4.4	4.6	4.7	4.4	4.4	4.4	4.2
164.5°	7.8	6.3	4.6	4.2	4.4	4.6	4.7	4.4	4.4	4.3	4.2
165°	7.2	6.0	4.5	4.2	4.4	4.7	4.8	4.4	4.4	4.3	4.2
165.5°	6.8	5.6	4.4	4.3	4.5	4.7	4.8	4.3	4.3	4.3	4.2
166°	6.3	5.3	4.2	4.4	4.6	4.8	4.9	4.3	4.3	4.3	4.2
166.5°	5.9	4.9	4.3	4.4	4.6	4.8	4.9	4.4	4.3	4.3	4.2
167°	5.5	4.7	4.3	4.5	4.7	4.9	5.0	4.4	4.3	4.3	4.2
167.5°	5.1	4.4	4.4	4.5	4.7	4.9	5.0	4.3	4.3	4.3	4.2
168°	4.7	4.3	4.4	4.5	4.7	4.9	5.0	4.3	4.3	4.3	4.2
168.5°	4.4	4.2	4.4	4.5	4.7	4.9	5.1	4.3	4.3	4.3	4.2
169°	4.1	4.3	4.4	4.6	4.7	4.9	5.1	4.3	4.3	4.3	4.2
169.5°	4.1	4.3	4.4	4.6	4.8	4.9	5.1	4.3	4.3	4.2	4.2
170°	4.1	4.3	4.4	4.6	4.8	5.0	5.1	4.3	4.3	4.2	4.1
170.5°	4.1	4.3	4.5	4.6	4.8	5.0	5.2	4.2	4.2	4.2	4.1
171°	4.1	4.3	4.5	4.6	4.8	5.0	5.2	4.2	4.2	4.2	4.1
171.5°	4.2	4.4	4.5	4.7	4.9	5.1	5.2	4.2	4.2	4.1	4.1
172°	4.2	4.4	4.6	4.8	4.9	5.2	5.3	4.2	4.2	4.1	4.0
172.5°	4.3	4.5	4.7	4.8	5.0	5.2	5.4	4.2	4.2	4.1	4.0
173°	4.4	4.6	4.8	4.9	5.1	5.3	5.5	4.2	4.1	4.1	4.0
173.5°	4.5	4.7	4.8	5.0	5.2	5.4	5.5	4.1	4.1	4.1	3.9
174°	4.5	4.7	4.9	5.0	5.2	5.4	5.6	4.1	4.1	4.0	3.9
174.5°	4.5	4.7	4.9	5.0	5.2	5.4	5.5	4.1	4.1	4.0	3.9
175°	4.5	4.7	4.8	5.0	5.2	5.4	5.5	4.1	4.1	4.0	3.9
175.5°	4.5	4.7	4.8	5.0	5.2	5.3	5.5	4.0	4.0	4.0	3.9
176°	4.5	4.7	4.8	5.0	5.1	5.3	5.5	4.0	4.0	3.9	3.8
176.5°	4.5	4.7	4.8	4.9	5.1	5.3	5.4	4.0	3.9	3.9	3.8
177°	4.5	4.7	4.8	4.9	5.1	5.2	5.4	3.9	3.9	3.9	3.8
177.5°	4.5	4.6	4.7	4.9	5.0	5.2	5.3	3.9	3.9	3.8	3.7
178°	4.4	4.6	4.7	4.8	5.0	5.1	5.3	3.9	3.8	3.8	3.7
178.5°	4.4	4.5	4.7	4.8	4.9	5.1	5.2	3.8	3.8	3.8	3.7
179°	4.4	4.5	4.6	4.7	4.9	5.1	5.2	3.8	3.7	3.7	3.6
179.5°	4.3	4.5	4.6	4.7	4.8	5.0	5.1	3.8	3.7	3.7	3.6



REPORT NUMBER: P973040  
CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
180°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7





REPORT NUMBER: P973040

CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5	3589.5
0.5°	3542.7	3547.7	3556.9	3567.2	3576.8	3588.4	3601.2	3612.8	3621.0	3629.5	3640.3
1°	3525.2	3527.8	3539.8	3555.5	3569.7	3589.1	3613.3	3638.0	3661.3	3672.8	3681.9
1.5°	3549.7	3539.5	3533.6	3540.8	3561.4	3590.0	3622.0	3660.8	3678.5	3673.7	3656.3
2°	3584.2	3562.1	3547.6	3536.8	3552.1	3587.5	3635.1	3672.0	3662.6	3626.5	3576.2
2.5°	3618.4	3591.9	3570.6	3543.5	3544.6	3585.6	3644.1	3670.0	3622.9	3539.3	3448.0
3°	3644.5	3620.8	3588.0	3554.5	3539.6	3581.6	3650.4	3651.3	3553.2	3433.2	3329.3
3.5°	3649.2	3637.8	3607.6	3566.9	3536.5	3581.6	3657.7	3617.3	3478.8	3337.8	3263.0
4°	3611.8	3640.7	3626.0	3579.0	3540.9	3582.1	3660.6	3585.2	3402.0	3265.0	3238.2
4.5°	3549.3	3624.1	3643.2	3599.9	3543.8	3579.7	3659.1	3536.2	3321.1	3236.8	3252.7
5°	3498.3	3581.4	3647.8	3615.8	3548.3	3575.9	3656.1	3477.7	3270.6	3238.2	3265.1
5.5°	3473.4	3530.7	3636.1	3627.5	3542.1	3572.1	3642.4	3418.7	3236.5	3252.6	3230.0
6°	3476.8	3492.0	3607.4	3629.7	3542.3	3566.6	3625.5	3355.0	3223.2	3259.2	3142.4
6.5°	3491.0	3475.8	3565.5	3629.5	3541.9	3559.2	3605.3	3294.4	3229.0	3228.8	3028.0
7°	3478.5	3478.9	3521.9	3628.6	3540.6	3554.5	3579.8	3255.0	3238.0	3147.9	2938.1
7.5°	3432.4	3482.9	3479.6	3622.5	3543.2	3549.4	3550.2	3223.8	3241.3	3041.9	2916.9
8°	3354.3	3479.3	3458.4	3605.2	3548.0	3539.9	3518.6	3201.6	3219.5	2954.6	2968.3
8.5°	3247.3	3451.8	3449.1	3579.3	3547.8	3530.3	3484.3	3195.1	3175.8	2900.7	3069.0
9°	3137.2	3401.9	3450.4	3544.3	3548.9	3523.3	3449.1	3194.5	3103.4	2906.9	3166.2
9.5°	3070.9	3326.8	3448.8	3509.4	3549.7	3513.5	3404.0	3191.4	3024.9	2949.3	3219.1
10°	3041.9	3231.3	3445.1	3469.9	3548.1	3505.6	3368.5	3197.5	2949.9	3033.7	3205.7
10.5°	3038.6	3140.9	3429.1	3440.0	3547.5	3498.7	3334.4	3194.8	2884.8	3118.3	3143.7
11°	3026.5	3061.1	3399.3	3414.9	3546.4	3488.0	3295.8	3181.2	2863.6	3172.7	3090.3
11.5°	2991.5	3015.9	3353.1	3395.7	3541.3	3480.8	3263.3	3157.3	2872.8	3193.9	3075.5
12°	2897.7	2994.3	3292.1	3386.9	3535.2	3470.0	3226.7	3123.3	2907.8	3159.6	3126.4
12.5°	2778.4	2990.0	3224.1	3379.4	3526.3	3457.7	3192.1	3072.5	2961.6	3108.5	3223.9
13°	2653.5	2983.4	3142.8	3372.5	3516.4	3445.0	3162.5	3022.1	3018.8	3067.3	3360.4
13.5°	2564.0	2952.6	3066.0	3360.6	3494.6	3431.9	3138.5	2963.8	3072.6	3052.7	3464.9
14°	2513.3	2890.2	3004.7	3349.4	3480.0	3419.4	3113.5	2901.0	3103.6	3075.9	3502.6
14.5°	2483.9	2799.4	2950.4	3331.1	3458.2	3401.0	3095.0	2857.1	3111.6	3138.0	3484.4
15°	2446.5	2682.6	2917.3	3309.2	3437.9	3386.4	3076.0	2818.0	3095.6	3233.0	3429.7
15.5°	2380.9	2580.8	2900.2	3281.6	3414.5	3372.1	3063.6	2794.4	3056.6	3323.1	3378.1
16°	2280.7	2499.9	2885.2	3250.9	3390.0	3357.4	3049.5	2784.4	3018.1	3392.2	3369.9
16.5°	2165.1	2447.8	2871.7	3216.0	3364.5	3342.7	3037.8	2789.0	2988.1	3420.8	3413.2
17°	2053.0	2416.7	2853.9	3178.8	3340.4	3324.5	3026.3	2803.6	2977.3	3412.0	3478.5
17.5°	1959.8	2389.0	2815.2	3128.7	3312.7	3307.3	3011.1	2820.4	2984.1	3376.5	3543.5
18°	1890.7	2345.0	2755.9	3075.0	3283.4	3290.5	2999.1	2846.4	3013.9	3323.8	3590.5
18.5°	1831.9	2279.4	2677.0	3016.9	3253.6	3272.2	2982.1	2870.7	3059.8	3289.8	3616.9
19°	1771.5	2189.1	2585.9	2951.0	3220.8	3255.4	2968.6	2889.5	3109.4	3285.4	3637.6
19.5°	1697.5	2090.0	2500.9	2892.1	3194.0	3234.6	2952.1	2907.1	3165.5	3311.3	3666.2
20°	1611.4	1991.6	2428.1	2836.4	3163.4	3218.7	2929.1	2916.4	3205.1	3357.8	3725.2
20.5°	1511.8	1910.3	2363.0	2787.6	3138.8	3197.8	2907.4	2909.7	3229.6	3409.2	3821.3
21°	1415.0	1843.9	2317.5	2746.7	3113.9	3177.5	2881.1	2894.8	3240.8	3458.9	3953.3
21.5°	1355.5	1790.6	2284.9	2713.1	3088.1	3151.6	2850.2	2875.3	3231.1	3493.5	4093.1
22°	1296.0	1740.7	2252.6	2683.3	3065.4	3127.4	2822.0	2851.5	3204.7	3516.2	4234.1



REPORT NUMBER: P973040

CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
22.5°	1236.5	1682.0	2216.9	2661.8	3045.7	3105.7	2795.7	2830.7	3166.1	3528.9	4353.8
23°	1177.0	1620.4	2173.7	2641.4	3024.9	3082.1	2766.0	2809.4	3129.9	3545.6	4424.0
23.5°	1118.9	1553.4	2118.7	2624.0	3008.4	3061.8	2735.7	2796.3	3103.7	3578.0	4478.2
24°	1085.5	1477.2	2051.9	2602.4	2988.2	3038.2	2702.2	2784.3	3091.9	3641.6	4541.0
24.5°	1056.4	1404.1	1985.6	2574.9	2968.6	3018.3	2666.8	2776.7	3097.7	3724.2	4610.4
25°	1028.6	1334.9	1917.1	2540.9	2949.5	3001.0	2637.0	2773.6	3115.6	3825.4	4703.1
25.5°	1000.1	1289.0	1856.0	2498.2	2931.7	2981.2	2607.3	2777.7	3143.9	3941.8	4814.4
26°	972.9	1243.1	1798.1	2452.5	2911.1	2964.5	2577.3	2791.3	3170.2	4026.2	4894.5
26.5°	945.7	1197.2	1745.1	2399.7	2894.6	2948.0	2556.4	2803.3	3193.4	4093.4	4948.2
27°	918.8	1151.3	1700.2	2352.8	2875.3	2934.7	2536.2	2825.6	3218.5	4147.8	4974.8
27.5°	891.3	1105.8	1654.9	2299.7	2856.9	2918.0	2518.8	2847.7	3233.4	4179.3	4982.8
28°	862.7	1077.8	1610.8	2253.2	2835.8	2904.7	2505.9	2863.3	3244.8	4204.8	4990.9
28.5°	835.8	1052.2	1570.0	2216.7	2817.5	2889.5	2491.7	2881.7	3260.2	4242.1	5010.6
29°	809.0	1027.9	1525.9	2181.0	2794.7	2877.3	2481.8	2893.7	3278.8	4288.2	5025.7
29.5°	781.6	1002.3	1481.0	2149.4	2773.2	2862.5	2473.6	2894.1	3297.6	4344.0	5023.2
30°	755.0	978.0	1440.2	2125.2	2752.2	2848.4	2463.8	2889.8	3332.0	4410.6	5001.0
30.5°	727.9	954.3	1397.8	2099.7	2729.3	2833.3	2457.0	2876.6	3373.6	4458.0	4966.1
31°	701.2	929.5	1356.1	2074.1	2705.4	2820.1	2450.5	2858.6	3417.0	4478.4	4931.1
31.5°	676.0	904.8	1317.7	2051.1	2682.9	2806.7	2444.7	2836.2	3482.9	4486.4	4903.3
32°	651.8	880.5	1281.3	2024.6	2658.0	2793.4	2443.7	2809.8	3538.7	4479.1	4882.4
32.5°	626.9	855.4	1254.6	1993.9	2637.9	2780.9	2442.6	2787.7	3580.7	4472.9	4856.3
33°	603.6	831.0	1227.9	1967.7	2616.5	2770.6	2444.1	2773.8	3619.0	4474.3	4823.1
33.5°	581.4	807.2	1201.3	1936.7	2597.6	2759.9	2443.8	2766.1	3645.7	4477.0	4780.0
34°	559.4	783.0	1174.6	1908.7	2575.9	2750.3	2444.1	2762.4	3659.8	4475.8	4734.5
34.5°	538.9	758.5	1148.1	1883.8	2555.1	2742.8	2443.6	2764.9	3673.5	4466.9	4692.8
35°	519.5	735.2	1129.5	1859.4	2536.9	2734.4	2443.9	2771.9	3682.1	4446.5	4658.8
35.5°	499.6	710.7	1112.2	1836.7	2522.3	2726.4	2441.4	2775.8	3686.4	4415.6	4622.7
36°	482.2	688.7	1097.7	1819.0	2508.3	2717.9	2441.2	2780.2	3699.0	4380.9	4578.3
36.5°	465.0	667.3	1083.3	1800.0	2496.8	2711.8	2439.7	2786.0	3718.2	4347.7	4526.2
37°	447.1	645.8	1068.2	1784.0	2486.9	2706.6	2433.3	2785.8	3735.9	4316.6	4474.4
37.5°	430.9	626.6	1054.3	1770.5	2477.0	2700.3	2425.7	2786.8	3753.0	4287.9	4422.2
38°	415.5	609.5	1040.1	1754.0	2469.9	2695.5	2415.8	2789.4	3766.5	4257.0	4383.3
38.5°	399.9	592.3	1025.8	1740.7	2464.3	2691.7	2404.1	2791.9	3771.4	4227.9	4349.8
39°	385.7	575.8	1012.5	1728.5	2460.5	2687.3	2394.8	2794.8	3773.9	4195.3	4309.6
39.5°	371.2	560.6	997.0	1712.7	2455.4	2682.2	2381.9	2801.7	3771.1	4159.2	4272.0
40°	357.2	545.9	982.8	1701.0	2450.8	2679.1	2373.5	2808.4	3760.9	4130.0	4236.3
40.5°	343.5	532.1	968.9	1688.6	2442.4	2670.4	2365.0	2815.7	3751.2	4105.3	4202.6
41°	330.4	519.5	953.7	1674.0	2433.8	2662.7	2357.0	2825.2	3742.2	4075.8	4171.4
41.5°	318.0	506.9	939.3	1660.2	2425.1	2654.2	2350.6	2831.7	3734.1	4047.7	4147.9
42°	306.8	495.9	925.8	1647.2	2413.5	2646.4	2344.2	2838.6	3730.7	4018.1	4127.8
42.5°	295.3	484.3	910.8	1631.4	2401.2	2640.2	2339.5	2848.9	3727.6	3988.0	4106.2
43°	284.3	473.6	896.9	1617.6	2389.1	2635.0	2336.5	2855.0	3717.6	3956.9	4079.8
43.5°	274.6	463.4	883.9	1604.5	2377.8	2632.3	2336.1	2861.0	3704.5	3928.1	4055.5
44°	264.8	453.5	869.7	1588.2	2367.0	2630.1	2338.3	2873.0	3685.6	3903.4	4032.6
44.5°	255.5	443.5	856.3	1574.9	2357.6	2626.9	2340.7	2881.1	3658.7	3881.6	4018.7



REPORT NUMBER: P973040

CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
45°	247.1	434.6	845.4	1562.4	2348.6	2625.7	2342.8	2889.2	3632.3	3859.6	4006.7
45.5°	239.0	425.5	834.6	1547.1	2340.5	2622.2	2345.1	2901.0	3610.7	3836.0	3995.0
46°	231.4	416.4	825.4	1534.8	2332.1	2619.6	2346.8	2908.0	3590.2	3808.6	3984.1
46.5°	224.5	408.0	817.6	1521.6	2322.3	2615.2	2346.2	2911.6	3573.5	3780.8	3976.1
47°	217.8	399.7	809.7	1508.1	2312.6	2610.3	2345.2	2919.0	3557.0	3753.6	3966.6
47.5°	211.6	391.0	803.6	1496.1	2303.3	2605.7	2343.2	2922.5	3537.9	3728.2	3957.6
48°	206.3	383.4	797.8	1482.7	2292.3	2599.6	2338.5	2924.6	3516.9	3702.9	3950.2
48.5°	200.7	375.5	791.7	1467.9	2283.2	2592.1	2332.4	2932.2	3494.9	3673.7	3942.1
49°	195.7	368.2	786.1	1454.2	2275.4	2585.6	2323.5	2937.2	3473.0	3643.9	3928.7
49.5°	190.9	361.3	781.2	1439.4	2265.7	2577.8	2314.9	2944.4	3455.0	3610.9	3916.2
50°	186.1	354.4	774.7	1423.3	2255.0	2570.0	2303.8	2954.0	3434.4	3576.5	3897.9
50.5°	181.6	347.8	769.7	1408.8	2245.6	2562.6	2290.6	2956.2	3412.5	3545.2	3876.7
51°	177.5	341.8	764.2	1391.7	2232.4	2554.5	2275.4	2957.7	3390.8	3510.3	3851.1
51.5°	173.2	335.4	757.2	1374.4	2219.8	2543.8	2257.6	2957.9	3363.0	3478.4	3821.9
52°	169.2	329.6	751.6	1360.2	2207.1	2529.4	2239.6	2951.5	3333.3	3450.4	3795.0
52.5°	165.4	323.7	744.4	1344.3	2194.0	2515.0	2218.9	2943.7	3300.9	3415.7	3765.3
53°	161.5	317.4	735.6	1329.8	2178.4	2497.1	2195.7	2933.1	3265.6	3381.5	3735.1
53.5°	157.9	311.4	728.1	1316.7	2163.6	2477.7	2171.9	2915.1	3228.9	3346.3	3714.7
54°	154.2	305.5	718.8	1302.7	2146.2	2454.2	2146.1	2893.8	3189.1	3309.8	3688.7
54.5°	150.4	299.4	710.3	1286.9	2127.6	2427.4	2118.3	2870.9	3149.9	3274.0	3656.3
55°	147.0	293.8	701.4	1273.5	2106.1	2395.4	2091.1	2846.3	3111.2	3240.3	3630.4
55.5°	143.4	288.0	691.7	1260.4	2084.4	2361.7	2059.8	2817.2	3071.3	3205.8	3595.8
56°	139.7	282.0	681.4	1247.3	2058.9	2324.5	2027.0	2785.1	3025.5	3168.2	3561.4
56.5°	136.3	276.6	672.6	1236.0	2034.1	2287.0	1993.1	2750.8	2983.3	3131.7	3529.2
57°	133.0	271.4	662.6	1225.2	2006.8	2244.0	1959.8	2711.1	2940.6	3095.8	3487.0
57.5°	129.6	266.0	652.4	1214.7	1979.7	2202.7	1924.6	2668.2	2899.9	3061.3	3448.7
58°	126.3	261.0	642.7	1204.7	1953.5	2160.2	1889.1	2619.9	2857.7	3020.0	3409.7
58.5°	123.0	256.0	632.5	1194.7	1927.1	2120.8	1856.5	2574.8	2814.2	2981.2	3365.4
59°	119.7	250.3	621.6	1184.7	1901.6	2081.6	1820.7	2526.2	2768.1	2938.5	3309.2
59.5°	116.3	244.6	610.4	1174.7	1874.1	2041.6	1786.8	2478.1	2723.0	2899.1	3253.9
60°	112.9	238.3	598.8	1164.6	1846.2	2001.1	1754.3	2430.6	2678.5	2862.3	3198.9
60.5°	109.5	231.9	586.3	1152.5	1818.8	1962.2	1721.0	2384.8	2634.7	2827.9	3136.8
61°	106.1	226.2	574.5	1139.9	1790.0	1921.2	1687.3	2335.0	2591.5	2793.1	3070.2
61.5°	102.8	220.6	561.2	1125.1	1761.9	1881.9	1654.7	2288.8	2545.7	2751.9	3010.1
62°	99.5	215.2	547.0	1108.7	1734.9	1842.8	1625.1	2240.0	2496.0	2704.9	2947.5
62.5°	96.4	209.9	533.6	1090.6	1706.7	1805.0	1593.9	2197.7	2446.9	2655.7	2883.9
63°	93.0	204.2	518.0	1069.6	1678.2	1770.4	1564.3	2151.6	2397.4	2602.0	2821.5
63.5°	89.9	198.4	503.6	1046.9	1649.6	1737.5	1534.4	2104.7	2348.6	2539.0	2753.9
64°	86.9	192.9	489.0	1025.7	1621.5	1702.8	1505.7	2060.2	2298.5	2474.6	2688.9
64.5°	84.0	186.8	473.8	1004.0	1590.6	1666.3	1475.9	2018.8	2249.5	2413.8	2629.3
65°	80.9	180.5	457.5	983.6	1560.3	1630.4	1444.5	1974.9	2199.4	2351.0	2567.7
65.5°	78.1	174.4	443.2	962.9	1526.5	1596.0	1414.0	1932.5	2149.2	2285.4	2506.5
66°	75.0	168.4	427.5	939.3	1494.0	1558.6	1383.4	1891.2	2099.1	2225.5	2446.2
66.5°	71.9	162.1	412.6	915.8	1461.5	1520.2	1349.9	1849.1	2047.1	2165.8	2384.1
67°	68.7	156.5	397.7	892.9	1428.1	1483.6	1317.0	1804.0	1996.3	2104.2	2326.1



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
67.5°	65.1	151.4	383.9	868.2	1393.2	1450.5	1285.3	1760.2	1943.1	2045.6	2271.8
68°	59.6	146.0	369.8	841.9	1358.3	1417.4	1253.2	1716.5	1887.4	1986.0	2214.0
68.5°	53.4	140.8	356.7	816.2	1322.2	1381.9	1221.2	1676.2	1834.0	1932.9	2155.6
69°	46.5	135.8	344.2	789.4	1286.9	1344.1	1189.1	1631.3	1778.0	1880.1	2094.3
69.5°	42.1	130.7	331.9	763.2	1250.5	1308.1	1157.1	1589.7	1720.9	1825.9	2030.1
70°	40.9	125.7	320.0	737.9	1214.1	1269.1	1125.0	1548.8	1666.3	1775.2	1966.7
70.5°	39.9	120.7	308.5	709.4	1177.7	1230.2	1092.2	1506.0	1611.9	1724.1	1903.0
71°	39.0	115.6	297.2	684.6	1141.3	1191.2	1060.0	1461.6	1556.5	1669.8	1838.6
71.5°	38.2	109.2	286.9	662.1	1104.8	1152.3	1026.1	1419.2	1501.7	1614.2	1775.4
72°	37.4	102.0	276.3	641.0	1066.3	1113.2	992.6	1376.5	1451.3	1564.6	1717.7
72.5°	36.6	96.8	265.6	619.9	1028.2	1072.3	957.2	1331.1	1400.5	1510.3	1657.0
73°	35.8	93.2	254.0	598.8	989.7	1034.3	924.7	1281.9	1350.8	1453.4	1595.2
73.5°	35.1	89.3	243.0	578.2	950.4	996.4	893.9	1232.7	1305.5	1402.2	1539.0
74°	34.3	85.4	232.8	559.1	912.9	956.1	861.6	1183.5	1259.8	1346.2	1479.0
74.5°	33.6	81.9	224.2	540.9	875.5	916.0	828.1	1134.3	1214.0	1293.9	1422.3
75°	32.9	78.7	215.1	523.7	839.1	878.1	796.0	1085.0	1168.2	1241.6	1364.7
75.5°	32.2	75.5	206.0	508.0	805.0	840.0	762.9	1032.0	1122.5	1189.3	1306.5
76°	31.5	72.7	197.6	493.8	771.9	802.7	730.4	979.7	1076.5	1137.0	1248.4
76.5°	30.8	70.0	188.9	477.8	742.0	767.3	699.0	933.5	1030.1	1084.9	1190.3
77°	30.1	67.4	180.9	461.9	710.8	731.6	666.1	886.5	981.4	1034.7	1132.2
77.5°	29.3	64.8	174.3	446.4	681.6	693.4	633.7	839.0	932.6	986.1	1074.1
78°	28.6	62.2	167.5	428.5	648.5	654.5	602.0	795.0	887.4	939.5	1021.2
78.5°	27.8	59.8	161.8	411.9	613.7	616.2	567.6	751.8	840.6	890.3	964.8
79°	26.9	57.4	155.8	394.4	577.1	579.6	532.9	709.1	796.2	843.8	910.3
79.5°	26.1	55.0	149.2	377.1	539.9	543.8	499.3	669.7	755.3	800.6	856.0
80°	25.3	52.8	141.5	359.1	502.7	507.9	465.9	630.4	713.9	754.2	803.3
80.5°	24.5	50.6	133.7	341.1	468.6	473.3	433.8	591.5	672.3	709.1	750.6
81°	23.7	48.5	126.0	322.6	436.6	439.2	405.6	554.9	634.0	667.0	703.7
81.5°	22.9	46.4	118.3	304.0	406.8	405.0	376.2	519.5	595.1	622.6	654.1
82°	22.1	44.3	110.5	285.5	376.6	370.3	346.1	483.3	558.0	580.8	605.5
82.5°	21.4	42.3	102.5	265.1	348.8	338.4	316.2	449.2	520.8	540.5	561.6
83°	20.6	40.2	94.7	245.6	321.3	307.4	289.8	416.3	484.6	502.1	518.7
83.5°	19.9	38.1	86.9	227.0	293.8	277.1	265.5	385.0	448.4	463.4	479.0
84°	19.2	36.2	79.6	207.9	266.8	248.2	242.8	354.5	414.7	430.2	444.1
84.5°	18.5	34.3	73.3	189.4	240.5	220.0	219.9	324.7	380.0	396.0	408.6
85°	17.9	32.6	67.4	171.9	215.8	193.5	200.2	297.3	349.2	366.2	377.2
85.5°	17.3	30.9	61.8	157.5	192.0	173.3	180.6	270.6	320.7	338.3	348.5
86°	16.7	29.3	57.0	143.0	174.0	153.0	163.3	245.1	293.5	312.1	321.5
86.5°	16.1	27.9	52.7	128.5	156.0	132.7	149.7	222.6	269.1	288.5	296.1
87°	15.5	26.5	48.9	114.1	137.9	112.5	136.0	203.6	248.7	268.2	274.7
87.5°	15.0	25.2	45.6	99.7	119.9	92.3	122.4	184.7	229.0	248.6	253.8
88°	14.4	24.1	42.7	90.0	101.9	79.2	109.0	169.3	211.7	230.8	235.0
88.5°	13.9	23.0	40.2	81.0	89.6	67.6	99.6	156.2	196.9	214.9	218.3
89°	13.4	22.0	38.0	73.5	79.6	58.5	91.1	147.7	183.8	201.0	202.8
89.5°	13.0	21.0	36.1	67.0	71.0	51.0	84.4	139.1	172.4	187.9	189.3



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
90°	12.6	20.2	34.4	61.7	64.3	45.5	79.4	130.6	161.7	177.0	177.9
90.5°	12.2	19.4	33.1	57.4	59.3	41.4	75.3	122.0	152.0	166.8	167.5
91°	11.8	18.7	31.9	53.8	55.7	38.3	72.2	113.5	144.2	157.1	158.2
91.5°	11.4	18.1	31.0	50.8	53.1	36.1	69.8	108.9	139.3	148.3	149.2
92°	11.0	17.6	30.3	48.4	51.4	34.8	67.9	105.1	134.4	141.4	140.9
92.5°	10.7	17.2	29.7	46.5	50.2	34.0	66.5	101.9	129.5	136.5	136.0
93°	10.5	16.8	29.4	45.2	49.5	33.6	65.2	99.3	124.6	131.6	131.2
93.5°	10.2	16.5	29.1	44.3	49.0	33.5	64.1	96.9	119.8	126.6	126.3
94°	10.0	16.1	28.9	43.8	48.9	33.5	63.2	94.9	116.6	121.7	121.5
94.5°	9.8	15.8	28.8	43.5	48.9	33.8	62.5	93.0	113.7	118.3	118.3
95°	9.7	15.5	28.7	43.2	49.0	34.1	62.0	91.3	111.1	115.1	115.7
95.5°	9.5	15.2	28.5	43.1	49.0	34.6	61.7	89.7	108.6	112.3	113.4
96°	9.3	15.0	28.4	42.9	49.0	35.1	61.7	88.3	106.4	109.8	111.4
96.5°	9.2	14.7	28.2	42.6	48.8	35.7	61.8	87.1	104.3	107.6	109.6
97°	9.0	14.5	28.0	42.3	48.6	36.2	62.0	86.1	102.4	105.5	108.1
97.5°	8.9	14.3	27.6	41.9	48.3	36.9	62.2	85.3	100.7	103.8	106.8
98°	8.7	14.1	27.2	41.4	48.0	37.5	62.5	84.7	99.2	102.2	105.6
98.5°	8.6	13.9	26.7	40.9	47.6	38.3	62.8	84.3	97.8	100.8	104.6
99°	8.5	13.6	26.1	40.3	47.3	39.0	63.2	83.9	96.7	99.6	103.7
99.5°	8.3	13.4	25.4	39.7	47.1	39.7	63.6	83.6	95.7	98.5	102.9
100°	8.2	13.2	24.7	39.1	46.9	40.5	64.1	83.5	94.9	97.4	102.2
100.5°	8.0	13.0	24.1	38.6	46.8	41.2	64.6	83.4	94.4	96.6	101.2
101°	7.9	12.8	23.5	38.0	46.8	42.0	65.1	83.4	93.9	96.2	100.3
101.5°	7.7	12.6	23.0	37.5	46.8	42.7	65.6	83.3	93.5	96.0	100.2
102°	7.4	12.5	22.5	37.0	47.0	43.5	66.2	83.3	93.0	95.8	100.4
102.5°	7.2	12.3	22.0	36.6	47.2	44.3	66.8	83.3	92.7	95.5	100.3
103°	7.0	12.2	21.6	36.2	47.5	45.0	67.5	83.4	92.3	95.2	100.1
103.5°	6.8	12.0	21.3	35.9	47.9	45.8	68.2	83.5	91.9	95.1	99.9
104°	6.7	11.9	21.0	35.6	48.4	46.6	68.9	83.6	91.6	94.9	99.8
104.5°	6.6	11.8	20.8	35.4	48.9	47.4	69.6	83.7	91.3	94.8	99.7
105°	6.5	11.7	20.6	35.2	49.4	48.2	70.2	83.7	90.9	94.7	99.7
105.5°	6.4	11.6	20.5	35.0	49.9	49.0	70.9	83.8	90.6	94.6	99.7
106°	6.4	11.5	20.4	35.0	50.4	49.7	71.5	83.9	90.2	94.4	99.6
106.5°	6.3	11.4	20.3	34.9	50.9	50.4	72.1	84.0	89.9	94.3	99.5
107°	6.3	11.3	20.2	34.9	51.4	51.2	72.7	84.1	89.6	94.1	99.4
107.5°	6.2	11.2	20.2	34.9	51.9	51.9	73.3	84.2	89.3	93.8	99.2
108°	6.1	11.1	20.2	34.8	52.4	52.5	73.9	84.4	89.0	93.4	98.9
108.5°	6.0	11.0	20.2	34.9	52.8	53.1	74.4	84.7	88.8	93.1	98.5
109°	6.0	10.9	20.2	34.9	53.2	53.7	74.9	85.1	88.7	92.8	98.2
109.5°	5.9	10.9	20.2	34.9	53.5	54.3	75.5	85.5	88.6	92.7	97.8
110°	5.8	10.8	20.2	35.0	53.9	54.8	76.0	85.9	88.5	92.6	97.5
110.5°	5.7	10.8	20.2	35.0	54.3	55.3	76.6	86.2	88.5	92.5	97.2
111°	5.7	10.7	20.2	35.1	54.7	55.9	77.2	86.6	88.5	92.4	96.9
111.5°	5.6	10.7	20.2	35.1	55.1	56.5	77.8	87.0	88.4	92.3	96.7
112°	5.6	10.7	20.3	35.1	55.5	57.1	78.3	87.3	88.4	92.3	96.4



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
112.5°	5.6	10.6	20.3	35.2	55.8	57.7	78.8	87.6	88.4	92.3	96.1
113°	5.6	10.6	20.3	35.1	56.3	58.2	79.3	87.9	88.3	92.2	96.0
113.5°	5.5	10.5	20.2	35.1	56.6	58.6	79.7	88.3	88.3	92.1	95.9
114°	5.5	10.5	20.2	35.1	56.9	59.0	80.1	88.6	88.3	92.1	95.8
114.5°	5.6	10.5	20.2	35.1	57.2	59.5	80.5	88.9	88.3	91.9	95.8
115°	5.6	10.5	20.1	35.0	57.5	59.9	80.9	89.1	88.2	91.8	95.7
115.5°	5.6	10.5	20.1	35.0	57.7	60.2	81.2	89.4	88.2	91.7	95.6
116°	5.6	10.4	20.0	35.0	57.9	60.5	81.4	89.6	88.2	91.7	95.5
116.5°	5.6	10.5	20.0	35.0	58.1	60.7	81.7	89.7	88.1	91.6	95.4
117°	5.7	10.5	19.9	34.9	58.4	60.8	81.9	89.8	88.1	91.6	95.3
117.5°	5.7	10.5	19.8	34.9	58.7	61.0	82.0	89.9	88.0	91.5	95.2
118°	5.8	10.5	19.8	34.9	58.9	61.1	82.1	90.0	88.0	91.5	95.1
118.5°	5.8	10.6	19.7	34.9	59.0	61.2	82.1	90.1	88.0	91.4	95.0
119°	5.9	10.6	19.7	34.9	59.1	61.2	82.0	90.1	88.0	91.4	94.9
119.5°	5.9	10.7	19.7	34.8	59.1	61.1	81.8	90.2	88.0	91.3	94.8
120°	6.0	10.7	19.6	34.8	59.1	61.0	81.6	90.2	88.0	91.4	94.7
120.5°	6.1	10.7	19.6	34.8	59.0	60.8	81.5	90.2	88.0	91.4	94.6
121°	6.1	10.8	19.6	34.8	59.0	60.6	81.2	90.2	88.0	91.5	94.6
121.5°	6.2	10.8	19.6	34.8	58.9	60.3	80.9	90.1	88.0	91.5	94.5
122°	6.3	10.9	19.6	34.8	58.9	60.0	80.5	90.1	88.1	91.6	94.5
122.5°	6.4	10.9	19.6	34.7	58.8	59.6	80.1	90.1	88.1	91.6	94.5
123°	6.5	11.0	19.7	34.7	58.7	59.2	79.7	90.1	88.2	91.7	94.5
123.5°	6.6	11.0	19.7	34.7	58.6	58.8	79.2	90.1	88.3	91.8	94.5
124°	6.6	11.1	19.7	34.7	58.5	58.4	78.8	90.2	88.4	91.9	94.5
124.5°	6.7	11.1	19.8	34.8	58.4	58.0	78.4	90.3	88.5	92.0	94.5
125°	6.8	11.2	19.8	34.9	58.3	57.6	77.9	90.4	88.6	92.1	94.5
125.5°	6.9	11.3	19.9	34.9	58.2	57.3	77.5	90.6	88.8	92.3	94.6
126°	6.9	11.3	20.0	35.0	58.2	57.1	77.1	90.7	89.0	92.4	94.6
126.5°	7.0	11.4	20.0	35.1	58.2	56.8	76.8	90.9	89.3	92.6	94.6
127°	7.1	11.5	20.1	35.2	58.2	56.6	76.4	91.1	89.5	92.7	94.6
127.5°	7.1	11.5	20.2	35.4	58.2	56.4	76.1	91.2	89.7	92.8	94.6
128°	7.2	11.6	20.3	35.5	58.3	56.3	75.8	91.4	90.0	93.0	94.6
128.5°	7.3	11.7	20.3	35.7	58.4	56.1	75.5	91.6	90.2	93.1	94.6
129°	7.3	11.7	20.4	35.8	58.4	56.0	75.3	91.8	90.5	93.2	94.6
129.5°	7.4	11.8	20.5	36.0	58.5	56.0	75.0	91.9	90.8	93.3	94.6
130°	7.4	11.9	20.5	36.2	58.5	55.9	74.8	92.1	91.0	93.3	94.5
130.5°	7.5	11.9	20.6	36.4	58.6	55.8	74.5	92.2	91.3	93.3	94.5
131°	7.5	12.0	20.7	36.6	58.6	55.7	74.3	92.2	91.6	93.3	94.4
131.5°	7.6	12.1	20.8	36.8	58.7	55.7	74.0	92.2	91.8	93.2	94.2
132°	7.6	12.1	20.8	37.0	58.7	55.6	73.7	92.1	92.0	93.2	94.0
132.5°	7.6	12.2	20.9	37.2	58.7	55.5	73.4	92.0	92.1	93.0	93.7
133°	7.7	12.2	21.0	37.4	58.7	55.4	73.1	91.9	92.3	92.9	93.4
133.5°	7.7	12.3	21.1	37.6	58.6	55.3	72.7	91.6	92.3	92.7	93.1
134°	7.7	12.4	21.2	37.8	58.5	55.1	72.2	91.3	92.4	92.5	92.6
134.5°	7.8	12.4	21.3	38.0	58.4	54.9	71.8	91.0	92.3	92.3	92.2





REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
135°	7.8	12.5	21.4	38.1	58.2	54.7	71.3	90.6	92.2	92.0	91.7
135.5°	7.8	12.6	21.5	38.3	57.9	54.4	70.8	90.1	92.1	91.7	91.2
136°	7.9	12.6	21.6	38.4	57.6	54.1	70.3	89.6	91.8	91.2	90.5
136.5°	7.9	12.7	21.6	38.5	57.3	53.8	69.6	89.0	91.5	90.8	89.8
137°	7.9	12.7	21.7	38.6	57.0	53.5	69.0	88.3	91.1	90.3	89.1
137.5°	7.9	12.8	21.7	38.7	56.5	53.1	68.3	87.6	90.7	89.8	88.3
138°	7.9	12.8	21.8	38.7	56.1	52.8	67.6	86.8	90.1	89.2	87.6
138.5°	7.9	12.8	21.8	38.7	55.6	52.3	66.9	85.9	89.5	88.6	86.9
139°	7.9	12.8	21.8	38.7	55.1	51.9	66.1	85.1	88.8	87.9	86.1
139.5°	7.9	12.9	21.8	38.7	54.4	51.4	65.3	84.1	88.0	87.2	85.4
140°	7.9	12.9	21.8	38.6	53.8	50.9	64.5	83.0	87.2	86.4	84.7
140.5°	7.9	12.8	21.8	38.5	53.1	50.3	63.5	81.9	86.2	85.5	84.0
141°	7.9	12.8	21.7	38.3	52.4	49.7	62.6	80.7	85.2	84.5	83.3
141.5°	7.9	12.8	21.7	38.1	51.5	49.1	61.6	79.5	84.2	83.5	82.6
142°	7.9	12.8	21.6	37.9	50.8	48.4	60.6	78.2	83.0	82.5	81.9
142.5°	7.9	12.7	21.5	37.6	49.9	47.7	59.5	76.9	81.8	81.3	81.2
143°	7.9	12.7	21.4	37.3	49.0	46.9	58.4	75.5	80.5	80.1	80.5
143.5°	7.8	12.6	21.3	37.0	48.1	46.2	57.2	74.0	79.2	78.9	79.7
144°	7.8	12.5	21.1	36.6	47.1	45.3	56.0	72.5	77.8	77.7	79.0
144.5°	7.8	12.4	21.0	36.1	46.1	44.5	54.8	71.0	76.3	76.4	78.1
145°	7.7	12.4	20.8	35.7	45.1	43.6	53.6	69.4	74.8	75.1	77.2
145.5°	7.7	12.3	20.6	35.2	44.0	42.7	52.2	67.8	73.3	73.9	76.4
146°	7.6	12.2	20.4	34.6	43.0	41.8	50.9	66.1	71.7	72.7	75.4
146.5°	7.5	12.0	20.2	34.0	41.8	40.8	49.6	64.3	70.1	71.4	74.3
147°	7.4	11.9	20.0	33.4	40.7	39.8	48.2	62.6	68.4	70.1	73.2
147.5°	7.3	11.7	19.8	32.7	39.6	38.8	46.8	60.8	66.8	68.9	72.1
148°	7.2	11.6	19.5	32.0	38.5	37.8	45.4	59.0	65.1	67.6	70.8
148.5°	7.1	11.4	19.2	31.3	37.3	36.8	44.0	57.2	63.5	66.4	69.7
149°	7.0	11.3	18.9	30.5	36.1	35.8	42.6	55.3	61.9	65.1	68.4
149.5°	6.9	11.1	18.6	29.7	35.0	34.7	41.2	53.4	60.2	63.8	67.1
150°	6.7	10.9	18.3	28.9	33.9	33.7	39.7	51.6	58.5	62.4	65.8
150.5°	6.6	10.7	18.0	28.0	32.7	32.6	38.3	49.7	56.7	61.0	64.5
151°	6.5	10.5	17.6	27.2	31.5	31.6	36.8	47.8	54.9	59.6	63.1
151.5°	6.3	10.3	17.3	26.3	30.4	30.5	35.4	46.0	53.1	58.1	61.8
152°	6.2	10.1	16.9	25.5	29.2	29.5	34.0	44.2	51.3	56.7	60.5
152.5°	6.0	9.9	16.5	24.6	28.2	28.4	32.7	42.4	49.5	55.2	59.1
153°	5.9	9.6	16.1	23.7	27.0	27.4	31.3	40.6	47.7	53.7	57.6
153.5°	5.7	9.4	15.7	22.8	25.9	26.4	29.9	38.9	45.8	52.2	56.2
154°	5.6	9.1	15.2	22.0	24.9	25.4	28.6	37.1	43.9	50.7	54.6
154.5°	5.4	8.8	14.8	21.0	23.8	24.3	27.3	35.4	42.0	49.1	53.1
155°	5.2	8.5	14.3	20.2	22.8	23.4	26.1	33.7	40.0	47.5	51.6
155.5°	5.1	8.2	13.7	19.3	21.8	22.4	24.8	32.0	38.1	45.8	50.0
156°	4.9	7.9	13.2	18.4	20.8	21.4	23.6	30.4	36.3	43.6	48.5
156.5°	4.7	7.6	12.6	17.6	19.8	20.5	22.5	28.8	34.4	41.6	47.0
157°	4.6	7.3	12.0	16.7	18.8	19.6	21.3	27.2	32.5	39.4	45.4



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
157.5°	4.5	7.0	11.5	15.9	18.0	18.7	20.2	25.7	30.5	37.4	44.0
158°	4.4	6.6	10.9	15.1	17.0	17.8	19.1	24.2	28.6	35.3	42.5
158.5°	4.4	6.3	10.4	14.3	16.2	17.0	18.0	22.7	26.7	33.2	40.9
159°	4.4	6.0	9.8	13.6	15.3	16.1	17.0	21.3	24.9	31.0	38.7
159.5°	4.3	5.6	9.3	12.8	14.5	15.3	16.1	20.0	23.3	29.0	36.3
160°	4.3	5.3	8.7	12.1	13.7	14.5	15.1	18.7	21.9	26.9	33.9
160.5°	4.3	5.1	8.2	11.3	12.9	13.7	14.2	17.4	20.5	24.9	31.6
161°	4.3	4.9	7.7	10.6	12.1	13.0	13.4	16.2	19.1	23.0	29.3
161.5°	4.2	4.7	7.2	9.9	11.4	12.2	12.6	15.1	17.8	21.0	26.9
162°	4.2	4.6	6.7	9.2	10.6	11.4	11.8	14.1	16.5	19.0	24.6
162.5°	4.2	4.5	6.2	8.6	9.9	10.7	11.0	13.1	15.3	17.0	22.5
163°	4.1	4.4	5.8	8.0	9.3	10.0	10.2	12.1	14.2	15.2	20.3
163.5°	4.1	4.3	5.5	7.4	8.7	9.4	9.6	11.1	13.2	14.2	18.3
164°	4.1	4.1	5.2	6.9	8.1	8.7	8.9	10.1	12.1	13.1	16.6
164.5°	4.1	4.0	4.9	6.4	7.5	8.2	8.3	9.3	11.0	12.1	14.8
165°	4.1	4.0	4.6	5.9	7.0	7.6	7.8	8.6	10.0	11.0	13.0
165.5°	4.1	4.0	4.4	5.5	6.5	7.1	7.2	7.9	9.1	10.0	11.2
166°	4.1	4.0	4.2	5.1	6.0	6.6	6.8	7.3	8.4	9.2	9.5
166.5°	4.1	4.0	4.1	4.8	5.6	6.2	6.3	6.7	7.7	8.4	8.8
167°	4.1	4.1	4.0	4.5	5.2	5.8	5.9	6.1	7.0	7.7	8.3
167.5°	4.1	4.1	4.1	4.3	4.9	5.4	5.5	5.7	6.5	7.1	7.8
168°	4.1	4.1	4.1	4.1	4.6	5.0	5.1	5.2	5.9	6.6	7.4
168.5°	4.1	4.1	4.1	4.1	4.3	4.6	4.8	4.8	5.5	6.2	7.0
169°	4.1	4.0	4.0	4.0	4.1	4.3	4.4	4.4	5.0	5.9	6.6
169.5°	4.1	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.8	5.6	6.3
170°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.1	4.7	5.4	6.0
170.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.1	4.6	5.2	5.7
171°	4.0	4.0	4.0	4.0	4.0	4.0	4.1	4.1	4.5	5.0	5.5
171.5°	4.0	3.9	4.0	4.0	4.0	4.1	4.1	4.1	4.4	4.9	5.3
172°	3.9	3.9	3.9	4.0	4.0	4.1	4.1	4.1	4.3	4.8	5.1
172.5°	3.9	3.9	3.9	4.0	4.0	4.1	4.1	4.1	4.3	4.6	4.9
173°	3.9	3.9	3.9	3.9	4.0	4.1	4.1	4.2	4.3	4.5	4.8
173.5°	3.9	3.8	3.9	3.9	4.0	4.0	4.1	4.2	4.2	4.5	4.7
174°	3.8	3.8	3.9	3.9	4.0	4.0	4.1	4.2	4.2	4.4	4.6
174.5°	3.8	3.8	3.9	3.9	4.0	4.1	4.1	4.2	4.3	4.4	4.5
175°	3.8	3.8	3.8	3.9	4.0	4.1	4.1	4.2	4.3	4.4	4.5
175.5°	3.8	3.8	3.8	3.9	4.0	4.0	4.1	4.2	4.3	4.3	4.4
176°	3.8	3.7	3.8	3.9	3.9	4.0	4.1	4.2	4.3	4.3	4.4
176.5°	3.7	3.7	3.8	3.8	3.9	4.0	4.1	4.2	4.3	4.3	4.4
177°	3.7	3.7	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.3	4.4
177.5°	3.7	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.3	4.4
178°	3.6	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.4
178.5°	3.6	3.6	3.6	3.7	3.8	3.9	4.0	4.1	4.3	4.4	4.4
179°	3.6	3.6	3.6	3.7	3.8	3.9	4.0	4.2	4.3	4.4	4.5
179.5°	3.6	3.5	3.6	3.7	3.8	3.9	4.0	4.2	4.3	4.4	4.5





REPORT NUMBER: P973040  
CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
180°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
0°	3589.5	3589.5	3589.5	3589.5
0.5°	3648.9	3656.1	3657.2	3645.7
1°	3681.8	3681.6	3677.6	3609.7
1.5°	3634.4	3608.6	3591.6	3480.7
2°	3523.1	3475.1	3447.3	3318.3
2.5°	3373.4	3325.4	3299.8	3223.4
3°	3274.2	3250.1	3245.4	3221.0
3.5°	3242.5	3248.5	3260.6	3245.2
4°	3260.2	3275.3	3272.1	3211.5
4.5°	3271.4	3245.7	3203.9	3082.7
5°	3221.0	3134.7	3061.5	2933.9
5.5°	3102.0	2984.9	2934.1	2882.2
6°	2972.2	2916.3	2922.9	2956.3
6.5°	2918.6	2957.2	3025.8	3097.0
7°	2952.7	3077.1	3161.8	3198.4
7.5°	3061.0	3195.3	3234.4	3185.3
8°	3173.5	3229.8	3199.2	3089.5
8.5°	3235.0	3172.0	3106.8	3035.7
9°	3203.7	3095.4	3077.5	3097.2
9.5°	3133.2	3085.3	3159.1	3270.0
10°	3082.9	3176.7	3339.5	3456.5
10.5°	3112.5	3342.7	3511.6	3540.3
11°	3217.4	3504.0	3572.2	3501.3
11.5°	3379.4	3568.9	3528.9	3413.5
12°	3505.6	3529.4	3445.1	3395.6
12.5°	3550.0	3452.7	3433.6	3482.1
13°	3520.1	3424.7	3516.2	3602.5
13.5°	3448.4	3483.5	3631.0	3663.3
14°	3409.1	3581.9	3692.4	3672.2
14.5°	3447.7	3660.0	3709.0	3680.0
15°	3528.3	3699.1	3726.4	3730.0
15.5°	3605.5	3715.1	3784.3	3864.3
16°	3654.2	3749.0	3904.3	4046.6
16.5°	3681.5	3833.2	4084.0	4244.2
17°	3702.6	3975.0	4277.2	4414.6
17.5°	3744.0	4161.8	4464.1	4545.2
18°	3833.3	4346.8	4602.9	4646.1
18.5°	3970.6	4503.0	4703.5	4748.8
19°	4138.2	4621.5	4802.5	4879.3
19.5°	4310.3	4714.0	4930.2	5044.4
20°	4442.7	4804.2	5088.9	5215.1
20.5°	4549.5	4930.5	5246.8	5357.0
21°	4630.2	5080.7	5378.4	5465.6
21.5°	4710.9	5223.5	5484.1	5547.8
22°	4816.5	5329.7	5563.3	5609.1



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
22.5°	4941.4	5406.3	5623.4	5639.4
23°	5063.6	5472.5	5657.6	5650.6
23.5°	5165.5	5522.4	5661.6	5644.4
24°	5233.7	5557.8	5647.7	5625.1
24.5°	5269.1	5555.8	5626.2	5606.2
25°	5305.3	5537.5	5613.3	5577.5
25.5°	5346.6	5510.1	5603.0	5547.4
26°	5360.7	5495.5	5580.4	5512.8
26.5°	5359.5	5491.1	5545.2	5489.5
27°	5342.1	5475.2	5504.1	5471.8
27.5°	5309.6	5438.1	5484.9	5431.9
28°	5288.8	5383.0	5463.5	5384.2
28.5°	5274.3	5342.9	5431.1	5329.2
29°	5255.1	5331.3	5380.0	5277.3
29.5°	5227.7	5317.9	5317.1	5223.8
30°	5183.9	5273.3	5259.3	5182.0
30.5°	5134.8	5199.6	5214.7	5138.0
31°	5101.7	5139.6	5182.2	5090.2
31.5°	5076.6	5099.4	5146.8	5038.1
32°	5048.2	5074.6	5089.5	4981.9
32.5°	4996.2	5039.9	5016.9	4937.7
33°	4928.7	4985.8	4955.4	4887.5
33.5°	4877.7	4919.6	4904.2	4816.7
34°	4839.3	4859.9	4851.5	4731.8
34.5°	4800.7	4809.7	4779.1	4663.1
35°	4749.5	4771.1	4713.9	4617.0
35.5°	4686.9	4728.5	4660.6	4589.2
36°	4628.5	4677.6	4623.3	4574.9
36.5°	4581.3	4623.8	4607.0	4578.3
37°	4540.9	4583.9	4600.6	4595.5
37.5°	4509.3	4554.3	4609.3	4615.6
38°	4475.4	4542.9	4626.0	4646.2
38.5°	4439.2	4542.3	4653.5	4677.2
39°	4400.1	4546.3	4687.2	4713.8
39.5°	4364.9	4564.3	4725.3	4749.6
40°	4342.6	4588.8	4766.7	4785.4
40.5°	4328.4	4619.9	4810.2	4819.5
41°	4323.2	4653.3	4849.8	4848.7
41.5°	4322.4	4685.9	4876.3	4877.3
42°	4333.4	4711.6	4899.8	4893.4
42.5°	4346.4	4735.1	4924.3	4921.0
43°	4353.7	4752.6	4954.2	4951.2
43.5°	4365.7	4767.4	4977.5	4974.1
44°	4378.4	4786.1	4992.9	4990.3
44.5°	4388.2	4797.8	5015.6	4986.6



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
45°	4399.2	4806.9	5020.8	4979.6
45.5°	4409.0	4816.1	5011.1	4949.7
46°	4416.6	4818.5	4993.4	4919.0
46.5°	4418.2	4816.2	4952.9	4864.9
47°	4421.3	4798.7	4912.6	4818.9
47.5°	4418.2	4777.8	4867.6	4767.1
48°	4410.4	4737.0	4823.4	4732.5
48.5°	4402.4	4696.6	4782.3	4690.2
49°	4386.8	4652.3	4729.5	4634.6
49.5°	4369.1	4614.5	4674.5	4570.4
50°	4344.0	4567.1	4607.4	4506.7
50.5°	4322.3	4523.8	4543.7	4456.4
51°	4281.8	4474.0	4481.6	4413.8
51.5°	4241.6	4413.6	4431.3	4376.9
52°	4196.7	4354.6	4382.0	4339.1
52.5°	4155.2	4301.1	4341.4	4305.1
53°	4115.4	4253.2	4298.8	4258.3
53.5°	4072.8	4208.7	4248.2	4211.3
54°	4029.5	4159.6	4202.7	4169.0
54.5°	3979.3	4118.8	4156.6	4121.3
55°	3929.8	4073.7	4107.6	4060.4
55.5°	3884.0	4029.4	4040.0	3986.3
56°	3844.6	3971.0	3964.6	3909.4
56.5°	3801.4	3907.4	3883.2	3823.3
57°	3746.9	3834.8	3808.6	3754.3
57.5°	3685.8	3770.6	3737.7	3691.0
58°	3625.9	3692.7	3668.5	3622.4
58.5°	3568.6	3624.0	3599.4	3556.3
59°	3505.7	3552.6	3528.2	3481.2
59.5°	3434.7	3477.4	3450.4	3395.8
60°	3363.3	3399.6	3367.1	3296.5
60.5°	3291.4	3325.7	3279.5	3200.6
61°	3219.3	3240.4	3184.2	3105.6
61.5°	3150.5	3157.7	3094.5	3016.9
62°	3072.3	3070.4	3006.3	2940.9
62.5°	2997.8	2989.0	2926.3	2873.6
63°	2924.6	2910.8	2865.0	2825.3
63.5°	2849.0	2842.7	2808.9	2780.0
64°	2775.8	2773.2	2756.2	2730.3
64.5°	2709.8	2717.5	2701.4	2676.4
65°	2647.3	2662.6	2645.8	2622.9
65.5°	2585.1	2601.8	2582.4	2550.0
66°	2525.5	2536.9	2515.0	2467.7
66.5°	2466.2	2472.1	2445.0	2388.7
67°	2402.8	2401.0	2368.1	2315.0



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
67.5°	2341.2	2326.3	2293.1	2246.8
68°	2275.5	2252.8	2231.8	2185.6
68.5°	2204.2	2187.7	2173.6	2126.0
69°	2133.6	2122.2	2114.8	2070.6
69.5°	2068.4	2061.0	2056.6	2009.1
70°	2003.8	1997.9	1993.3	1940.7
70.5°	1940.5	1935.7	1927.5	1873.5
71°	1876.5	1874.0	1862.9	1808.3
71.5°	1814.1	1808.2	1796.2	1743.2
72°	1749.4	1745.0	1730.7	1684.6
72.5°	1687.6	1684.2	1668.7	1626.2
73°	1627.1	1617.8	1605.3	1562.3
73.5°	1567.4	1551.6	1540.4	1497.7
74°	1505.4	1490.6	1474.3	1434.6
74.5°	1440.3	1429.9	1407.3	1361.5
75°	1379.6	1361.1	1342.2	1290.5
75.5°	1317.3	1297.4	1277.1	1220.7
76°	1254.9	1233.6	1212.1	1150.7
76.5°	1192.6	1169.8	1147.0	1084.2
77°	1130.3	1106.0	1081.9	1021.3
77.5°	1068.2	1042.3	1015.3	958.8
78°	1011.3	981.4	953.4	899.5
78.5°	953.5	921.7	891.9	844.2
79°	894.4	862.7	834.2	790.9
79.5°	836.5	802.4	779.7	736.5
80°	778.1	748.3	729.9	690.9
80.5°	724.3	697.5	681.0	646.0
81°	673.7	651.2	637.4	603.9
81.5°	623.7	608.8	598.6	567.0
82°	579.2	568.3	560.1	531.1
82.5°	536.1	528.5	521.0	495.2
83°	496.3	494.0	486.7	459.3
83.5°	460.3	458.6	452.3	423.4
84°	427.2	423.0	417.6	387.5
84.5°	396.4	391.1	385.6	357.5
85°	367.7	362.3	355.5	328.8
85.5°	340.3	332.8	327.6	304.2
86°	315.0	307.2	303.0	281.8
86.5°	291.6	284.0	279.3	261.3
87°	269.9	262.3	258.7	243.1
87.5°	248.8	243.7	241.8	227.4
88°	230.9	226.7	225.9	212.9
88.5°	214.2	211.3	211.6	200.7
89°	200.0	198.7	199.6	189.7
89.5°	186.9	186.8	188.3	179.7



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
90°	175.5	176.4	178.2	171.3
90.5°	165.5	167.9	170.3	163.7
91°	157.5	160.4	162.9	157.1
91.5°	149.8	153.7	156.4	151.7
92°	142.5	147.8	151.3	146.7
92.5°	138.3	141.7	145.7	141.0
93°	134.2	136.0	140.0	135.8
93.5°	130.0	133.2	135.5	132.2
94°	125.8	130.5	133.4	129.5
94.5°	121.7	127.7	131.3	127.4
95°	119.3	125.0	129.2	125.7
95.5°	117.5	123.1	127.1	124.0
96°	115.6	121.4	125.1	122.2
96.5°	114.1	120.1	123.7	121.0
97°	112.9	118.9	122.5	120.2
97.5°	111.7	117.9	121.6	119.5
98°	110.8	117.1	120.8	118.7
98.5°	110.0	116.3	120.0	117.8
99°	109.1	115.6	119.2	117.2
99.5°	108.4	114.8	118.5	116.5
100°	107.7	114.0	117.6	115.6
100.5°	107.1	113.3	116.8	114.6
101°	105.8	112.6	115.9	113.7
101.5°	104.7	110.8	114.5	111.7
102°	104.5	109.4	112.3	110.0
102.5°	104.8	109.1	111.0	109.2
103°	104.7	109.5	111.0	109.5
103.5°	104.3	109.3	111.3	109.4
104°	103.9	108.7	110.8	108.9
104.5°	103.6	108.2	110.2	108.2
105°	103.4	107.7	109.5	107.6
105.5°	103.1	107.2	108.9	106.9
106°	102.9	106.8	108.2	106.3
106.5°	102.7	106.5	107.8	105.8
107°	102.6	106.2	107.4	105.4
107.5°	102.4	105.9	107.0	105.0
108°	102.1	105.5	106.6	104.5
108.5°	101.7	105.1	106.1	103.8
109°	101.2	104.6	105.4	103.0
109.5°	100.7	103.9	104.7	102.2
110°	100.1	103.2	103.9	101.3
110.5°	99.6	102.5	103.1	100.3
111°	99.1	101.9	102.3	99.5
111.5°	98.6	101.3	101.5	98.6
112°	98.2	100.6	100.7	97.8



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
112.5°	97.7	100.0	100.0	96.9
113°	97.3	99.4	99.2	96.2
113.5°	96.9	98.7	98.5	95.5
114°	96.6	98.1	97.8	94.9
114.5°	96.4	97.6	97.2	94.3
115°	96.3	97.1	96.6	93.7
115.5°	96.2	96.7	96.0	93.1
116°	96.2	96.5	95.5	92.5
116.5°	96.2	96.3	95.1	92.0
117°	96.1	96.2	94.7	91.6
117.5°	96.1	96.1	94.5	91.3
118°	96.1	96.1	94.4	91.2
118.5°	96.1	96.1	94.2	91.0
119°	96.1	96.1	94.2	90.9
119.5°	96.1	96.1	94.1	90.9
120°	95.9	96.1	94.2	91.0
120.5°	95.9	96.1	94.3	91.1
121°	95.9	96.1	94.3	91.3
121.5°	95.8	96.1	94.4	91.4
122°	95.8	96.1	94.4	91.5
122.5°	95.8	96.2	94.4	91.6
123°	95.8	96.2	94.4	91.8
123.5°	95.7	96.2	94.5	92.0
124°	95.7	96.2	94.6	92.1
124.5°	95.7	96.2	94.7	92.4
125°	95.7	96.3	94.8	92.6
125.5°	95.7	96.4	94.9	92.8
126°	95.8	96.5	95.0	93.0
126.5°	95.8	96.6	95.2	93.3
127°	95.8	96.7	95.2	93.3
127.5°	95.9	96.8	95.2	93.3
128°	95.9	97.0	95.2	93.4
128.5°	96.0	97.1	95.2	93.4
129°	96.1	97.2	95.2	93.4
129.5°	96.1	97.2	95.2	93.4
130°	96.1	97.3	95.2	93.3
130.5°	96.1	97.3	95.1	93.2
131°	96.0	97.4	95.1	93.1
131.5°	96.0	97.3	95.0	93.0
132°	95.9	97.2	94.9	92.9
132.5°	95.8	97.0	94.7	92.6
133°	95.6	96.9	94.5	92.3
133.5°	95.4	96.6	94.1	91.9
134°	95.1	96.4	93.7	91.4
134.5°	94.8	96.0	93.3	90.9



REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
135°	94.4	95.6	92.8	90.2
135.5°	94.0	95.2	92.3	89.6
136°	93.6	94.7	91.8	88.9
136.5°	93.2	94.1	91.2	88.1
137°	92.7	93.5	90.6	87.3
137.5°	92.1	93.0	89.9	86.5
138°	91.3	92.4	89.2	85.5
138.5°	90.5	91.7	88.4	84.6
139°	89.1	91.1	87.7	83.7
139.5°	88.5	90.3	87.0	83.0
140°	87.9	89.5	86.3	82.1
140.5°	87.3	88.5	85.5	81.4
141°	86.8	87.2	84.7	80.4
141.5°	86.1	86.1	83.6	79.3
142°	85.4	85.5	82.6	78.1
142.5°	84.7	84.9	80.7	75.7
143°	83.9	84.2	79.8	74.9
143.5°	83.1	83.6	79.1	74.4
144°	82.2	83.0	78.4	73.8
144.5°	81.2	82.2	77.7	73.2
145°	80.3	81.4	76.9	72.7
145.5°	79.3	80.6	76.1	72.0
146°	78.3	79.7	75.2	71.3
146.5°	77.2	78.8	74.4	70.6
147°	76.2	77.9	73.5	69.8
147.5°	75.0	76.8	72.6	69.1
148°	73.9	75.8	71.7	68.3
148.5°	72.8	74.7	70.8	67.6
149°	71.5	73.5	69.8	66.7
149.5°	70.3	72.4	68.8	65.8
150°	69.0	71.2	67.8	65.0
150.5°	67.6	69.9	66.8	64.1
151°	66.3	68.7	65.7	63.1
151.5°	65.1	67.4	64.7	62.1
152°	63.7	66.0	63.5	61.0
152.5°	62.3	64.6	62.4	60.0
153°	61.0	63.3	61.2	58.8
153.5°	59.6	61.8	59.9	58.3
154°	58.1	60.4	58.7	57.2
154.5°	56.7	59.0	57.5	56.1
155°	55.2	57.5	56.3	54.9
155.5°	53.8	56.1	55.0	53.8
156°	52.3	54.7	53.8	52.6
156.5°	50.8	53.2	52.6	51.4
157°	49.2	51.7	51.3	50.2





REPORT NUMBER: P973040  
 CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
157.5°	47.7	50.2	50.1	49.0
158°	46.2	48.5	48.8	47.7
158.5°	44.6	47.0	47.4	46.4
159°	43.2	45.5	46.1	45.0
159.5°	41.7	43.9	44.7	43.6
160°	40.1	42.4	43.2	42.2
160.5°	38.5	41.0	41.9	40.8
161°	36.5	39.5	40.5	39.5
161.5°	33.9	37.9	39.2	38.2
162°	31.4	36.4	37.9	36.8
162.5°	28.8	34.2	36.4	35.3
163°	26.2	31.3	34.8	33.8
163.5°	23.8	28.7	32.5	31.3
164°	21.5	26.0	29.6	28.6
164.5°	19.4	23.4	26.9	25.9
165°	17.4	21.1	24.3	23.3
165.5°	15.5	18.9	21.8	20.8
166°	13.7	16.9	19.4	18.5
166.5°	11.8	15.0	17.4	16.4
167°	9.9	13.0	15.3	14.5
167.5°	8.1	11.1	13.3	12.5
168°	7.7	9.1	11.3	10.4
168.5°	7.3	7.2	9.3	8.2
169°	6.9	6.9	7.4	6.3
169.5°	6.6	6.6	6.8	5.9
170°	6.3	6.3	6.6	5.7
170.5°	6.0	6.1	6.4	5.4
171°	5.7	5.9	6.2	5.1
171.5°	5.5	5.7	6.0	4.9
172°	5.3	5.5	5.8	4.6
172.5°	5.1	5.4	5.7	4.4
173°	5.0	5.2	5.5	4.3
173.5°	4.8	5.0	5.3	4.2
174°	4.7	4.9	5.2	4.0
174.5°	4.7	4.8	5.0	3.9
175°	4.6	4.7	4.8	3.8
175.5°	4.5	4.7	4.7	3.7
176°	4.5	4.6	4.7	3.6
176.5°	4.5	4.6	4.7	3.5
177°	4.4	4.6	4.7	3.5
177.5°	4.5	4.6	4.7	3.5
178°	4.5	4.6	4.8	3.5
178.5°	4.5	4.6	4.8	3.6
179°	4.6	4.7	4.8	3.6
179.5°	4.6	4.7	4.9	3.7



REPORT NUMBER: P973040  
CATALOG NUMBER: WP-6984-80W-3000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
180°	3.7	3.7	3.7	3.7

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Lumark

Report Number: SP1-2410-249-1

Test Date: 10/24/2024

Luminaire Tested: WP-6984-3000K-H (100W)

Data in this report applies to families of products including WP-6984-3000K-H (100W)

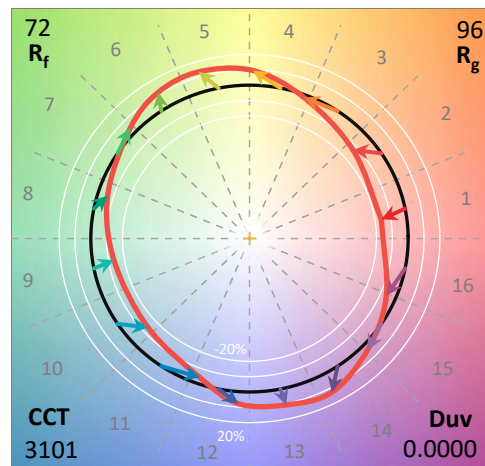
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2410-249-1  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 10/24/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Lumark  
 Catalog Number: **WP-6984-3000K-H (100W)**  
 Description: DIALITE SQLED WALL PACK SAMPLE 100w-3000K HIGH OUTPUT

**Spectral Parameters**

CCT (K): 3101  
 CIE u': 0.2471  
 CIE v': 0.5193  
 Duv: 0.0000  
 CIE x: 0.4299  
 CIE y: 0.4015  
 CIE z: 0.1686  
 Peak Wavelength (nm): 596  
 Dominant Wavelength (nm): 582  
 Purity: 49.54025  
 Rf: 72.3  
 Rg: 96

CRI (Ra):	70.7		
R1:	67.4	R9:	-31.2
R2:	79.4	R10:	51.8
R3:	89.6	R11:	62.2
R4:	67.9	R12:	42.7
R5:	66.0	R13:	69.2
R6:	70.5	R14:	93.8
R7:	78.5	R15:	60.4
R8:	46.0		



**Test Conditions**

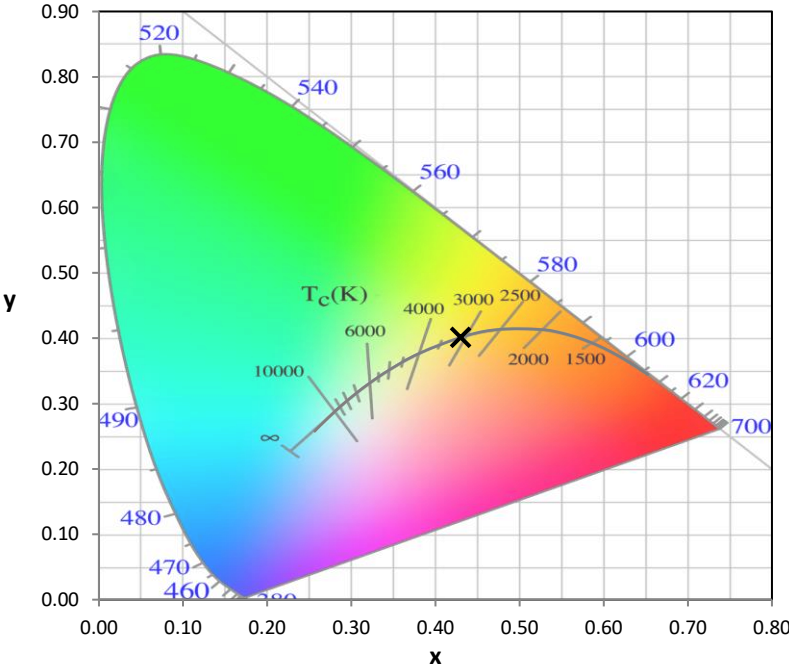
Stabilization Time: 49M  
 Operation Time: 1H 49M  
 Sphere Temperature (°C): 25.4

REPORT NUMBER: SP1-2410-249-1

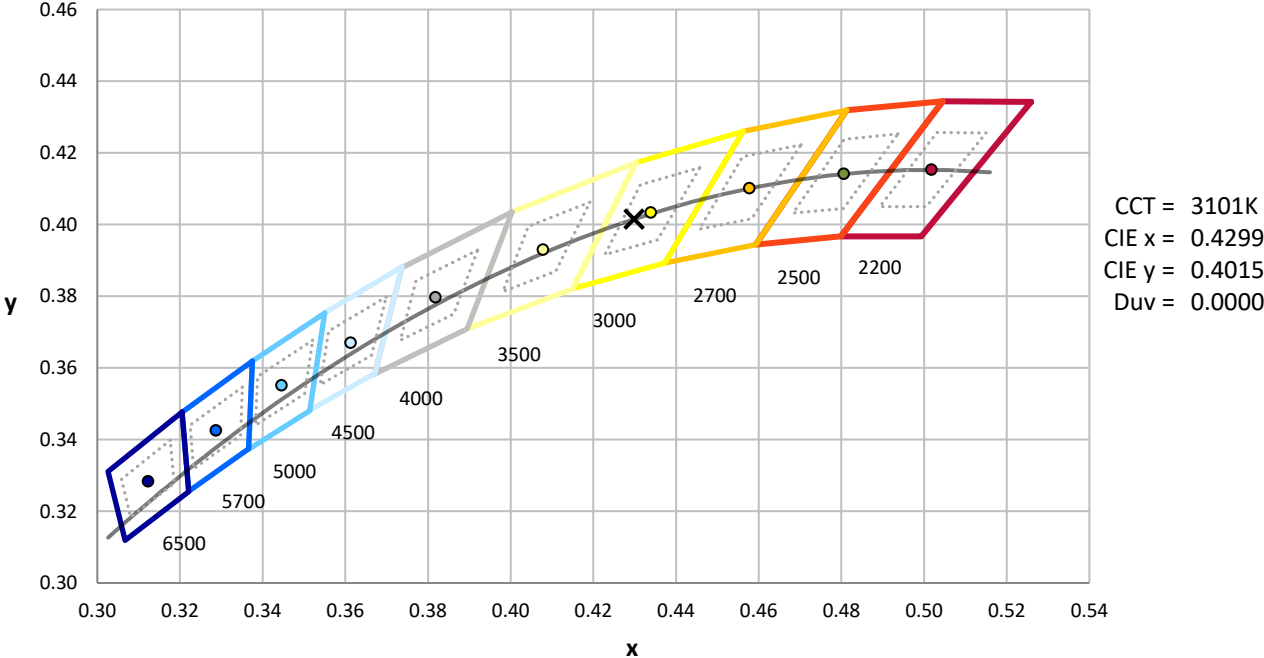
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085	10/22/2024	10/22/2025
Room Thermometer	IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2410-249-1

CIE 1931 Chromaticity Diagram



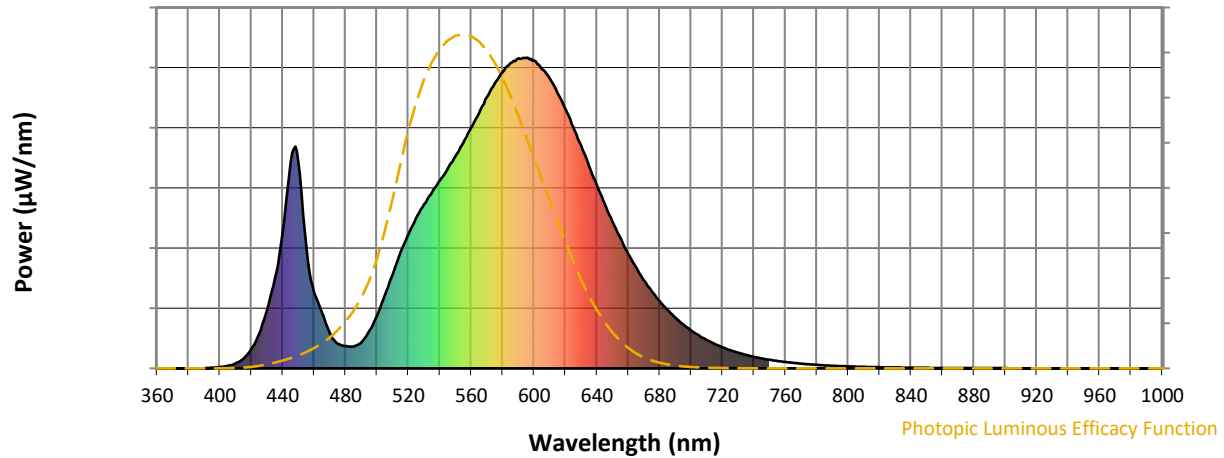
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2410-249-1

**Photopic Flux vs. Wavelength**

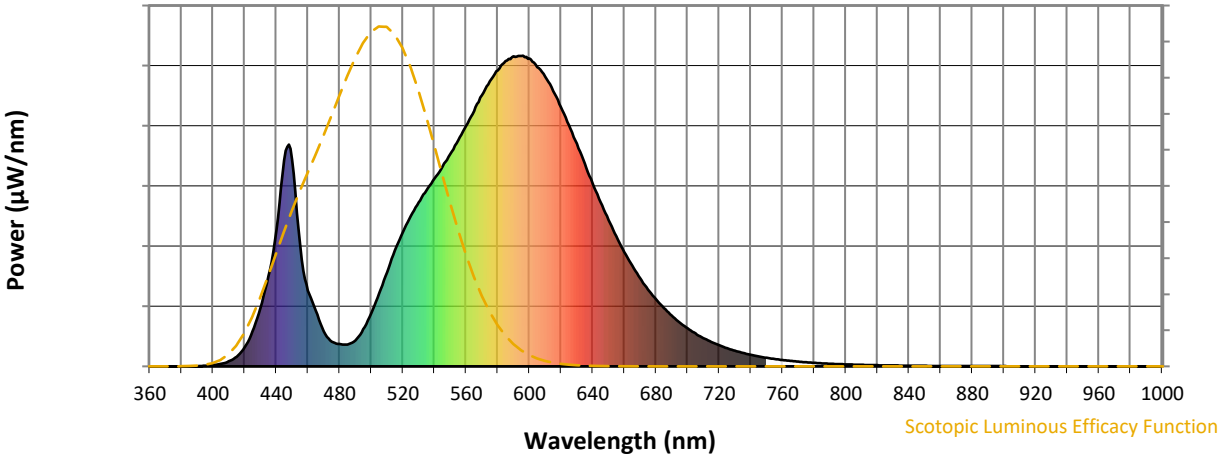


**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)
360	0	NR	490	84	NR	620	834	NR	750	28	NR	880	1	NR
365	0	NR	495	119	NR	625	776	NR	755	24	NR	885	1	NR
370	0	NR	500	170	NR	630	717	NR	760	20	NR	890	1	NR
375	0	NR	505	235	NR	635	652	NR	765	18	NR	895	1	NR
380	0	NR	510	303	NR	640	589	NR	770	15	NR	900	1	NR
385	0	NR	515	373	NR	645	529	NR	775	13	NR	905	1	NR
390	0	NR	520	432	NR	650	471	NR	780	11	NR	910	0	NR
395	2	NR	525	484	NR	655	419	NR	785	10	NR	915	0	NR
400	4	NR	530	528	NR	660	368	NR	790	9	NR	920	0	NR
405	8	NR	535	566	NR	665	324	NR	795	7	NR	925	0	NR
410	16	NR	540	605	NR	670	283	NR	800	6	NR	930	0	NR
415	31	NR	545	642	NR	675	247	NR	805	6	NR	935	0	NR
420	61	NR	550	683	NR	680	216	NR	810	5	NR	940	0	NR
425	112	NR	555	727	NR	685	188	NR	815	4	NR	945	0	NR
430	187	NR	560	775	NR	690	163	NR	820	4	NR	950	0	NR
435	290	NR	565	822	NR	695	141	NR	825	3	NR	955	0	NR
440	437	NR	570	872	NR	700	122	NR	830	3	NR	960	0	NR
445	663	NR	575	918	NR	705	106	NR	835	3	NR	965	0	NR
450	664	NR	580	953	NR	710	91	NR	840	2	NR	970	0	NR
455	392	NR	585	983	NR	715	78	NR	845	2	NR	975	0	NR
460	244	NR	590	998	NR	720	68	NR	850	2	NR	980	0	NR
465	180	NR	595	999	NR	725	58	NR	855	1	NR	985	0	NR
470	112	NR	600	991	NR	730	50	NR	860	1	NR	990	0	NR
475	80	NR	605	963	NR	735	43	NR	865	1	NR	995	0	NR
480	72	NR	610	932	NR	740	37	NR	870	1	NR	1000	0	NR
485	70	NR	615	886	NR	745	32	NR	875	1	NR			

REPORT NUMBER: SP1-2410-249-1

Scotopic Flux vs. Wavelength



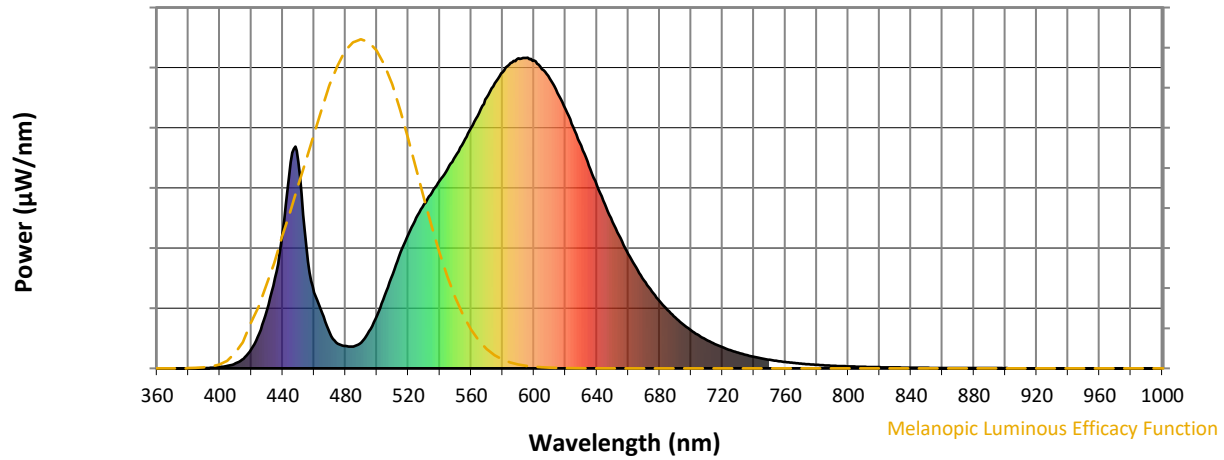
Scotopic Lumens: NR S/P: 1.21

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	84	NR	620	834	NR	750	28	NR	880	1	NR
365	0	NR	495	119	NR	625	776	NR	755	24	NR	885	1	NR
370	0	NR	500	170	NR	630	717	NR	760	20	NR	890	1	NR
375	0	NR	505	235	NR	635	652	NR	765	18	NR	895	1	NR
380	0	NR	510	303	NR	640	589	NR	770	15	NR	900	1	NR
385	0	NR	515	373	NR	645	529	NR	775	13	NR	905	1	NR
390	0	NR	520	432	NR	650	471	NR	780	11	NR	910	0	NR
395	2	NR	525	484	NR	655	419	NR	785	10	NR	915	0	NR
400	4	NR	530	528	NR	660	368	NR	790	9	NR	920	0	NR
405	8	NR	535	566	NR	665	324	NR	795	7	NR	925	0	NR
410	16	NR	540	605	NR	670	283	NR	800	6	NR	930	0	NR
415	31	NR	545	642	NR	675	247	NR	805	6	NR	935	0	NR
420	61	NR	550	683	NR	680	216	NR	810	5	NR	940	0	NR
425	112	NR	555	727	NR	685	188	NR	815	4	NR	945	0	NR
430	187	NR	560	775	NR	690	163	NR	820	4	NR	950	0	NR
435	290	NR	565	822	NR	695	141	NR	825	3	NR	955	0	NR
440	437	NR	570	872	NR	700	122	NR	830	3	NR	960	0	NR
445	663	NR	575	918	NR	705	106	NR	835	3	NR	965	0	NR
450	664	NR	580	953	NR	710	91	NR	840	2	NR	970	0	NR
455	392	NR	585	983	NR	715	78	NR	845	2	NR	975	0	NR
460	244	NR	590	998	NR	720	68	NR	850	2	NR	980	0	NR
465	180	NR	595	999	NR	725	58	NR	855	1	NR	985	0	NR
470	112	NR	600	991	NR	730	50	NR	860	1	NR	990	0	NR
475	80	NR	605	963	NR	735	43	NR	865	1	NR	995	0	NR
480	72	NR	610	932	NR	740	37	NR	870	1	NR	1000	0	NR
485	70	NR	615	886	NR	745	32	NR	875	1	NR			



REPORT NUMBER: SP1-2410-249-1

Melanopic Flux vs. Wavelength



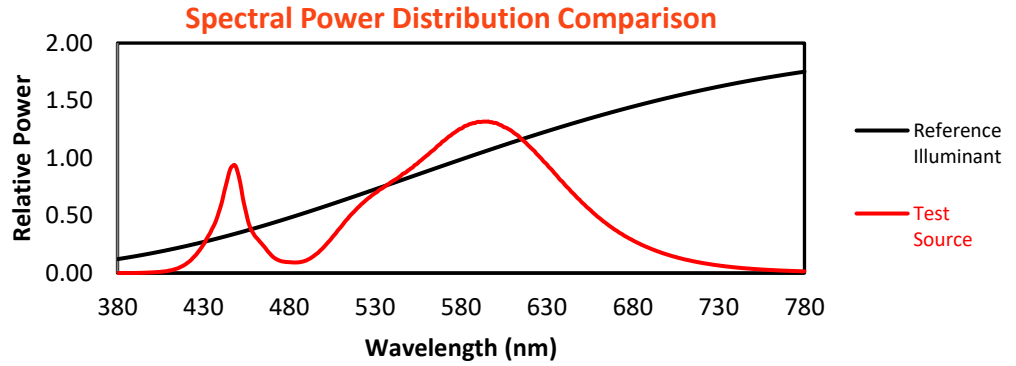
Melanopic Lumens: NR

M/P: 2.18

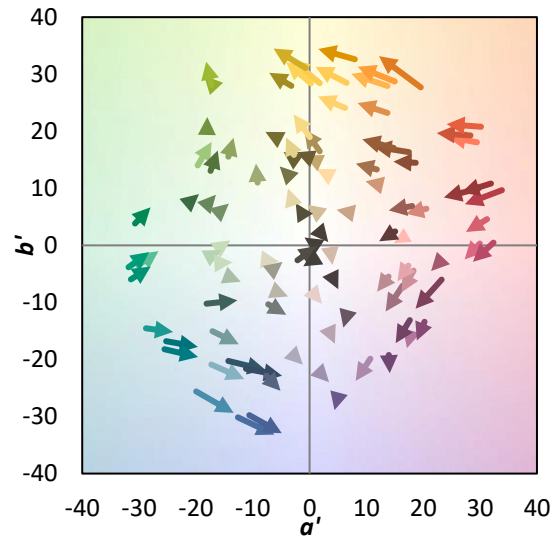
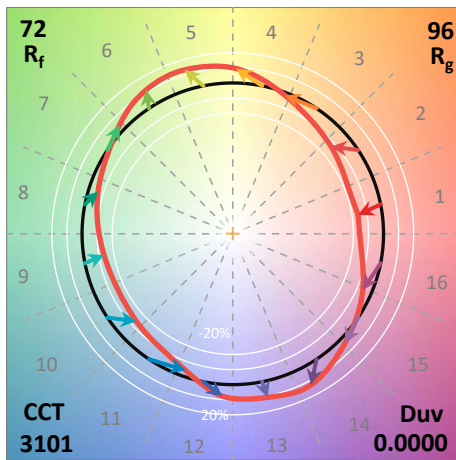
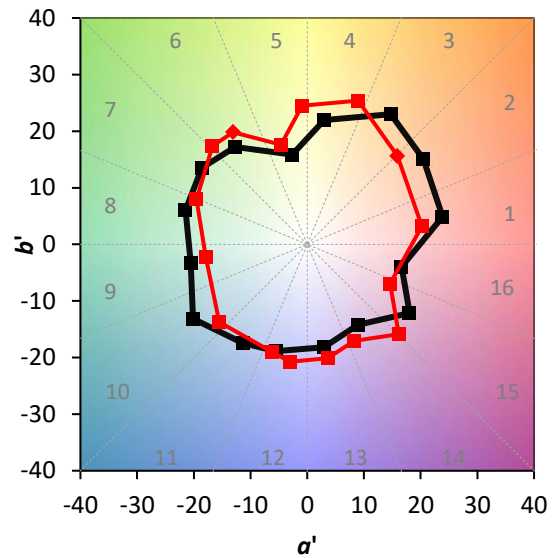
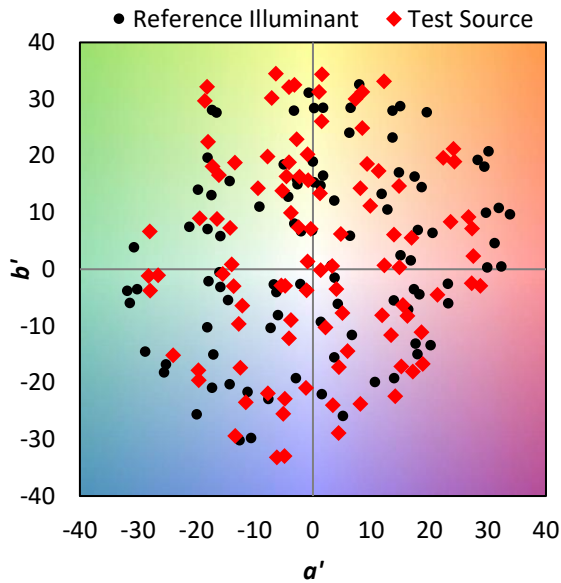
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	84	NR	620	834	NR	750	28	NR	880	1	NR
365	0	NR	495	119	NR	625	776	NR	755	24	NR	885	1	NR
370	0	NR	500	170	NR	630	717	NR	760	20	NR	890	1	NR
375	0	NR	505	235	NR	635	652	NR	765	18	NR	895	1	NR
380	0	NR	510	303	NR	640	589	NR	770	15	NR	900	1	NR
385	0	NR	515	373	NR	645	529	NR	775	13	NR	905	1	NR
390	0	NR	520	432	NR	650	471	NR	780	11	NR	910	0	NR
395	2	NR	525	484	NR	655	419	NR	785	10	NR	915	0	NR
400	4	NR	530	528	NR	660	368	NR	790	9	NR	920	0	NR
405	8	NR	535	566	NR	665	324	NR	795	7	NR	925	0	NR
410	16	NR	540	605	NR	670	283	NR	800	6	NR	930	0	NR
415	31	NR	545	642	NR	675	247	NR	805	6	NR	935	0	NR
420	61	NR	550	683	NR	680	216	NR	810	5	NR	940	0	NR
425	112	NR	555	727	NR	685	188	NR	815	4	NR	945	0	NR
430	187	NR	560	775	NR	690	163	NR	820	4	NR	950	0	NR
435	290	NR	565	822	NR	695	141	NR	825	3	NR	955	0	NR
440	437	NR	570	872	NR	700	122	NR	830	3	NR	960	0	NR
445	663	NR	575	918	NR	705	106	NR	835	3	NR	965	0	NR
450	664	NR	580	953	NR	710	91	NR	840	2	NR	970	0	NR
455	392	NR	585	983	NR	715	78	NR	845	2	NR	975	0	NR
460	244	NR	590	998	NR	720	68	NR	850	2	NR	980	0	NR
465	180	NR	595	999	NR	725	58	NR	855	1	NR	985	0	NR
470	112	NR	600	991	NR	730	50	NR	860	1	NR	990	0	NR
475	80	NR	605	963	NR	735	43	NR	865	1	NR	995	0	NR
480	72	NR	610	932	NR	740	37	NR	870	1	NR	1000	0	NR
485	70	NR	615	886	NR	745	32	NR	875	1	NR			

**Summary**

$R_f = 72.3$   
 $R_g = 96$   
 $CIE R_a = 70.7$   
 $R_9 = -31.2$

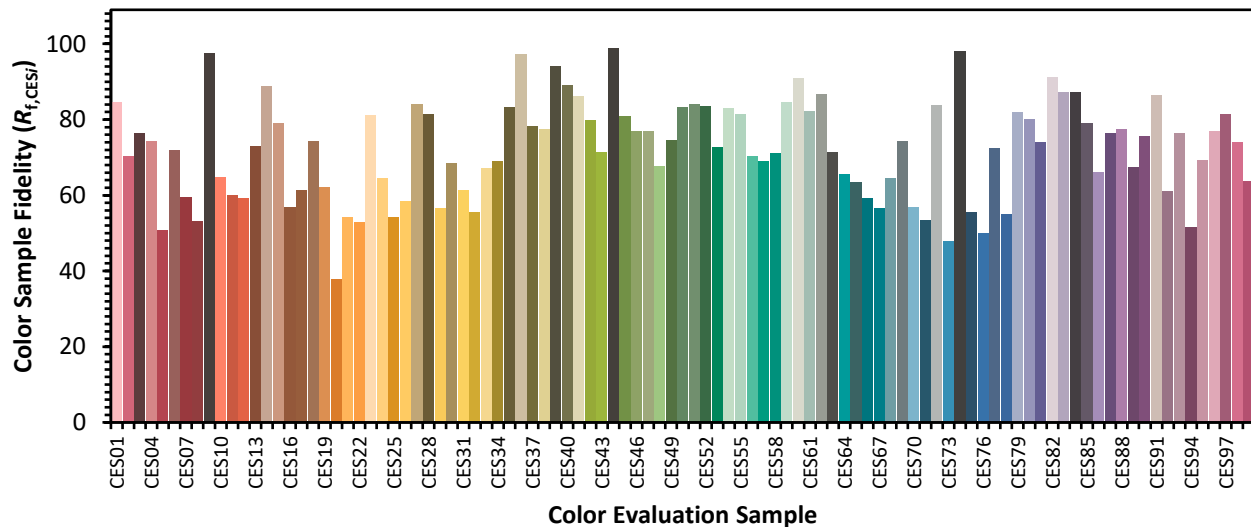


**Color Vector Graphics**

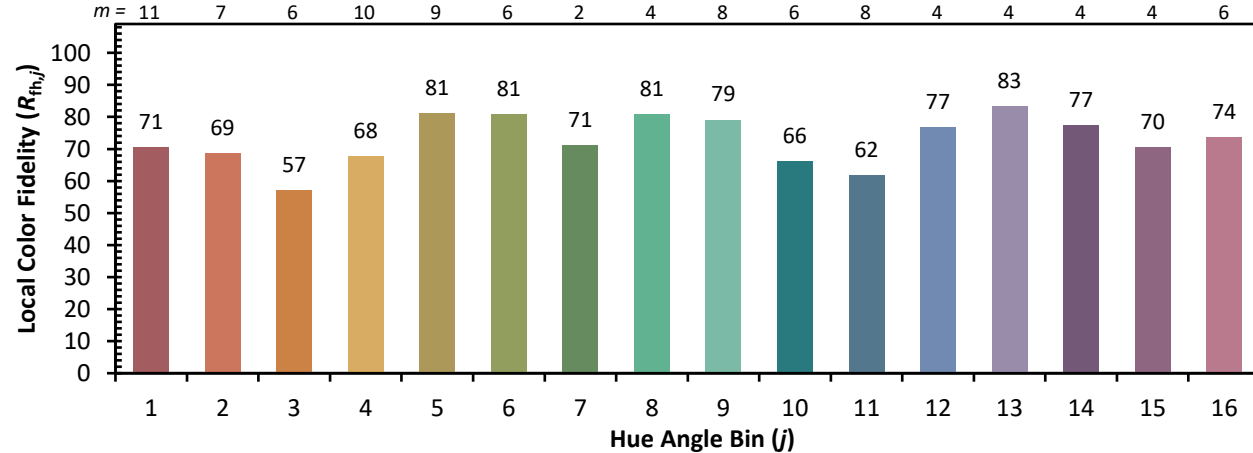
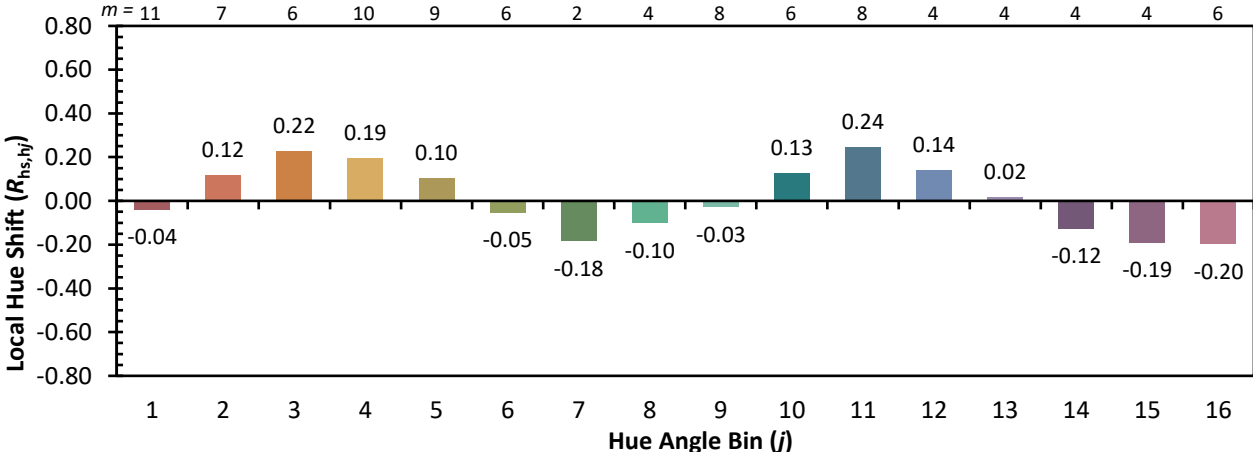
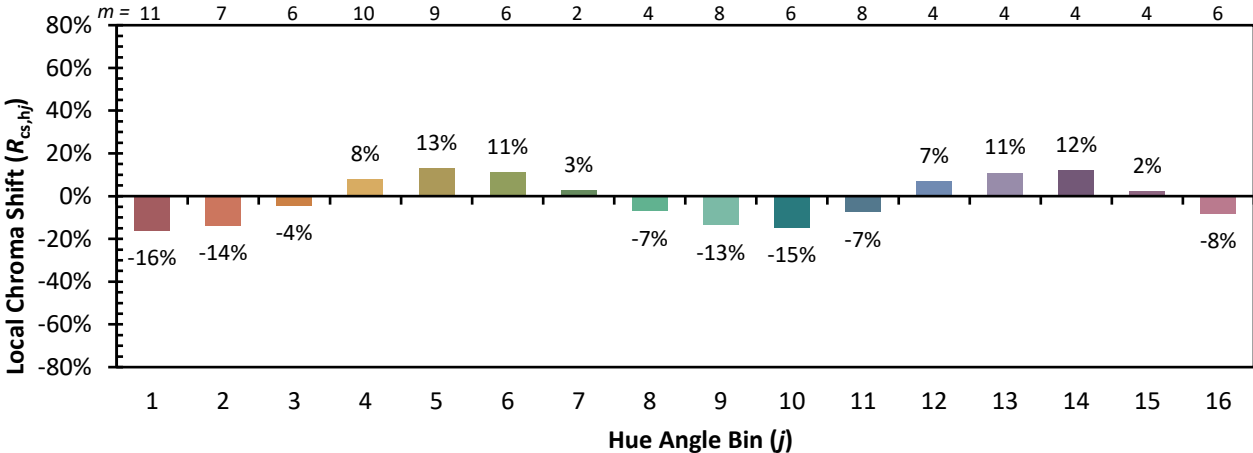


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

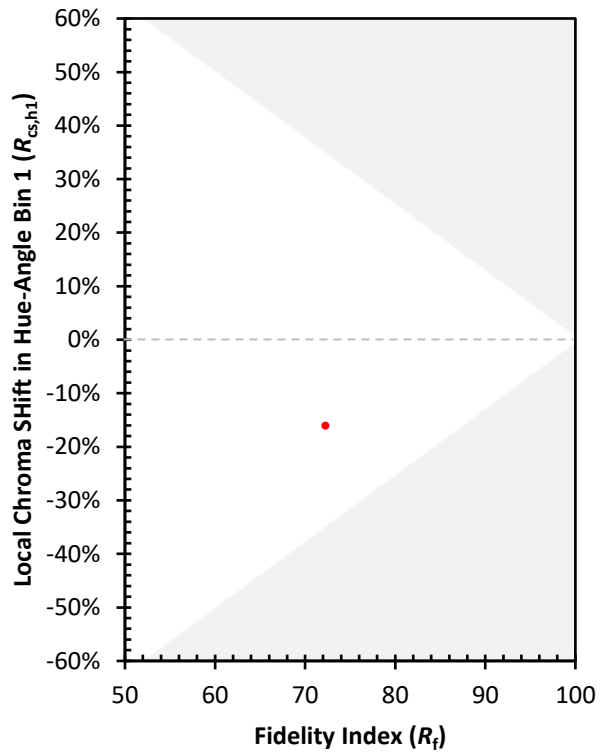
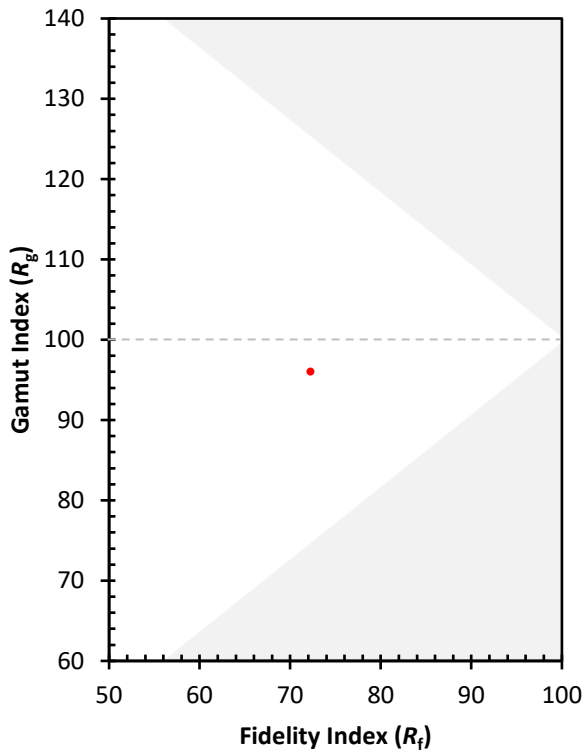
CES01 = 86	CES26 = 58	CES51 = 84	CES76 = 50
CES02 = 62	CES27 = 84	CES52 = 84	CES77 = 73
CES03 = 31	CES28 = 81	CES53 = 73	CES78 = 55
CES04 = 71	CES29 = 57	CES54 = 83	CES79 = 82
CES05 = 49	CES30 = 69	CES55 = 82	CES80 = 80
CES06 = 51	CES31 = 61	CES56 = 70	CES81 = 74
CES07 = 41	CES32 = 56	CES57 = 69	CES82 = 91
CES08 = 40	CES33 = 67	CES58 = 71	CES83 = 87
CES09 = 29	CES34 = 69	CES59 = 84	CES84 = 87
CES10 = 76	CES35 = 83	CES60 = 91	CES85 = 79
CES11 = 59	CES36 = 97	CES61 = 82	CES86 = 66
CES12 = 65	CES37 = 78	CES62 = 87	CES87 = 76
CES13 = 43	CES38 = 78	CES63 = 71	CES88 = 77
CES14 = 74	CES39 = 94	CES64 = 66	CES89 = 67
CES15 = 71	CES40 = 89	CES65 = 63	CES90 = 76
CES16 = 47	CES41 = 86	CES66 = 59	CES91 = 86
CES17 = 50	CES42 = 80	CES67 = 57	CES92 = 61
CES18 = 56	CES43 = 71	CES68 = 64	CES93 = 76
CES19 = 73	CES44 = 99	CES69 = 74	CES94 = 52
CES20 = 66	CES45 = 81	CES70 = 57	CES95 = 69
CES21 = 87	CES46 = 77	CES71 = 53	CES96 = 77
CES22 = 79	CES47 = 77	CES72 = 84	CES97 = 82
CES23 = 92	CES48 = 68	CES73 = 48	CES98 = 74
CES24 = 91	CES49 = 75	CES74 = 98	CES99 = 64
CES25 = 73	CES50 = 83	CES75 = 56	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)