

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: P973041

Luminaire Tested: **WP-6984-80W-4000K**

Issue Date: 03/12/2025



**Test Information**

Test Method: LM-79-08  
Report Number: P973041  
Test Lab: LEADING TESTING LABORATORIES  
Issue Date: 03/12/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: WP-6984-80W-4000K  
Description: LUMARK WALL PACK SQUARE LED 70CRI CCT SELECTIVE FIXTURE OPERATING @80W-4000K  
Light Source: 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

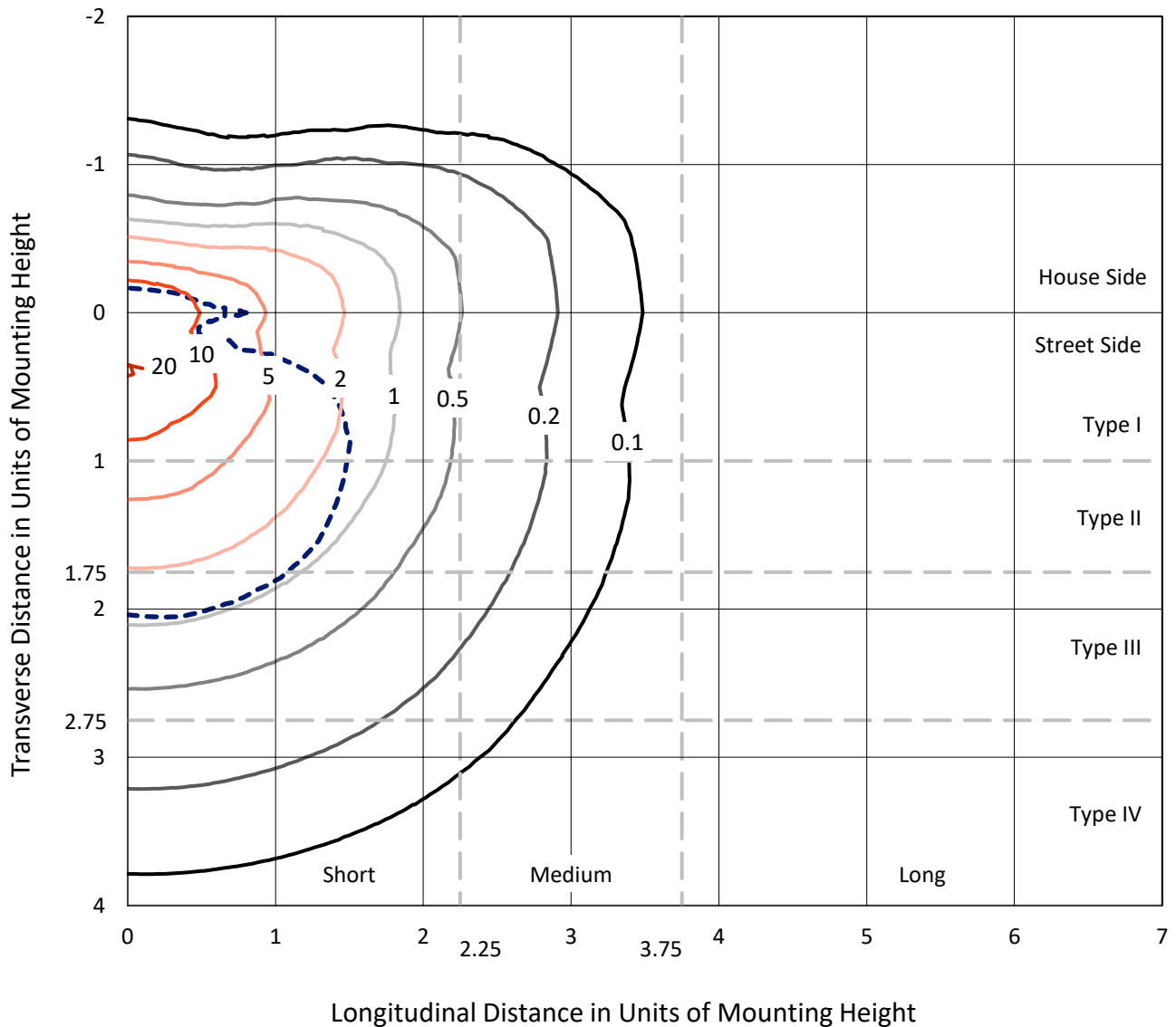
Lumens per Lamp: N/A  
Luminaire Lumens: 10992.3 lumens  
Efficiency: N/A  
Efficacy: 143.3 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.96' x L: 0.25' x H: 0.67')  
IES Classification: Type III - Short  
BUG Rating: B2 - U3 - G2

Input Watts (W): 76.7  
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

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### Iso-Footcandle Lines of Horizontal Illumination

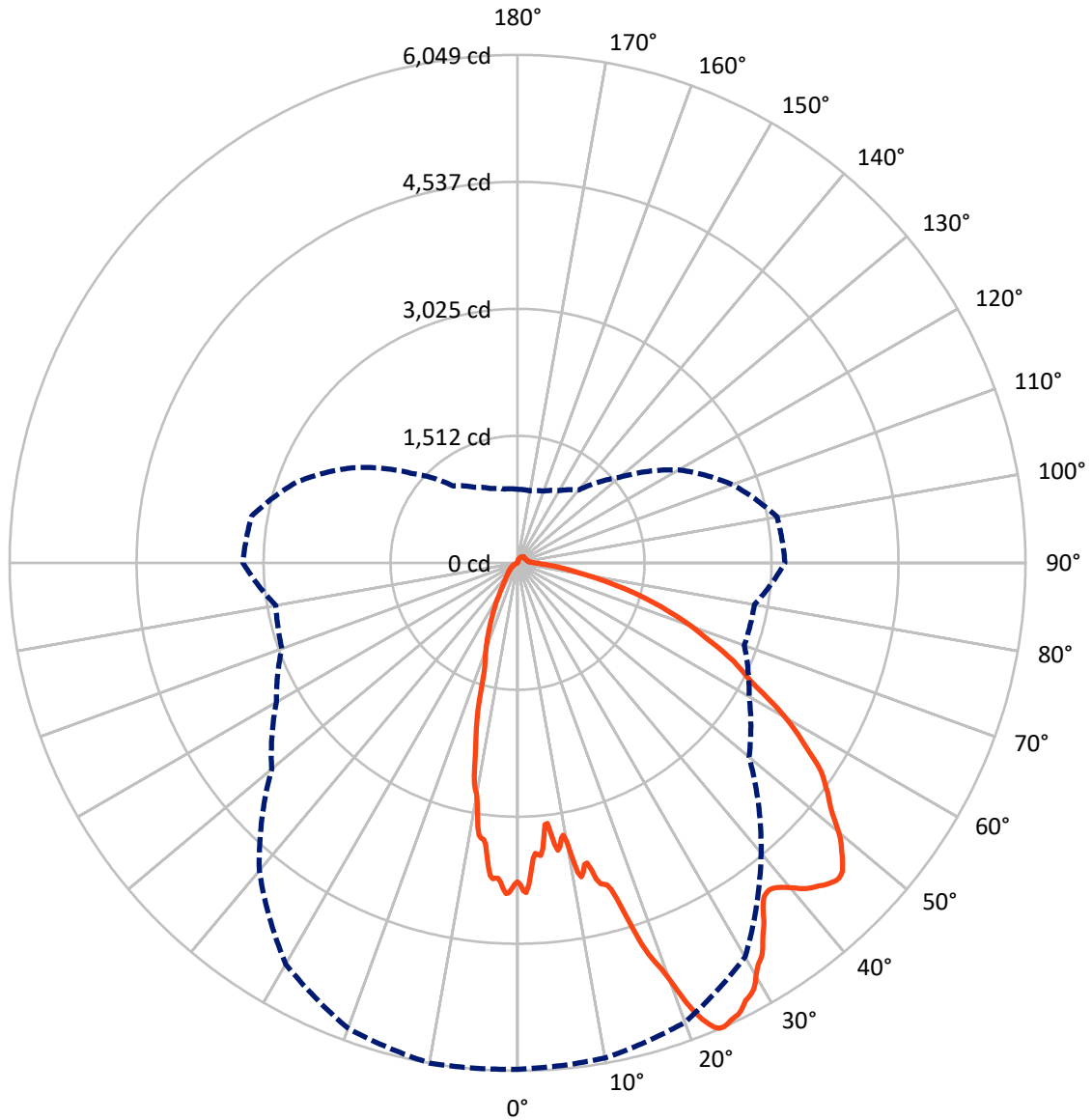
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 20.9 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



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

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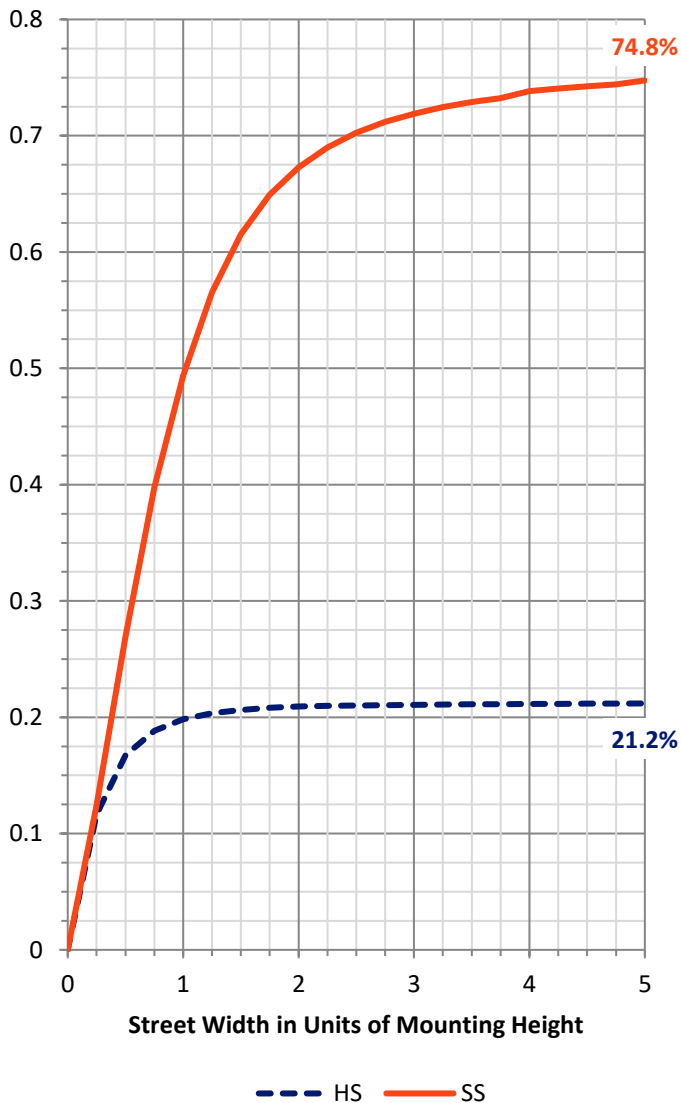
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2356.0	55.9	2411.8
	% Fixture	21.4	0.5	21.9
<b>Street Side</b>	Lumens	8306.5	274.0	8580.5
	% Fixture	75.6	2.5	78.1
<b>Total</b>	Lumens	10662.5	329.8	10992.3
	% Fixture	97.0	3.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	337.1	3.1
10°-20°	890.4	8.1
20°-30°	1396.6	12.7
30°-40°	1686.3	15.3
40°-50°	1920.7	17.5
50°-60°	1907.8	17.4
60°-70°	1460.4	13.3
70°-80°	813.9	7.4
80°-90°	249.2	2.3
90°-100°	74.1	0.7
100°-110°	60.0	0.5
110°-120°	55.1	0.5
120°-130°	49.7	0.5
130°-140°	42.9	0.4
140°-150°	29.7	0.3
150°-160°	14.2	0.1
160°-170°	3.5	0.0
170°-180°	0.4	0.0
0°-90°	10662.5	97.0
0°-180°	10992.3	100.0

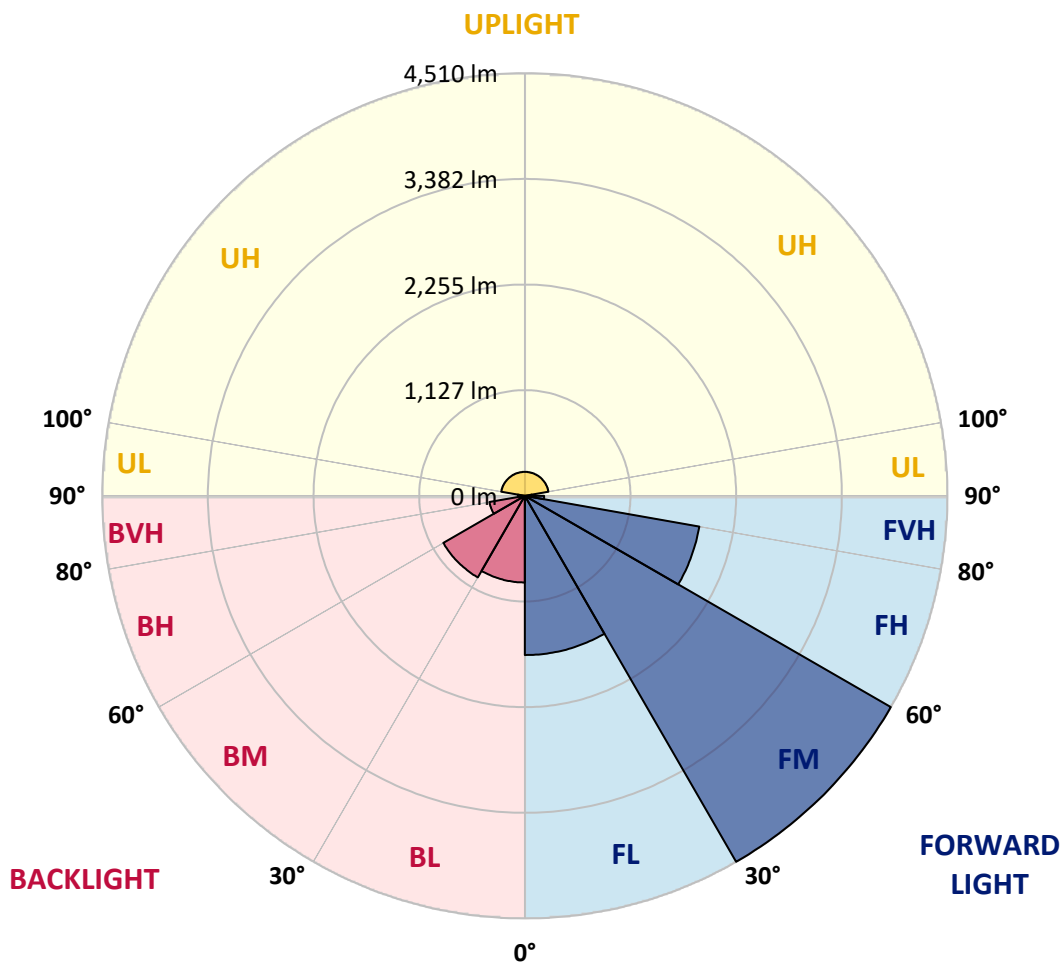


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1699.6	15.5			
FM (30°-60°)	4509.9	41.0			
FH (60°-80°)	1891.3	17.2			G2/5000
FVH (80°-90°)	205.7	1.9			G2/225
BL (0°-30°)	924.6	8.4	B2/1000		
BM (30°-60°)	1004.8	9.1	B2/2500		
BH (60°-80°)	383.0	3.5	B1/500		G1/500
BVH (80°-90°)	43.5	0.4			G1/100
UL (90°-100°)	74.1	0.7		U3/500	
UH (100°-180°)	255.7	2.3		U3/500	

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





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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1
0.5°	3895.2	3893.6	3893.4	3894.4	3893.0	3884.9	3875.5	3864.3	3851.6	3839.3	3827.6
1°	3856.7	3860.6	3875.6	3891.2	3908.4	3912.9	3905.5	3890.0	3859.8	3835.4	3815.2
1.5°	3718.9	3730.0	3756.6	3801.6	3850.1	3889.1	3911.2	3903.3	3865.1	3827.4	3798.0
2°	3545.4	3557.4	3594.3	3656.7	3735.1	3814.8	3888.9	3908.9	3877.3	3819.7	3782.2
2.5°	3444.0	3451.0	3467.6	3513.5	3597.5	3713.0	3832.3	3897.1	3884.2	3816.8	3771.1
3°	3441.4	3435.3	3432.6	3440.4	3486.7	3599.5	3753.2	3871.4	3879.9	3806.8	3758.0
3.5°	3467.3	3460.5	3452.4	3433.7	3436.2	3499.6	3662.7	3828.6	3871.0	3795.1	3742.8
4°	3431.2	3442.0	3454.6	3450.6	3426.6	3441.1	3573.0	3775.8	3860.9	3789.6	3735.9
4.5°	3293.6	3323.5	3380.1	3442.0	3436.0	3416.8	3494.0	3717.5	3849.1	3774.7	3727.3
5°	3134.6	3158.1	3229.4	3352.5	3434.4	3411.0	3433.4	3648.8	3828.6	3760.7	3724.6
5.5°	3079.5	3078.7	3097.0	3210.2	3370.9	3420.1	3399.0	3583.0	3808.1	3746.1	3716.9
6°	3158.6	3128.6	3079.0	3092.8	3255.7	3410.2	3375.8	3516.6	3785.5	3731.2	3715.6
6.5°	3308.9	3267.6	3166.6	3072.1	3129.9	3360.0	3371.2	3455.1	3763.4	3717.5	3709.6
7°	3417.3	3398.6	3306.8	3142.0	3059.1	3272.5	3373.4	3403.6	3729.6	3702.8	3705.1
7.5°	3403.3	3413.3	3409.8	3265.0	3062.9	3158.1	3372.8	3363.7	3691.0	3682.2	3694.9
8°	3300.9	3318.8	3383.5	3375.1	3129.4	3065.4	3349.6	3331.4	3658.5	3663.9	3681.3
8.5°	3243.4	3234.5	3281.4	3391.2	3247.5	3013.8	3300.9	3309.1	3619.8	3640.6	3672.1
9°	3309.1	3255.3	3209.2	3316.9	3342.6	3012.4	3225.9	3291.3	3576.0	3626.3	3660.3
9.5°	3493.8	3423.0	3252.1	3222.5	3371.2	3071.7	3135.3	3283.0	3531.4	3616.1	3645.7
10°	3693.0	3624.4	3408.2	3190.8	3316.4	3167.9	3045.0	3278.3	3490.9	3601.7	3636.4
10.5°	3782.6	3752.8	3612.5	3268.8	3222.0	3253.6	2981.6	3274.8	3448.7	3592.1	3624.4
11°	3740.9	3745.8	3734.2	3442.9	3158.3	3304.5	2948.4	3266.4	3410.7	3587.0	3614.4
11.5°	3647.1	3658.5	3722.7	3617.1	3163.5	3295.2	2957.3	3250.2	3376.7	3578.2	3607.1
12°	3627.9	3599.5	3634.6	3710.5	3264.9	3239.2	3000.0	3221.3	3345.2	3570.3	3597.8
12.5°	3720.4	3656.0	3565.3	3690.6	3420.6	3161.1	3060.7	3172.6	3306.7	3563.5	3588.7
13°	3849.0	3782.6	3604.7	3599.0	3568.9	3106.1	3138.8	3124.0	3271.6	3551.2	3575.6
13.5°	3914.0	3869.0	3717.7	3522.2	3649.0	3101.1	3204.6	3061.4	3237.9	3534.4	3559.8
14°	3923.5	3885.5	3810.1	3543.5	3633.0	3160.0	3242.8	3002.5	3204.7	3514.7	3541.2
14.5°	3931.8	3870.6	3833.6	3642.8	3554.8	3285.0	3241.8	2946.2	3174.7	3496.5	3523.3
15°	3985.3	3892.5	3810.0	3729.7	3468.1	3422.4	3209.1	2897.9	3145.9	3483.0	3501.9
15.5°	4128.7	4000.7	3803.7	3763.5	3444.8	3538.5	3156.0	2863.5	3119.5	3464.4	3483.9
16°	4323.5	4174.6	3873.0	3738.8	3506.7	3594.2	3091.0	2844.9	3097.3	3447.6	3464.3
16.5°	4534.7	4385.8	4016.1	3706.3	3603.5	3584.2	3039.6	2846.4	3080.5	3429.7	3443.0
17°	4716.7	4579.1	4200.9	3726.6	3669.9	3523.0	3019.3	2864.5	3066.3	3412.3	3424.2
17.5°	4856.2	4716.3	4385.2	3815.1	3680.5	3443.7	3038.0	2890.8	3054.0	3396.3	3405.4
18°	4964.1	4835.9	4540.7	3964.3	3645.9	3382.5	3093.7	2930.1	3041.9	3377.5	3386.2
18.5°	5073.7	4938.9	4656.4	4132.5	3616.2	3379.5	3190.2	2976.9	3028.1	3360.3	3368.0
19°	5213.2	5050.7	4753.4	4283.1	3622.4	3431.8	3286.1	3014.9	3020.2	3341.4	3350.2
19.5°	5389.6	5201.6	4842.8	4408.9	3690.3	3505.4	3377.6	3049.9	3006.0	3321.6	3332.2
20°	5572.0	5386.0	4951.1	4507.7	3800.9	3550.8	3433.7	3064.9	2994.9	3302.7	3310.0
20.5°	5723.6	5568.2	5109.9	4607.3	3935.1	3554.3	3447.7	3065.2	2981.0	3282.5	3287.8
21°	5839.6	5704.2	5280.8	4699.2	4070.5	3523.5	3415.3	3050.5	2963.3	3265.9	3264.3
21.5°	5927.4	5821.4	5455.3	4797.9	4182.2	3483.4	3355.6	3023.2	2944.6	3248.0	3241.0
22°	5993.0	5913.1	5606.9	4930.3	4274.3	3455.6	3283.1	2982.1	2925.2	3231.0	3216.0



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
22.5°	6025.3	5957.7	5718.2	5089.1	4357.6	3467.4	3218.6	2939.0	2906.5	3214.1	3191.3
23°	6037.3	5980.6	5790.1	5258.2	4434.3	3518.3	3180.0	2903.0	2885.4	3199.1	3165.8
23.5°	6030.6	5987.8	5824.3	5418.0	4512.5	3599.1	3184.4	2873.2	2863.7	3183.7	3138.8
24°	6010.0	5984.7	5857.4	5539.3	4590.8	3695.6	3217.7	2858.4	2839.8	3169.2	3114.2
24.5°	5989.8	5966.0	5879.8	5614.4	4686.1	3795.2	3266.3	2858.6	2813.6	3150.7	3089.4
25°	5959.2	5929.7	5880.8	5644.7	4812.1	3888.2	3304.5	2872.7	2790.7	3136.9	3065.1
25.5°	5927.0	5890.7	5853.2	5661.1	4957.6	3965.8	3321.5	2906.7	2763.7	3120.8	3042.7
26°	5890.0	5859.5	5800.7	5694.6	5099.6	4030.2	3309.8	2949.7	2742.6	3105.6	3022.1
26.5°	5865.2	5836.1	5752.7	5714.7	5221.1	4086.6	3281.1	3004.8	2722.9	3093.5	3000.5
27°	5846.2	5809.0	5726.8	5708.4	5298.3	4141.7	3247.5	3058.1	2708.1	3082.2	2979.6
27.5°	5803.6	5777.1	5702.2	5662.5	5317.0	4194.4	3225.5	3096.6	2695.1	3072.4	2960.8
28°	5752.6	5735.7	5684.2	5601.8	5312.0	4246.6	3222.2	3121.3	2683.3	3062.6	2941.8
28.5°	5693.8	5689.0	5655.5	5536.4	5312.7	4313.9	3239.9	3129.7	2675.5	3053.6	2926.0
29°	5638.4	5635.0	5618.0	5502.6	5345.1	4398.7	3278.3	3122.4	2668.6	3043.6	2911.1
29.5°	5581.3	5583.9	5575.3	5482.3	5375.9	4500.6	3331.4	3101.5	2664.7	3035.4	2898.1
30°	5536.6	5536.3	5520.6	5459.8	5368.4	4600.7	3387.6	3074.2	2666.0	3027.3	2884.1
30.5°	5489.5	5503.1	5476.0	5431.6	5318.8	4690.8	3445.0	3040.8	2668.5	3020.9	2871.5
31°	5438.5	5452.1	5443.5	5389.1	5237.0	4755.5	3502.4	3008.9	2673.9	3015.2	2858.9
31.5°	5382.9	5390.5	5418.0	5346.5	5169.7	4782.5	3549.1	2985.6	2678.8	3008.7	2847.5
32°	5322.8	5333.4	5372.1	5295.6	5130.7	4786.3	3584.8	2973.7	2685.7	3003.1	2836.6
32.5°	5275.6	5294.4	5300.3	5245.7	5114.6	4782.9	3617.4	2974.1	2692.6	2997.7	2827.6
33°	5221.9	5265.9	5237.1	5212.9	5093.2	4785.9	3644.2	2985.5	2702.8	2992.4	2817.5
33.5°	5146.3	5211.6	5196.5	5187.6	5060.3	4800.7	3674.4	3003.8	2711.6	2988.2	2805.3
34°	5055.6	5119.9	5179.3	5151.0	5023.0	4818.5	3711.5	3024.2	2719.8	2984.9	2791.3
34.5°	4982.2	5030.5	5144.7	5088.5	4988.8	4819.8	3747.1	3038.8	2724.6	2982.5	2778.7
35°	4933.0	4958.6	5072.5	5014.6	4949.1	4795.5	3784.8	3043.1	2727.9	2978.4	2768.0
35.5°	4903.2	4908.8	4973.1	4949.3	4907.7	4749.7	3831.0	3042.5	2729.4	2975.1	2757.9
36°	4888.0	4880.6	4892.6	4923.2	4860.0	4700.1	3878.0	3031.6	2725.5	2970.7	2746.1
36.5°	4891.6	4880.5	4839.3	4908.0	4820.7	4662.8	3926.7	3017.1	2720.7	2967.7	2735.6
37°	4910.0	4893.1	4805.2	4854.9	4797.0	4634.3	3970.0	3004.6	2714.5	2961.8	2725.0
37.5°	4931.5	4915.3	4787.4	4771.8	4767.8	4611.0	4005.4	2994.6	2706.1	2956.0	2714.9
38°	4964.1	4947.4	4781.6	4681.5	4731.7	4586.4	4032.3	2987.1	2696.9	2946.9	2701.5
38.5°	4997.2	4983.7	4787.4	4621.3	4675.6	4556.9	4048.9	2985.7	2685.8	2936.9	2689.6
39°	5036.4	5025.8	4798.0	4580.7	4622.9	4520.3	4053.4	2988.7	2675.3	2924.4	2675.6
39.5°	5074.6	5066.8	4822.9	4548.4	4589.0	4488.4	4053.8	2994.5	2662.6	2914.1	2660.9
40°	5112.8	5102.2	4853.8	4521.9	4574.6	4460.6	4053.8	3005.0	2652.0	2903.9	2647.6
40.5°	5149.3	5134.6	4883.3	4501.3	4553.2	4434.8	4054.0	3013.1	2644.1	2896.4	2636.3
41°	5180.5	5167.4	4910.6	4492.1	4510.4	4407.3	4051.7	3020.4	2636.7	2890.2	2626.2
41.5°	5211.0	5193.8	4936.4	4486.6	4454.9	4380.2	4046.2	3028.3	2633.4	2884.1	2616.5
42°	5228.3	5224.8	4962.6	4490.1	4403.8	4355.9	4030.3	3036.8	2630.1	2880.2	2608.8
42.5°	5257.8	5245.3	4986.6	4498.7	4366.0	4332.8	4012.1	3043.0	2629.1	2874.0	2600.3
43°	5290.0	5274.2	5018.8	4509.1	4337.0	4308.7	3986.5	3050.4	2629.3	2870.1	2592.8
43.5°	5314.4	5296.6	5044.7	4518.5	4312.3	4282.0	3957.5	3055.3	2631.5	2868.0	2588.4
44°	5331.8	5314.1	5067.9	4523.2	4289.6	4248.6	3931.5	3056.5	2635.0	2865.0	2583.4
44.5°	5327.8	5329.6	5081.9	4534.3	4273.5	4216.7	3908.4	3058.3	2640.7	2861.5	2581.6





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CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
45°	5320.3	5321.4	5093.2	4540.8	4260.7	4191.8	3891.6	3057.4	2647.2	2857.7	2579.7
45.5°	5288.4	5317.9	5094.9	4543.5	4247.1	4166.9	3874.0	3059.3	2649.3	2854.8	2572.8
46°	5255.6	5289.5	5088.2	4544.7	4237.9	4146.6	3858.2	3063.9	2649.8	2847.9	2567.5
46.5°	5197.8	5253.0	5079.8	4540.9	4230.7	4124.5	3844.0	3068.8	2648.2	2840.6	2559.8
47°	5148.6	5197.4	5053.5	4535.9	4224.6	4095.0	3830.6	3072.8	2640.4	2833.2	2551.3
47.5°	5093.3	5144.9	5024.2	4522.2	4218.7	4058.8	3815.6	3078.2	2631.4	2824.0	2543.8
48°	5056.4	5111.0	4976.1	4501.0	4207.3	4025.2	3798.4	3080.0	2619.2	2814.0	2536.4
48.5°	5011.2	5078.3	4935.2	4480.6	4190.4	3992.4	3779.0	3078.5	2605.7	2804.7	2525.9
49°	4951.8	5034.2	4884.4	4459.3	4172.1	3959.9	3756.9	3080.5	2592.5	2794.9	2513.4
49.5°	4883.1	4979.2	4849.1	4433.3	4155.2	3926.8	3735.3	3078.2	2574.0	2783.1	2503.4
50°	4815.1	4903.8	4811.4	4403.5	4132.1	3897.8	3715.4	3078.8	2555.6	2770.0	2490.9
50.5°	4761.4	4836.9	4766.2	4368.2	4110.4	3867.5	3697.4	3078.6	2535.6	2757.5	2478.9
51°	4715.8	4768.0	4704.5	4332.8	4084.2	3832.9	3675.0	3072.2	2513.4	2742.5	2465.7
51.5°	4676.4	4715.1	4648.8	4292.1	4053.1	3797.5	3651.0	3065.6	2489.0	2726.2	2451.7
52°	4636.0	4680.4	4590.8	4253.9	4017.8	3762.9	3625.3	3057.3	2465.3	2708.1	2433.7
52.5°	4599.7	4648.5	4531.6	4214.8	3980.4	3726.8	3599.6	3045.5	2439.9	2693.4	2414.1
53°	4549.7	4610.3	4487.9	4181.3	3942.3	3685.9	3571.3	3030.9	2412.5	2672.7	2394.3
53.5°	4499.5	4553.3	4455.2	4148.8	3901.6	3644.2	3539.4	3016.4	2386.3	2648.9	2374.4
54°	4454.2	4500.3	4432.1	4103.9	3864.9	3604.8	3506.8	2998.3	2358.4	2625.0	2356.9
54.5°	4403.3	4443.8	4393.0	4064.9	3829.6	3563.6	3468.4	2978.7	2330.5	2592.1	2335.6
55°	4338.2	4381.3	4331.6	4029.7	3791.0	3525.1	3427.2	2954.1	2298.0	2558.8	2308.6
55.5°	4259.1	4305.3	4266.5	3995.6	3753.5	3484.2	3385.6	2919.1	2266.3	2527.0	2281.9
56°	4176.9	4226.3	4209.1	3962.5	3709.6	3444.1	3343.9	2879.5	2236.1	2493.5	2255.7
56.5°	4084.9	4137.4	4145.1	3925.7	3671.0	3403.9	3300.7	2837.2	2204.2	2458.1	2230.3
57°	4011.2	4050.6	4067.4	3878.0	3636.0	3367.5	3251.3	2792.2	2170.9	2421.9	2207.9
57.5°	3943.6	3981.8	3989.9	3822.2	3604.3	3329.7	3200.6	2751.3	2138.2	2383.5	2184.3
58°	3870.3	3924.2	3910.3	3759.8	3571.1	3294.5	3147.6	2711.4	2105.4	2346.0	2160.3
58.5°	3799.7	3863.1	3835.6	3693.7	3533.9	3258.3	3093.9	2669.8	2070.2	2307.5	2139.4
59°	3719.4	3795.3	3764.8	3628.6	3482.2	3219.1	3042.5	2622.0	2036.4	2271.4	2119.1
59.5°	3628.2	3714.8	3698.0	3562.8	3423.1	3178.3	2992.9	2575.1	2004.4	2231.6	2090.5
60°	3522.1	3622.0	3630.8	3504.1	3362.8	3134.7	2940.5	2528.7	1970.0	2189.9	2063.5
60.5°	3419.6	3516.9	3552.7	3444.1	3301.0	3084.4	2887.7	2481.2	1935.3	2149.6	2031.3
61°	3318.1	3414.9	3462.6	3385.9	3243.0	3033.6	2833.3	2432.0	1899.2	2108.8	1998.9
61.5°	3223.3	3314.6	3370.6	3321.9	3182.8	2983.8	2782.3	2384.3	1865.0	2071.7	1973.2
62°	3142.1	3228.2	3278.0	3256.3	3117.5	2930.5	2729.4	2335.1	1831.9	2034.6	1947.8
62.5°	3070.3	3150.4	3186.9	3177.1	3056.0	2866.5	2679.5	2284.8	1798.9	1995.0	1912.6
63°	3018.7	3080.9	3103.5	3099.8	2998.9	2805.4	2630.4	2236.2	1767.9	1954.8	1880.7
63.5°	2970.2	3021.6	3028.1	3023.7	2937.6	2744.1	2582.3	2190.8	1733.1	1915.6	1846.0
64°	2917.1	2971.6	2957.5	2947.1	2871.9	2680.2	2530.6	2144.9	1697.2	1874.2	1811.2
64.5°	2859.5	2920.9	2895.2	2874.0	2805.1	2610.9	2480.9	2102.2	1661.4	1834.5	1774.0
65°	2802.3	2862.4	2844.9	2812.2	2740.2	2544.1	2432.1	2058.5	1623.0	1793.3	1735.7
65.5°	2724.5	2784.9	2785.8	2751.3	2677.4	2476.1	2381.8	2011.4	1586.7	1752.5	1700.3
66°	2636.6	2706.0	2722.7	2692.5	2615.0	2409.1	2327.3	1962.0	1549.0	1715.0	1663.4
66.5°	2552.2	2616.4	2645.7	2636.4	2554.1	2342.9	2264.2	1914.8	1514.0	1676.7	1624.3
67°	2473.5	2526.8	2573.0	2575.1	2494.6	2282.1	2198.0	1868.1	1477.2	1638.6	1582.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
67.5°	2400.6	2449.1	2495.5	2505.2	2432.4	2224.8	2129.4	1820.7	1440.1	1597.8	1549.0
68°	2335.2	2380.9	2415.0	2433.9	2369.5	2164.6	2064.7	1774.7	1404.0	1558.1	1509.5
68.5°	2271.4	2309.2	2334.0	2362.0	2307.8	2109.1	1995.0	1726.0	1368.3	1520.0	1471.1
69°	2212.3	2240.2	2260.2	2289.1	2243.4	2056.0	1927.5	1681.4	1330.3	1481.1	1430.1
69.5°	2146.6	2179.1	2189.1	2213.7	2175.2	2002.6	1859.5	1635.9	1289.4	1437.8	1387.4
70°	2073.5	2107.3	2119.2	2144.0	2106.3	1941.6	1794.2	1589.6	1250.1	1396.1	1351.1
70.5°	2001.7	2036.8	2053.4	2077.1	2038.8	1879.9	1735.2	1543.2	1209.4	1354.7	1306.4
71°	1932.0	1966.5	1985.6	2012.2	1967.6	1819.2	1673.9	1497.7	1171.1	1310.8	1264.7
71.5°	1862.4	1893.9	1913.1	1941.5	1895.4	1754.4	1615.4	1456.5	1135.0	1270.7	1220.6
72°	1799.9	1830.7	1840.7	1870.9	1827.5	1690.2	1558.5	1412.8	1098.9	1230.1	1176.2
72.5°	1737.5	1766.8	1778.1	1801.8	1761.7	1624.8	1500.1	1369.1	1062.6	1189.8	1135.4
73°	1669.2	1705.1	1717.0	1735.3	1693.4	1561.5	1444.3	1329.1	1027.9	1149.3	1094.3
73.5°	1600.2	1637.6	1651.2	1666.7	1628.5	1499.9	1391.9	1286.0	991.5	1109.6	1052.2
74°	1532.8	1569.8	1581.9	1599.6	1564.6	1438.1	1344.1	1238.5	953.7	1070.0	1011.2
74.5°	1454.6	1491.2	1513.3	1532.0	1500.1	1378.9	1296.3	1183.1	917.9	1027.1	972.6
75°	1378.8	1409.8	1439.1	1464.3	1438.7	1321.8	1249.4	1130.2	882.3	987.8	934.2
75.5°	1304.2	1334.8	1367.8	1396.8	1377.5	1266.4	1199.8	1075.8	841.2	944.1	894.3
76°	1229.5	1260.7	1295.2	1325.2	1314.6	1207.9	1148.6	1017.2	799.9	900.9	855.3
76.5°	1158.4	1188.6	1223.7	1255.8	1252.5	1150.9	1094.9	958.7	757.9	858.7	818.9
77°	1091.2	1121.3	1158.2	1189.0	1190.7	1096.3	1042.0	906.4	721.0	818.3	781.1
77.5°	1024.4	1055.6	1092.3	1122.8	1125.8	1043.1	988.0	854.9	684.6	775.3	743.8
78°	961.1	989.3	1029.4	1058.1	1065.7	987.5	932.7	807.3	646.6	733.8	704.5
78.5°	902.0	929.2	966.6	996.1	1005.0	932.7	880.1	760.2	612.1	691.1	667.7
79°	845.0	871.2	902.3	935.5	943.4	880.8	834.8	718.0	578.2	650.0	631.6
79.5°	786.8	812.8	843.1	874.6	882.2	828.8	790.4	676.1	544.4	610.4	607.0
80°	738.1	760.4	786.3	816.7	824.9	777.1	745.0	637.6	510.6	572.9	571.0
80.5°	690.2	712.6	730.1	759.9	770.1	730.7	703.5	600.8	476.7	535.5	534.3
81°	645.2	663.6	679.8	704.9	717.4	685.0	660.8	564.5	442.9	498.0	497.5
81.5°	605.8	620.7	632.1	654.2	665.2	637.6	617.0	528.2	413.0	460.6	460.8
82°	567.4	581.2	590.1	607.7	614.9	589.1	576.1	492.0	383.7	423.2	424.9
82.5°	529.1	541.9	551.0	568.1	574.6	548.7	535.2	455.7	353.9	389.8	391.0
83°	490.7	502.6	512.0	529.0	534.4	508.4	494.4	421.1	323.6	356.7	359.6
83.5°	452.3	463.3	472.9	489.9	494.3	468.1	453.6	390.1	295.4	324.6	331.6
84°	414.0	424.0	433.9	450.8	454.1	427.7	412.8	359.9	268.7	292.5	302.9
84.5°	381.9	392.1	400.0	411.7	414.0	394.3	378.4	329.0	243.2	261.7	273.8
85°	351.3	361.9	368.6	379.3	382.2	364.0	346.2	301.1	218.7	231.9	245.9
85.5°	325.1	335.1	340.2	350.0	354.0	336.3	315.5	273.9	196.7	204.9	220.4
86°	301.0	310.0	314.4	323.4	327.7	311.2	288.9	248.7	177.1	179.0	196.4
86.5°	279.2	287.3	290.8	298.8	303.3	288.3	264.6	224.5	157.4	154.1	172.8
87°	259.7	267.7	270.2	276.1	280.6	267.2	244.0	202.4	139.2	132.1	151.6
87.5°	243.0	249.5	251.9	256.4	260.4	248.4	225.2	185.1	123.8	112.5	132.0
88°	227.5	232.2	235.0	237.7	241.5	231.2	207.4	168.7	111.2	95.1	114.1
88.5°	214.4	218.4	219.8	221.9	224.8	215.5	192.8	155.6	100.8	80.4	100.3
89°	202.6	205.8	206.5	207.8	209.3	201.5	179.9	144.1	92.3	69.1	89.4
89.5°	192.0	194.5	194.2	194.6	195.5	189.2	168.3	134.8	85.2	59.8	80.8



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CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
90°	183.0	184.5	183.4	183.0	183.3	178.0	158.2	126.3	79.4	54.9	73.7
90.5°	174.9	176.3	174.6	173.6	173.2	168.7	149.2	119.6	75.1	49.9	67.5
91°	167.8	168.9	166.5	164.6	163.9	159.5	141.3	114.1	71.4	45.0	62.8
91.5°	162.0	163.0	159.8	156.9	155.2	150.8	134.7	109.4	68.4	40.0	60.5
92°	156.7	157.2	153.3	149.5	146.4	143.6	129.2	105.5	65.9	37.5	58.3
92.5°	150.7	151.3	146.6	142.0	139.7	137.6	124.6	102.3	63.9	35.8	56.2
93°	145.1	145.5	140.4	136.1	134.3	132.1	120.3	99.4	62.5	34.8	54.0
93.5°	141.2	141.5	136.2	131.8	129.6	127.3	116.8	97.0	61.6	34.1	51.9
94°	138.4	138.6	132.8	128.0	125.3	123.2	113.6	94.7	60.8	33.7	51.2
94.5°	136.1	136.2	130.1	124.8	121.4	119.6	110.7	92.7	59.9	33.5	50.7
95°	134.3	134.4	128.0	122.0	118.2	116.3	108.0	90.8	59.1	33.4	49.7
95.5°	132.5	132.7	126.0	119.9	115.6	113.6	105.8	89.1	58.3	33.4	49.3
96°	130.5	130.8	124.3	117.9	113.3	111.0	103.6	87.5	57.8	33.2	49.1
96.5°	129.3	129.5	122.9	116.2	111.2	108.8	101.5	86.0	57.4	33.4	48.9
97°	128.4	128.6	121.9	114.8	109.3	106.7	99.6	84.7	57.3	33.7	48.6
97.5°	127.7	127.8	121.1	113.7	107.8	104.7	97.8	83.5	57.4	34.1	48.3
98°	126.8	127.0	120.2	112.6	106.3	102.8	95.9	82.6	57.5	34.5	48.0
98.5°	125.9	126.2	119.5	111.5	105.0	101.3	94.5	81.8	57.7	34.9	47.6
99°	125.2	125.4	118.8	110.6	103.9	99.8	93.1	81.2	57.8	35.3	47.2
99.5°	124.5	124.6	118.1	109.8	102.9	98.4	92.0	80.7	58.0	35.8	46.8
100°	123.5	123.8	117.3	109.1	101.9	97.2	91.0	80.3	58.3	36.2	46.4
100.5°	122.5	122.9	116.7	108.2	101.0	96.2	90.1	80.0	58.5	36.7	46.0
101°	121.5	122.1	115.6	107.1	100.2	95.4	89.4	79.8	58.8	37.2	45.7
101.5°	119.3	120.1	114.2	106.3	99.8	94.9	88.9	79.7	59.1	37.8	45.5
102°	117.5	118.5	113.3	106.1	99.7	94.4	88.4	79.6	59.5	38.4	45.3
102.5°	116.6	117.9	113.3	106.2	99.5	93.9	87.9	79.5	59.9	38.9	45.2
103°	117.0	118.3	113.6	106.2	99.3	93.6	87.4	79.5	60.4	39.5	45.2
103.5°	116.9	118.4	113.5	106.1	99.1	93.2	87.0	79.4	60.9	40.1	45.3
104°	116.4	117.9	113.1	105.8	98.8	92.8	86.6	79.4	61.4	40.7	45.4
104.5°	115.6	117.3	112.8	105.5	98.5	92.5	86.2	79.3	62.0	41.4	45.5
105°	114.9	116.7	112.4	105.3	98.4	92.2	85.8	79.3	62.5	42.0	45.7
105.5°	114.3	116.2	112.0	105.1	98.3	91.9	85.5	79.3	63.0	42.5	46.0
106°	113.6	115.6	111.5	104.9	98.2	91.6	85.2	79.2	63.5	43.1	46.3
106.5°	113.0	115.0	111.2	104.7	98.0	91.3	84.9	79.1	63.9	43.7	46.6
107°	112.6	114.6	110.8	104.5	97.8	91.0	84.5	79.0	64.3	44.3	46.8
107.5°	112.2	114.0	110.3	104.1	97.6	90.7	84.1	79.0	64.7	44.8	47.1
108°	111.6	113.3	109.8	103.7	97.4	90.4	83.9	79.0	65.2	45.3	47.4
108.5°	110.9	112.6	109.3	103.3	97.1	90.1	83.6	79.0	65.7	45.8	47.7
109°	110.1	111.8	108.6	102.9	96.8	89.8	83.5	79.2	66.2	46.3	48.0
109.5°	109.2	110.9	107.9	102.4	96.5	89.5	83.3	79.4	66.7	46.8	48.3
110°	108.2	109.9	107.4	101.9	96.2	89.3	83.3	79.6	67.2	47.3	48.6
110.5°	107.2	109.0	106.7	101.5	96.0	89.1	83.1	79.8	67.7	47.8	48.9
111°	106.3	108.2	106.0	100.9	95.7	88.9	83.0	80.0	68.1	48.3	49.2
111.5°	105.4	107.3	105.3	100.5	95.3	88.7	82.9	80.2	68.6	48.8	49.4
112°	104.5	106.4	104.7	100.1	95.0	88.6	82.8	80.5	69.0	49.2	49.7



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 CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
112.5°	103.5	105.6	104.1	99.6	94.5	88.4	82.8	80.7	69.4	49.7	49.9
113°	102.8	104.8	103.4	99.0	94.2	88.4	82.9	80.9	69.8	50.1	50.1
113.5°	102.1	104.2	102.8	98.4	94.0	88.2	82.9	81.1	70.2	50.4	50.4
114°	101.4	103.6	102.2	98.0	93.8	88.2	82.9	81.3	70.6	50.7	50.6
114.5°	100.8	103.0	101.5	97.5	93.7	88.1	82.9	81.5	70.9	51.1	50.8
115°	100.2	102.3	100.8	97.2	93.5	88.0	82.9	81.7	71.2	51.4	51.0
115.5°	99.5	101.6	100.2	97.0	93.2	87.8	82.8	81.9	71.5	51.7	51.1
116°	98.8	100.9	99.7	96.8	93.1	87.7	82.8	82.0	71.7	52.0	51.2
116.5°	98.3	100.3	99.4	96.6	93.0	87.7	82.8	82.1	72.0	52.1	51.3
117°	97.9	99.9	99.1	96.4	92.8	87.6	82.8	82.1	72.2	52.3	51.5
117.5°	97.6	99.5	98.8	96.2	92.7	87.5	82.9	82.2	72.3	52.4	51.5
118°	97.4	99.2	98.6	96.2	92.6	87.4	82.8	82.2	72.4	52.4	51.6
118.5°	97.3	98.9	98.5	96.1	92.4	87.4	82.8	82.2	72.3	52.3	51.6
119°	97.1	98.7	98.4	96.0	92.3	87.4	82.8	82.2	72.2	52.2	51.7
119.5°	97.2	98.6	98.4	95.9	92.1	87.3	82.9	82.2	72.1	52.0	51.8
120°	97.2	98.6	98.5	95.8	92.1	87.3	82.9	82.1	72.1	51.9	51.9
120.5°	97.4	98.7	98.6	95.8	91.9	87.3	82.9	82.1	71.9	51.7	52.0
121°	97.6	98.7	98.5	95.7	91.8	87.3	83.0	82.2	71.8	51.5	52.0
121.5°	97.6	98.8	98.5	95.6	91.8	87.4	83.2	82.2	71.5	51.3	52.0
122°	97.7	98.9	98.6	95.6	91.8	87.4	83.3	82.3	71.3	51.1	52.0
122.5°	97.9	99.0	98.6	95.6	91.8	87.6	83.3	82.3	71.1	50.8	51.9
123°	98.1	99.2	98.7	95.6	91.8	87.7	83.5	82.3	70.7	50.4	51.9
123.5°	98.3	99.3	98.9	95.6	91.8	87.8	83.6	82.3	70.4	50.1	51.8
124°	98.5	99.5	99.0	95.5	91.8	88.0	83.8	82.3	70.1	49.8	51.7
124.5°	98.7	99.7	99.2	95.4	91.8	88.2	84.0	82.4	69.7	49.5	51.7
125°	98.9	99.9	99.3	95.3	91.9	88.4	84.2	82.5	69.4	49.3	51.5
125.5°	99.2	100.1	99.4	95.3	92.0	88.6	84.5	82.7	69.0	49.0	51.4
126°	99.4	100.3	99.5	95.2	92.1	88.8	84.9	82.8	68.7	48.6	51.3
126.5°	99.7	100.5	99.6	95.1	92.3	89.1	85.2	83.0	68.5	48.4	51.2
127°	99.7	100.6	99.7	95.1	92.4	89.4	85.5	83.2	68.3	48.2	51.2
127.5°	99.7	100.8	99.7	95.0	92.5	89.6	85.9	83.4	68.0	48.1	51.2
128°	99.8	100.9	99.8	94.9	92.7	89.9	86.3	83.7	67.9	48.0	51.3
128.5°	99.8	101.0	99.9	94.8	92.9	90.1	86.7	83.9	67.8	48.0	51.3
129°	99.8	101.0	99.9	94.8	93.0	90.4	87.2	84.3	67.7	48.0	51.4
129.5°	99.7	101.0	99.9	94.7	93.1	90.7	87.7	84.5	67.6	48.0	51.6
130°	99.7	101.0	100.0	94.6	93.2	90.9	88.1	84.8	67.6	48.1	51.7
130.5°	99.6	101.0	100.0	94.5	93.3	91.1	88.6	85.1	67.6	48.2	51.9
131°	99.5	100.9	100.0	94.4	93.4	91.2	89.1	85.5	67.6	48.4	52.1
131.5°	99.4	100.9	100.0	94.3	93.4	91.4	89.6	85.8	67.6	48.6	52.2
132°	99.3	100.8	100.0	94.1	93.4	91.6	90.1	86.1	67.7	48.7	52.4
132.5°	99.0	100.6	99.8	93.9	93.4	91.7	90.5	86.3	67.7	48.9	52.5
133°	98.6	100.4	99.6	93.7	93.2	91.8	90.9	86.6	67.7	49.1	52.6
133.5°	98.2	100.1	99.4	93.4	93.0	91.8	91.2	86.8	67.8	49.3	52.7
134°	97.7	99.7	99.2	93.1	92.7	91.9	91.5	87.0	67.8	49.5	52.9
134.5°	97.1	99.3	98.8	92.8	92.3	91.8	91.7	87.2	67.7	49.6	53.0



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
135°	96.4	99.0	98.5	92.5	91.9	91.8	91.9	87.3	67.7	49.8	53.0
135.5°	95.7	98.5	98.1	92.2	91.4	91.8	92.0	87.4	67.7	49.9	53.1
136°	95.0	98.0	97.6	91.9	90.9	91.6	92.0	87.4	67.6	50.0	53.1
136.5°	94.2	97.4	97.1	91.6	90.4	91.5	92.0	87.4	67.5	50.1	53.1
137°	93.3	96.7	96.6	91.2	89.8	91.3	91.9	87.4	67.3	50.2	53.1
137.5°	92.4	95.9	95.9	90.7	89.2	91.0	91.7	87.2	67.2	50.3	53.1
138°	91.4	95.1	95.4	90.2	88.5	90.6	91.5	87.0	67.0	50.4	53.0
138.5°	90.4	94.4	94.8	89.1	87.8	90.2	91.2	86.7	66.7	50.5	52.9
139°	89.4	93.5	94.0	88.5	87.1	89.7	90.7	86.4	66.4	50.5	52.7
139.5°	88.7	92.7	93.2	88.1	86.4	89.1	90.3	86.0	66.1	50.4	52.5
140°	87.8	91.9	92.3	87.6	85.7	88.4	89.7	85.5	65.7	50.3	52.2
140.5°	87.0	90.8	91.1	87.1	85.1	87.8	89.1	84.8	65.2	50.2	51.9
141°	85.9	89.7	89.6	86.7	84.4	87.0	88.3	84.2	64.7	50.1	51.5
141.5°	84.7	88.5	88.8	86.2	83.8	86.1	87.4	83.4	64.1	49.9	51.0
142°	83.4	86.9	87.9	85.6	83.0	85.2	86.6	82.5	63.5	49.6	50.6
142.5°	80.9	85.7	87.2	85.0	82.3	84.2	85.6	81.6	62.8	49.2	50.1
143°	80.0	84.9	86.3	84.3	81.5	83.1	84.6	80.6	61.9	48.9	49.5
143.5°	79.5	84.0	85.5	83.6	80.8	82.0	83.4	79.4	61.1	48.5	48.9
144°	78.9	83.1	84.7	82.9	80.1	80.8	82.2	78.2	60.2	47.9	48.2
144.5°	78.2	82.2	83.8	82.1	79.4	79.7	81.0	77.0	59.2	47.4	47.5
145°	77.6	81.2	82.9	81.3	78.6	78.5	79.7	75.6	58.3	46.8	46.7
145.5°	76.9	80.3	81.9	80.4	77.8	77.3	78.4	74.2	57.2	46.2	45.9
146°	76.2	79.3	81.0	79.4	76.8	76.1	77.0	72.7	56.1	45.5	45.1
146.5°	75.4	78.3	80.0	78.4	75.9	74.9	75.5	71.1	54.9	44.8	44.2
147°	74.6	77.2	79.0	77.3	74.8	73.6	74.0	69.5	53.7	44.0	43.3
147.5°	73.8	76.2	78.0	76.3	73.9	72.4	72.5	67.8	52.4	43.2	42.4
148°	73.0	75.1	76.8	75.1	72.7	71.1	71.0	66.1	51.1	42.3	41.4
148.5°	72.2	73.9	75.7	73.9	71.5	69.9	69.4	64.3	49.8	41.4	40.4
149°	71.3	72.8	74.5	72.7	70.4	68.5	67.7	62.5	48.4	40.5	39.3
149.5°	70.3	71.6	73.3	71.4	69.0	67.2	66.0	60.7	47.0	39.5	38.3
150°	69.4	70.3	72.1	70.1	67.9	65.9	64.2	58.9	45.6	38.5	37.2
150.5°	68.5	69.1	70.9	68.7	66.5	64.4	62.5	57.1	44.1	37.5	36.2
151°	67.5	67.9	69.6	67.4	65.1	63.1	60.8	55.4	42.7	36.4	35.1
151.5°	66.3	66.6	68.0	66.0	63.8	62.3	59.0	53.6	41.2	35.4	34.0
152°	65.2	65.2	66.5	64.6	62.4	60.8	57.3	51.6	39.7	34.3	32.9
152.5°	64.1	63.8	65.0	63.2	61.0	59.2	55.6	49.7	38.3	33.2	31.8
153°	62.8	62.4	63.5	61.4	59.6	57.7	53.8	47.7	36.8	32.1	30.6
153.5°	62.3	61.2	62.2	60.2	58.2	56.2	51.9	45.7	35.4	31.0	29.6
154°	61.1	60.0	60.8	59.0	56.9	54.6	49.8	43.8	34.0	29.9	28.5
154.5°	59.9	58.7	59.4	57.8	55.5	53.1	47.8	41.9	32.6	28.8	27.4
155°	58.7	57.5	58.0	56.7	53.9	51.4	45.8	40.1	31.2	27.7	26.3
155.5°	57.5	56.3	56.6	55.1	52.3	49.5	43.8	38.2	29.8	26.6	25.2
156°	56.2	54.9	55.2	53.5	50.8	47.3	41.8	36.4	28.5	25.5	24.2
156.5°	55.0	53.6	53.6	51.9	49.2	45.2	39.8	34.6	27.1	24.4	23.2
157°	53.7	52.2	52.1	50.3	47.7	43.2	37.9	32.8	25.8	23.4	22.1



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 CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
157.5°	52.4	50.8	50.4	48.7	46.1	41.1	35.9	31.1	24.6	22.3	21.2
158°	51.0	49.4	48.8	47.1	44.5	39.0	33.9	29.4	23.3	21.3	20.2
158.5°	49.6	47.9	47.1	45.5	42.8	36.9	31.9	27.7	22.1	20.3	19.2
159°	48.0	46.4	45.6	43.9	40.7	34.7	30.0	26.1	21.0	19.4	18.3
159.5°	46.5	44.9	44.0	42.3	38.3	32.7	28.0	24.6	19.8	18.4	17.4
160°	45.1	43.5	42.5	40.7	36.0	30.6	26.4	23.1	18.7	17.4	16.5
160.5°	43.6	42.0	41.0	39.0	33.7	28.6	24.8	21.6	17.6	16.5	15.6
161°	42.2	40.6	39.5	37.2	31.4	26.6	23.1	20.2	16.5	15.6	14.7
161.5°	40.8	39.2	37.9	34.6	29.0	24.6	21.5	18.8	15.5	14.6	13.9
162°	39.3	37.7	36.3	32.0	26.8	22.6	20.0	17.5	14.4	13.8	13.0
162.5°	37.7	36.2	34.1	29.5	24.6	20.6	18.6	16.2	13.5	12.9	12.2
163°	36.1	34.5	31.4	27.1	22.5	18.6	17.2	14.9	12.5	12.1	11.4
163.5°	33.4	31.7	28.8	24.7	20.5	16.6	15.8	13.8	11.6	11.3	10.7
164°	30.5	29.0	26.2	22.6	18.5	15.1	14.5	12.7	10.8	10.5	10.0
164.5°	27.6	26.3	23.7	20.5	16.5	13.9	13.3	11.6	10.0	9.8	9.3
165°	24.9	23.7	21.3	18.5	14.5	12.7	12.1	10.7	9.2	9.1	8.7
165.5°	22.2	21.2	19.1	16.6	12.5	11.6	11.0	9.8	8.5	8.5	8.1
166°	19.8	19.0	17.2	14.7	10.6	10.5	10.0	8.9	7.8	7.9	7.5
166.5°	17.6	16.9	15.1	12.7	9.8	9.5	9.0	8.0	7.1	7.3	7.0
167°	15.4	14.9	13.2	10.8	9.1	8.6	8.1	7.3	6.5	6.7	6.5
167.5°	13.3	12.9	11.1	8.7	8.5	7.8	7.3	6.6	6.0	6.2	6.0
168°	11.1	10.7	9.0	7.9	7.9	7.2	6.5	6.0	5.5	5.7	5.5
168.5°	8.7	8.4	7.2	7.4	7.4	6.8	6.1	5.4	4.9	5.1	5.1
169°	6.7	6.8	6.7	6.9	6.9	6.4	5.7	4.8	4.4	4.6	4.6
169.5°	6.3	6.4	6.3	6.4	6.4	6.0	5.3	4.2	4.0	4.2	4.2
170°	6.0	6.0	6.0	6.1	6.0	5.6	4.8	4.1	3.8	3.9	4.1
170.5°	5.7	5.7	5.6	5.7	5.7	5.2	4.6	4.0	3.8	3.9	4.2
171°	5.4	5.4	5.3	5.4	5.3	4.9	4.4	3.9	3.8	4.0	4.2
171.5°	5.2	5.1	5.1	5.1	5.0	4.7	4.3	3.9	3.8	4.0	4.2
172°	5.0	5.0	4.9	4.8	4.7	4.5	4.2	3.8	3.9	4.1	4.3
172.5°	4.8	4.8	4.7	4.6	4.5	4.4	4.1	3.9	4.0	4.2	4.4
173°	4.6	4.6	4.6	4.4	4.4	4.3	4.1	3.9	4.1	4.3	4.5
173.5°	4.5	4.5	4.4	4.3	4.2	4.2	4.0	4.0	4.2	4.4	4.6
174°	4.3	4.3	4.3	4.1	4.1	4.1	4.0	4.0	4.2	4.4	4.6
174.5°	4.2	4.2	4.0	4.0	4.0	4.0	3.9	4.0	4.2	4.4	4.6
175°	4.0	4.0	3.9	3.9	3.9	3.9	3.9	4.0	4.2	4.4	4.6
175.5°	3.9	3.9	3.8	3.8	3.8	3.8	3.9	4.1	4.3	4.5	4.7
176°	3.8	3.8	3.7	3.7	3.7	3.8	3.9	4.1	4.3	4.5	4.7
176.5°	3.8	3.7	3.7	3.6	3.7	3.8	3.9	4.1	4.3	4.5	4.7
177°	3.7	3.7	3.7	3.6	3.6	3.8	3.9	4.1	4.3	4.4	4.7
177.5°	3.7	3.7	3.7	3.6	3.6	3.8	3.9	4.1	4.2	4.4	4.6
178°	3.8	3.8	3.7	3.6	3.7	3.7	3.9	4.0	4.2	4.4	4.6
178.5°	3.8	3.8	3.7	3.7	3.7	3.8	3.9	4.0	4.2	4.4	4.5
179°	3.9	3.9	3.8	3.7	3.7	3.8	3.9	4.1	4.2	4.3	4.5
179.5°	3.9	3.9	3.8	3.7	3.7	3.8	3.9	4.1	4.2	4.3	4.5



REPORT NUMBER: P973041  
CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
180°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0



REPORT NUMBER: P973041

CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1
0.5°	3816.1	3806.8	3800.2	3798.2	3800.2	3798.8	3798.9	3773.4	3772.4	3774.7	3779.4
1°	3802.6	3794.8	3799.3	3806.3	3816.8	3824.3	3827.1	3768.3	3766.7	3765.8	3764.4
1.5°	3784.7	3791.3	3815.0	3842.1	3866.6	3880.4	3881.8	3817.2	3812.4	3805.6	3798.2
2°	3782.4	3808.7	3846.5	3883.5	3910.5	3925.1	3932.9	3874.1	3866.9	3859.0	3847.2
2.5°	3781.3	3832.5	3883.8	3917.3	3937.0	3939.4	3939.3	3902.0	3895.5	3893.6	3887.5
3°	3790.0	3853.9	3902.5	3927.5	3923.0	3901.6	3888.4	3880.0	3880.6	3891.9	3897.0
3.5°	3797.4	3871.5	3908.8	3899.4	3861.3	3824.3	3809.6	3801.3	3808.2	3827.8	3870.9
4°	3809.7	3876.9	3890.3	3835.7	3782.4	3764.9	3766.9	3739.3	3738.1	3755.0	3797.9
4.5°	3815.9	3873.3	3849.0	3766.4	3743.8	3748.9	3764.3	3724.3	3719.0	3721.9	3738.8
5°	3820.5	3856.1	3781.1	3722.3	3733.9	3759.3	3773.0	3740.5	3728.7	3718.3	3713.5
5.5°	3815.7	3825.1	3722.2	3705.3	3736.9	3746.6	3738.1	3724.4	3723.7	3723.7	3717.8
6°	3807.4	3777.9	3688.6	3701.8	3715.8	3677.4	3634.0	3645.0	3654.1	3694.5	3721.5
6.5°	3798.9	3724.5	3667.9	3689.5	3650.3	3556.3	3494.3	3513.9	3534.1	3606.9	3685.4
7°	3785.1	3677.5	3658.6	3649.5	3538.3	3420.2	3374.1	3383.5	3402.1	3478.3	3605.9
7.5°	3762.2	3643.2	3639.8	3570.9	3409.8	3322.4	3318.6	3304.2	3303.7	3354.0	3485.5
8°	3729.3	3617.6	3611.0	3470.9	3312.6	3288.0	3309.7	3290.2	3281.3	3279.9	3364.3
8.5°	3700.3	3589.9	3557.1	3360.3	3256.2	3276.6	3278.1	3275.8	3277.2	3264.5	3281.8
9°	3658.9	3568.2	3489.6	3270.6	3238.3	3235.7	3186.4	3197.4	3218.7	3252.9	3261.2
9.5°	3625.3	3544.5	3403.7	3215.2	3216.0	3137.1	3042.9	3071.2	3101.7	3196.4	3257.9
10°	3593.4	3514.5	3315.3	3184.3	3147.1	2997.9	2897.8	2912.6	2949.8	3071.9	3230.4
10.5°	3562.7	3479.9	3238.7	3162.4	3039.1	2860.8	2799.4	2801.4	2816.9	2921.1	3156.5
11°	3541.6	3435.2	3173.6	3120.1	2916.0	2767.2	2747.6	2743.0	2745.0	2794.2	3017.5
11.5°	3519.8	3384.5	3124.5	3043.1	2798.3	2712.7	2686.2	2693.2	2700.7	2728.7	2874.7
12°	3500.6	3330.6	3096.3	2947.8	2712.5	2655.7	2587.7	2602.4	2632.6	2690.0	2770.2
12.5°	3481.6	3270.0	3068.5	2848.5	2663.2	2563.7	2456.1	2472.9	2520.1	2632.7	2715.2
13°	3465.1	3213.9	3030.5	2742.9	2599.9	2439.1	2318.9	2326.3	2375.4	2529.5	2681.7
13.5°	3442.7	3164.6	2979.9	2664.0	2516.8	2308.2	2210.7	2209.2	2245.4	2393.2	2630.3
14°	3415.5	3119.6	2915.3	2607.9	2413.6	2198.7	2123.2	2122.5	2146.5	2255.6	2536.8
14.5°	3387.5	3078.7	2837.8	2546.7	2293.7	2106.9	2034.3	2042.4	2068.8	2153.5	2408.3
15°	3352.4	3044.5	2762.6	2479.8	2185.0	2024.5	1938.1	1942.5	1983.1	2076.7	2269.9
15.5°	3313.7	3012.2	2685.1	2401.7	2094.1	1934.2	1823.5	1822.1	1880.7	2001.9	2159.1
16°	3276.9	2980.3	2615.6	2307.7	2013.8	1830.8	1693.7	1693.9	1754.3	1910.7	2078.0
16.5°	3237.8	2943.7	2561.2	2209.0	1930.7	1712.6	1564.2	1565.5	1620.1	1802.0	2015.8
17°	3201.1	2897.9	2505.8	2122.7	1844.2	1593.4	1456.2	1453.2	1494.4	1664.9	1938.3
17.5°	3165.8	2850.1	2446.4	2036.4	1744.6	1476.5	1367.5	1398.5	1434.2	1535.9	1841.1
18°	3128.3	2800.3	2389.5	1954.9	1628.7	1379.3	1303.9	1343.9	1374.0	1427.4	1725.8
18.5°	3092.3	2740.3	2323.8	1879.8	1523.8	1307.3	1255.1	1289.2	1313.7	1369.3	1604.1
19°	3055.7	2685.9	2248.7	1802.8	1423.3	1251.6	1214.3	1234.6	1253.5	1311.1	1484.5
19.5°	3013.7	2626.2	2171.3	1716.2	1334.5	1206.1	1176.7	1180.0	1193.9	1253.0	1422.5
20°	2973.7	2562.3	2090.5	1630.3	1268.3	1169.0	1140.1	1143.2	1155.3	1195.3	1360.6
20.5°	2936.0	2498.5	2002.4	1532.9	1212.6	1130.6	1100.6	1105.9	1118.3	1159.2	1298.7
21°	2892.6	2445.4	1927.5	1439.4	1169.3	1094.7	1062.9	1066.9	1080.3	1123.2	1236.7
21.5°	2853.5	2388.8	1855.0	1359.0	1132.2	1058.8	1024.7	1027.9	1042.1	1085.6	1175.9
22°	2819.1	2340.8	1784.3	1281.9	1096.7	1021.2	984.0	988.5	1003.2	1049.5	1140.8





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**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
22.5°	2781.7	2300.3	1724.5	1221.3	1062.0	983.9	945.5	950.3	964.7	1013.9	1106.8
23°	2752.1	2260.4	1660.6	1173.7	1028.7	947.6	908.9	912.0	928.1	977.0	1073.6
23.5°	2721.8	2213.9	1583.8	1130.5	993.9	909.2	870.7	876.2	892.6	942.1	1040.9
24°	2693.6	2166.6	1512.6	1095.5	958.7	874.1	834.4	839.2	855.1	906.6	1008.1
24.5°	2663.0	2110.9	1439.6	1063.7	926.5	841.1	800.4	804.2	820.7	871.9	976.0
25°	2632.8	2044.9	1362.4	1031.5	891.7	805.5	764.3	769.2	786.5	839.2	943.5
25.5°	2601.9	1981.2	1297.6	1000.4	857.3	770.6	729.3	734.0	751.3	806.0	911.1
26°	2570.3	1910.9	1242.5	972.4	827.3	739.5	697.6	700.6	718.2	773.5	879.7
26.5°	2538.6	1845.8	1187.6	942.7	795.5	707.0	664.0	668.7	686.2	741.3	849.9
27°	2501.0	1790.0	1146.4	912.6	763.3	675.0	632.2	635.6	652.1	709.6	818.6
27.5°	2462.0	1736.2	1109.0	884.3	734.0	644.0	612.0	603.7	620.4	677.6	788.2
28°	2421.4	1687.2	1074.9	856.1	704.2	615.9	580.9	574.0	590.6	647.9	757.8
28.5°	2380.3	1642.6	1045.0	826.8	673.6	588.3	549.2	544.7	560.4	617.7	728.7
29°	2342.9	1599.0	1019.3	800.4	646.5	560.6	517.5	515.9	530.7	588.8	699.5
29.5°	2309.3	1555.7	991.5	772.9	619.2	533.0	485.8	489.8	503.6	562.1	671.2
30°	2274.2	1513.1	966.9	745.1	593.5	505.3	460.5	464.8	477.5	535.6	643.4
30.5°	2246.2	1466.0	942.9	720.2	567.8	477.7	437.9	441.4	453.4	509.3	616.5
31°	2222.1	1419.7	916.2	694.4	542.1	453.2	415.3	419.4	430.7	485.4	590.3
31.5°	2198.6	1379.7	892.0	667.9	516.4	429.9	394.1	398.8	408.3	462.6	566.1
32°	2182.7	1337.0	868.8	644.8	490.7	409.8	375.9	379.8	388.2	440.5	542.7
32.5°	2164.7	1298.7	844.7	620.5	468.3	389.1	357.5	362.4	369.4	419.7	519.9
33°	2145.8	1267.4	824.1	598.5	446.7	369.7	340.4	345.9	351.6	400.3	498.1
33.5°	2127.3	1235.9	804.4	576.6	427.2	352.4	325.4	330.9	335.5	381.6	477.4
34°	2106.9	1209.6	782.0	554.7	408.4	335.9	311.3	316.7	319.7	363.5	457.4
34.5°	2082.8	1188.0	761.8	532.8	389.7	319.5	298.0	303.5	305.2	346.5	438.5
35°	2061.0	1168.6	743.2	510.9	373.0	305.6	286.7	291.5	292.3	331.0	420.2
35.5°	2036.8	1151.2	723.2	491.0	357.2	292.4	275.6	280.2	280.5	316.0	401.2
36°	2010.8	1138.0	705.5	471.3	341.1	279.6	265.2	270.0	269.3	302.3	383.9
36.5°	1987.6	1123.8	688.6	454.1	326.5	268.3	255.8	260.4	259.5	289.4	367.5
37°	1963.5	1110.5	669.9	436.6	312.8	257.6	246.8	251.0	250.1	277.6	351.2
37.5°	1941.6	1099.3	653.5	420.1	299.0	247.9	238.0	242.3	241.3	266.7	335.6
38°	1921.3	1085.7	638.1	405.0	286.7	238.9	229.8	234.0	233.1	256.6	321.0
38.5°	1903.1	1073.2	621.1	390.6	275.0	230.5	222.1	225.8	225.0	247.1	307.3
39°	1886.5	1062.3	606.7	376.4	263.6	222.6	214.5	218.6	217.6	238.8	294.9
39.5°	1871.8	1050.0	592.4	363.8	253.1	215.2	207.5	211.3	210.4	230.1	282.4
40°	1855.2	1037.3	578.1	350.8	243.4	208.1	200.8	204.8	203.9	222.2	271.1
40.5°	1838.4	1027.3	563.8	338.6	233.9	201.2	194.0	198.4	197.5	214.7	260.7
41°	1824.4	1014.8	549.5	328.0	225.6	195.0	188.4	192.6	191.5	207.4	250.7
41.5°	1809.5	1002.4	535.3	317.4	217.8	189.0	182.8	186.8	185.9	200.6	241.4
42°	1794.0	991.5	522.8	306.4	209.7	183.0	177.3	181.4	180.5	194.4	233.2
42.5°	1781.4	979.5	511.2	297.2	202.6	177.7	172.2	176.2	175.3	188.4	225.1
43°	1767.3	968.8	498.4	288.2	196.3	172.5	167.2	171.1	170.2	182.7	217.3
43.5°	1752.0	958.2	486.3	278.8	189.5	167.3	162.1	166.2	165.1	177.2	210.1
44°	1739.3	946.9	475.2	270.2	183.5	162.5	157.4	161.5	160.3	171.9	203.3
44.5°	1727.1	936.2	463.3	262.5	178.0	157.8	153.1	156.9	155.7	167.0	196.7



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**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
45°	1713.7	925.2	452.1	254.6	172.4	153.2	148.6	152.8	151.2	161.9	190.5
45.5°	1702.0	913.8	442.0	247.4	167.4	148.9	144.5	148.7	146.9	157.0	184.5
46°	1691.2	904.1	430.7	239.9	162.7	144.7	140.6	144.8	143.3	152.5	178.9
46.5°	1678.4	895.8	420.9	233.0	157.9	140.8	136.6	141.2	139.7	147.8	173.4
47°	1667.5	885.9	411.8	226.5	153.4	136.7	132.9	137.6	136.1	144.0	168.4
47.5°	1656.0	877.7	402.4	220.1	149.2	132.9	129.2	134.0	132.4	140.3	163.5
48°	1642.4	870.2	394.3	213.7	145.0	129.1	125.6	130.5	128.8	136.5	158.9
48.5°	1630.1	860.7	386.1	208.2	141.1	125.6	122.1	126.7	125.3	132.7	154.0
49°	1614.3	850.6	377.5	202.7	137.2	122.0	118.5	123.2	122.0	128.9	149.7
49.5°	1596.8	842.1	370.0	197.4	133.3	118.5	114.8	119.6	118.4	125.4	145.5
50°	1582.4	831.1	362.9	192.5	129.6	115.1	111.3	116.0	115.1	121.9	141.7
50.5°	1567.8	817.8	355.1	188.0	126.1	112.0	108.0	112.7	111.7	118.5	137.9
51°	1550.7	804.9	348.2	183.3	122.3	108.7	104.7	109.2	108.4	115.3	134.0
51.5°	1537.5	791.6	342.1	179.2	118.9	105.5	101.5	105.9	105.3	111.9	130.2
52°	1522.3	777.8	335.3	175.1	115.6	102.6	98.5	102.9	102.3	108.8	126.6
52.5°	1505.5	766.4	329.7	170.9	112.2	99.6	95.7	99.7	99.3	105.5	123.0
53°	1490.6	754.5	324.2	167.0	108.9	96.5	93.0	96.8	96.4	102.3	119.6
53.5°	1471.6	741.0	317.8	163.2	105.9	93.8	90.4	93.8	93.6	99.1	116.3
54°	1451.7	727.9	312.1	159.3	102.8	90.9	87.6	91.1	90.7	96.0	113.2
54.5°	1432.4	714.6	306.9	155.6	99.8	88.1	85.1	88.5	88.1	93.1	110.1
55°	1415.0	702.6	301.1	152.0	97.0	85.5	82.5	85.8	85.5	90.2	107.2
55.5°	1398.3	690.8	296.1	148.4	94.2	82.9	80.0	83.2	82.8	87.2	104.3
56°	1382.8	677.7	291.2	144.9	91.4	80.3	77.5	80.8	80.3	84.3	101.5
56.5°	1368.0	665.2	286.0	141.4	88.7	77.6	75.3	78.4	77.8	81.4	98.6
57°	1353.5	653.1	280.5	137.7	86.0	75.1	73.1	76.1	75.3	78.6	95.6
57.5°	1342.0	642.5	275.4	134.5	83.2	72.6	70.9	73.9	73.1	75.7	92.6
58°	1327.8	631.4	269.2	131.1	80.6	70.3	68.5	71.5	70.8	73.0	89.7
58.5°	1314.1	621.9	263.2	127.7	77.8	67.9	66.0	69.0	68.3	70.4	86.8
59°	1301.7	612.7	257.7	124.3	75.0	65.5	63.2	66.4	65.8	68.1	83.9
59.5°	1289.3	602.0	251.8	121.0	72.3	63.1	60.1	63.7	63.1	65.6	80.9
60°	1278.9	591.2	246.1	117.5	69.7	60.2	57.0	60.3	60.2	62.9	77.9
60.5°	1269.7	580.5	240.1	114.2	67.1	57.2	54.0	56.3	56.6	60.2	75.1
61°	1255.5	569.8	233.7	111.0	64.8	54.3	50.9	52.6	52.8	57.3	72.4
61.5°	1235.3	560.4	228.0	107.5	62.0	51.4	47.8	49.7	49.4	54.1	69.8
62°	1217.8	549.8	223.1	104.2	59.5	48.5	44.3	46.0	46.5	50.6	67.1
62.5°	1201.6	538.3	218.0	100.9	57.0	45.5	39.2	38.3	42.3	47.2	64.4
63°	1186.4	526.1	212.9	97.6	54.5	42.2	29.7	30.7	33.8	44.1	61.4
63.5°	1168.9	512.6	207.4	94.4	52.0	37.7	19.2	23.0	25.3	38.8	58.3
64°	1149.3	498.4	201.0	91.2	49.2	29.8	8.7	15.4	16.9	31.0	55.2
64.5°	1128.1	484.9	194.8	88.0	46.4	19.9	6.8	7.7	8.4	23.3	52.1
65°	1102.8	469.5	188.2	84.9	43.3	10.0	5.1	0.2	0.3	15.5	48.5
65.5°	1079.4	455.1	181.2	81.7	38.8	2.5	3.5	0.1	0.2	7.7	43.6
66°	1053.9	441.1	175.3	78.3	31.4	1.8	1.9	0.1	0.1	0.2	36.0
66.5°	1028.4	424.6	170.4	75.2	23.2	1.3	0.2	0.1	0.1	0.2	27.4
67°	1003.9	411.1	165.5	72.1	16.1	0.7	0.1	0.1	0.1	0.2	19.6



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**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
67.5°	974.5	398.0	160.0	68.6	12.4	0.2	0.1	0.1	0.2	0.2	16.6
68°	944.4	383.0	154.2	64.0	11.6	0.1	0.1	0.1	0.2	0.2	16.1
68.5°	918.1	370.1	148.0	59.8	11.2	0.1	0.1	0.2	0.2	0.2	15.8
69°	889.6	357.7	142.2	55.6	10.9	0.1	0.1	0.2	0.2	0.2	15.5
69.5°	860.1	344.5	136.5	51.3	10.7	0.1	0.1	0.2	0.2	0.2	15.3
70°	830.1	332.3	130.1	47.1	10.5	0.1	0.1	0.2	0.2	0.2	15.0
70.5°	800.9	320.4	124.2	42.9	10.3	0.2	0.1	0.2	0.2	0.2	14.8
71°	769.7	307.6	117.9	41.8	10.2	0.2	0.1	0.2	0.2	0.2	14.6
71.5°	736.7	294.3	110.0	40.8	10.0	0.2	0.2	0.2	0.2	0.2	14.4
72°	705.9	281.3	102.5	39.8	9.9	0.2	0.2	0.2	0.2	0.2	14.2
72.5°	674.4	266.9	96.3	39.0	9.8	0.2	0.2	0.2	0.2	0.2	13.9
73°	644.8	252.4	91.8	38.1	9.7	0.2	0.2	0.2	0.2	0.2	13.7
73.5°	615.6	240.8	88.4	37.3	9.5	0.2	0.2	0.2	0.2	0.2	13.6
74°	591.6	229.9	85.4	36.5	9.4	0.2	0.2	0.2	0.2	0.2	13.3
74.5°	567.6	220.2	82.1	35.7	9.3	0.2	0.2	0.2	0.2	0.2	13.1
75°	543.7	212.7	79.3	34.9	9.2	0.2	0.2	0.2	0.3	0.3	12.9
75.5°	519.7	205.6	76.6	34.1	9.1	0.2	0.2	0.3	0.3	0.3	12.6
76°	495.8	197.9	73.8	33.3	8.9	0.2	0.2	0.3	0.3	0.3	12.4
76.5°	474.7	190.5	71.3	32.5	8.8	0.2	0.2	0.3	0.3	0.3	12.2
77°	455.1	184.1	69.0	31.7	8.6	0.2	0.2	0.3	0.3	0.3	11.9
77.5°	435.4	176.6	66.6	30.8	8.5	0.2	0.2	0.3	0.3	0.3	11.7
78°	415.5	169.1	64.3	29.9	8.3	0.2	0.2	0.3	0.3	0.3	11.4
78.5°	395.2	161.0	61.8	29.0	8.1	0.2	0.2	0.3	0.3	0.3	11.2
79°	374.7	154.0	60.0	28.2	8.0	0.2	0.2	0.3	0.3	0.3	10.9
79.5°	354.5	147.4	58.3	27.3	7.8	0.2	0.2	0.3	0.3	0.3	10.7
80°	336.4	141.6	56.5	26.4	7.6	0.2	0.2	0.3	0.3	0.3	10.4
80.5°	317.9	135.6	54.8	25.5	7.4	0.3	0.3	0.3	0.3	0.4	10.2
81°	299.6	129.6	52.8	24.6	7.2	0.3	0.3	0.4	0.4	0.4	10.0
81.5°	281.5	123.5	50.8	23.7	7.1	0.3	0.3	0.4	0.4	0.4	9.8
82°	263.3	116.5	48.5	22.8	6.9	0.3	0.3	0.4	0.4	0.4	9.5
82.5°	246.4	109.0	46.2	21.9	6.7	0.3	0.3	0.4	0.4	0.4	9.3
83°	229.9	101.6	44.0	21.0	6.5	0.3	0.3	0.4	0.4	0.4	9.1
83.5°	212.7	95.2	41.7	20.2	6.4	0.3	0.3	0.4	0.4	0.5	8.9
84°	194.5	88.8	39.5	19.3	6.2	0.3	0.3	0.5	0.5	0.5	8.6
84.5°	178.2	82.2	37.4	18.5	6.0	0.3	0.3	0.5	0.5	0.5	8.4
85°	163.8	76.2	35.2	17.7	5.9	0.3	0.3	0.5	0.5	0.5	8.2
85.5°	150.3	70.8	33.3	17.0	5.7	0.4	0.4	0.5	0.5	0.5	8.0
86°	137.2	65.5	31.6	16.3	5.6	0.4	0.4	0.5	0.6	0.6	7.8
86.5°	124.5	60.8	29.9	15.6	5.4	0.4	0.4	0.6	0.6	0.6	7.6
87°	113.1	56.9	28.4	15.0	5.3	0.4	0.4	0.6	0.6	0.6	7.4
87.5°	103.0	53.0	26.9	14.4	5.2	0.4	0.4	0.6	0.6	0.6	7.2
88°	93.4	49.2	25.5	13.8	5.0	0.4	0.4	0.6	0.7	0.7	7.0
88.5°	85.2	45.3	24.3	13.3	4.9	0.5	0.5	0.7	0.7	0.7	6.8
89°	77.6	42.4	23.2	12.8	4.8	0.5	0.5	0.7	0.7	0.7	6.5
89.5°	71.4	39.6	22.2	12.4	4.6	0.5	0.5	0.7	0.7	0.8	6.3



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**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
90°	65.9	37.3	21.3	11.9	4.5	0.5	0.5	0.8	0.8	0.8	6.1
90.5°	60.7	35.3	20.4	11.4	4.3	0.6	0.6	0.8	0.8	0.8	6.0
91°	57.7	33.5	19.6	11.0	4.2	0.6	0.6	0.8	0.8	0.8	5.8
91.5°	54.8	32.1	18.8	10.6	4.1	0.6	0.6	0.9	0.9	0.9	5.7
92°	51.8	30.8	18.2	10.3	4.0	0.6	0.6	0.9	0.9	0.9	5.6
92.5°	48.9	29.7	17.6	10.1	3.9	0.6	0.6	0.9	0.9	0.9	5.4
93°	47.1	28.8	17.2	9.8	3.8	0.7	0.7	1.0	1.0	1.0	5.3
93.5°	45.5	28.2	16.8	9.6	3.7	0.7	0.7	1.0	1.0	1.0	5.1
94°	44.2	27.9	16.5	9.3	3.6	0.7	0.7	1.0	1.0	1.0	5.0
94.5°	43.3	27.5	16.2	9.1	3.6	0.7	0.7	1.0	1.1	1.1	4.9
95°	42.7	27.2	15.8	8.9	3.5	0.8	0.8	1.1	1.1	1.1	4.9
95.5°	42.2	26.9	15.5	8.7	3.4	0.8	0.8	1.1	1.1	1.1	4.8
96°	41.8	26.6	15.2	8.6	3.3	0.8	0.8	1.1	1.2	1.2	4.7
96.5°	41.4	26.2	15.0	8.5	3.2	0.8	0.8	1.2	1.2	1.2	4.6
97°	40.9	25.9	14.7	8.3	3.2	0.9	0.9	1.2	1.2	1.2	4.5
97.5°	40.4	25.6	14.5	8.2	3.1	0.9	0.9	1.3	1.3	1.3	4.4
98°	39.8	25.3	14.3	8.1	3.1	0.9	0.9	1.3	1.3	1.3	4.4
98.5°	39.2	25.0	14.1	7.9	3.0	0.9	1.0	1.3	1.3	1.3	4.3
99°	38.6	24.6	13.8	7.8	3.0	1.0	1.0	1.4	1.4	1.4	4.2
99.5°	38.0	24.2	13.6	7.7	2.9	1.0	1.0	1.4	1.4	1.4	4.2
100°	37.4	23.8	13.4	7.6	2.9	1.0	1.0	1.4	1.4	1.4	4.1
100.5°	36.8	23.3	13.2	7.6	2.9	1.1	1.1	1.5	1.5	1.5	4.0
101°	36.3	22.9	13.1	7.5	2.8	1.1	1.1	1.5	1.5	1.5	4.0
101.5°	35.7	22.5	13.0	7.4	2.8	1.1	1.1	1.5	1.5	1.5	3.9
102°	35.2	22.2	12.8	7.3	2.8	1.1	1.2	1.6	1.6	1.6	3.9
102.5°	34.7	21.8	12.7	7.2	2.8	1.2	1.2	1.6	1.6	1.6	3.8
103°	34.3	21.5	12.6	7.2	2.7	1.2	1.2	1.7	1.7	1.6	3.7
103.5°	34.0	21.3	12.5	7.1	2.7	1.2	1.2	1.7	1.7	1.7	3.6
104°	33.7	21.0	12.4	7.0	2.7	1.3	1.3	1.7	1.7	1.7	3.6
104.5°	33.5	20.8	12.3	7.0	2.7	1.3	1.3	1.8	1.8	1.8	3.5
105°	33.4	20.7	12.2	6.9	2.7	1.3	1.3	1.8	1.8	1.8	3.5
105.5°	33.3	20.5	12.0	6.8	2.7	1.4	1.4	1.9	1.9	1.9	3.5
106°	33.2	20.5	11.9	6.8	2.6	1.4	1.4	1.9	1.9	1.9	3.5
106.5°	33.1	20.4	11.8	6.7	2.6	1.4	1.5	2.0	2.0	2.0	3.5
107°	33.1	20.4	11.7	6.6	2.6	1.5	1.5	2.0	2.0	2.0	3.5
107.5°	33.1	20.3	11.6	6.5	2.6	1.5	1.5	2.1	2.1	2.0	3.5
108°	33.1	20.3	11.5	6.4	2.6	1.5	1.6	2.1	2.1	2.1	3.5
108.5°	33.2	20.3	11.4	6.3	2.6	1.6	1.6	2.2	2.1	2.1	3.5
109°	33.2	20.3	11.4	6.2	2.6	1.6	1.6	2.2	2.2	2.1	3.5
109.5°	33.2	20.3	11.3	6.1	2.6	1.6	1.7	2.2	2.2	2.2	3.5
110°	33.3	20.3	11.3	6.1	2.6	1.7	1.7	2.3	2.2	2.2	3.5
110.5°	33.3	20.2	11.3	6.0	2.7	1.7	1.8	2.3	2.3	2.2	3.5
111°	33.3	20.2	11.3	6.0	2.7	1.8	1.8	2.3	2.3	2.3	3.5
111.5°	33.3	20.1	11.3	5.9	2.7	1.8	1.8	2.4	2.3	2.3	3.6
112°	33.4	20.1	11.4	5.9	2.8	1.8	1.9	2.4	2.4	2.3	3.6



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**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
112.5°	33.4	20.1	11.4	5.9	2.8	1.9	1.9	2.4	2.4	2.4	3.6
113°	33.5	20.0	11.4	5.9	2.9	1.9	2.0	2.5	2.4	2.4	3.6
113.5°	33.5	20.0	11.4	5.9	2.9	2.0	2.0	2.5	2.5	2.4	3.6
114°	33.5	19.9	11.4	5.9	2.9	2.0	2.1	2.5	2.5	2.5	3.6
114.5°	33.5	19.9	11.4	5.9	3.0	2.1	2.1	2.6	2.5	2.5	3.6
115°	33.5	19.8	11.3	6.0	3.0	2.1	2.2	2.6	2.6	2.5	3.7
115.5°	33.5	19.8	11.3	6.1	3.1	2.2	2.2	2.6	2.6	2.5	3.7
116°	33.5	19.8	11.2	6.2	3.2	2.2	2.3	2.7	2.6	2.6	3.7
116.5°	33.6	19.7	11.2	6.3	3.2	2.3	2.3	2.7	2.7	2.6	3.7
117°	33.7	19.7	11.2	6.4	3.3	2.3	2.4	2.7	2.7	2.6	3.8
117.5°	33.7	19.6	11.1	6.5	3.4	2.4	2.4	2.7	2.7	2.7	3.8
118°	33.8	19.6	11.1	6.5	3.5	2.5	2.5	2.8	2.7	2.7	3.8
118.5°	33.9	19.6	11.1	6.6	3.5	2.5	2.5	2.8	2.8	2.7	3.8
119°	33.9	19.5	11.1	6.7	3.6	2.6	2.6	2.8	2.8	2.8	3.9
119.5°	34.0	19.5	11.1	6.7	3.6	2.6	2.7	2.9	2.8	2.8	3.9
120°	34.0	19.5	11.1	6.8	3.7	2.7	2.7	2.9	2.9	2.8	3.9
120.5°	34.0	19.5	11.2	6.9	3.8	2.8	2.8	2.9	2.9	2.9	4.0
121°	34.1	19.5	11.2	6.9	3.8	2.8	2.9	3.0	3.0	2.9	4.0
121.5°	34.1	19.5	11.2	7.0	3.8	2.9	2.9	3.0	3.0	3.0	4.0
122°	34.1	19.5	11.3	7.1	3.9	2.9	3.0	3.1	3.0	3.0	4.1
122.5°	34.1	19.5	11.3	7.2	3.9	3.0	3.0	3.1	3.1	3.0	4.1
123°	34.1	19.6	11.4	7.2	4.0	3.0	3.1	3.1	3.1	3.1	4.1
123.5°	34.2	19.6	11.4	7.3	4.0	3.1	3.1	3.2	3.1	3.1	4.2
124°	34.2	19.7	11.5	7.3	4.1	3.2	3.2	3.2	3.2	3.1	4.2
124.5°	34.3	19.8	11.6	7.3	4.1	3.2	3.2	3.3	3.2	3.2	4.3
125°	34.3	19.9	11.6	7.4	4.1	3.3	3.3	3.3	3.3	3.2	4.4
125.5°	34.4	20.0	11.7	7.4	4.2	3.3	3.3	3.4	3.3	3.3	4.4
126°	34.5	20.1	11.8	7.5	4.2	3.4	3.4	3.4	3.4	3.3	4.5
126.5°	34.7	20.2	11.9	7.5	4.2	3.4	3.4	3.5	3.4	3.4	4.6
127°	34.9	20.4	12.0	7.6	4.2	3.4	3.5	3.5	3.5	3.4	4.7
127.5°	35.1	20.5	12.1	7.6	4.3	3.5	3.5	3.6	3.6	3.5	4.7
128°	35.3	20.6	12.2	7.6	4.3	3.5	3.6	3.7	3.6	3.6	4.8
128.5°	35.6	20.8	12.3	7.7	4.3	3.6	3.6	3.7	3.7	3.6	4.8
129°	35.8	21.0	12.3	7.7	4.4	3.6	3.7	3.8	3.7	3.7	4.9
129.5°	36.1	21.1	12.4	7.7	4.4	3.7	3.7	3.8	3.8	3.7	4.9
130°	36.4	21.3	12.5	7.7	4.4	3.7	3.8	3.9	3.9	3.8	5.0
130.5°	36.7	21.4	12.6	7.8	4.5	3.8	3.8	4.0	3.9	3.8	5.0
131°	37.0	21.6	12.7	7.8	4.5	3.8	3.9	4.0	4.0	3.9	5.0
131.5°	37.2	21.8	12.8	7.8	4.5	3.9	3.9	4.1	4.0	4.0	5.1
132°	37.5	21.9	12.9	7.9	4.6	3.9	4.0	4.1	4.1	4.0	5.1
132.5°	37.8	22.1	13.0	7.9	4.6	4.0	4.0	4.2	4.2	4.1	5.1
133°	38.1	22.2	13.0	7.9	4.6	4.0	4.1	4.3	4.2	4.1	5.2
133.5°	38.3	22.4	13.1	7.9	4.6	4.0	4.1	4.3	4.3	4.2	5.2
134°	38.6	22.5	13.2	8.0	4.7	4.1	4.1	4.4	4.4	4.3	5.2
134.5°	38.8	22.6	13.2	8.0	4.7	4.1	4.2	4.4	4.4	4.3	5.3



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**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
135°	39.1	22.7	13.3	8.0	4.7	4.1	4.2	4.5	4.5	4.4	5.3
135.5°	39.3	22.8	13.3	8.0	4.7	4.2	4.2	4.6	4.5	4.4	5.3
136°	39.5	22.9	13.3	8.0	4.7	4.2	4.3	4.6	4.6	4.5	5.4
136.5°	39.7	22.9	13.4	8.0	4.7	4.2	4.3	4.7	4.6	4.6	5.4
137°	39.9	23.0	13.4	8.0	4.8	4.3	4.3	4.7	4.7	4.6	5.4
137.5°	40.0	23.0	13.4	8.0	4.8	4.3	4.4	4.8	4.7	4.7	5.4
138°	40.2	23.1	13.4	8.0	4.8	4.3	4.4	4.8	4.8	4.7	5.5
138.5°	40.3	23.1	13.4	8.0	4.8	4.4	4.4	4.8	4.8	4.8	5.5
139°	40.4	23.1	13.4	8.0	4.8	4.4	4.5	4.9	4.9	4.8	5.5
139.5°	40.4	23.1	13.4	8.0	4.8	4.4	4.5	4.9	4.9	4.8	5.5
140°	40.4	23.1	13.4	8.0	4.8	4.4	4.5	5.0	5.0	4.9	5.5
140.5°	40.4	23.0	13.3	7.9	4.8	4.5	4.6	5.0	5.0	4.9	5.5
141°	40.3	23.0	13.3	7.9	4.8	4.5	4.6	5.0	5.0	5.0	5.6
141.5°	40.2	22.9	13.3	7.9	4.8	4.5	4.6	5.1	5.1	5.0	5.6
142°	40.0	22.9	13.2	7.8	4.8	4.5	4.6	5.1	5.1	5.0	5.6
142.5°	39.9	22.8	13.1	7.8	4.8	4.5	4.6	5.1	5.1	5.1	5.6
143°	39.6	22.7	13.0	7.7	4.8	4.5	4.6	5.2	5.2	5.1	5.6
143.5°	39.4	22.6	13.0	7.7	4.8	4.6	4.6	5.2	5.2	5.1	5.6
144°	39.1	22.5	12.9	7.6	4.8	4.6	4.6	5.2	5.2	5.2	5.6
144.5°	38.7	22.4	12.8	7.6	4.8	4.6	4.7	5.2	5.2	5.2	5.6
145°	38.3	22.2	12.7	7.5	4.8	4.6	4.7	5.3	5.3	5.2	5.6
145.5°	37.9	22.1	12.6	7.5	4.8	4.6	4.7	5.3	5.3	5.2	5.6
146°	37.4	21.9	12.5	7.4	4.8	4.6	4.7	5.3	5.3	5.2	5.5
146.5°	36.9	21.7	12.3	7.3	4.8	4.6	4.7	5.3	5.3	5.3	5.5
147°	36.3	21.6	12.2	7.3	4.8	4.6	4.7	5.3	5.3	5.3	5.5
147.5°	35.8	21.4	12.1	7.2	4.7	4.6	4.7	5.3	5.3	5.3	5.5
148°	35.1	21.2	12.0	7.1	4.7	4.6	4.7	5.3	5.3	5.3	5.4
148.5°	34.4	20.9	11.9	7.1	4.7	4.7	4.8	5.3	5.3	5.3	5.4
149°	33.7	20.7	11.7	7.0	4.7	4.7	4.8	5.3	5.3	5.3	5.4
149.5°	32.9	20.4	11.6	6.9	4.7	4.7	4.8	5.3	5.3	5.2	5.3
150°	32.1	20.1	11.5	6.8	4.7	4.7	4.8	5.2	5.3	5.2	5.3
150.5°	31.3	19.8	11.3	6.8	4.7	4.7	4.8	5.2	5.2	5.2	5.3
151°	30.5	19.5	11.2	6.7	4.6	4.7	4.8	5.2	5.2	5.2	5.2
151.5°	29.6	19.2	11.0	6.6	4.6	4.7	4.8	5.2	5.2	5.2	5.2
152°	28.7	18.8	10.9	6.5	4.6	4.7	4.8	5.2	5.2	5.2	5.1
152.5°	27.9	18.5	10.7	6.4	4.6	4.7	4.8	5.2	5.2	5.2	5.1
153°	27.0	18.1	10.6	6.4	4.6	4.7	4.8	5.2	5.2	5.1	5.1
153.5°	26.1	17.7	10.4	6.2	4.5	4.7	4.8	5.1	5.1	5.1	5.0
154°	25.1	17.3	10.2	6.1	4.5	4.7	4.8	5.1	5.1	5.1	5.0
154.5°	24.2	16.8	10.0	6.0	4.5	4.7	4.8	5.1	5.1	5.1	5.0
155°	23.3	16.4	9.8	5.9	4.5	4.7	4.8	5.1	5.1	5.1	4.9
155.5°	22.4	15.9	9.6	5.8	4.5	4.7	4.8	5.0	5.0	5.0	4.9
156°	21.5	15.5	9.4	5.7	4.5	4.7	4.8	5.0	5.0	5.0	4.9
156.5°	20.6	15.0	9.2	5.5	4.5	4.7	4.8	5.0	5.0	5.0	4.8
157°	19.7	14.5	9.0	5.4	4.5	4.7	4.9	5.0	5.0	5.0	4.8



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**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
157.5°	18.8	14.0	8.8	5.3	4.5	4.8	4.9	5.0	5.0	4.9	4.8
158°	18.0	13.5	8.5	5.2	4.5	4.8	4.9	5.0	5.0	4.9	4.8
158.5°	17.1	13.0	8.3	5.0	4.6	4.8	4.9	5.0	4.9	4.9	4.8
159°	16.3	12.4	8.0	4.9	4.6	4.8	5.0	5.0	4.9	4.9	4.8
159.5°	15.5	11.9	7.7	4.8	4.6	4.8	5.0	4.9	4.9	4.9	4.7
160°	14.7	11.4	7.5	4.7	4.6	4.9	5.0	4.9	4.9	4.9	4.7
160.5°	13.9	10.8	7.2	4.6	4.6	4.9	5.0	4.9	4.9	4.8	4.7
161°	13.1	10.3	6.9	4.6	4.6	4.9	5.0	4.9	4.9	4.8	4.7
161.5°	12.3	9.7	6.6	4.6	4.6	4.9	5.0	4.8	4.8	4.8	4.7
162°	11.6	9.2	6.3	4.5	4.6	4.9	5.0	4.8	4.8	4.8	4.6
162.5°	10.8	8.7	6.0	4.4	4.6	4.9	5.0	4.8	4.8	4.7	4.6
163°	10.2	8.2	5.7	4.4	4.6	4.9	5.0	4.8	4.7	4.7	4.6
163.5°	9.5	7.7	5.3	4.4	4.6	4.9	5.0	4.7	4.7	4.7	4.5
164°	8.9	7.2	5.1	4.4	4.7	4.9	5.0	4.7	4.7	4.6	4.5
164.5°	8.3	6.8	5.0	4.5	4.7	4.9	5.1	4.7	4.7	4.6	4.5
165°	7.7	6.4	4.8	4.5	4.7	5.0	5.1	4.6	4.6	4.6	4.5
165.5°	7.2	6.0	4.6	4.6	4.8	5.0	5.2	4.6	4.6	4.6	4.5
166°	6.8	5.7	4.5	4.7	4.9	5.1	5.2	4.6	4.6	4.6	4.5
166.5°	6.3	5.3	4.6	4.7	4.9	5.1	5.3	4.6	4.6	4.6	4.5
167°	5.9	5.0	4.6	4.8	5.0	5.2	5.3	4.6	4.6	4.6	4.5
167.5°	5.5	4.7	4.7	4.8	5.0	5.2	5.4	4.6	4.6	4.6	4.5
168°	5.1	4.6	4.7	4.8	5.0	5.2	5.4	4.6	4.6	4.6	4.5
168.5°	4.7	4.5	4.7	4.9	5.1	5.2	5.4	4.6	4.6	4.6	4.5
169°	4.4	4.5	4.7	4.9	5.1	5.3	5.4	4.6	4.6	4.6	4.5
169.5°	4.4	4.5	4.7	4.9	5.1	5.3	5.4	4.6	4.6	4.5	4.4
170°	4.4	4.6	4.7	4.9	5.1	5.3	5.5	4.6	4.6	4.5	4.4
170.5°	4.4	4.6	4.8	4.9	5.1	5.3	5.5	4.5	4.5	4.5	4.4
171°	4.4	4.6	4.8	5.0	5.2	5.4	5.5	4.5	4.5	4.4	4.4
171.5°	4.5	4.7	4.8	5.0	5.2	5.4	5.6	4.5	4.5	4.4	4.3
172°	4.5	4.7	4.9	5.1	5.3	5.5	5.7	4.5	4.5	4.4	4.3
172.5°	4.6	4.8	5.0	5.2	5.3	5.6	5.8	4.5	4.5	4.4	4.3
173°	4.7	4.9	5.1	5.3	5.4	5.7	5.8	4.4	4.4	4.4	4.2
173.5°	4.8	5.0	5.2	5.3	5.5	5.7	5.9	4.4	4.4	4.3	4.2
174°	4.8	5.0	5.2	5.4	5.5	5.8	5.9	4.4	4.4	4.3	4.2
174.5°	4.8	5.0	5.2	5.3	5.5	5.7	5.9	4.4	4.4	4.3	4.2
175°	4.8	5.0	5.2	5.3	5.5	5.7	5.9	4.4	4.3	4.3	4.2
175.5°	4.8	5.0	5.2	5.3	5.5	5.7	5.9	4.3	4.3	4.3	4.1
176°	4.8	5.0	5.2	5.3	5.5	5.7	5.8	4.3	4.3	4.2	4.1
176.5°	4.8	5.0	5.1	5.3	5.5	5.6	5.8	4.2	4.2	4.2	4.0
177°	4.8	5.0	5.1	5.3	5.4	5.6	5.8	4.2	4.2	4.1	4.0
177.5°	4.8	5.0	5.1	5.2	5.4	5.5	5.7	4.2	4.1	4.1	4.0
178°	4.7	4.9	5.0	5.1	5.3	5.5	5.6	4.1	4.1	4.1	4.0
178.5°	4.7	4.9	5.0	5.1	5.3	5.4	5.6	4.1	4.0	4.0	3.9
179°	4.7	4.8	4.9	5.1	5.2	5.4	5.5	4.0	4.0	4.0	3.9
179.5°	4.6	4.8	4.9	5.0	5.2	5.3	5.5	4.0	4.0	4.0	3.9



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**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
180°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0





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CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1	3835.1
0.5°	3785.2	3790.5	3800.3	3811.3	3821.6	3833.9	3847.6	3860.0	3868.8	3877.9	3889.4
1°	3766.5	3769.2	3782.1	3798.8	3814.0	3834.7	3860.6	3886.9	3911.8	3924.1	3933.9
1.5°	3792.6	3781.7	3775.4	3783.0	3805.1	3835.7	3869.8	3911.3	3930.2	3925.1	3906.5
2°	3829.5	3805.8	3790.3	3778.8	3795.2	3833.0	3883.9	3923.3	3913.2	3874.7	3820.9
2.5°	3866.1	3837.7	3815.0	3786.0	3787.1	3830.9	3893.5	3921.1	3870.8	3781.5	3684.0
3°	3893.9	3868.6	3833.5	3797.8	3781.8	3826.7	3900.2	3901.2	3796.4	3668.2	3557.2
3.5°	3898.9	3886.7	3854.5	3811.0	3778.5	3826.7	3907.9	3864.8	3716.8	3566.2	3486.3
4°	3859.0	3889.9	3874.1	3824.0	3783.3	3827.2	3911.1	3830.5	3634.8	3488.5	3459.7
4.5°	3792.2	3872.1	3892.5	3846.2	3786.3	3824.6	3909.5	3778.2	3548.3	3458.3	3475.3
5°	3737.7	3826.5	3897.4	3863.2	3791.1	3820.6	3906.3	3715.7	3494.4	3459.8	3488.5
5.5°	3711.1	3772.4	3884.9	3875.7	3784.5	3816.5	3891.7	3652.7	3458.0	3475.2	3451.0
6°	3714.7	3731.0	3854.2	3878.1	3784.7	3810.7	3873.6	3584.6	3443.8	3482.2	3357.4
6.5°	3729.9	3713.6	3809.5	3877.8	3784.2	3802.8	3852.0	3519.8	3450.0	3449.7	3235.2
7°	3716.5	3717.0	3762.9	3876.9	3782.8	3797.8	3824.7	3477.8	3459.6	3363.3	3139.2
7.5°	3667.3	3721.2	3717.8	3870.4	3785.6	3792.3	3793.2	3444.4	3463.1	3250.0	3116.5
8°	3583.9	3717.4	3695.0	3851.9	3790.7	3782.2	3759.4	3420.7	3439.8	3156.7	3171.4
8.5°	3469.5	3688.0	3685.1	3824.2	3790.6	3771.9	3722.7	3413.7	3393.1	3099.2	3279.0
9°	3351.9	3634.7	3686.5	3786.8	3791.8	3764.4	3685.1	3413.1	3315.7	3105.8	3382.9
9.5°	3281.0	3554.5	3684.8	3749.6	3792.6	3754.0	3636.9	3409.8	3231.9	3151.1	3439.4
10°	3250.0	3452.4	3680.8	3707.4	3790.9	3745.4	3599.0	3416.4	3151.8	3241.3	3425.1
10.5°	3246.6	3355.9	3663.8	3675.4	3790.3	3738.2	3562.6	3413.4	3082.2	3331.6	3358.9
11°	3233.6	3270.6	3631.9	3648.6	3789.1	3726.7	3521.3	3398.9	3059.6	3389.8	3301.8
11.5°	3196.2	3222.3	3582.6	3628.1	3783.6	3719.0	3486.6	3373.4	3069.4	3412.4	3286.0
12°	3096.0	3199.2	3517.4	3618.6	3777.1	3707.4	3447.5	3337.0	3106.7	3375.9	3340.4
12.5°	2968.6	3194.6	3444.8	3610.7	3767.6	3694.3	3410.5	3282.7	3164.2	3321.3	3444.5
13°	2835.1	3187.5	3357.8	3603.2	3757.0	3680.7	3378.9	3228.9	3225.4	3277.2	3590.3
13.5°	2739.5	3154.6	3275.9	3590.6	3733.7	3666.7	3353.3	3166.6	3282.8	3261.6	3702.0
14°	2685.3	3088.0	3210.3	3578.6	3718.1	3653.4	3326.5	3099.5	3316.0	3286.4	3742.3
14.5°	2653.9	2990.9	3152.3	3559.1	3694.9	3633.7	3306.8	3052.7	3324.5	3352.7	3722.8
15°	2613.9	2866.2	3116.9	3535.7	3673.1	3618.1	3286.5	3010.9	3307.4	3454.2	3664.4
15.5°	2543.9	2757.4	3098.7	3506.2	3648.1	3602.9	3273.3	2985.6	3265.7	3550.5	3609.2
16°	2436.8	2671.0	3082.7	3473.4	3622.0	3587.2	3258.2	2974.9	3224.6	3624.3	3600.5
16.5°	2313.3	2615.3	3068.2	3436.1	3594.8	3571.5	3245.6	2979.8	3192.6	3654.9	3646.8
17°	2193.4	2582.1	3049.2	3396.3	3569.0	3552.0	3233.4	2995.4	3181.1	3645.5	3716.6
17.5°	2093.9	2552.5	3007.8	3342.8	3539.4	3533.6	3217.1	3013.4	3188.3	3607.6	3786.0
18°	2020.0	2505.5	2944.5	3285.4	3508.1	3515.7	3204.4	3041.2	3220.1	3551.3	3836.2
18.5°	1957.3	2435.4	2860.2	3223.4	3476.2	3496.1	3186.2	3067.1	3269.2	3515.0	3864.4
19°	1892.7	2338.9	2762.9	3152.9	3441.2	3478.1	3171.7	3087.2	3322.1	3510.2	3886.6
19.5°	1813.7	2233.1	2672.0	3090.0	3412.5	3455.9	3154.1	3106.0	3382.1	3537.9	3917.0
20°	1721.7	2127.9	2594.2	3030.5	3379.9	3438.9	3129.5	3115.9	3424.4	3587.6	3980.2
20.5°	1615.2	2041.0	2524.7	2978.4	3353.6	3416.6	3106.4	3108.8	3450.6	3642.4	4082.8
21°	1511.8	1970.0	2476.1	2934.7	3327.0	3394.9	3078.2	3092.9	3462.6	3695.5	4223.8
21.5°	1448.2	1913.1	2441.3	2898.8	3299.4	3367.3	3045.3	3072.0	3452.2	3732.5	4373.2
22°	1384.7	1859.9	2406.7	2866.9	3275.2	3341.4	3015.1	3046.6	3423.9	3756.8	4523.8



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CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
22.5°	1321.1	1797.1	2368.6	2843.9	3254.1	3318.2	2987.0	3024.4	3382.8	3770.4	4651.8
23°	1257.5	1731.3	2322.5	2822.2	3231.9	3293.0	2955.3	3001.6	3344.0	3788.2	4726.8
23.5°	1195.5	1659.7	2263.6	2803.6	3214.3	3271.3	2922.9	2987.7	3316.0	3822.9	4784.6
24°	1159.8	1578.3	2192.3	2780.5	3192.7	3246.1	2887.1	2974.8	3303.5	3890.8	4851.7
24.5°	1128.7	1500.2	2121.4	2751.1	3171.7	3224.8	2849.3	2966.7	3309.6	3979.0	4925.8
25°	1099.0	1426.3	2048.3	2714.8	3151.3	3206.3	2817.5	2963.4	3328.8	4087.2	5024.9
25.5°	1068.5	1377.2	1983.0	2669.2	3132.3	3185.2	2785.7	2967.7	3359.0	4211.6	5143.8
26°	1039.5	1328.2	1921.1	2620.3	3110.3	3167.4	2753.7	2982.3	3387.1	4301.7	5229.4
26.5°	1010.4	1279.1	1864.5	2564.0	3092.7	3149.7	2731.4	2995.1	3411.9	4373.5	5286.8
27°	981.6	1230.1	1816.5	2513.8	3072.0	3135.5	2709.8	3019.0	3438.8	4431.6	5315.2
27.5°	952.3	1181.5	1768.2	2457.1	3052.4	3117.7	2691.2	3042.6	3454.7	4465.3	5323.8
28°	921.7	1151.5	1721.0	2407.4	3029.8	3103.5	2677.4	3059.3	3466.9	4492.5	5332.5
28.5°	893.0	1124.2	1677.5	2368.4	3010.3	3087.2	2662.2	3078.9	3483.3	4532.4	5353.4
29°	864.4	1098.2	1630.3	2330.2	2985.9	3074.2	2651.6	3091.7	3503.2	4581.6	5369.6
29.5°	835.0	1070.9	1582.3	2296.4	2963.0	3058.3	2642.8	3092.1	3523.3	4641.2	5367.0
30°	806.7	1045.0	1538.8	2270.6	2940.6	3043.3	2632.4	3087.5	3560.0	4712.4	5343.2
30.5°	777.7	1019.6	1493.4	2243.4	2916.1	3027.1	2625.1	3073.5	3604.5	4763.0	5306.0
31°	749.2	993.1	1448.9	2216.0	2890.6	3013.0	2618.2	3054.2	3650.8	4784.9	5268.5
31.5°	722.2	966.7	1407.8	2191.4	2866.5	2998.8	2612.0	3030.3	3721.2	4793.5	5238.9
32°	696.4	940.7	1369.0	2163.1	2839.9	2984.6	2610.9	3002.0	3780.9	4785.6	5216.6
32.5°	669.8	913.9	1340.5	2130.3	2818.5	2971.2	2609.8	2978.5	3825.8	4779.0	5188.6
33°	644.9	887.8	1312.0	2102.4	2795.5	2960.2	2611.4	2963.7	3866.6	4780.5	5153.1
33.5°	621.2	862.4	1283.5	2069.2	2775.3	2948.7	2611.0	2955.4	3895.1	4783.3	5107.1
34°	597.6	836.6	1255.0	2039.3	2752.1	2938.5	2611.3	2951.4	3910.2	4782.0	5058.5
34.5°	575.8	810.4	1226.7	2012.7	2730.0	2930.4	2610.8	2954.1	3924.9	4772.6	5013.9
35°	555.1	785.5	1206.8	1986.6	2710.5	2921.5	2611.1	2961.5	3934.1	4750.8	4977.6
35.5°	533.8	759.3	1188.3	1962.4	2694.9	2913.0	2608.5	2965.8	3938.7	4717.8	4939.1
36°	515.2	735.8	1172.9	1943.5	2680.0	2903.8	2608.3	2970.4	3952.1	4680.7	4891.6
36.5°	496.8	712.9	1157.4	1923.2	2667.7	2897.4	2606.6	2976.6	3972.7	4645.2	4835.9
37°	477.7	690.0	1141.3	1906.0	2657.1	2891.8	2599.8	2976.4	3991.5	4612.0	4780.6
37.5°	460.4	669.4	1126.4	1891.6	2646.5	2885.1	2591.6	2977.5	4009.8	4581.3	4724.8
38°	443.9	651.3	1111.2	1874.0	2638.9	2879.9	2581.1	2980.3	4024.2	4548.3	4683.3
38.5°	427.3	632.8	1096.0	1859.8	2633.0	2875.9	2568.6	2983.0	4029.5	4517.3	4647.5
39°	412.1	615.2	1081.8	1846.8	2628.9	2871.2	2558.7	2986.0	4032.1	4482.4	4604.5
39.5°	396.6	599.0	1065.2	1829.9	2623.5	2865.8	2544.9	2993.4	4029.1	4443.8	4564.3
40°	381.6	583.2	1050.1	1817.4	2618.5	2862.4	2535.9	3000.5	4018.2	4412.6	4526.2
40.5°	367.0	568.5	1035.2	1804.1	2609.6	2853.2	2526.8	3008.4	4007.9	4386.2	4490.2
41°	353.0	555.1	1019.0	1788.6	2600.3	2844.9	2518.2	3018.5	3998.2	4354.7	4456.9
41.5°	339.8	541.6	1003.5	1773.8	2591.1	2835.8	2511.5	3025.5	3989.6	4324.7	4431.7
42°	327.8	529.8	989.2	1759.9	2578.7	2827.5	2504.6	3032.8	3986.0	4293.1	4410.3
42.5°	315.5	517.5	973.2	1743.0	2565.5	2820.8	2499.6	3043.8	3982.6	4260.9	4387.2
43°	303.8	506.0	958.2	1728.3	2552.6	2815.4	2496.4	3050.4	3972.0	4227.7	4359.0
43.5°	293.4	495.1	944.4	1714.3	2540.5	2812.4	2495.9	3056.8	3958.0	4196.9	4333.0
44°	282.9	484.5	929.3	1696.9	2529.0	2810.1	2498.3	3069.6	3937.8	4170.5	4308.5
44.5°	273.0	473.8	914.9	1682.6	2518.9	2806.7	2500.8	3078.2	3909.0	4147.3	4293.7



REPORT NUMBER: P973041

CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
45°	264.0	464.3	903.3	1669.4	2509.3	2805.4	2503.2	3087.0	3880.9	4123.7	4280.8
45.5°	255.3	454.7	891.7	1652.9	2500.7	2801.7	2505.6	3099.5	3857.7	4098.5	4268.4
46°	247.2	444.9	881.9	1639.8	2491.7	2798.9	2507.4	3107.0	3835.9	4069.2	4256.7
46.5°	239.9	435.9	873.6	1625.7	2481.2	2794.2	2506.7	3110.8	3818.1	4039.5	4248.2
47°	232.7	427.0	865.1	1611.3	2470.9	2788.9	2505.6	3118.7	3800.4	4010.5	4238.1
47.5°	226.1	417.7	858.6	1598.5	2460.9	2784.0	2503.6	3122.5	3780.0	3983.3	4228.4
48°	220.5	409.6	852.4	1584.2	2449.2	2777.5	2498.5	3124.7	3757.6	3956.3	4220.5
48.5°	214.4	401.2	845.8	1568.3	2439.4	2769.4	2492.0	3132.8	3734.0	3925.0	4211.8
49°	209.1	393.4	839.9	1553.7	2431.2	2762.5	2482.5	3138.1	3710.7	3893.3	4197.5
49.5°	204.0	386.0	834.6	1537.9	2420.7	2754.2	2473.3	3145.9	3691.4	3857.9	4184.2
50°	198.9	378.7	827.7	1520.7	2409.3	2745.9	2461.4	3156.1	3669.4	3821.3	4164.6
50.5°	194.0	371.6	822.4	1505.2	2399.2	2737.9	2447.3	3158.5	3646.0	3787.8	4142.0
51°	189.6	365.2	816.5	1486.9	2385.2	2729.3	2431.1	3160.1	3622.8	3750.5	4114.6
51.5°	185.0	358.4	809.0	1468.5	2371.7	2717.9	2412.1	3160.3	3593.2	3716.4	4083.4
52°	180.8	352.2	803.1	1453.2	2358.2	2702.5	2392.8	3153.5	3561.4	3686.6	4054.7
52.5°	176.7	345.9	795.3	1436.3	2344.1	2687.1	2370.7	3145.2	3526.8	3649.5	4023.0
53°	172.6	339.2	785.9	1420.8	2327.5	2668.0	2346.0	3133.8	3489.0	3612.9	3990.7
53.5°	168.7	332.7	777.9	1406.8	2311.6	2647.2	2320.5	3114.6	3449.8	3575.3	3968.9
54°	164.8	326.5	768.0	1391.9	2293.1	2622.1	2293.0	3091.8	3407.3	3536.3	3941.1
54.5°	160.7	319.9	758.9	1375.0	2273.1	2593.5	2263.3	3067.4	3365.4	3498.0	3906.5
55°	157.0	313.9	749.4	1360.7	2250.3	2559.3	2234.2	3041.1	3324.0	3462.1	3878.8
55.5°	153.2	307.7	739.0	1346.7	2227.0	2523.3	2200.8	3010.0	3281.4	3425.2	3841.8
56°	149.2	301.3	728.0	1332.6	2199.8	2483.6	2165.7	2975.7	3232.6	3385.0	3805.2
56.5°	145.6	295.6	718.7	1320.6	2173.3	2443.5	2129.5	2939.0	3187.5	3346.0	3770.8
57°	142.1	289.9	707.9	1309.1	2144.1	2397.5	2093.9	2896.6	3141.8	3307.7	3725.6
57.5°	138.5	284.2	697.0	1297.8	2115.2	2353.4	2056.3	2850.8	3098.3	3270.8	3684.6
58°	135.0	278.8	686.6	1287.1	2087.1	2308.1	2018.3	2799.2	3053.3	3226.7	3643.0
58.5°	131.4	273.5	675.8	1276.4	2058.9	2266.0	1983.6	2751.0	3006.8	3185.2	3595.7
59°	127.9	267.4	664.1	1265.7	2031.7	2224.0	1945.3	2699.1	2957.5	3139.6	3535.7
59.5°	124.2	261.3	652.2	1255.0	2002.4	2181.3	1909.1	2647.7	2909.3	3097.5	3476.6
60°	120.6	254.7	639.8	1244.3	1972.5	2138.1	1874.3	2596.9	2861.8	3058.1	3417.8
60.5°	117.0	247.8	626.4	1231.3	1943.3	2096.5	1838.8	2548.0	2815.0	3021.4	3351.4
61°	113.4	241.7	613.8	1217.9	1912.5	2052.6	1802.7	2494.8	2768.8	2984.2	3280.3
61.5°	109.9	235.7	599.6	1202.1	1882.5	2010.6	1768.0	2445.4	2719.9	2940.2	3216.0
62°	106.3	229.9	584.4	1184.6	1853.6	1968.8	1736.3	2393.3	2666.8	2890.0	3149.2
62.5°	103.0	224.3	570.1	1165.2	1823.5	1928.5	1703.0	2348.1	2614.3	2837.5	3081.2
63°	99.4	218.2	553.5	1142.8	1793.1	1891.6	1671.4	2298.8	2561.4	2780.1	3014.5
63.5°	96.1	212.0	538.0	1118.5	1762.5	1856.4	1639.4	2248.7	2509.3	2712.7	2942.3
64°	92.9	206.1	522.4	1095.9	1732.4	1819.3	1608.7	2201.2	2455.8	2643.9	2872.9
64.5°	89.7	199.6	506.2	1072.7	1699.4	1780.4	1576.9	2157.0	2403.5	2579.0	2809.3
65°	86.5	192.8	488.8	1050.9	1667.1	1741.9	1543.4	2110.0	2349.9	2511.9	2743.4
65.5°	83.4	186.3	473.5	1028.8	1631.0	1705.2	1510.7	2064.7	2296.2	2441.8	2678.0
66°	80.1	179.9	456.8	1003.5	1596.3	1665.3	1478.1	2020.7	2242.8	2377.8	2613.6
66.5°	76.9	173.2	440.8	978.5	1561.5	1624.3	1442.3	1975.6	2187.2	2314.0	2547.2
67°	73.4	167.2	424.9	954.0	1525.8	1585.1	1407.2	1927.4	2132.9	2248.2	2485.3



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**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
67.5°	69.5	161.8	410.1	927.6	1488.6	1549.7	1373.2	1880.6	2076.0	2185.6	2427.3
68°	63.7	156.0	395.1	899.5	1451.3	1514.4	1339.0	1834.0	2016.6	2121.9	2365.5
68.5°	57.1	150.4	381.1	872.0	1412.6	1476.5	1304.7	1790.9	1959.6	2065.2	2303.1
69°	49.6	145.1	367.7	843.4	1375.0	1436.1	1270.5	1742.9	1899.6	2008.7	2237.6
69.5°	45.0	139.7	354.6	815.4	1336.1	1397.6	1236.2	1698.4	1838.7	1950.8	2169.0
70°	43.7	134.3	341.9	788.3	1297.2	1356.0	1202.0	1654.8	1780.3	1896.7	2101.3
70.5°	42.7	128.9	329.6	757.9	1258.3	1314.4	1167.0	1609.1	1722.2	1842.0	2033.2
71°	41.7	123.5	317.6	731.4	1219.4	1272.7	1132.6	1561.7	1663.0	1784.1	1964.4
71.5°	40.9	116.7	306.5	707.4	1180.4	1231.1	1096.3	1516.4	1604.5	1724.7	1896.9
72°	39.9	109.0	295.2	684.9	1139.3	1189.4	1060.5	1470.7	1550.6	1671.7	1835.3
72.5°	39.1	103.4	283.8	662.3	1098.6	1145.6	1022.7	1422.2	1496.3	1613.7	1770.4
73°	38.3	99.5	271.4	639.7	1057.4	1105.1	988.0	1369.6	1443.3	1552.8	1704.3
73.5°	37.5	95.4	259.6	617.8	1015.5	1064.6	955.1	1317.0	1394.9	1498.2	1644.3
74°	36.7	91.2	248.7	597.4	975.4	1021.5	920.6	1264.5	1346.0	1438.3	1580.2
74.5°	35.9	87.6	239.5	577.9	935.4	978.7	884.8	1211.9	1297.1	1382.4	1519.6
75°	35.1	84.1	229.8	559.5	896.5	938.2	850.5	1159.3	1248.2	1326.6	1458.0
75.5°	34.4	80.7	220.1	542.7	860.1	897.5	815.1	1102.6	1199.3	1270.7	1395.9
76°	33.7	77.6	211.1	527.6	824.7	857.6	780.4	1046.7	1150.1	1214.9	1333.8
76.5°	32.9	74.8	201.8	510.5	792.8	819.8	746.8	997.3	1100.6	1159.1	1271.8
77°	32.1	72.0	193.3	493.5	759.5	781.7	711.7	947.2	1048.6	1105.5	1209.7
77.5°	31.3	69.3	186.3	476.9	728.2	740.8	677.1	896.4	996.4	1053.6	1147.6
78°	30.5	66.5	178.9	457.9	692.9	699.3	643.1	849.4	948.1	1003.8	1091.0
78.5°	29.7	63.9	172.9	440.0	655.7	658.4	606.4	803.3	898.2	951.2	1030.8
79°	28.8	61.3	166.4	421.4	616.6	619.2	569.4	757.6	850.6	901.5	972.6
79.5°	27.9	58.8	159.4	402.9	576.8	581.0	533.5	715.5	807.0	855.4	914.6
80°	27.0	56.4	151.2	383.6	537.1	542.7	497.8	673.6	762.7	805.9	858.3
80.5°	26.2	54.1	142.9	364.4	500.7	505.6	463.5	632.0	718.3	757.6	802.0
81°	25.3	51.8	134.6	344.7	466.5	469.2	433.4	592.9	677.3	712.6	751.9
81.5°	24.5	49.6	126.3	324.8	434.7	432.7	402.0	555.1	635.8	665.2	698.8
82°	23.6	47.4	118.1	305.0	402.3	395.7	369.8	516.4	596.2	620.5	646.9
82.5°	22.8	45.2	109.6	283.3	372.7	361.5	337.9	480.0	556.4	577.5	600.0
83°	22.0	43.0	101.1	262.4	343.3	328.4	309.6	444.7	517.7	536.4	554.2
83.5°	21.3	40.8	92.8	242.5	313.9	296.0	283.7	411.3	479.1	495.1	511.8
84°	20.5	38.6	85.0	222.2	285.1	265.2	259.4	378.8	443.0	459.7	474.5
84.5°	19.8	36.7	78.3	202.3	257.0	235.1	235.0	347.0	406.0	423.2	436.6
85°	19.1	34.8	72.0	183.7	230.6	206.8	213.9	317.6	373.1	391.2	403.0
85.5°	18.4	33.0	66.0	168.2	205.2	185.1	193.0	289.1	342.7	361.4	372.3
86°	17.8	31.3	60.9	152.8	185.9	163.5	174.5	261.9	313.6	333.5	343.5
86.5°	17.2	29.8	56.3	137.3	166.7	141.8	159.9	237.8	287.5	308.3	316.4
87°	16.6	28.3	52.2	121.9	147.4	120.2	145.3	217.5	265.7	286.6	293.5
87.5°	16.0	27.0	48.7	106.5	128.1	98.7	130.7	197.4	244.7	265.6	271.1
88°	15.4	25.7	45.6	96.1	108.9	84.6	116.5	180.9	226.2	246.6	251.0
88.5°	14.9	24.5	42.9	86.6	95.8	72.2	106.4	166.9	210.4	229.6	233.2
89°	14.3	23.5	40.6	78.5	85.0	62.5	97.3	157.8	196.4	214.8	216.7
89.5°	13.9	22.5	38.5	71.6	75.9	54.5	90.2	148.7	184.2	200.8	202.2



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**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
90°	13.4	21.6	36.8	65.9	68.7	48.6	84.8	139.5	172.8	189.1	190.1
90.5°	13.0	20.7	35.3	61.3	63.3	44.2	80.5	130.4	162.4	178.2	179.0
91°	12.6	20.0	34.1	57.5	59.5	40.9	77.1	121.2	154.1	167.9	169.0
91.5°	12.1	19.4	33.1	54.3	56.7	38.6	74.6	116.3	148.8	158.4	159.4
92°	11.7	18.9	32.3	51.7	54.9	37.2	72.6	112.3	143.6	151.1	150.6
92.5°	11.4	18.4	31.8	49.7	53.6	36.3	71.0	108.9	138.4	145.8	145.3
93°	11.2	18.0	31.4	48.3	52.9	35.9	69.7	106.1	133.2	140.6	140.1
93.5°	10.9	17.6	31.1	47.4	52.4	35.8	68.5	103.6	128.0	135.3	134.9
94°	10.7	17.2	30.9	46.8	52.2	35.8	67.5	101.4	124.6	130.1	129.8
94.5°	10.5	16.9	30.8	46.4	52.2	36.1	66.8	99.4	121.5	126.3	126.4
95°	10.3	16.5	30.6	46.2	52.3	36.4	66.3	97.5	118.7	123.0	123.6
95.5°	10.1	16.2	30.5	46.0	52.4	36.9	66.0	95.9	116.0	120.0	121.1
96°	10.0	16.0	30.3	45.8	52.3	37.5	65.9	94.4	113.7	117.3	119.0
96.5°	9.8	15.8	30.1	45.6	52.2	38.1	66.1	93.0	111.4	114.9	117.1
97°	9.7	15.5	29.9	45.2	51.9	38.7	66.2	92.0	109.4	112.7	115.5
97.5°	9.5	15.3	29.5	44.8	51.6	39.4	66.5	91.2	107.6	110.9	114.1
98°	9.3	15.1	29.1	44.3	51.3	40.1	66.7	90.5	106.0	109.2	112.8
98.5°	9.2	14.8	28.5	43.7	50.9	40.9	67.1	90.0	104.5	107.7	111.7
99°	9.0	14.6	27.8	43.1	50.5	41.6	67.5	89.6	103.3	106.4	110.7
99.5°	8.9	14.4	27.1	42.4	50.3	42.4	68.0	89.3	102.2	105.2	109.9
100°	8.7	14.1	26.4	41.8	50.1	43.2	68.5	89.2	101.4	104.0	109.2
100.5°	8.6	13.9	25.8	41.2	50.0	44.0	69.1	89.1	100.8	103.2	108.1
101°	8.4	13.7	25.1	40.6	50.0	44.8	69.6	89.1	100.3	102.7	107.2
101.5°	8.2	13.5	24.5	40.0	50.0	45.7	70.1	89.0	99.9	102.5	107.0
102°	7.9	13.3	24.0	39.5	50.2	46.5	70.7	89.0	99.4	102.3	107.3
102.5°	7.7	13.2	23.5	39.1	50.5	47.3	71.4	89.0	99.0	102.0	107.1
103°	7.5	13.0	23.1	38.7	50.8	48.1	72.1	89.1	98.6	101.8	106.9
103.5°	7.3	12.9	22.7	38.3	51.2	48.9	72.9	89.2	98.2	101.6	106.8
104°	7.2	12.7	22.4	38.0	51.7	49.8	73.6	89.3	97.9	101.4	106.6
104.5°	7.1	12.6	22.2	37.8	52.2	50.6	74.3	89.4	97.5	101.3	106.5
105°	7.0	12.5	22.0	37.6	52.7	51.5	75.0	89.5	97.1	101.2	106.5
105.5°	6.9	12.4	21.9	37.4	53.3	52.3	75.7	89.6	96.8	101.0	106.5
106°	6.8	12.3	21.8	37.3	53.8	53.1	76.4	89.7	96.4	100.9	106.4
106.5°	6.8	12.2	21.7	37.3	54.4	53.9	77.1	89.7	96.1	100.7	106.4
107°	6.7	12.1	21.6	37.3	55.0	54.7	77.7	89.8	95.7	100.5	106.2
107.5°	6.6	12.0	21.6	37.2	55.5	55.4	78.3	89.9	95.4	100.2	106.0
108°	6.5	11.9	21.6	37.2	56.0	56.1	78.9	90.1	95.1	99.8	105.7
108.5°	6.5	11.8	21.6	37.3	56.4	56.8	79.5	90.5	94.9	99.5	105.2
109°	6.4	11.7	21.6	37.3	56.8	57.4	80.1	90.9	94.7	99.2	104.9
109.5°	6.3	11.6	21.6	37.3	57.1	58.0	80.6	91.3	94.7	99.0	104.5
110°	6.2	11.5	21.6	37.4	57.5	58.6	81.3	91.7	94.6	98.9	104.1
110.5°	6.1	11.5	21.6	37.4	58.0	59.1	81.8	92.1	94.5	98.8	103.8
111°	6.0	11.4	21.6	37.5	58.4	59.7	82.5	92.6	94.5	98.7	103.6
111.5°	6.0	11.4	21.6	37.5	58.8	60.4	83.1	92.9	94.5	98.6	103.3
112°	6.0	11.4	21.6	37.6	59.3	61.0	83.7	93.3	94.4	98.6	103.0



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**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
112.5°	6.0	11.3	21.7	37.6	59.7	61.6	84.2	93.6	94.4	98.6	102.7
113°	5.9	11.3	21.6	37.6	60.1	62.1	84.7	94.0	94.4	98.5	102.5
113.5°	5.9	11.3	21.6	37.5	60.5	62.6	85.2	94.3	94.4	98.4	102.4
114°	5.9	11.2	21.6	37.5	60.8	63.1	85.6	94.6	94.4	98.4	102.4
114.5°	5.9	11.2	21.6	37.5	61.1	63.5	86.0	94.9	94.3	98.2	102.3
115°	6.0	11.2	21.5	37.4	61.4	64.0	86.4	95.2	94.3	98.1	102.3
115.5°	6.0	11.2	21.4	37.4	61.7	64.4	86.8	95.5	94.3	98.0	102.2
116°	6.0	11.2	21.4	37.4	61.9	64.6	87.0	95.7	94.2	98.0	102.1
116.5°	6.0	11.2	21.3	37.4	62.1	64.8	87.3	95.8	94.1	97.9	102.0
117°	6.1	11.2	21.3	37.3	62.4	65.0	87.5	95.9	94.1	97.8	101.9
117.5°	6.1	11.2	21.2	37.3	62.7	65.1	87.6	96.0	94.1	97.8	101.7
118°	6.2	11.2	21.1	37.3	62.9	65.3	87.7	96.1	94.1	97.7	101.6
118.5°	6.2	11.3	21.1	37.3	63.1	65.4	87.7	96.2	94.1	97.7	101.5
119°	6.3	11.3	21.0	37.2	63.1	65.4	87.6	96.3	94.0	97.6	101.3
119.5°	6.3	11.4	21.0	37.2	63.1	65.3	87.4	96.3	94.0	97.6	101.3
120°	6.4	11.4	21.0	37.2	63.1	65.2	87.2	96.3	94.0	97.6	101.2
120.5°	6.5	11.5	21.0	37.2	63.1	65.0	87.0	96.4	94.0	97.7	101.1
121°	6.6	11.5	21.0	37.2	63.0	64.8	86.8	96.3	94.0	97.7	101.0
121.5°	6.7	11.6	20.9	37.2	63.0	64.5	86.4	96.3	94.0	97.8	101.0
122°	6.7	11.6	20.9	37.1	62.9	64.1	86.0	96.3	94.1	97.8	101.0
122.5°	6.8	11.7	21.0	37.1	62.8	63.7	85.6	96.3	94.1	97.9	101.0
123°	6.9	11.7	21.0	37.1	62.7	63.2	85.2	96.3	94.2	98.0	101.0
123.5°	7.0	11.8	21.0	37.1	62.6	62.8	84.7	96.3	94.3	98.1	101.0
124°	7.1	11.8	21.1	37.1	62.5	62.4	84.2	96.4	94.4	98.2	101.0
124.5°	7.2	11.9	21.1	37.2	62.4	62.0	83.7	96.5	94.5	98.3	101.0
125°	7.3	12.0	21.2	37.2	62.3	61.6	83.3	96.6	94.7	98.5	101.0
125.5°	7.3	12.0	21.3	37.3	62.2	61.3	82.8	96.8	94.9	98.6	101.0
126°	7.4	12.1	21.3	37.4	62.2	61.0	82.4	96.9	95.1	98.8	101.0
126.5°	7.5	12.2	21.4	37.5	62.2	60.7	82.0	97.1	95.4	98.9	101.0
127°	7.6	12.3	21.5	37.6	62.2	60.4	81.6	97.3	95.6	99.0	101.0
127.5°	7.6	12.3	21.6	37.8	62.2	60.3	81.3	97.5	95.9	99.2	101.0
128°	7.7	12.4	21.6	37.9	62.3	60.1	81.0	97.7	96.2	99.3	101.1
128.5°	7.8	12.5	21.7	38.1	62.4	60.0	80.7	97.9	96.4	99.5	101.1
129°	7.8	12.5	21.8	38.3	62.4	59.9	80.4	98.0	96.7	99.6	101.1
129.5°	7.9	12.6	21.9	38.5	62.5	59.8	80.1	98.2	97.0	99.7	101.0
130°	7.9	12.7	21.9	38.7	62.5	59.7	79.9	98.4	97.3	99.7	101.0
130.5°	8.0	12.7	22.0	38.9	62.6	59.6	79.6	98.5	97.6	99.7	100.9
131°	8.0	12.8	22.1	39.1	62.6	59.6	79.4	98.5	97.8	99.7	100.8
131.5°	8.1	12.9	22.2	39.3	62.7	59.5	79.0	98.5	98.1	99.6	100.6
132°	8.1	12.9	22.3	39.5	62.7	59.4	78.7	98.4	98.3	99.5	100.5
132.5°	8.1	13.0	22.4	39.8	62.7	59.3	78.4	98.3	98.4	99.4	100.1
133°	8.2	13.1	22.5	40.0	62.7	59.2	78.1	98.2	98.6	99.2	99.8
133.5°	8.2	13.2	22.6	40.2	62.6	59.0	77.7	97.9	98.7	99.1	99.4
134°	8.3	13.2	22.6	40.4	62.5	58.8	77.2	97.6	98.7	98.8	99.0
134.5°	8.3	13.3	22.7	40.6	62.3	58.6	76.7	97.2	98.6	98.6	98.5



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**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
135°	8.3	13.4	22.8	40.7	62.1	58.4	76.2	96.8	98.5	98.3	98.0
135.5°	8.4	13.4	22.9	40.9	61.9	58.2	75.6	96.3	98.4	97.9	97.4
136°	8.4	13.5	23.0	41.0	61.6	57.9	75.1	95.7	98.1	97.5	96.7
136.5°	8.4	13.5	23.1	41.2	61.3	57.5	74.4	95.1	97.8	97.0	96.0
137°	8.4	13.6	23.2	41.3	60.9	57.1	73.7	94.4	97.4	96.5	95.2
137.5°	8.5	13.6	23.2	41.3	60.4	56.8	73.0	93.6	96.9	95.9	94.4
138°	8.5	13.7	23.3	41.4	59.9	56.4	72.3	92.8	96.3	95.3	93.6
138.5°	8.5	13.7	23.3	41.4	59.4	55.9	71.5	91.8	95.6	94.7	92.9
139°	8.5	13.7	23.3	41.4	58.8	55.4	70.6	90.9	94.8	93.9	92.0
139.5°	8.5	13.7	23.3	41.3	58.2	54.9	69.8	89.8	94.1	93.1	91.3
140°	8.5	13.7	23.3	41.2	57.5	54.4	68.9	88.7	93.1	92.3	90.5
140.5°	8.5	13.7	23.3	41.1	56.7	53.7	67.9	87.5	92.1	91.3	89.8
141°	8.5	13.7	23.2	41.0	55.9	53.1	66.9	86.2	91.1	90.3	89.0
141.5°	8.5	13.7	23.1	40.7	55.1	52.4	65.9	85.0	89.9	89.2	88.2
142°	8.5	13.6	23.1	40.5	54.2	51.7	64.8	83.6	88.7	88.1	87.5
142.5°	8.4	13.6	23.0	40.2	53.3	50.9	63.6	82.2	87.4	86.8	86.7
143°	8.4	13.5	22.8	39.9	52.4	50.1	62.4	80.7	86.0	85.6	86.0
143.5°	8.4	13.5	22.7	39.5	51.3	49.3	61.1	79.1	84.6	84.3	85.2
144°	8.3	13.4	22.6	39.1	50.3	48.4	59.8	77.5	83.1	83.0	84.4
144.5°	8.3	13.3	22.4	38.6	49.2	47.5	58.5	75.8	81.5	81.6	83.4
145°	8.2	13.2	22.2	38.1	48.1	46.6	57.2	74.1	79.9	80.3	82.5
145.5°	8.2	13.1	22.0	37.6	47.0	45.6	55.8	72.4	78.3	79.0	81.6
146°	8.1	13.0	21.8	37.0	45.9	44.6	54.4	70.6	76.6	77.6	80.5
146.5°	8.0	12.8	21.6	36.3	44.7	43.6	53.0	68.7	74.9	76.3	79.4
147°	7.9	12.7	21.4	35.7	43.5	42.6	51.5	66.9	73.1	74.9	78.2
147.5°	7.8	12.5	21.1	34.9	42.3	41.5	50.0	65.0	71.3	73.6	77.0
148°	7.7	12.4	20.8	34.2	41.1	40.4	48.5	63.1	69.6	72.3	75.7
148.5°	7.6	12.2	20.6	33.4	39.8	39.3	47.1	61.1	67.9	70.9	74.4
149°	7.5	12.0	20.2	32.6	38.6	38.2	45.6	59.1	66.1	69.6	73.1
149.5°	7.3	11.9	19.9	31.7	37.4	37.1	44.0	57.1	64.4	68.1	71.7
150°	7.2	11.7	19.6	30.9	36.2	36.0	42.4	55.1	62.5	66.7	70.3
150.5°	7.1	11.5	19.2	29.9	34.9	34.9	40.9	53.1	60.6	65.2	68.9
151°	6.9	11.3	18.8	29.0	33.7	33.7	39.3	51.1	58.6	63.7	67.5
151.5°	6.8	11.0	18.4	28.1	32.5	32.6	37.8	49.2	56.8	62.1	66.1
152°	6.6	10.8	18.0	27.2	31.3	31.5	36.3	47.3	54.8	60.6	64.6
152.5°	6.5	10.5	17.6	26.3	30.1	30.4	34.9	45.3	52.9	59.0	63.1
153°	6.3	10.3	17.2	25.3	28.9	29.3	33.4	43.4	50.9	57.4	61.6
153.5°	6.1	10.0	16.7	24.4	27.7	28.2	32.0	41.5	48.9	55.8	60.0
154°	6.0	9.7	16.2	23.5	26.6	27.1	30.6	39.6	46.9	54.2	58.3
154.5°	5.8	9.4	15.8	22.5	25.4	26.0	29.2	37.8	44.9	52.5	56.7
155°	5.6	9.1	15.2	21.5	24.3	25.0	27.9	36.0	42.8	50.8	55.1
155.5°	5.4	8.8	14.7	20.6	23.3	23.9	26.5	34.2	40.8	48.9	53.4
156°	5.2	8.5	14.1	19.7	22.2	22.9	25.2	32.4	38.8	46.6	51.8
156.5°	5.0	8.1	13.5	18.8	21.2	21.9	24.0	30.7	36.7	44.4	50.2
157°	4.9	7.8	12.9	17.9	20.1	20.9	22.8	29.1	34.7	42.1	48.6



REPORT NUMBER: P973041  
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**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
157.5°	4.8	7.4	12.2	17.0	19.2	20.0	21.6	27.4	32.6	39.9	47.0
158°	4.7	7.1	11.6	16.1	18.2	19.1	20.4	25.8	30.6	37.7	45.4
158.5°	4.7	6.7	11.1	15.3	17.3	18.1	19.3	24.3	28.6	35.4	43.7
159°	4.6	6.4	10.5	14.5	16.4	17.2	18.2	22.8	26.6	33.1	41.3
159.5°	4.6	6.0	9.9	13.7	15.5	16.3	17.2	21.4	24.9	30.9	38.8
160°	4.6	5.7	9.3	12.9	14.6	15.5	16.1	19.9	23.4	28.8	36.2
160.5°	4.6	5.4	8.8	12.1	13.8	14.7	15.2	18.6	21.9	26.6	33.8
161°	4.5	5.2	8.2	11.3	13.0	13.9	14.3	17.3	20.4	24.6	31.3
161.5°	4.5	5.1	7.7	10.6	12.1	13.0	13.5	16.1	19.0	22.4	28.7
162°	4.5	4.9	7.1	9.9	11.3	12.2	12.6	15.1	17.6	20.3	26.3
162.5°	4.5	4.8	6.6	9.2	10.6	11.4	11.8	14.0	16.4	18.2	24.0
163°	4.4	4.7	6.2	8.5	9.9	10.7	10.9	12.9	15.2	16.2	21.7
163.5°	4.4	4.6	5.8	7.9	9.3	10.0	10.2	11.9	14.1	15.1	19.6
164°	4.4	4.4	5.5	7.3	8.6	9.3	9.5	10.8	12.9	14.0	17.7
164.5°	4.4	4.3	5.2	6.8	8.0	8.7	8.9	10.0	11.8	12.9	15.8
165°	4.3	4.3	4.9	6.3	7.5	8.1	8.3	9.2	10.7	11.8	13.9
165.5°	4.3	4.3	4.7	5.8	6.9	7.6	7.7	8.4	9.8	10.7	12.0
166°	4.4	4.3	4.5	5.5	6.4	7.1	7.2	7.8	9.0	9.8	10.1
166.5°	4.4	4.3	4.3	5.1	6.0	6.6	6.8	7.1	8.2	9.0	9.4
167°	4.4	4.3	4.3	4.8	5.6	6.2	6.3	6.6	7.5	8.3	8.8
167.5°	4.4	4.3	4.3	4.6	5.2	5.7	5.9	6.0	6.9	7.6	8.3
168°	4.4	4.3	4.3	4.4	4.9	5.3	5.5	5.6	6.3	7.0	7.9
168.5°	4.4	4.3	4.3	4.3	4.6	5.0	5.1	5.1	5.8	6.6	7.4
169°	4.4	4.3	4.3	4.3	4.4	4.6	4.8	4.7	5.4	6.3	7.0
169.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.4	4.4	5.1	6.0	6.7
170°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	5.0	5.8	6.4
170.5°	4.3	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.9	5.6	6.1
171°	4.3	4.2	4.2	4.3	4.3	4.3	4.3	4.4	4.8	5.4	5.8
171.5°	4.2	4.2	4.2	4.3	4.3	4.3	4.4	4.4	4.7	5.2	5.6
172°	4.2	4.2	4.2	4.2	4.3	4.3	4.4	4.4	4.6	5.1	5.4
172.5°	4.2	4.2	4.2	4.2	4.3	4.3	4.4	4.4	4.6	5.0	5.3
173°	4.2	4.1	4.2	4.2	4.3	4.3	4.4	4.4	4.5	4.9	5.1
173.5°	4.1	4.1	4.1	4.2	4.2	4.3	4.4	4.5	4.5	4.8	5.0
174°	4.1	4.1	4.1	4.2	4.2	4.3	4.4	4.5	4.5	4.7	4.9
174.5°	4.1	4.1	4.1	4.2	4.2	4.3	4.4	4.5	4.5	4.7	4.8
175°	4.1	4.1	4.1	4.2	4.2	4.3	4.4	4.5	4.6	4.7	4.8
175.5°	4.1	4.0	4.1	4.2	4.2	4.3	4.4	4.5	4.6	4.6	4.8
176°	4.0	4.0	4.1	4.1	4.2	4.3	4.4	4.5	4.6	4.6	4.7
176.5°	4.0	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.6	4.7
177°	3.9	3.9	4.0	4.1	4.1	4.3	4.4	4.5	4.6	4.6	4.7
177.5°	3.9	3.9	3.9	4.0	4.1	4.2	4.3	4.5	4.6	4.6	4.7
178°	3.9	3.9	3.9	4.0	4.1	4.2	4.3	4.4	4.6	4.6	4.7
178.5°	3.8	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.6	4.7	4.7
179°	3.8	3.8	3.9	3.9	4.1	4.2	4.3	4.4	4.6	4.7	4.8
179.5°	3.8	3.8	3.8	3.9	4.1	4.2	4.3	4.5	4.6	4.7	4.8





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**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
180°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0



REPORT NUMBER: P973041  
 CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
0°	3835.1	3835.1	3835.1	3835.1
0.5°	3898.6	3906.3	3907.4	3895.2
1°	3933.8	3933.6	3929.3	3856.7
1.5°	3883.1	3855.5	3837.4	3718.9
2°	3764.2	3712.8	3683.2	3545.4
2.5°	3604.2	3553.0	3525.6	3444.0
3°	3498.2	3472.5	3467.4	3441.4
3.5°	3464.4	3470.7	3483.7	3467.3
4°	3483.3	3499.4	3496.0	3431.2
4.5°	3495.2	3467.8	3423.2	3293.6
5°	3441.4	3349.2	3271.0	3134.6
5.5°	3314.2	3189.2	3134.8	3079.5
6°	3175.6	3115.9	3122.9	3158.6
6.5°	3118.3	3159.5	3232.9	3308.9
7°	3154.7	3287.6	3378.2	3417.3
7.5°	3270.5	3414.0	3455.7	3403.3
8°	3390.7	3450.8	3418.1	3300.9
8.5°	3456.4	3389.1	3319.3	3243.4
9°	3423.0	3307.3	3288.1	3309.1
9.5°	3347.6	3296.4	3375.3	3493.8
10°	3293.9	3394.1	3568.0	3693.0
10.5°	3325.5	3571.5	3751.9	3782.6
11°	3437.5	3743.7	3816.6	3740.9
11.5°	3610.7	3813.1	3770.4	3647.1
12°	3745.5	3770.9	3680.9	3627.9
12.5°	3793.0	3689.0	3668.5	3720.4
13°	3761.0	3659.0	3756.8	3849.0
13.5°	3684.4	3721.9	3879.5	3914.0
14°	3642.3	3827.0	3945.1	3923.5
14.5°	3683.6	3910.5	3962.8	3931.8
15°	3769.7	3952.2	3981.4	3985.3
15.5°	3852.2	3969.3	4043.3	4128.7
16°	3904.2	4005.5	4171.4	4323.5
16.5°	3933.4	4095.6	4363.5	4534.7
17°	3956.0	4247.0	4569.9	4716.7
17.5°	4000.2	4446.6	4769.6	4856.2
18°	4095.6	4644.3	4917.8	4964.1
18.5°	4242.3	4811.2	5025.4	5073.7
19°	4421.3	4937.7	5131.1	5213.2
19.5°	4605.2	5036.5	5267.6	5389.6
20°	4746.8	5132.9	5437.1	5572.0
20.5°	4860.8	5267.9	5605.8	5723.6
21°	4947.0	5428.4	5746.4	5839.6
21.5°	5033.3	5580.9	5859.4	5927.4
22°	5146.0	5694.4	5943.9	5993.0



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**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
22.5°	5279.5	5776.2	6008.2	6025.3
23°	5410.1	5847.0	6044.7	6037.3
23.5°	5518.9	5900.3	6049.0	6030.6
24°	5591.8	5938.1	6034.1	6010.0
24.5°	5629.6	5936.0	6011.2	5989.8
25°	5668.3	5916.5	5997.4	5959.2
25.5°	5712.5	5887.1	5986.4	5927.0
26°	5727.6	5871.5	5962.2	5890.0
26.5°	5726.3	5866.9	5924.6	5865.2
27°	5707.7	5849.9	5880.7	5846.2
27.5°	5672.9	5810.2	5860.2	5803.6
28°	5650.7	5751.4	5837.4	5752.6
28.5°	5635.2	5708.5	5802.8	5693.8
29°	5614.7	5696.1	5748.1	5638.4
29.5°	5585.4	5681.8	5680.9	5581.3
30°	5538.6	5634.2	5619.2	5536.6
30.5°	5486.2	5555.4	5571.5	5489.5
31°	5450.9	5491.3	5536.9	5438.5
31.5°	5424.0	5448.3	5498.9	5382.9
32°	5393.7	5421.9	5437.8	5322.8
32.5°	5338.1	5384.8	5360.2	5275.6
33°	5266.0	5327.0	5294.5	5221.9
33.5°	5211.4	5256.3	5239.8	5146.3
34°	5170.5	5192.5	5183.4	5055.6
34.5°	5129.2	5138.8	5106.1	4982.2
35°	5074.5	5097.6	5036.5	4933.0
35.5°	5007.6	5052.0	4979.5	4903.2
36°	4945.2	4997.7	4939.7	4888.0
36.5°	4894.8	4940.2	4922.3	4891.6
37°	4851.6	4897.5	4915.5	4910.0
37.5°	4817.9	4866.0	4924.7	4931.5
38°	4781.7	4853.8	4942.5	4964.1
38.5°	4743.0	4853.1	4971.9	4997.2
39°	4701.2	4857.4	5007.9	5036.4
39.5°	4663.5	4876.6	5048.7	5074.6
40°	4639.8	4902.8	5092.9	5112.8
40.5°	4624.6	4936.1	5139.3	5149.3
41°	4619.0	4971.7	5181.6	5180.5
41.5°	4618.1	5006.5	5210.0	5211.0
42°	4629.9	5034.0	5235.1	5228.3
42.5°	4643.8	5059.1	5261.3	5257.8
43°	4651.6	5077.9	5293.3	5290.0
43.5°	4664.4	5093.6	5318.2	5314.4
44°	4678.0	5113.6	5334.6	5331.8
44.5°	4688.5	5126.1	5358.8	5327.8



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 CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
45°	4700.2	5135.8	5364.4	5320.3
45.5°	4710.7	5145.7	5354.0	5288.4
46°	4718.8	5148.3	5335.1	5255.6
46.5°	4720.6	5145.7	5291.8	5197.8
47°	4723.9	5127.1	5248.8	5148.6
47.5°	4720.6	5104.7	5200.6	5093.3
48°	4712.2	5061.2	5153.5	5056.4
48.5°	4703.7	5018.0	5109.5	5011.2
49°	4687.0	4970.6	5053.1	4951.8
49.5°	4668.1	4930.3	4994.4	4883.1
50°	4641.2	4879.6	4922.6	4815.1
50.5°	4618.0	4833.3	4854.6	4761.4
51°	4574.8	4780.1	4788.3	4715.8
51.5°	4531.9	4715.7	4734.6	4676.4
52°	4483.8	4652.6	4681.9	4636.0
52.5°	4439.6	4595.4	4638.5	4599.7
53°	4397.0	4544.2	4592.9	4549.7
53.5°	4351.5	4496.7	4538.9	4499.5
54°	4305.3	4444.2	4490.3	4454.2
54.5°	4251.6	4400.6	4441.0	4403.3
55°	4198.7	4352.4	4388.7	4338.2
55.5°	4149.8	4305.1	4316.5	4259.1
56°	4107.7	4242.7	4235.9	4176.9
56.5°	4061.5	4174.8	4148.9	4084.9
57°	4003.3	4097.3	4069.2	4011.2
57.5°	3938.0	4028.7	3993.4	3943.6
58°	3874.0	3945.4	3919.5	3870.3
58.5°	3812.8	3872.0	3845.7	3799.7
59°	3745.6	3795.7	3769.6	3719.4
59.5°	3669.7	3715.4	3686.5	3628.2
60°	3593.4	3632.3	3597.5	3522.1
60.5°	3516.6	3553.3	3504.0	3419.6
61°	3439.6	3462.2	3402.1	3318.1
61.5°	3366.1	3373.8	3306.2	3223.3
62°	3282.6	3280.5	3212.0	3142.1
62.5°	3203.0	3193.6	3126.6	3070.3
63°	3124.7	3109.9	3061.0	3018.7
63.5°	3043.9	3037.2	3001.1	2970.2
64°	2965.8	2962.9	2944.8	2917.1
64.5°	2895.2	2903.5	2886.2	2859.5
65°	2828.4	2844.8	2826.8	2802.3
65.5°	2762.0	2779.9	2759.1	2724.5
66°	2698.4	2710.5	2687.1	2636.6
66.5°	2635.0	2641.3	2612.3	2552.2
67°	2567.2	2565.3	2530.2	2473.5



REPORT NUMBER: P973041  
 CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
67.5°	2501.5	2485.5	2450.1	2400.6
68°	2431.3	2407.0	2384.6	2335.2
68.5°	2355.0	2337.4	2322.3	2271.4
69°	2279.6	2267.4	2259.5	2212.3
69.5°	2209.9	2202.1	2197.3	2146.6
70°	2140.9	2134.6	2129.7	2073.5
70.5°	2073.3	2068.2	2059.4	2001.7
71°	2004.9	2002.2	1990.4	1932.0
71.5°	1938.2	1931.9	1919.1	1862.4
72°	1869.1	1864.4	1849.1	1799.9
72.5°	1803.1	1799.4	1782.9	1737.5
73°	1738.5	1728.5	1715.2	1669.2
73.5°	1674.7	1657.8	1645.8	1600.2
74°	1608.4	1592.6	1575.2	1532.8
74.5°	1538.8	1527.7	1503.6	1454.6
75°	1474.0	1454.3	1434.0	1378.8
75.5°	1407.4	1386.1	1364.5	1304.2
76°	1340.8	1318.0	1295.0	1229.5
76.5°	1274.2	1249.8	1225.5	1158.4
77°	1207.6	1181.7	1155.9	1091.2
77.5°	1141.3	1113.6	1084.8	1024.4
78°	1080.5	1048.5	1018.6	961.1
78.5°	1018.8	984.8	953.0	902.0
79°	955.6	921.8	891.3	845.0
79.5°	893.8	857.3	833.0	786.8
80°	831.4	799.5	779.9	738.1
80.5°	773.9	745.3	727.6	690.2
81°	719.8	695.7	681.0	645.2
81.5°	666.4	650.5	639.5	605.8
82°	618.8	607.2	598.4	567.4
82.5°	572.8	564.7	556.6	529.1
83°	530.2	527.8	520.0	490.7
83.5°	491.8	489.9	483.2	452.3
84°	456.4	451.9	446.1	414.0
84.5°	423.5	417.8	412.0	381.9
85°	392.9	387.0	379.8	351.3
85.5°	363.6	355.6	350.0	325.1
86°	336.5	328.2	323.7	301.0
86.5°	311.6	303.5	298.5	279.2
87°	288.4	280.2	276.4	259.7
87.5°	265.8	260.4	258.3	243.0
88°	246.7	242.2	241.4	227.5
88.5°	228.8	225.7	226.1	214.4
89°	213.7	212.2	213.2	202.6
89.5°	199.7	199.6	201.2	192.0



REPORT NUMBER: P973041  
 CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
90°	187.5	188.5	190.4	183.0
90.5°	176.8	179.4	181.9	174.9
91°	168.3	171.4	174.1	167.8
91.5°	160.0	164.2	167.1	162.0
92°	152.3	157.9	161.7	156.7
92.5°	147.8	151.4	155.7	150.7
93°	143.3	145.3	149.6	145.1
93.5°	138.9	142.3	144.8	141.2
94°	134.4	139.4	142.5	138.4
94.5°	130.0	136.5	140.3	136.1
95°	127.5	133.6	138.1	134.3
95.5°	125.6	131.5	135.8	132.5
96°	123.6	129.7	133.6	130.5
96.5°	121.9	128.3	132.1	129.3
97°	120.6	127.0	130.9	128.4
97.5°	119.3	125.9	129.9	127.7
98°	118.4	125.1	129.1	126.8
98.5°	117.5	124.3	128.2	125.9
99°	116.6	123.5	127.3	125.2
99.5°	115.8	122.7	126.6	124.5
100°	115.1	121.9	125.6	123.5
100.5°	114.4	121.1	124.8	122.5
101°	113.0	120.3	123.9	121.5
101.5°	111.9	118.4	122.3	119.3
102°	111.6	116.9	120.0	117.5
102.5°	112.0	116.6	118.6	116.6
103°	111.8	117.0	118.6	117.0
103.5°	111.4	116.8	118.9	116.9
104°	111.1	116.1	118.4	116.4
104.5°	110.7	115.6	117.7	115.6
105°	110.4	115.0	117.0	114.9
105.5°	110.2	114.6	116.3	114.3
106°	109.9	114.1	115.6	113.6
106.5°	109.8	113.8	115.1	113.0
107°	109.6	113.4	114.7	112.6
107.5°	109.4	113.1	114.3	112.2
108°	109.1	112.7	113.9	111.6
108.5°	108.6	112.3	113.3	110.9
109°	108.1	111.7	112.6	110.1
109.5°	107.5	111.0	111.8	109.2
110°	107.0	110.3	111.1	108.2
110.5°	106.4	109.6	110.2	107.2
111°	105.9	108.9	109.3	106.3
111.5°	105.4	108.2	108.5	105.4
112°	104.9	107.5	107.6	104.5



REPORT NUMBER: P973041  
 CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
112.5°	104.4	106.8	106.9	103.5
113°	103.9	106.2	106.0	102.8
113.5°	103.6	105.5	105.3	102.1
114°	103.2	104.8	104.5	101.4
114.5°	103.0	104.2	103.8	100.8
115°	102.9	103.8	103.2	100.2
115.5°	102.8	103.3	102.6	99.5
116°	102.8	103.1	102.0	98.8
116.5°	102.7	102.9	101.6	98.3
117°	102.7	102.8	101.2	97.9
117.5°	102.7	102.7	101.0	97.6
118°	102.7	102.6	100.8	97.4
118.5°	102.7	102.6	100.7	97.3
119°	102.7	102.6	100.6	97.1
119.5°	102.6	102.7	100.6	97.2
120°	102.5	102.7	100.6	97.2
120.5°	102.4	102.7	100.7	97.4
121°	102.4	102.7	100.8	97.6
121.5°	102.4	102.7	100.8	97.6
122°	102.3	102.7	100.8	97.7
122.5°	102.4	102.7	100.8	97.9
123°	102.3	102.7	100.9	98.1
123.5°	102.3	102.7	100.9	98.3
124°	102.2	102.8	101.0	98.5
124.5°	102.2	102.8	101.1	98.7
125°	102.2	102.9	101.3	98.9
125.5°	102.3	103.0	101.4	99.2
126°	102.3	103.1	101.5	99.4
126.5°	102.4	103.2	101.7	99.7
127°	102.4	103.3	101.7	99.7
127.5°	102.4	103.5	101.7	99.7
128°	102.5	103.6	101.8	99.8
128.5°	102.6	103.7	101.8	99.8
129°	102.6	103.8	101.8	99.8
129.5°	102.7	103.9	101.7	99.7
130°	102.7	104.0	101.7	99.7
130.5°	102.7	104.0	101.7	99.6
131°	102.6	104.0	101.6	99.5
131.5°	102.5	104.0	101.5	99.4
132°	102.4	103.8	101.4	99.3
132.5°	102.3	103.7	101.2	99.0
133°	102.1	103.5	100.9	98.6
133.5°	101.9	103.2	100.5	98.2
134°	101.6	103.0	100.2	97.7
134.5°	101.3	102.6	99.7	97.1



REPORT NUMBER: P973041  
 CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
135°	100.9	102.2	99.1	96.4
135.5°	100.5	101.7	98.6	95.7
136°	100.1	101.2	98.1	95.0
136.5°	99.6	100.6	97.5	94.2
137°	99.0	99.9	96.8	93.3
137.5°	98.4	99.4	96.1	92.4
138°	97.6	98.7	95.3	91.4
138.5°	96.7	98.0	94.4	90.4
139°	95.2	97.3	93.7	89.4
139.5°	94.5	96.5	93.0	88.7
140°	93.9	95.6	92.2	87.8
140.5°	93.3	94.6	91.4	87.0
141°	92.7	93.2	90.5	85.9
141.5°	92.0	92.0	89.4	84.7
142°	91.3	91.4	88.2	83.4
142.5°	90.5	90.7	86.2	80.9
143°	89.6	90.0	85.2	80.0
143.5°	88.8	89.4	84.5	79.5
144°	87.8	88.6	83.8	78.9
144.5°	86.8	87.8	83.0	78.2
145°	85.8	87.0	82.2	77.6
145.5°	84.8	86.1	81.3	76.9
146°	83.6	85.1	80.4	76.2
146.5°	82.5	84.2	79.5	75.4
147°	81.4	83.2	78.6	74.6
147.5°	80.2	82.1	77.6	73.8
148°	78.9	81.0	76.6	73.0
148.5°	77.7	79.8	75.6	72.2
149°	76.4	78.5	74.6	71.3
149.5°	75.1	77.3	73.5	70.3
150°	73.7	76.1	72.5	69.4
150.5°	72.3	74.7	71.4	68.5
151°	70.8	73.4	70.2	67.5
151.5°	69.5	72.0	69.2	66.3
152°	68.0	70.5	67.9	65.2
152.5°	66.6	69.0	66.6	64.1
153°	65.2	67.6	65.3	62.8
153.5°	63.6	66.1	64.0	62.3
154°	62.0	64.5	62.7	61.1
154.5°	60.6	63.0	61.4	59.9
155°	59.0	61.4	60.1	58.7
155.5°	57.5	59.9	58.8	57.5
156°	55.9	58.4	57.5	56.2
156.5°	54.3	56.8	56.2	55.0
157°	52.5	55.2	54.8	53.7





REPORT NUMBER: P973041  
 CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
157.5°	50.9	53.6	53.6	52.4
158°	49.3	51.9	52.1	51.0
158.5°	47.7	50.2	50.7	49.6
159°	46.1	48.6	49.2	48.0
159.5°	44.5	46.9	47.7	46.5
160°	42.8	45.3	46.2	45.1
160.5°	41.1	43.8	44.7	43.6
161°	39.0	42.2	43.3	42.2
161.5°	36.2	40.5	41.9	40.8
162°	33.5	38.8	40.5	39.3
162.5°	30.8	36.6	38.9	37.7
163°	28.0	33.4	37.2	36.1
163.5°	25.4	30.6	34.7	33.4
164°	23.0	27.8	31.6	30.5
164.5°	20.7	25.0	28.7	27.6
165°	18.6	22.5	26.0	24.9
165.5°	16.6	20.1	23.3	22.2
166°	14.6	18.1	20.7	19.8
166.5°	12.6	16.0	18.5	17.6
167°	10.6	13.9	16.4	15.4
167.5°	8.7	11.8	14.2	13.3
168°	8.3	9.8	12.1	11.1
168.5°	7.8	7.7	9.9	8.7
169°	7.4	7.4	7.9	6.7
169.5°	7.0	7.1	7.3	6.3
170°	6.7	6.8	7.1	6.0
170.5°	6.4	6.5	6.8	5.7
171°	6.1	6.3	6.6	5.4
171.5°	5.9	6.1	6.4	5.2
172°	5.7	5.9	6.2	5.0
172.5°	5.5	5.7	6.0	4.8
173°	5.3	5.5	5.9	4.6
173.5°	5.2	5.3	5.7	4.5
174°	5.1	5.2	5.6	4.3
174.5°	5.0	5.1	5.4	4.2
175°	4.9	5.0	5.1	4.0
175.5°	4.8	5.0	5.1	3.9
176°	4.8	4.9	5.0	3.8
176.5°	4.8	4.9	5.0	3.8
177°	4.8	4.9	5.0	3.7
177.5°	4.8	4.9	5.0	3.7
178°	4.8	4.9	5.1	3.8
178.5°	4.8	5.0	5.1	3.8
179°	4.9	5.0	5.2	3.9
179.5°	4.9	5.1	5.2	3.9



REPORT NUMBER: P973041  
CATALOG NUMBER: WP-6984-80W-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
180°	4.0	4.0	4.0	4.0

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

Report Prepared for

Cooper Lighting Solutions

Lumark

Report Number: SP1-2410-249-2

Test Date: 10/24/2024

Luminaire Tested: WP-6984-4000K-H (100W)

Data in this report applies to families of products including WP-6984-4000K-H (100W)

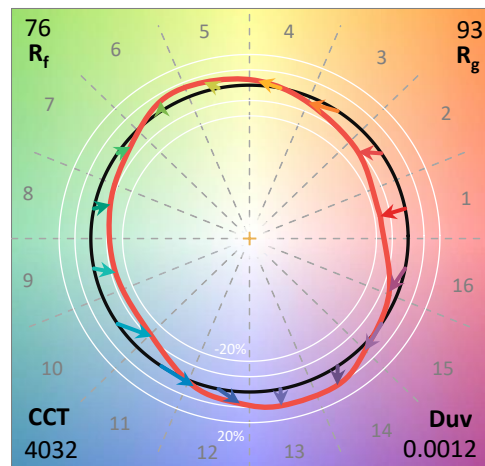
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2410-249-2  
 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-6984-4000K-H (100W)**  
 Description: DIALITE SQLED WALL PACK SAMPLE 100w-4000K HIGH OUTPUT

**Spectral Parameters**

CCT (K): 4032  
 CIE u': 0.2238  
 CIE v': 0.5025  
 Duv: 0.0012  
 CIE x: 0.3799  
 CIE y: 0.3790  
 CIE z: 0.2411  
 Peak Wavelength (nm): 452  
 Dominant Wavelength (nm): 578  
 Purity: 27.73699  
 R<sub>f</sub>: 75.7  
 R<sub>g</sub>: 93.4

CRI (Ra):	73.7		
R1:	70.9	R9:	-23.4
R2:	80.7	R10:	53.1
R3:	87.5	R11:	66.9
R4:	71.9	R12:	41.8
R5:	70.1	R13:	72.7
R6:	71.8	R14:	92.8
R7:	82.5	R15:	64.6
R8:	54.4		



**Test Conditions**

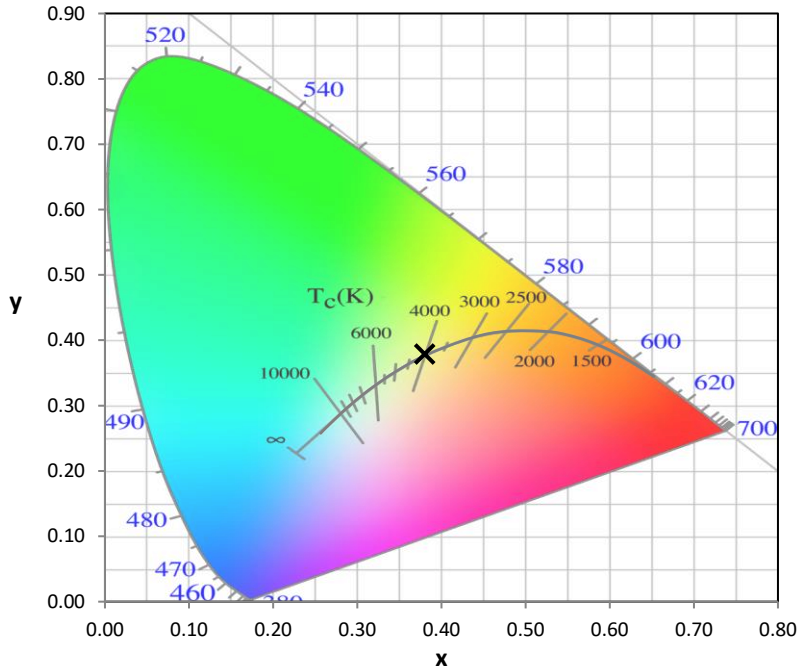
Stabilization Time: 20M  
 Operation Time: 1H 20M  
 Sphere Temperature (°C): 25.4

REPORT NUMBER: SP1-2410-249-2

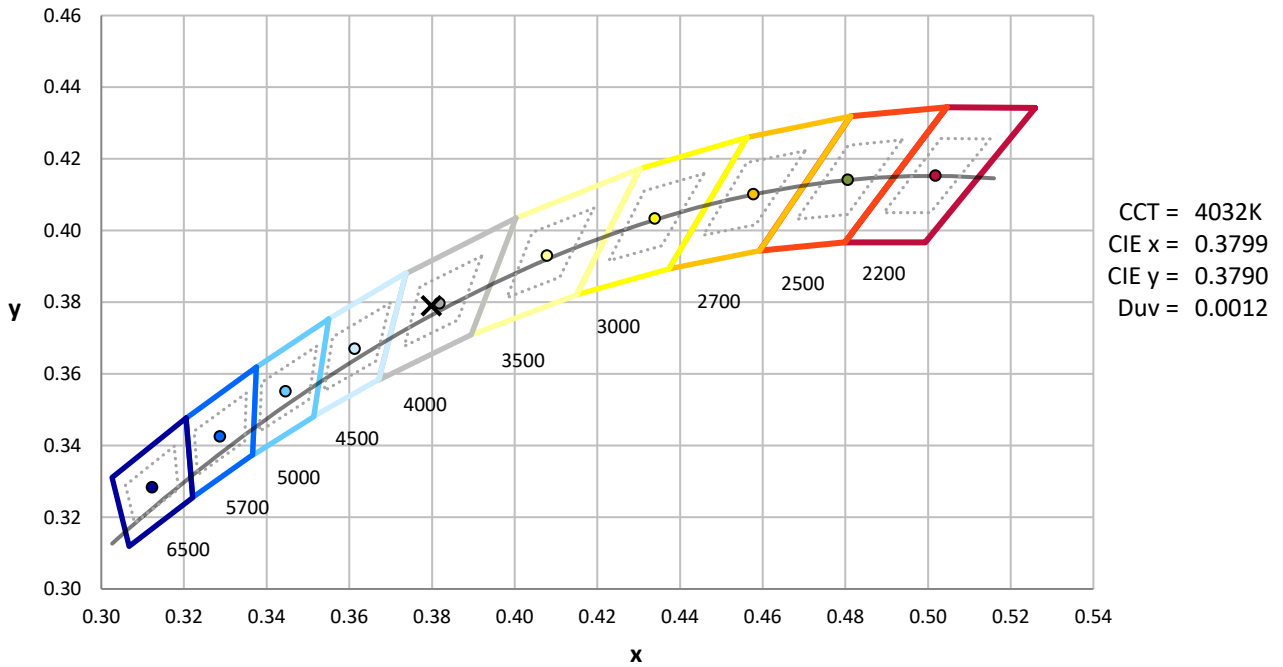
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2410-249-2

**CIE 1931 Chromaticity Diagram**



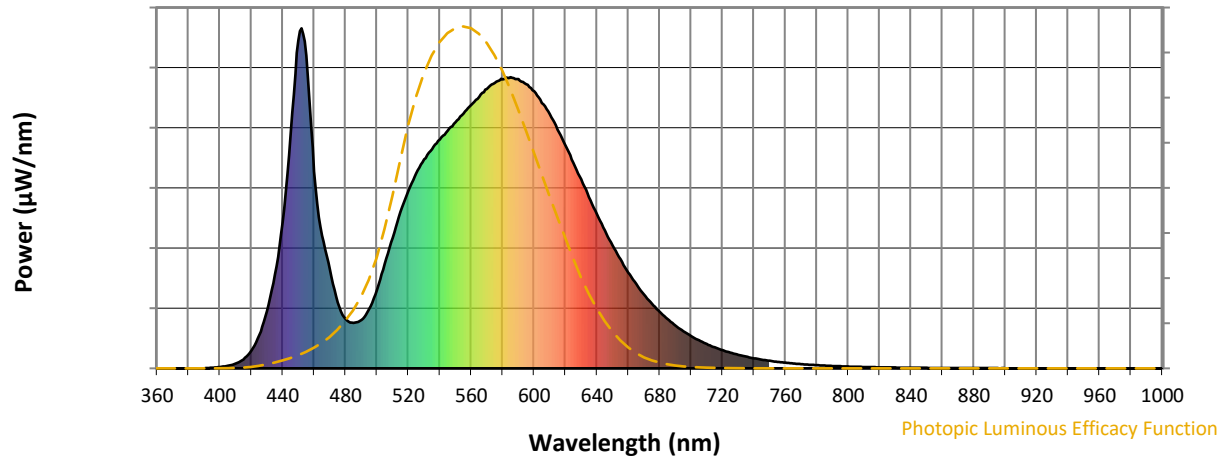
**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2410-249-2

**Photopic Flux vs. Wavelength**

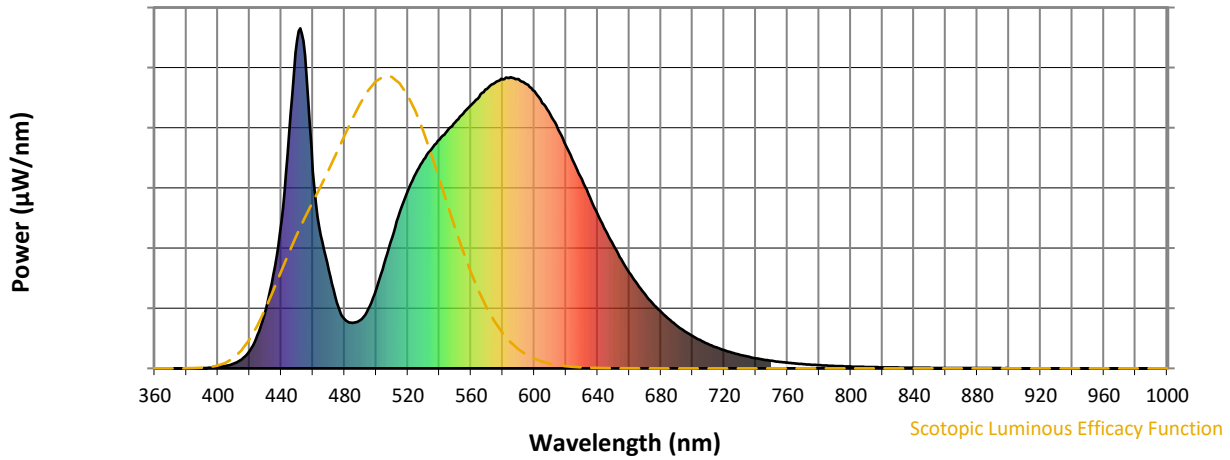


**Photopic Lumens: NR**

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	142	NR	620	655	NR	750	22	NR	880	1	NR
365	0	NR	495	174	NR	625	605	NR	755	19	NR	885	1	NR
370	0	NR	500	231	NR	630	556	NR	760	17	NR	890	1	NR
375	0	NR	505	307	NR	635	503	NR	765	14	NR	895	1	NR
380	0	NR	510	384	NR	640	453	NR	770	12	NR	900	0	NR
385	0	NR	515	460	NR	645	406	NR	775	11	NR	905	0	NR
390	0	NR	520	522	NR	650	361	NR	780	9	NR	910	0	NR
395	2	NR	525	573	NR	655	321	NR	785	8	NR	915	0	NR
400	4	NR	530	614	NR	660	282	NR	790	7	NR	920	0	NR
405	7	NR	535	645	NR	665	248	NR	795	6	NR	925	0	NR
410	14	NR	540	673	NR	670	217	NR	800	5	NR	930	0	NR
415	27	NR	545	700	NR	675	190	NR	805	5	NR	935	0	NR
420	52	NR	550	724	NR	680	166	NR	810	4	NR	940	0	NR
425	98	NR	555	749	NR	685	145	NR	815	4	NR	945	0	NR
430	169	NR	560	775	NR	690	126	NR	820	3	NR	950	0	NR
435	277	NR	565	798	NR	695	110	NR	825	3	NR	955	0	NR
440	430	NR	570	822	NR	700	95	NR	830	2	NR	960	0	NR
445	690	NR	575	839	NR	705	82	NR	835	2	NR	965	0	NR
450	965	NR	580	850	NR	710	71	NR	840	2	NR	970	0	NR
455	920	NR	585	856	NR	715	62	NR	845	2	NR	975	0	NR
460	579	NR	590	851	NR	720	54	NR	850	1	NR	980	0	NR
465	390	NR	595	836	NR	725	46	NR	855	1	NR	985	0	NR
470	289	NR	600	815	NR	730	40	NR	860	1	NR	990	0	NR
475	194	NR	605	781	NR	735	34	NR	865	1	NR	995	0	NR
480	145	NR	610	747	NR	740	30	NR	870	1	NR	1000	0	NR
485	134	NR	615	702	NR	745	26	NR	875	1	NR			

REPORT NUMBER: SP1-2410-249-2

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

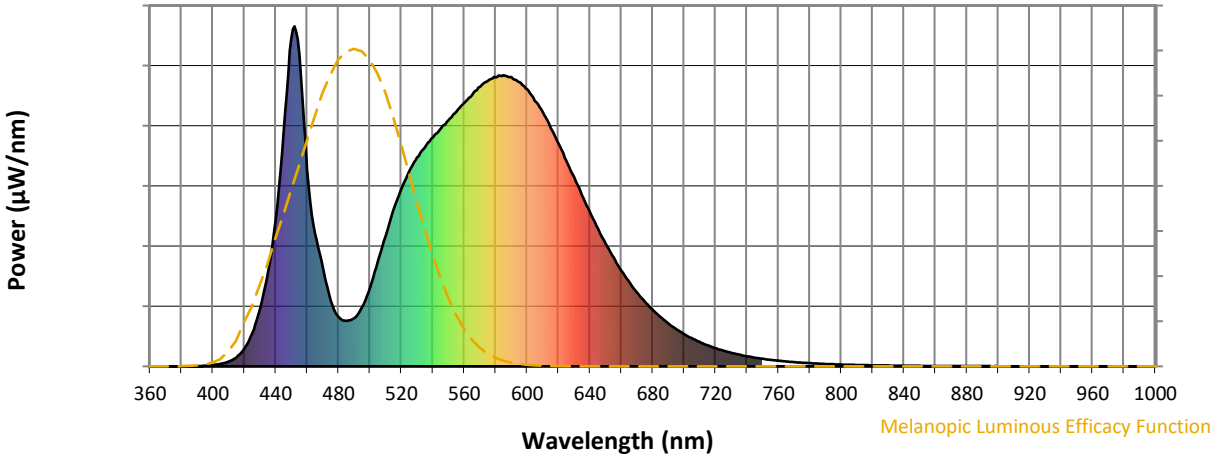
**S/P: 1.55**

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	142	NR	620	655	NR	750	22	NR	880	1	NR
365	0	NR	495	174	NR	625	605	NR	755	19	NR	885	1	NR
370	0	NR	500	231	NR	630	556	NR	760	17	NR	890	1	NR
375	0	NR	505	307	NR	635	503	NR	765	14	NR	895	1	NR
380	0	NR	510	384	NR	640	453	NR	770	12	NR	900	0	NR
385	0	NR	515	460	NR	645	406	NR	775	11	NR	905	0	NR
390	0	NR	520	522	NR	650	361	NR	780	9	NR	910	0	NR
395	2	NR	525	573	NR	655	321	NR	785	8	NR	915	0	NR
400	4	NR	530	614	NR	660	282	NR	790	7	NR	920	0	NR
405	7	NR	535	645	NR	665	248	NR	795	6	NR	925	0	NR
410	14	NR	540	673	NR	670	217	NR	800	5	NR	930	0	NR
415	27	NR	545	700	NR	675	190	NR	805	5	NR	935	0	NR
420	52	NR	550	724	NR	680	166	NR	810	4	NR	940	0	NR
425	98	NR	555	749	NR	685	145	NR	815	4	NR	945	0	NR
430	169	NR	560	775	NR	690	126	NR	820	3	NR	950	0	NR
435	277	NR	565	798	NR	695	110	NR	825	3	NR	955	0	NR
440	430	NR	570	822	NR	700	95	NR	830	2	NR	960	0	NR
445	690	NR	575	839	NR	705	82	NR	835	2	NR	965	0	NR
450	965	NR	580	850	NR	710	71	NR	840	2	NR	970	0	NR
455	920	NR	585	856	NR	715	62	NR	845	2	NR	975	0	NR
460	579	NR	590	851	NR	720	54	NR	850	1	NR	980	0	NR
465	390	NR	595	836	NR	725	46	NR	855	1	NR	985	0	NR
470	289	NR	600	815	NR	730	40	NR	860	1	NR	990	0	NR
475	194	NR	605	781	NR	735	34	NR	865	1	NR	995	0	NR
480	145	NR	610	747	NR	740	30	NR	870	1	NR	1000	0	NR
485	134	NR	615	702	NR	745	26	NR	875	1	NR			



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Melanopic Flux vs. Wavelength



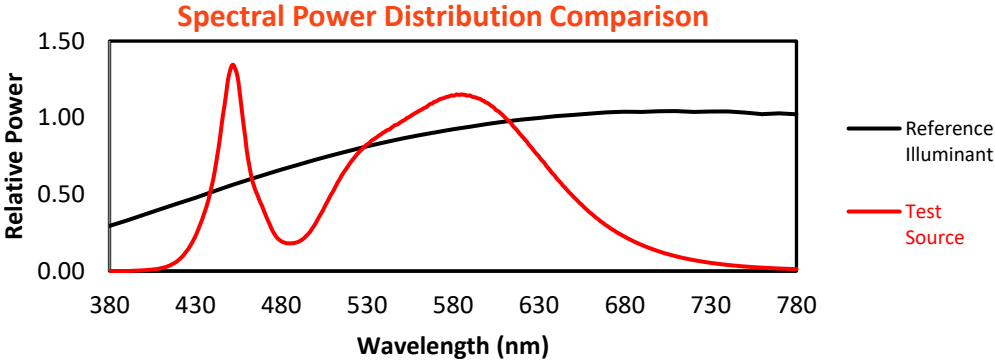
Melanopic Lumens: NR

M/P: 3.08

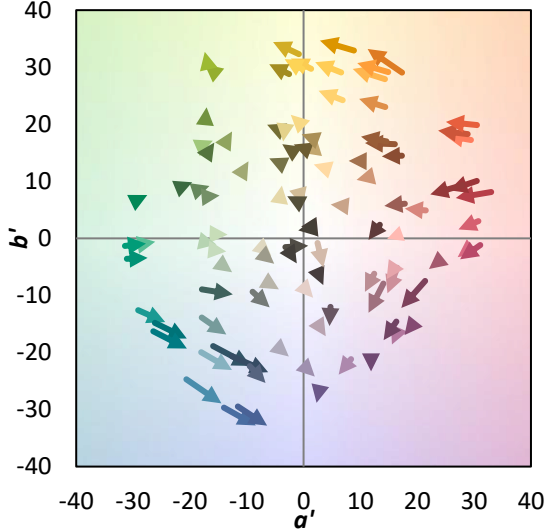
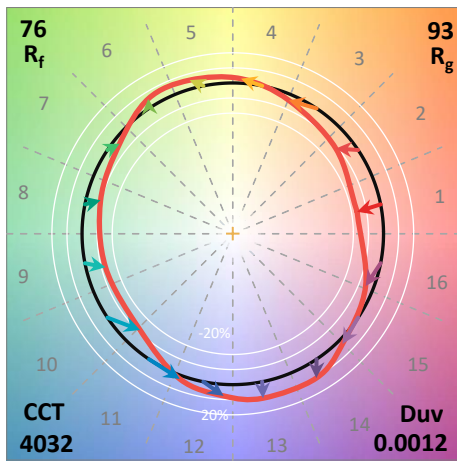
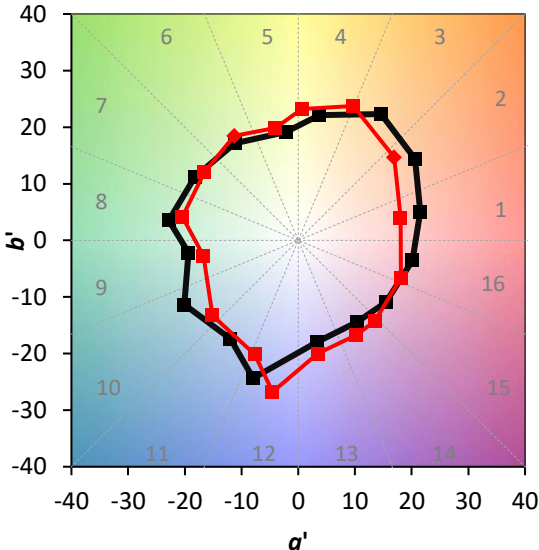
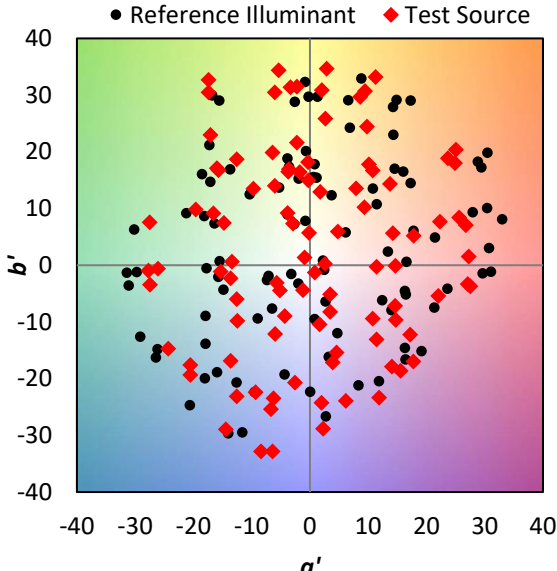
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	142	NR	620	655	NR	750	22	NR	880	1	NR
365	0	NR	495	174	NR	625	605	NR	755	19	NR	885	1	NR
370	0	NR	500	231	NR	630	556	NR	760	17	NR	890	1	NR
375	0	NR	505	307	NR	635	503	NR	765	14	NR	895	1	NR
380	0	NR	510	384	NR	640	453	NR	770	12	NR	900	0	NR
385	0	NR	515	460	NR	645	406	NR	775	11	NR	905	0	NR
390	0	NR	520	522	NR	650	361	NR	780	9	NR	910	0	NR
395	2	NR	525	573	NR	655	321	NR	785	8	NR	915	0	NR
400	4	NR	530	614	NR	660	282	NR	790	7	NR	920	0	NR
405	7	NR	535	645	NR	665	248	NR	795	6	NR	925	0	NR
410	14	NR	540	673	NR	670	217	NR	800	5	NR	930	0	NR
415	27	NR	545	700	NR	675	190	NR	805	5	NR	935	0	NR
420	52	NR	550	724	NR	680	166	NR	810	4	NR	940	0	NR
425	98	NR	555	749	NR	685	145	NR	815	4	NR	945	0	NR
430	169	NR	560	775	NR	690	126	NR	820	3	NR	950	0	NR
435	277	NR	565	798	NR	695	110	NR	825	3	NR	955	0	NR
440	430	NR	570	822	NR	700	95	NR	830	2	NR	960	0	NR
445	690	NR	575	839	NR	705	82	NR	835	2	NR	965	0	NR
450	965	NR	580	850	NR	710	71	NR	840	2	NR	970	0	NR
455	920	NR	585	856	NR	715	62	NR	845	2	NR	975	0	NR
460	579	NR	590	851	NR	720	54	NR	850	1	NR	980	0	NR
465	390	NR	595	836	NR	725	46	NR	855	1	NR	985	0	NR
470	289	NR	600	815	NR	730	40	NR	860	1	NR	990	0	NR
475	194	NR	605	781	NR	735	34	NR	865	1	NR	995	0	NR
480	145	NR	610	747	NR	740	30	NR	870	1	NR	1000	0	NR
485	134	NR	615	702	NR	745	26	NR	875	1	NR			

**Summary**

$R_f = 75.7$   
 $R_g = 93.4$   
 CIE  $R_a = 73.7$   
 $R_g = -23.4$

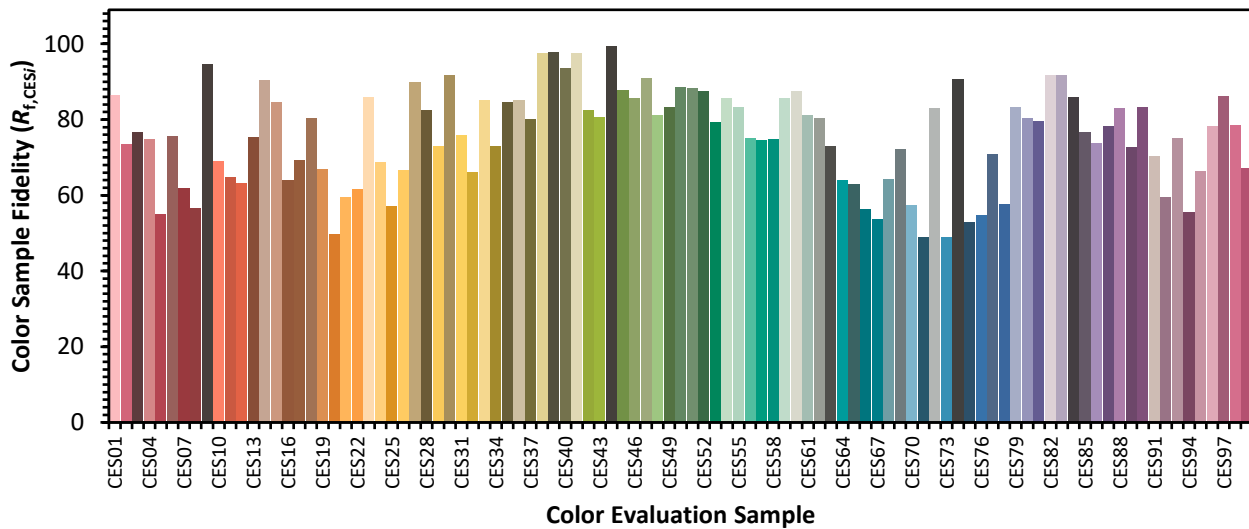


**Color Vector Graphics**

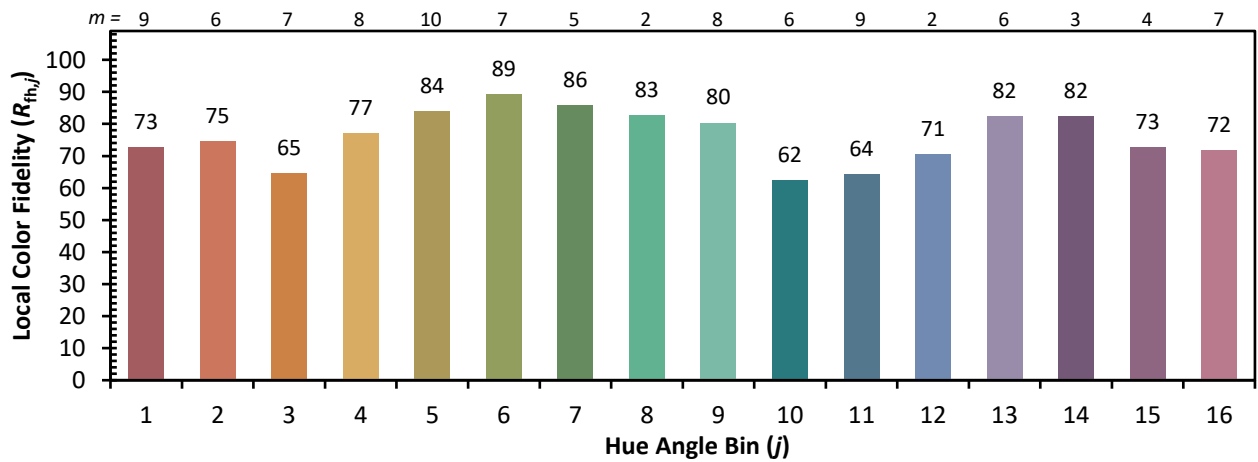
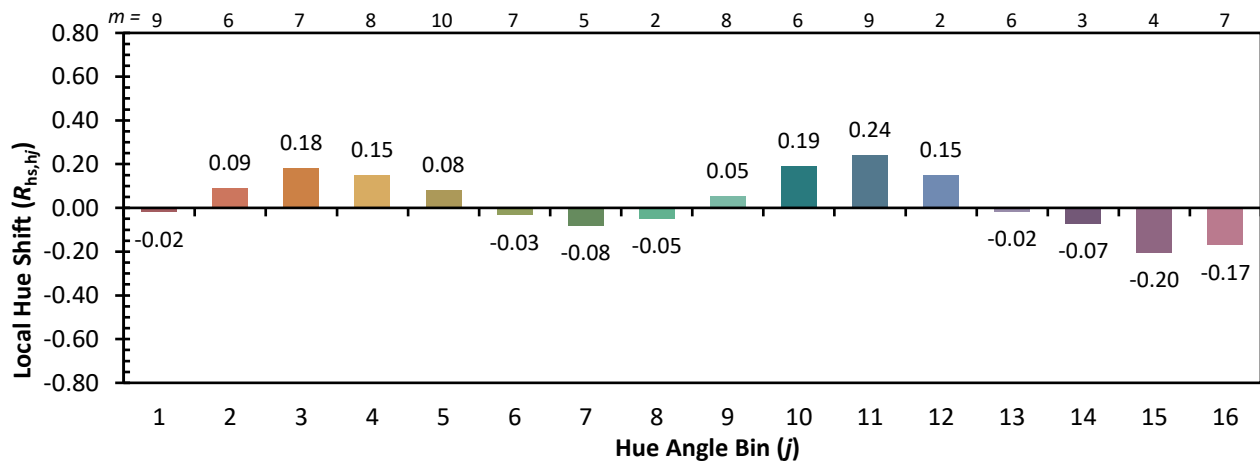
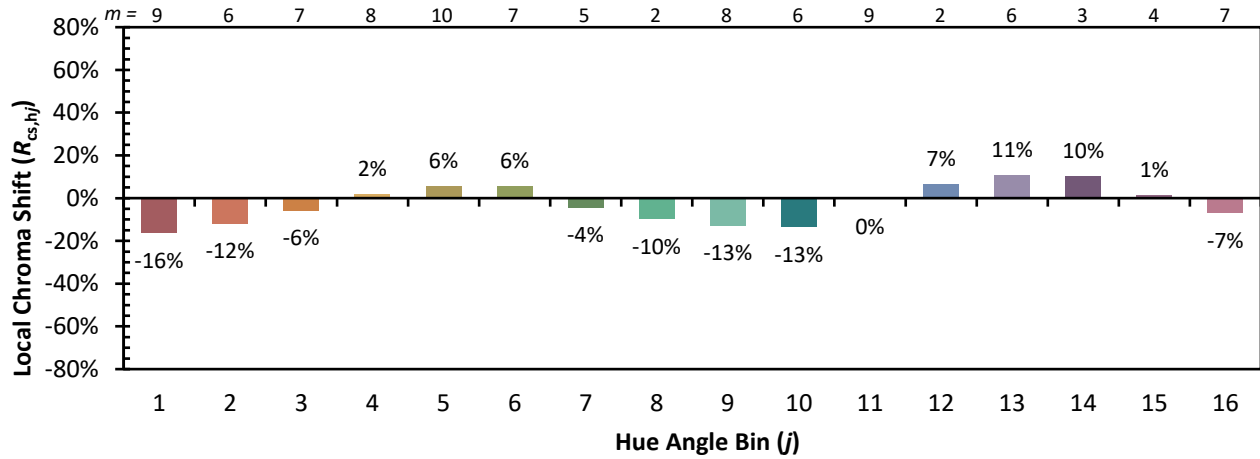


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

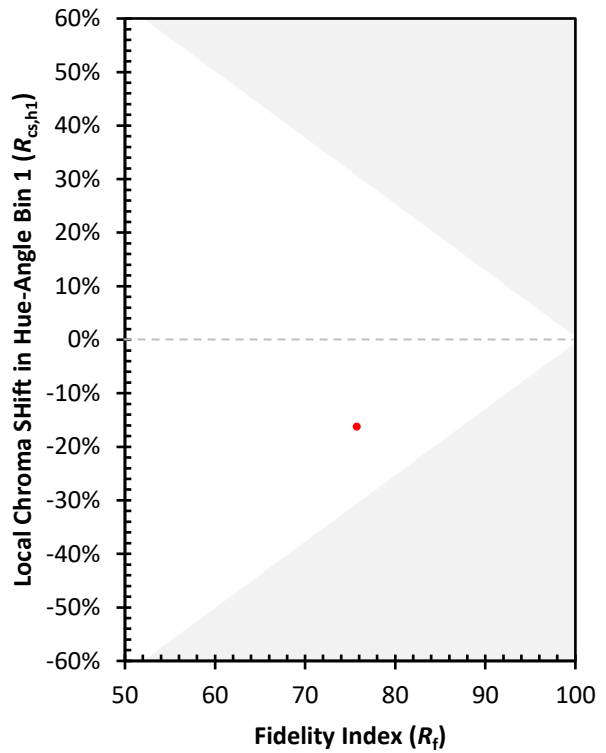
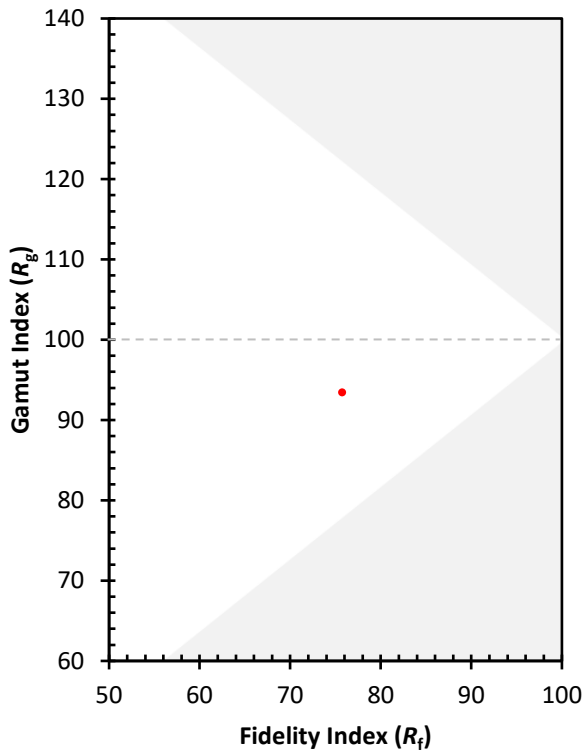
CES01 = 85	CES26 = 67	CES51 = 88	CES76 = 55
CES02 = 61	CES27 = 90	CES52 = 88	CES77 = 71
CES03 = 30	CES28 = 83	CES53 = 79	CES78 = 58
CES04 = 70	CES29 = 73	CES54 = 86	CES79 = 83
CES05 = 47	CES30 = 92	CES55 = 83	CES80 = 80
CES06 = 50	CES31 = 76	CES56 = 75	CES81 = 80
CES07 = 40	CES32 = 66	CES57 = 75	CES82 = 92
CES08 = 39	CES33 = 85	CES58 = 75	CES83 = 92
CES09 = 29	CES34 = 73	CES59 = 86	CES84 = 86
CES10 = 74	CES35 = 85	CES60 = 88	CES85 = 77
CES11 = 57	CES36 = 85	CES61 = 81	CES86 = 74
CES12 = 63	CES37 = 80	CES62 = 80	CES87 = 78
CES13 = 42	CES38 = 98	CES63 = 73	CES88 = 83
CES14 = 74	CES39 = 98	CES64 = 64	CES89 = 73
CES15 = 71	CES40 = 93	CES65 = 63	CES90 = 83
CES16 = 46	CES41 = 98	CES66 = 56	CES91 = 70
CES17 = 49	CES42 = 83	CES67 = 54	CES92 = 60
CES18 = 56	CES43 = 81	CES68 = 64	CES93 = 75
CES19 = 71	CES44 = 99	CES69 = 72	CES94 = 55
CES20 = 65	CES45 = 88	CES70 = 57	CES95 = 67
CES21 = 86	CES46 = 86	CES71 = 49	CES96 = 78
CES22 = 78	CES47 = 91	CES72 = 83	CES97 = 86
CES23 = 92	CES48 = 81	CES73 = 49	CES98 = 78
CES24 = 91	CES49 = 83	CES74 = 91	CES99 = 67
CES25 = 72	CES50 = 89	CES75 = 53	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)