

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: P973044

Luminaire Tested: **WP-6984-90W-4000K**

Issue Date: 03/12/2025



Test Information

Test Method: LM-79-08
Report Number: P973044
Test Lab: LEADING TESTING LABORATORIES
Issue Date: 03/12/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: WP-6984-90W-4000K
Description: LUMARK WALL PACK SQUARE LED 70CRI CCT SELECTIVE FIXTURE OPERATING @90W-4000K
Light Source: 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

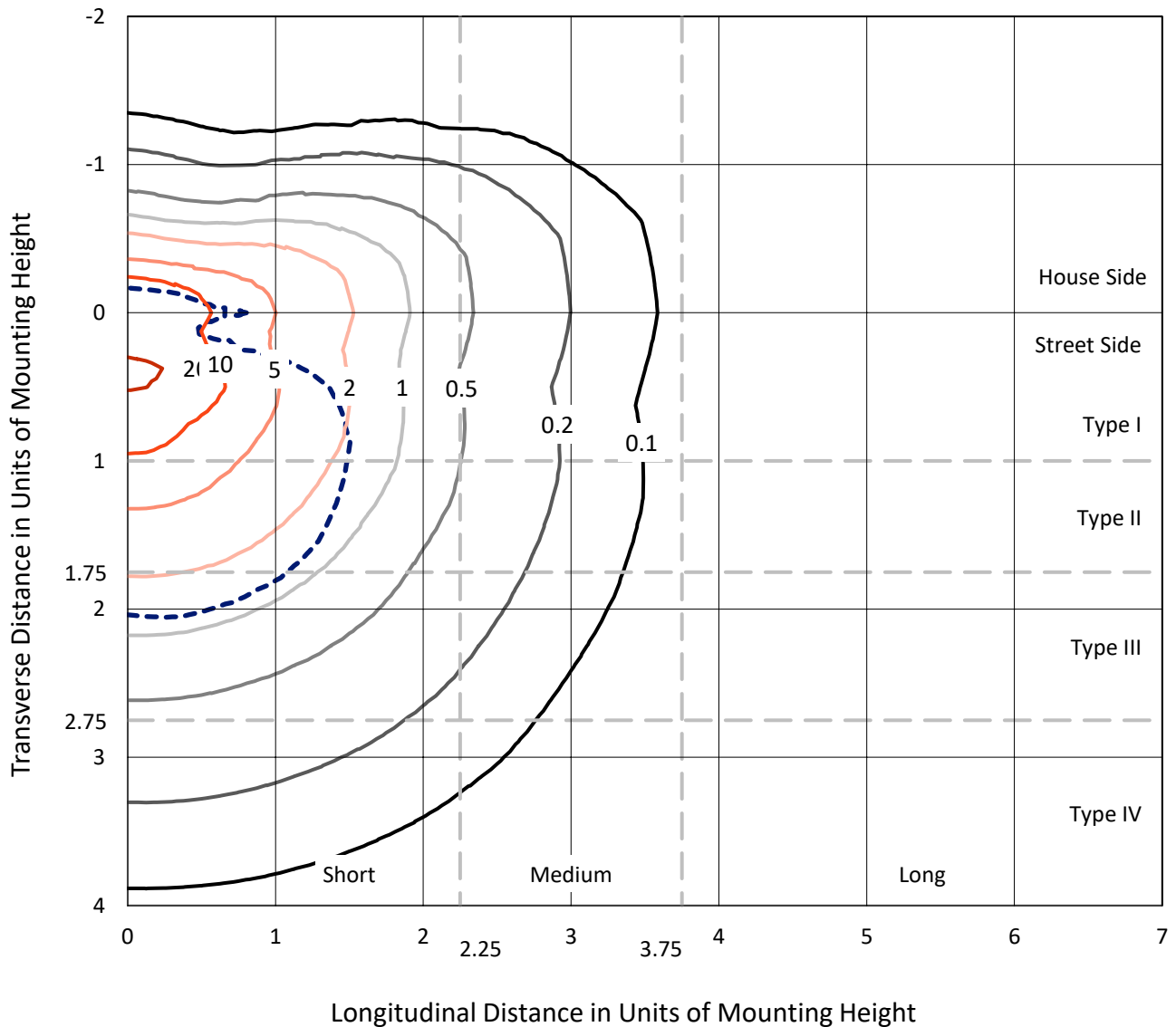
Lumens per Lamp: N/A
Luminaire Lumens: 12301.4 lumens
Efficiency: N/A
Efficacy: 142.4 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.96' x L: 0.25' x H: 0.67')
IES Classification: Type III - Short
BUG Rating: B3 - U3 - G3

Input Watts (W): 86.4
Input Voltage (V): 120
Input Current (A_{in}): 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

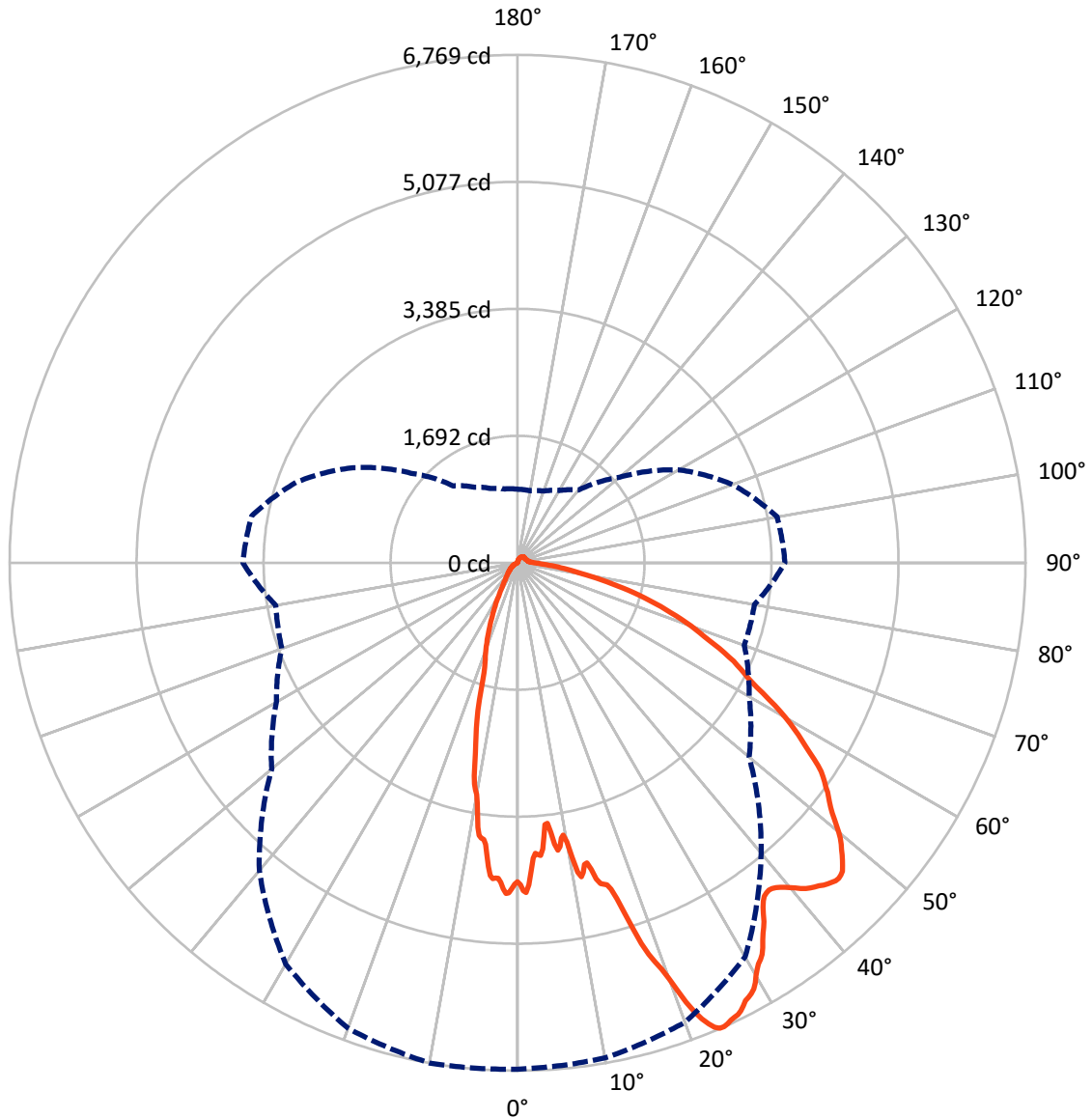
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 23.4 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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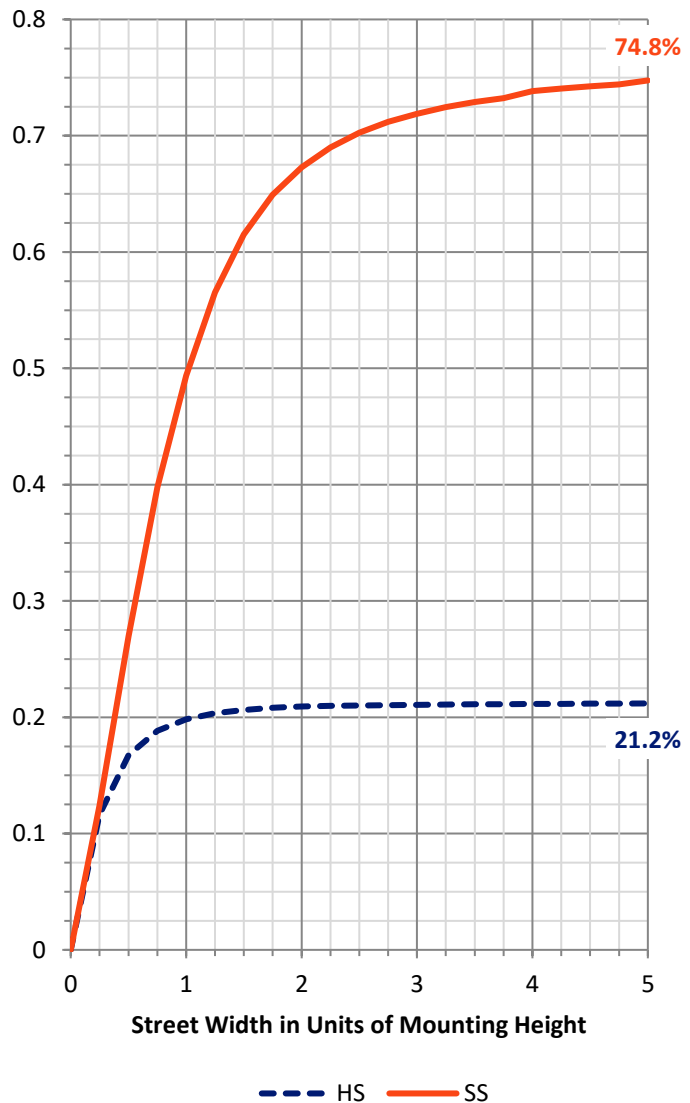
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2636.5	62.5	2699.0
	% Fixture	21.4	0.5	21.9
Street Side	Lumens	9295.7	306.6	9602.3
	% Fixture	75.6	2.5	78.1
Total	Lumens	11932.2	369.1	12301.4
	% Fixture	97.0	3.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	377.3	3.1
10°-20°	996.5	8.1
20°-30°	1563.0	12.7
30°-40°	1887.1	15.3
40°-50°	2149.4	17.5
50°-60°	2135.0	17.4
60°-70°	1634.3	13.3
70°-80°	910.8	7.4
80°-90°	278.9	2.3
90°-100°	83.0	0.7
100°-110°	67.2	0.5
110°-120°	61.7	0.5
120°-130°	55.6	0.5
130°-140°	48.0	0.4
140°-150°	33.3	0.3
150°-160°	15.9	0.1
160°-170°	3.9	0.0
170°-180°	0.5	0.0
0°-90°	11932.2	97.0
0°-180°	12301.4	100.0

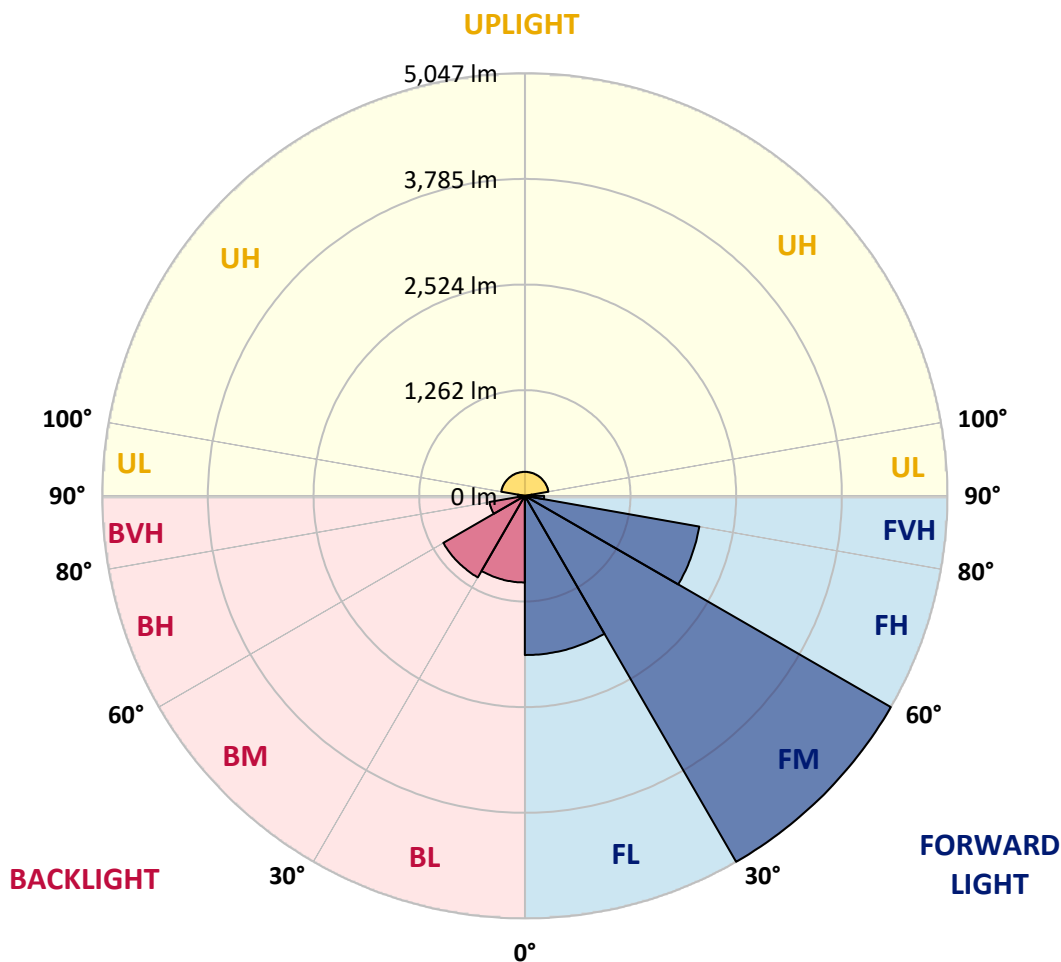


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1902.0	15.5			
FM	(30°-60°)	5047.0	41.0			
FH	(60°-80°)	2116.5	17.2			G2/5000
FVH	(80°-90°)	230.2	1.9			G3/500
BL	(0°-30°)	1034.7	8.4	B3/2500		
BM	(30°-60°)	1124.5	9.1	B2/2500		
BH	(60°-80°)	428.6	3.5	B1/500		G1/500
BVH	(80°-90°)	48.7	0.4			G1/100
UL	(90°-100°)	83.0	0.7		U3/500	
UH	(100°-180°)	286.2	2.3		U3/500	

BUG Rating: B3-U3-G3
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8
0.5°	4359.1	4357.3	4357.1	4358.2	4356.6	4347.5	4337.0	4324.5	4310.3	4296.5	4283.4
1°	4316.0	4320.3	4337.2	4354.6	4373.8	4378.9	4370.6	4353.3	4319.4	4292.1	4269.6
1.5°	4161.7	4174.2	4204.0	4254.3	4308.6	4352.3	4377.0	4368.1	4325.4	4283.2	4250.3
2°	3967.6	3981.0	4022.3	4092.1	4179.9	4269.1	4352.0	4374.3	4339.0	4274.5	4232.6
2.5°	3854.2	3861.9	3880.5	3931.9	4025.9	4155.2	4288.7	4361.2	4346.8	4271.3	4220.2
3°	3851.2	3844.3	3841.3	3850.1	3901.9	4028.1	4200.1	4332.5	4341.9	4260.2	4205.5
3.5°	3880.2	3872.6	3863.5	3842.6	3845.4	3916.3	4098.9	4284.5	4332.0	4247.0	4188.6
4°	3839.9	3851.9	3866.0	3861.5	3834.6	3850.9	3998.5	4225.5	4320.7	4240.9	4180.8
4.5°	3685.9	3719.3	3782.6	3851.9	3845.2	3823.7	3910.1	4160.2	4307.5	4224.2	4171.2
5°	3507.9	3534.2	3614.0	3751.8	3843.4	3817.2	3842.2	4083.3	4284.6	4208.5	4168.1
5.5°	3446.2	3445.3	3465.9	3592.5	3772.3	3827.4	3803.7	4009.7	4261.6	4192.2	4159.5
6°	3534.7	3501.1	3445.7	3461.1	3643.4	3816.3	3777.8	3935.4	4236.4	4175.6	4158.1
6.5°	3703.0	3656.7	3543.7	3437.9	3502.7	3760.2	3772.7	3866.6	4211.6	4160.1	4151.4
7°	3824.2	3803.3	3700.6	3516.2	3423.4	3662.2	3775.1	3809.0	4173.8	4143.8	4146.3
7.5°	3808.6	3819.8	3815.9	3653.8	3427.7	3534.2	3774.5	3764.2	4130.5	4120.7	4134.9
8°	3694.0	3714.0	3786.4	3777.1	3502.1	3430.4	3748.5	3728.1	4094.2	4100.2	4119.7
8.5°	3629.6	3619.7	3672.2	3795.0	3634.3	3372.7	3694.0	3703.2	4050.9	4074.2	4109.4
9°	3703.2	3643.0	3591.4	3711.9	3740.6	3371.1	3610.1	3683.3	4001.8	4058.2	4096.2
9.5°	3909.8	3830.6	3639.4	3606.2	3772.7	3437.4	3508.7	3673.9	3952.0	4046.7	4079.9
10°	4132.8	4056.0	3814.0	3570.8	3711.4	3545.2	3407.7	3668.8	3906.6	4030.6	4069.4
10.5°	4233.0	4199.8	4042.7	3658.1	3605.7	3641.1	3336.7	3664.8	3859.4	4019.9	4056.0
11°	4186.4	4191.9	4178.9	3852.9	3534.4	3698.0	3299.5	3655.4	3816.9	4014.2	4044.8
11.5°	4081.5	4094.2	4166.0	4047.9	3540.2	3687.7	3309.5	3637.3	3778.9	4004.3	4036.7
12°	4059.9	4028.1	4067.5	4152.4	3653.8	3625.0	3357.3	3604.9	3743.6	3995.5	4026.3
12.5°	4163.5	4091.3	3989.9	4130.1	3827.9	3537.5	3425.1	3550.5	3700.5	3987.9	4016.1
13°	4307.4	4233.0	4034.0	4027.5	3994.0	3475.9	3512.6	3496.0	3661.2	3974.1	4001.4
13.5°	4380.1	4329.7	4160.5	3941.7	4083.5	3470.4	3586.3	3426.0	3623.5	3955.3	3983.7
14°	4390.7	4348.2	4263.8	3965.5	4065.7	3536.3	3629.0	3360.1	3586.3	3933.2	3962.9
14.5°	4400.1	4331.5	4290.2	4076.7	3978.2	3676.2	3627.9	3297.1	3552.8	3912.9	3942.8
15°	4459.9	4356.1	4263.7	4173.9	3881.1	3830.0	3591.3	3243.0	3520.5	3897.8	3919.0
15.5°	4620.4	4477.1	4256.7	4211.6	3855.1	3959.9	3531.8	3204.5	3491.0	3877.0	3898.8
16°	4838.3	4671.7	4334.2	4184.1	3924.3	4022.2	3459.1	3183.7	3466.1	3858.1	3876.8
16.5°	5074.7	4908.0	4494.4	4147.6	4032.6	4011.1	3401.5	3185.4	3447.3	3838.2	3853.0
17°	5278.4	5124.4	4701.1	4170.3	4106.9	3942.5	3378.9	3205.6	3431.5	3818.7	3831.9
17.5°	5434.5	5277.9	4907.4	4269.4	4118.8	3853.8	3399.8	3235.1	3417.7	3800.7	3810.9
18°	5555.2	5411.8	5081.4	4436.3	4080.1	3785.3	3462.2	3279.0	3404.1	3779.7	3789.5
18.5°	5677.9	5527.1	5211.0	4624.6	4046.9	3782.0	3570.2	3331.4	3388.8	3760.5	3769.1
19°	5834.0	5652.2	5319.4	4793.2	4053.8	3840.4	3677.4	3373.9	3379.8	3739.3	3749.1
19.5°	6031.4	5821.0	5419.5	4934.0	4129.8	3922.8	3779.9	3413.0	3364.0	3717.1	3729.0
20°	6235.6	6027.4	5540.7	5044.5	4253.5	3973.6	3842.6	3429.9	3351.5	3696.1	3704.2
20.5°	6405.2	6231.3	5718.5	5156.0	4403.7	3977.5	3858.3	3430.2	3336.0	3673.4	3679.4
21°	6535.0	6383.5	5909.7	5258.8	4555.2	3943.1	3822.0	3413.7	3316.2	3654.8	3653.1
21.5°	6633.3	6514.6	6105.0	5369.3	4680.2	3898.3	3755.2	3383.3	3295.3	3634.8	3627.0
22°	6706.6	6617.3	6274.6	5517.4	4783.3	3867.1	3674.1	3337.3	3273.6	3615.8	3599.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
22.5°	6742.8	6667.2	6399.1	5695.2	4876.5	3880.3	3601.8	3289.0	3252.6	3596.8	3571.4
23°	6756.2	6692.8	6479.6	5884.4	4962.4	3937.3	3558.7	3248.7	3229.0	3580.1	3542.8
23.5°	6748.8	6700.8	6517.9	6063.2	5049.9	4027.7	3563.7	3215.3	3204.7	3562.8	3512.6
24°	6725.7	6697.4	6554.9	6199.0	5137.5	4135.7	3600.9	3198.8	3178.0	3546.6	3485.0
24.5°	6703.1	6676.5	6580.0	6283.0	5244.1	4247.2	3655.3	3199.0	3148.7	3525.9	3457.3
25°	6668.9	6635.9	6581.1	6317.0	5385.1	4351.3	3698.0	3214.8	3123.0	3510.5	3430.2
25.5°	6632.8	6592.2	6550.3	6335.3	5547.9	4438.1	3717.1	3252.8	3092.8	3492.5	3405.0
26°	6591.4	6557.3	6491.5	6372.7	5706.9	4510.2	3704.0	3301.0	3069.2	3475.5	3382.0
26.5°	6563.6	6531.2	6437.7	6395.2	5842.8	4573.3	3671.9	3362.7	3047.1	3461.8	3357.8
27°	6542.4	6500.8	6408.8	6388.2	5929.2	4634.9	3634.3	3422.3	3030.6	3449.2	3334.4
27.5°	6494.7	6465.1	6381.3	6336.9	5950.1	4694.0	3609.6	3465.4	3016.0	3438.3	3313.4
28°	6437.7	6418.8	6361.1	6268.9	5944.6	4752.3	3605.9	3493.0	3002.8	3427.3	3292.1
28.5°	6371.9	6366.5	6329.0	6195.7	5945.4	4827.6	3625.7	3502.4	2994.1	3417.3	3274.5
29°	6309.9	6306.0	6287.0	6157.9	5981.6	4922.5	3668.7	3494.2	2986.4	3406.1	3257.8
29.5°	6245.9	6248.8	6239.2	6135.1	6016.1	5036.5	3728.1	3470.9	2982.1	3396.8	3243.2
30°	6196.0	6195.6	6178.1	6110.0	6007.7	5148.6	3791.0	3440.3	2983.5	3387.8	3227.6
30.5°	6143.3	6158.4	6128.1	6078.4	5952.2	5249.4	3855.3	3402.9	2986.3	3380.7	3213.4
31°	6086.2	6101.4	6091.8	6030.9	5860.7	5321.8	3919.5	3367.2	2992.3	3374.2	3199.4
31.5°	6023.9	6032.4	6063.3	5983.2	5785.3	5352.1	3971.7	3341.2	2997.9	3367.0	3186.6
32°	5956.7	5968.5	6011.8	5926.3	5741.6	5356.3	4011.7	3327.8	3005.5	3360.7	3174.5
32.5°	5903.9	5924.8	5931.5	5870.4	5723.7	5352.5	4048.2	3328.2	3013.2	3354.6	3164.3
33°	5843.8	5893.0	5860.8	5833.6	5699.8	5355.9	4078.2	3341.1	3024.6	3348.8	3153.0
33.5°	5759.1	5832.2	5815.3	5805.3	5662.9	5372.4	4111.9	3361.5	3034.5	3344.1	3139.4
34°	5657.6	5729.6	5796.1	5764.4	5621.2	5392.3	4153.5	3384.3	3043.7	3340.4	3123.7
34.5°	5575.5	5629.6	5757.4	5694.5	5582.9	5393.7	4193.3	3400.7	3049.0	3337.7	3109.6
35°	5520.4	5549.1	5676.6	5611.8	5538.5	5366.6	4235.6	3405.5	3052.7	3333.1	3097.6
35.5°	5487.1	5493.4	5565.3	5538.7	5492.2	5315.4	4287.3	3404.8	3054.4	3329.4	3086.3
36°	5470.1	5461.8	5475.2	5509.5	5438.7	5259.8	4339.8	3392.6	3050.1	3324.5	3073.1
36.5°	5474.1	5461.7	5415.5	5492.5	5394.8	5218.0	4394.3	3376.3	3044.8	3321.2	3061.3
37°	5494.7	5475.8	5377.5	5433.0	5368.3	5186.2	4442.8	3362.4	3037.7	3314.6	3049.5
37.5°	5518.7	5500.7	5357.5	5340.0	5335.6	5160.1	4482.4	3351.2	3028.4	3308.0	3038.2
38°	5555.3	5536.6	5351.1	5239.0	5295.2	5132.6	4512.5	3342.8	3018.0	3297.8	3023.3
38.5°	5592.3	5577.2	5357.5	5171.6	5232.4	5099.6	4531.1	3341.2	3005.6	3286.6	3009.8
39°	5636.1	5624.3	5369.4	5126.2	5173.5	5058.6	4536.1	3344.6	2993.9	3272.6	2994.3
39.5°	5679.0	5670.2	5397.2	5090.1	5135.4	5022.9	4536.5	3351.1	2979.6	3261.1	2977.8
40°	5721.7	5709.8	5431.8	5060.4	5119.3	4991.8	4536.5	3362.8	2967.8	3249.7	2962.9
40.5°	5762.5	5746.1	5464.8	5037.3	5095.4	4962.9	4536.8	3371.9	2958.9	3241.4	2950.3
41°	5797.4	5782.8	5495.4	5027.1	5047.5	4932.2	4534.2	3380.1	2950.7	3234.4	2938.9
41.5°	5831.6	5812.4	5524.3	5020.9	4985.4	4901.8	4528.0	3388.9	2947.0	3227.6	2928.1
42°	5850.9	5847.0	5553.6	5024.8	4928.3	4874.6	4510.2	3398.5	2943.3	3223.2	2919.5
42.5°	5883.9	5870.0	5580.4	5034.4	4885.9	4848.8	4489.9	3405.3	2942.2	3216.2	2910.0
43°	5919.9	5902.3	5616.4	5046.0	4853.5	4821.8	4461.3	3413.7	2942.4	3211.9	2901.6
43.5°	5947.3	5927.4	5645.4	5056.6	4825.9	4791.9	4428.8	3419.2	2944.8	3209.5	2896.7
44°	5966.7	5946.9	5671.5	5061.8	4800.5	4754.6	4399.7	3420.5	2948.7	3206.2	2891.1
44.5°	5962.3	5964.3	5687.0	5074.3	4782.5	4718.9	4373.8	3422.6	2955.2	3202.3	2889.0



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CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
45°	5953.9	5955.1	5699.7	5081.6	4768.1	4691.0	4355.0	3421.4	2962.5	3198.1	2886.9
45.5°	5918.2	5951.2	5701.6	5084.6	4752.9	4663.1	4335.4	3423.6	2964.7	3194.7	2879.2
46°	5881.4	5919.4	5694.1	5085.9	4742.5	4640.4	4317.6	3428.8	2965.3	3187.0	2873.2
46.5°	5816.8	5878.6	5684.7	5081.7	4734.5	4615.7	4301.8	3434.3	2963.5	3178.8	2864.6
47°	5761.8	5816.3	5655.3	5076.1	4727.7	4582.7	4286.7	3438.8	2954.8	3170.6	2855.1
47.5°	5699.8	5757.6	5622.5	5060.8	4721.1	4542.2	4270.0	3444.8	2944.8	3160.3	2846.7
48°	5658.5	5719.6	5568.7	5037.0	4708.4	4504.5	4250.8	3446.8	2931.1	3149.1	2838.5
48.5°	5607.9	5683.1	5522.9	5014.2	4689.4	4467.9	4229.1	3445.1	2916.0	3138.7	2826.7
49°	5541.5	5633.7	5466.1	4990.4	4669.0	4431.4	4204.3	3447.4	2901.2	3127.7	2812.7
49.5°	5464.6	5572.2	5426.6	4961.2	4650.1	4394.4	4180.2	3444.8	2880.6	3114.6	2801.6
50°	5388.5	5487.8	5384.4	4927.9	4624.2	4361.9	4157.8	3445.4	2860.0	3099.8	2787.6
50.5°	5328.4	5412.9	5333.8	4888.4	4599.9	4328.1	4137.7	3445.2	2837.6	3085.9	2774.2
51°	5277.4	5335.8	5264.7	4848.8	4570.5	4289.4	4112.6	3438.1	2812.7	3069.1	2759.4
51.5°	5233.3	5276.6	5202.4	4803.2	4535.7	4249.7	4085.8	3430.7	2785.4	3050.9	2743.6
52°	5188.0	5237.7	5137.5	4760.5	4496.2	4211.0	4057.0	3421.4	2758.9	3030.6	2723.5
52.5°	5147.5	5202.1	5071.2	4716.7	4454.4	4170.6	4028.2	3408.1	2730.4	3014.1	2701.6
53°	5091.5	5159.3	5022.4	4679.3	4411.8	4124.9	3996.6	3391.9	2699.8	2991.0	2679.5
53.5°	5035.3	5095.5	4985.7	4642.9	4366.2	4078.2	3960.9	3375.6	2670.4	2964.3	2657.2
54°	4984.7	5036.2	4959.8	4592.7	4325.1	4034.1	3924.5	3355.3	2639.3	2937.6	2637.5
54.5°	4927.7	4972.9	4916.2	4548.9	4285.7	3988.0	3881.5	3333.4	2608.1	2900.8	2613.8
55°	4854.8	4903.1	4847.4	4509.6	4242.4	3944.9	3835.3	3305.9	2571.7	2863.6	2583.5
55.5°	4766.3	4818.0	4774.5	4471.4	4200.5	3899.1	3788.8	3266.7	2536.2	2827.9	2553.7
56°	4674.3	4729.6	4710.3	4434.4	4151.4	3854.3	3742.1	3222.4	2502.4	2790.5	2524.4
56.5°	4571.4	4630.1	4638.7	4393.2	4108.2	3809.2	3693.8	3175.1	2466.7	2750.8	2495.9
57°	4488.9	4532.9	4551.7	4339.8	4069.0	3768.6	3638.5	3124.7	2429.4	2710.3	2470.9
57.5°	4413.2	4456.0	4465.0	4277.4	4033.5	3726.2	3581.8	3079.0	2392.8	2667.3	2444.4
58°	4331.2	4391.5	4376.0	4207.6	3996.3	3686.9	3522.5	3034.3	2356.1	2625.3	2417.5
58.5°	4252.2	4323.1	4292.4	4133.6	3954.7	3646.3	3462.4	2987.7	2316.7	2582.3	2394.2
59°	4162.3	4247.2	4213.2	4060.8	3896.9	3602.4	3404.8	2934.2	2278.9	2541.9	2371.5
59.5°	4060.3	4157.1	4138.4	3987.1	3830.7	3556.7	3349.3	2881.8	2243.0	2497.4	2339.5
60°	3941.5	4053.3	4063.1	3921.3	3763.3	3508.0	3290.7	2829.8	2204.6	2450.6	2309.2
60.5°	3826.8	3935.8	3975.8	3854.2	3694.1	3451.7	3231.6	2776.6	2165.8	2405.6	2273.2
61°	3713.3	3821.6	3875.0	3789.1	3629.2	3394.9	3170.7	2721.6	2125.4	2359.9	2236.9
61.5°	3607.2	3709.3	3772.0	3717.5	3561.8	3339.1	3113.6	2668.3	2087.1	2318.4	2208.2
62°	3516.3	3612.6	3668.3	3644.0	3488.7	3279.5	3054.4	2613.1	2050.0	2276.9	2179.7
62.5°	3435.9	3525.6	3566.4	3555.5	3419.9	3207.8	2998.6	2556.9	2013.1	2232.5	2140.4
63°	3378.2	3447.8	3473.1	3469.0	3356.0	3139.5	2943.6	2502.5	1978.4	2187.6	2104.7
63.5°	3323.9	3381.4	3388.7	3383.7	3287.4	3070.9	2889.8	2451.7	1939.4	2143.7	2065.8
64°	3264.5	3325.5	3309.7	3298.1	3214.0	2999.3	2831.9	2400.3	1899.3	2097.4	2026.9
64.5°	3200.0	3268.7	3240.0	3216.2	3139.2	2921.8	2776.4	2352.5	1859.3	2053.0	1985.3
65°	3136.1	3203.3	3183.6	3147.1	3066.6	2847.1	2721.8	2303.6	1816.3	2006.9	1942.4
65.5°	3049.0	3116.5	3117.5	3078.9	2996.3	2770.9	2665.4	2251.0	1775.7	1961.2	1902.8
66°	2950.6	3028.3	3047.0	3013.1	2926.4	2696.0	2604.4	2195.6	1733.4	1919.2	1861.4
66.5°	2856.1	2928.0	2960.8	2950.4	2858.2	2622.0	2533.9	2142.8	1694.4	1876.4	1817.8
67°	2768.0	2827.7	2879.4	2881.7	2791.7	2553.9	2459.7	2090.6	1653.1	1833.7	1771.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
67.5°	2686.4	2740.8	2792.7	2803.5	2722.0	2489.7	2383.0	2037.5	1611.6	1788.0	1733.5
68°	2613.3	2664.4	2702.6	2723.7	2651.7	2422.4	2310.6	1986.1	1571.1	1743.7	1689.2
68.5°	2541.9	2584.2	2611.9	2643.3	2582.6	2360.3	2232.6	1931.6	1531.2	1701.0	1646.3
69°	2475.7	2507.0	2529.3	2561.7	2510.5	2300.8	2157.1	1881.7	1488.8	1657.5	1600.5
69.5°	2402.2	2438.6	2449.8	2477.4	2434.3	2241.0	2081.0	1830.7	1443.0	1609.0	1552.7
70°	2320.4	2358.3	2371.6	2399.3	2357.1	2172.9	2007.9	1778.9	1399.0	1562.3	1512.0
70.5°	2240.1	2279.4	2298.0	2324.4	2281.6	2103.8	1941.8	1727.0	1353.4	1516.0	1462.0
71°	2162.1	2200.7	2222.1	2251.9	2201.9	2035.9	1873.3	1676.1	1310.6	1466.9	1415.3
71.5°	2084.2	2119.5	2141.0	2172.7	2121.1	1963.3	1807.7	1629.9	1270.2	1422.0	1366.0
72°	2014.2	2048.8	2059.9	2093.8	2045.1	1891.4	1744.1	1581.0	1229.7	1376.5	1316.2
72.5°	1944.4	1977.2	1989.9	2016.3	1971.5	1818.3	1678.7	1532.2	1189.2	1331.5	1270.6
73°	1868.0	1908.1	1921.4	1941.9	1895.1	1747.5	1616.3	1487.4	1150.3	1286.2	1224.6
73.5°	1790.8	1832.6	1847.8	1865.2	1822.4	1678.5	1557.7	1439.1	1109.6	1241.7	1177.5
74°	1715.3	1756.7	1770.3	1790.1	1751.0	1609.3	1504.2	1386.0	1067.3	1197.4	1131.6
74.5°	1627.9	1668.8	1693.6	1714.4	1678.7	1543.1	1450.7	1324.0	1027.2	1149.5	1088.4
75°	1543.0	1577.6	1610.4	1638.7	1610.1	1479.3	1398.2	1264.8	987.4	1105.4	1045.5
75.5°	1459.5	1493.8	1530.7	1563.1	1541.5	1417.2	1342.7	1203.9	941.4	1056.6	1000.8
76°	1375.9	1410.8	1449.5	1483.0	1471.1	1351.8	1285.4	1138.3	895.2	1008.1	957.1
76.5°	1296.3	1330.1	1369.5	1405.3	1401.6	1287.9	1225.3	1072.9	848.2	961.0	916.5
77°	1221.1	1254.8	1296.1	1330.6	1332.5	1226.9	1166.1	1014.3	806.9	915.7	874.1
77.5°	1146.4	1181.3	1222.4	1256.6	1259.8	1167.3	1105.6	956.7	766.2	867.6	832.3
78°	1075.5	1107.1	1152.0	1184.1	1192.6	1105.1	1043.7	903.5	723.6	821.2	788.4
78.5°	1009.4	1039.8	1081.7	1114.7	1124.7	1043.8	984.9	850.7	685.0	773.4	747.2
79°	945.6	975.0	1009.7	1046.9	1055.7	985.7	934.2	803.5	647.1	727.4	706.8
79.5°	880.6	909.6	943.5	978.8	987.2	927.5	884.6	756.6	609.2	683.1	679.3
80°	826.0	851.0	879.9	914.0	923.1	869.6	833.7	713.5	571.4	641.1	639.0
80.5°	772.4	797.5	817.0	850.4	861.8	817.7	787.3	672.3	533.5	599.2	597.9
81°	722.1	742.6	760.8	788.9	802.9	766.6	739.5	631.7	495.6	557.3	556.8
81.5°	678.0	694.6	707.4	732.1	744.4	713.5	690.5	591.1	462.1	515.4	515.7
82°	635.0	650.4	660.3	680.0	688.2	659.2	644.7	550.6	429.4	473.6	475.5
82.5°	592.1	606.4	616.6	635.7	643.0	614.1	599.0	510.0	396.0	436.2	437.6
83°	549.1	562.5	572.9	592.0	598.1	568.9	553.3	471.2	362.2	399.1	402.4
83.5°	506.2	518.5	529.3	548.2	553.1	523.8	507.6	436.6	330.6	363.2	371.1
84°	463.3	474.5	485.6	504.5	508.2	478.7	461.9	402.7	300.7	327.4	338.9
84.5°	427.4	438.8	447.6	460.8	463.3	441.2	423.5	368.2	272.2	292.8	306.4
85°	393.1	405.0	412.5	424.4	427.7	407.4	387.4	337.0	244.8	259.5	275.2
85.5°	363.8	375.0	380.7	391.7	396.1	376.4	353.0	306.5	220.1	229.3	246.7
86°	336.9	346.9	351.9	361.9	366.7	348.2	323.3	278.4	198.2	200.3	219.8
86.5°	312.5	321.6	325.4	334.4	339.4	322.6	296.1	251.3	176.2	172.5	193.4
87°	290.6	299.6	302.3	309.0	314.0	299.0	273.0	226.5	155.8	147.9	169.6
87.5°	271.9	279.3	282.0	286.9	291.4	278.0	252.0	207.2	138.5	125.9	147.7
88°	254.5	259.8	263.0	266.0	270.3	258.7	232.1	188.8	124.4	106.4	127.7
88.5°	240.0	244.5	246.0	248.3	251.6	241.2	215.8	174.1	112.8	90.0	112.2
89°	226.8	230.3	231.1	232.6	234.2	225.5	201.3	161.2	103.3	77.4	100.0
89.5°	214.8	217.6	217.4	217.7	218.8	211.8	188.4	150.8	95.3	67.0	90.4



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CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
90°	204.8	206.5	205.3	204.8	205.1	199.2	177.1	141.3	88.9	61.4	82.4
90.5°	195.7	197.3	195.3	194.2	193.8	188.8	167.0	133.9	84.0	55.9	75.6
91°	187.8	189.0	186.3	184.2	183.4	178.5	158.1	127.7	80.0	50.3	70.3
91.5°	181.3	182.5	178.9	175.6	173.7	168.8	150.8	122.4	76.5	44.8	67.7
92°	175.4	175.9	171.5	167.3	163.9	160.7	144.6	118.1	73.7	41.9	65.3
92.5°	168.6	169.4	164.0	158.9	156.3	153.9	139.4	114.5	71.5	40.1	62.9
93°	162.4	162.9	157.2	152.3	150.3	147.8	134.7	111.2	69.9	38.9	60.5
93.5°	158.0	158.4	152.4	147.5	145.0	142.5	130.7	108.5	68.9	38.2	58.0
94°	154.9	155.1	148.6	143.3	140.2	137.9	127.1	106.0	68.0	37.7	57.3
94.5°	152.3	152.4	145.6	139.7	135.9	133.8	123.9	103.7	67.1	37.5	56.7
95°	150.3	150.4	143.3	136.5	132.2	130.2	120.8	101.6	66.2	37.4	55.7
95.5°	148.3	148.5	141.0	134.2	129.3	127.1	118.4	99.7	65.2	37.4	55.2
96°	146.1	146.3	139.1	132.0	126.8	124.3	116.0	98.0	64.7	37.1	54.9
96.5°	144.7	144.9	137.6	130.1	124.4	121.8	113.6	96.2	64.3	37.3	54.7
97°	143.7	144.0	136.4	128.5	122.4	119.5	111.4	94.8	64.2	37.7	54.4
97.5°	142.9	143.0	135.5	127.2	120.7	117.2	109.4	93.4	64.2	38.1	54.1
98°	141.9	142.1	134.5	126.0	119.0	115.1	107.4	92.4	64.4	38.6	53.7
98.5°	140.9	141.2	133.7	124.8	117.5	113.4	105.7	91.5	64.5	39.1	53.3
99°	140.2	140.4	133.0	123.8	116.3	111.7	104.2	90.9	64.7	39.5	52.8
99.5°	139.3	139.4	132.1	122.8	115.2	110.2	102.9	90.3	64.9	40.0	52.3
100°	138.2	138.5	131.3	122.1	114.1	108.8	101.8	89.9	65.2	40.6	51.9
100.5°	137.1	137.5	130.6	121.1	113.0	107.7	100.8	89.5	65.5	41.1	51.5
101°	136.0	136.6	129.4	119.8	112.2	106.8	100.1	89.3	65.8	41.7	51.1
101.5°	133.5	134.4	127.8	118.9	111.7	106.1	99.5	89.1	66.1	42.3	50.9
102°	131.5	132.7	126.8	118.7	111.5	105.6	99.0	89.1	66.5	42.9	50.7
102.5°	130.5	131.9	126.8	118.9	111.4	105.1	98.4	89.0	67.0	43.6	50.6
103°	130.9	132.4	127.1	118.9	111.2	104.7	97.8	88.9	67.6	44.2	50.6
103.5°	130.8	132.5	127.1	118.7	110.9	104.3	97.3	88.9	68.2	44.9	50.7
104°	130.2	132.0	126.6	118.4	110.6	103.9	96.9	88.8	68.8	45.6	50.8
104.5°	129.4	131.3	126.2	118.1	110.3	103.5	96.4	88.8	69.3	46.3	50.9
105°	128.6	130.6	125.8	117.8	110.2	103.2	96.0	88.8	69.9	47.0	51.2
105.5°	127.9	130.0	125.4	117.6	110.1	102.9	95.7	88.7	70.5	47.6	51.4
106°	127.1	129.4	124.8	117.4	109.9	102.5	95.3	88.6	71.0	48.2	51.8
106.5°	126.5	128.7	124.4	117.2	109.7	102.2	95.0	88.5	71.5	48.9	52.1
107°	126.0	128.2	124.0	116.9	109.4	101.9	94.6	88.5	71.9	49.5	52.4
107.5°	125.5	127.6	123.5	116.5	109.2	101.5	94.2	88.4	72.4	50.1	52.8
108°	124.9	126.8	122.9	116.0	109.0	101.2	93.9	88.4	72.9	50.7	53.1
108.5°	124.1	126.0	122.3	115.6	108.6	100.8	93.6	88.5	73.5	51.2	53.4
109°	123.2	125.1	121.6	115.1	108.3	100.5	93.4	88.6	74.0	51.8	53.8
109.5°	122.2	124.1	120.8	114.6	108.0	100.2	93.2	88.8	74.6	52.4	54.1
110°	121.1	123.0	120.2	114.0	107.7	99.9	93.2	89.1	75.2	52.9	54.4
110.5°	120.0	122.0	119.4	113.5	107.4	99.7	93.0	89.3	75.7	53.5	54.7
111°	118.9	121.1	118.6	113.0	107.1	99.5	92.8	89.5	76.2	54.0	55.0
111.5°	117.9	120.1	117.9	112.5	106.7	99.3	92.8	89.8	76.7	54.6	55.3
112°	116.9	119.1	117.2	112.0	106.3	99.1	92.7	90.1	77.2	55.1	55.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
112.5°	115.9	118.1	116.5	111.5	105.8	99.0	92.7	90.3	77.7	55.6	55.8
113°	115.0	117.3	115.7	110.8	105.4	98.9	92.7	90.6	78.2	56.0	56.1
113.5°	114.2	116.6	115.1	110.2	105.2	98.7	92.7	90.7	78.6	56.4	56.4
114°	113.5	116.0	114.3	109.6	105.0	98.7	92.7	90.9	79.0	56.8	56.6
114.5°	112.8	115.3	113.6	109.1	104.8	98.6	92.7	91.2	79.3	57.2	56.8
115°	112.1	114.5	112.8	108.8	104.6	98.4	92.7	91.4	79.6	57.5	57.0
115.5°	111.3	113.7	112.1	108.5	104.3	98.3	92.7	91.6	80.0	57.9	57.2
116°	110.6	112.9	111.6	108.3	104.2	98.2	92.7	91.7	80.3	58.2	57.3
116.5°	110.0	112.3	111.2	108.1	104.1	98.1	92.7	91.8	80.5	58.4	57.5
117°	109.6	111.8	110.9	107.9	103.9	98.0	92.7	91.9	80.8	58.5	57.6
117.5°	109.2	111.3	110.6	107.7	103.8	97.9	92.7	92.0	80.9	58.6	57.6
118°	109.0	111.0	110.4	107.6	103.6	97.8	92.7	91.9	81.0	58.6	57.7
118.5°	108.8	110.7	110.3	107.5	103.5	97.8	92.7	92.0	80.9	58.5	57.8
119°	108.7	110.5	110.1	107.5	103.3	97.8	92.7	92.0	80.8	58.4	57.9
119.5°	108.7	110.4	110.1	107.3	103.1	97.7	92.7	92.0	80.7	58.2	58.0
120°	108.8	110.4	110.2	107.2	103.0	97.7	92.8	91.9	80.6	58.0	58.1
120.5°	109.0	110.5	110.3	107.2	102.9	97.7	92.8	91.9	80.5	57.9	58.2
121°	109.2	110.5	110.3	107.1	102.8	97.7	92.9	92.0	80.3	57.7	58.2
121.5°	109.3	110.5	110.3	107.0	102.7	97.8	93.1	92.0	80.1	57.5	58.2
122°	109.4	110.6	110.4	106.9	102.7	97.9	93.2	92.1	79.8	57.1	58.2
122.5°	109.5	110.8	110.4	107.0	102.7	98.0	93.2	92.1	79.5	56.8	58.1
123°	109.8	111.0	110.5	107.0	102.7	98.1	93.4	92.1	79.2	56.4	58.1
123.5°	110.0	111.1	110.6	106.9	102.7	98.3	93.6	92.1	78.8	56.1	58.0
124°	110.2	111.3	110.7	106.8	102.7	98.5	93.8	92.1	78.5	55.8	57.9
124.5°	110.4	111.5	111.0	106.7	102.8	98.7	94.0	92.2	78.0	55.4	57.8
125°	110.7	111.8	111.1	106.7	102.8	98.9	94.3	92.3	77.6	55.2	57.7
125.5°	111.0	112.0	111.2	106.6	103.0	99.2	94.6	92.5	77.2	54.8	57.5
126°	111.3	112.3	111.3	106.5	103.1	99.4	95.0	92.7	76.9	54.4	57.4
126.5°	111.6	112.4	111.4	106.4	103.2	99.7	95.3	92.9	76.6	54.2	57.3
127°	111.6	112.6	111.5	106.4	103.4	100.0	95.7	93.1	76.4	54.0	57.3
127.5°	111.6	112.8	111.6	106.3	103.5	100.3	96.2	93.4	76.2	53.8	57.3
128°	111.7	112.9	111.7	106.2	103.7	100.6	96.6	93.6	76.0	53.7	57.4
128.5°	111.7	113.0	111.8	106.1	103.9	100.9	97.0	93.9	75.8	53.7	57.4
129°	111.7	113.1	111.8	106.0	104.1	101.2	97.6	94.3	75.7	53.7	57.6
129.5°	111.6	113.1	111.8	106.0	104.2	101.5	98.1	94.5	75.7	53.8	57.7
130°	111.6	113.0	111.9	105.9	104.3	101.7	98.6	94.9	75.6	53.8	57.9
130.5°	111.5	113.0	111.9	105.8	104.4	101.9	99.2	95.3	75.6	54.0	58.1
131°	111.3	113.0	111.9	105.7	104.5	102.1	99.7	95.7	75.6	54.2	58.3
131.5°	111.2	112.9	111.9	105.5	104.6	102.3	100.3	96.0	75.7	54.3	58.5
132°	111.1	112.8	111.9	105.3	104.5	102.5	100.8	96.3	75.7	54.5	58.6
132.5°	110.7	112.6	111.7	105.1	104.5	102.6	101.3	96.6	75.8	54.8	58.8
133°	110.4	112.3	111.5	104.8	104.3	102.7	101.7	96.9	75.8	55.0	58.9
133.5°	109.9	112.0	111.2	104.5	104.0	102.8	102.1	97.2	75.8	55.2	59.0
134°	109.3	111.6	111.0	104.2	103.7	102.8	102.4	97.4	75.8	55.4	59.2
134.5°	108.6	111.2	110.6	103.9	103.3	102.8	102.6	97.6	75.8	55.5	59.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
135°	107.9	110.7	110.2	103.5	102.8	102.8	102.8	97.7	75.8	55.7	59.3
135.5°	107.1	110.2	109.8	103.2	102.3	102.7	102.9	97.8	75.7	55.9	59.4
136°	106.3	109.7	109.3	102.8	101.7	102.6	103.0	97.8	75.7	56.0	59.4
136.5°	105.4	109.0	108.7	102.5	101.2	102.4	103.0	97.8	75.5	56.1	59.5
137°	104.4	108.2	108.1	102.0	100.5	102.1	102.8	97.8	75.4	56.2	59.5
137.5°	103.4	107.3	107.4	101.5	99.8	101.8	102.7	97.6	75.2	56.3	59.4
138°	102.2	106.4	106.7	101.0	99.0	101.4	102.4	97.4	75.0	56.5	59.3
138.5°	101.1	105.6	106.1	99.7	98.2	100.9	102.0	97.0	74.7	56.5	59.2
139°	100.1	104.6	105.2	99.1	97.4	100.4	101.5	96.7	74.4	56.5	59.0
139.5°	99.2	103.8	104.3	98.6	96.7	99.7	101.1	96.2	74.0	56.5	58.7
140°	98.2	102.8	103.3	98.0	95.9	99.0	100.4	95.6	73.5	56.3	58.4
140.5°	97.3	101.7	101.9	97.5	95.2	98.2	99.7	94.9	73.0	56.2	58.1
141°	96.1	100.4	100.3	97.0	94.5	97.3	98.8	94.2	72.4	56.0	57.6
141.5°	94.8	99.1	99.3	96.4	93.7	96.3	97.9	93.3	71.7	55.8	57.1
142°	93.4	97.3	98.4	95.8	92.9	95.3	96.9	92.3	71.0	55.5	56.6
142.5°	90.5	95.9	97.5	95.1	92.0	94.2	95.8	91.3	70.2	55.1	56.0
143°	89.6	95.0	96.5	94.3	91.2	93.0	94.6	90.1	69.3	54.7	55.4
143.5°	89.0	94.0	95.7	93.6	90.5	91.7	93.3	88.9	68.4	54.2	54.7
144°	88.2	93.0	94.7	92.7	89.7	90.4	92.0	87.5	67.4	53.6	54.0
144.5°	87.5	92.0	93.8	91.9	88.8	89.2	90.7	86.1	66.3	53.1	53.2
145°	86.9	90.9	92.8	91.0	87.9	87.9	89.2	84.6	65.2	52.4	52.3
145.5°	86.1	89.8	91.7	89.9	87.1	86.5	87.7	83.0	64.0	51.7	51.4
146°	85.2	88.7	90.6	88.9	86.0	85.1	86.2	81.4	62.7	50.9	50.5
146.5°	84.4	87.6	89.5	87.7	84.9	83.8	84.5	79.6	61.4	50.1	49.5
147°	83.5	86.4	88.4	86.5	83.7	82.4	82.8	77.8	60.1	49.2	48.5
147.5°	82.6	85.2	87.2	85.3	82.7	81.0	81.2	75.9	58.7	48.3	47.4
148°	81.7	84.0	85.9	84.0	81.3	79.6	79.4	74.0	57.2	47.3	46.3
148.5°	80.8	82.7	84.7	82.7	80.0	78.2	77.7	71.9	55.7	46.3	45.2
149°	79.7	81.5	83.4	81.3	78.7	76.7	75.8	69.9	54.2	45.3	44.0
149.5°	78.7	80.1	82.1	79.9	77.3	75.2	73.9	67.9	52.6	44.2	42.9
150°	77.7	78.7	80.7	78.4	76.0	73.7	71.9	65.9	51.0	43.1	41.7
150.5°	76.6	77.3	79.3	76.9	74.4	72.1	69.9	64.0	49.4	41.9	40.5
151°	75.5	76.0	77.8	75.4	72.9	70.6	68.0	62.0	47.8	40.8	39.2
151.5°	74.2	74.5	76.1	73.9	71.3	69.7	66.1	60.0	46.2	39.6	38.0
152°	73.0	73.0	74.4	72.3	69.8	68.0	64.1	57.8	44.5	38.3	36.8
152.5°	71.7	71.4	72.8	70.7	68.3	66.3	62.2	55.6	42.9	37.1	35.6
153°	70.3	69.8	71.1	68.7	66.7	64.6	60.2	53.4	41.2	35.9	34.3
153.5°	69.8	68.5	69.6	67.4	65.2	62.9	58.0	51.2	39.6	34.7	33.1
154°	68.4	67.1	68.0	66.0	63.6	61.1	55.8	49.0	38.0	33.4	31.9
154.5°	67.0	65.7	66.5	64.7	62.1	59.4	53.5	46.9	36.4	32.2	30.6
155°	65.7	64.4	64.9	63.4	60.3	57.5	51.3	44.8	34.9	31.0	29.4
155.5°	64.3	63.0	63.3	61.7	58.5	55.3	49.1	42.7	33.3	29.8	28.3
156°	62.9	61.5	61.8	59.9	56.8	53.0	46.8	40.7	31.9	28.6	27.1
156.5°	61.5	59.9	60.0	58.1	55.1	50.6	44.6	38.7	30.4	27.4	25.9
157°	60.1	58.4	58.3	56.3	53.4	48.3	42.4	36.7	28.9	26.2	24.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
157.5°	58.6	56.9	56.4	54.5	51.5	46.0	40.2	34.8	27.5	25.0	23.7
158°	57.1	55.3	54.6	52.7	49.8	43.7	38.0	32.9	26.1	23.9	22.6
158.5°	55.5	53.6	52.7	50.9	47.9	41.3	35.7	31.0	24.8	22.8	21.5
159°	53.8	51.9	51.0	49.1	45.6	38.9	33.5	29.2	23.4	21.7	20.4
159.5°	52.1	50.2	49.2	47.3	42.8	36.5	31.4	27.5	22.2	20.5	19.4
160°	50.5	48.6	47.5	45.5	40.3	34.3	29.5	25.8	20.9	19.5	18.4
160.5°	48.8	47.0	45.8	43.7	37.7	32.0	27.7	24.2	19.7	18.5	17.4
161°	47.2	45.5	44.2	41.6	35.1	29.8	25.9	22.6	18.5	17.4	16.5
161.5°	45.6	43.9	42.4	38.7	32.5	27.6	24.1	21.0	17.3	16.4	15.5
162°	44.0	42.2	40.6	35.8	30.0	25.3	22.4	19.5	16.2	15.4	14.6
162.5°	42.2	40.6	38.1	33.0	27.5	23.1	20.8	18.1	15.1	14.5	13.7
163°	40.4	38.7	35.2	30.3	25.1	20.8	19.2	16.7	14.0	13.5	12.8
163.5°	37.4	35.5	32.2	27.7	22.9	18.5	17.7	15.4	13.0	12.6	12.0
164°	34.2	32.4	29.3	25.3	20.7	16.9	16.2	14.2	12.0	11.8	11.2
164.5°	30.9	29.4	26.5	22.9	18.5	15.5	14.9	13.0	11.1	11.0	10.4
165°	27.8	26.5	23.9	20.7	16.3	14.2	13.6	11.9	10.3	10.2	9.7
165.5°	24.9	23.8	21.4	18.6	14.0	13.0	12.3	10.9	9.5	9.5	9.1
166°	22.2	21.3	19.2	16.4	11.9	11.8	11.2	9.9	8.7	8.8	8.4
166.5°	19.7	18.9	16.9	14.3	10.9	10.6	10.1	9.0	8.0	8.1	7.8
167°	17.3	16.7	14.7	12.1	10.2	9.7	9.1	8.2	7.3	7.5	7.2
167.5°	14.9	14.4	12.5	9.7	9.5	8.8	8.2	7.3	6.7	6.9	6.7
168°	12.4	12.0	10.0	8.9	8.9	8.1	7.3	6.7	6.1	6.3	6.2
168.5°	9.8	9.4	8.0	8.3	8.3	7.6	6.8	6.0	5.5	5.7	5.7
169°	7.5	7.6	7.4	7.7	7.7	7.1	6.4	5.4	4.9	5.1	5.1
169.5°	7.1	7.1	7.1	7.2	7.2	6.7	5.9	4.7	4.4	4.7	4.7
170°	6.8	6.8	6.7	6.8	6.8	6.3	5.4	4.5	4.2	4.4	4.6
170.5°	6.4	6.4	6.3	6.4	6.4	5.8	5.2	4.4	4.2	4.4	4.7
171°	6.1	6.0	5.9	6.1	6.0	5.5	5.0	4.4	4.2	4.4	4.7
171.5°	5.8	5.8	5.7	5.7	5.6	5.3	4.8	4.3	4.3	4.5	4.7
172°	5.6	5.5	5.5	5.4	5.3	5.0	4.7	4.3	4.4	4.6	4.8
172.5°	5.3	5.3	5.3	5.2	5.1	4.9	4.6	4.3	4.5	4.7	4.9
173°	5.1	5.2	5.1	5.0	4.9	4.8	4.6	4.4	4.6	4.8	5.0
173.5°	5.0	5.0	5.0	4.8	4.7	4.7	4.5	4.4	4.7	4.9	5.1
174°	4.8	4.8	4.8	4.6	4.6	4.5	4.5	4.5	4.7	4.9	5.2
174.5°	4.7	4.7	4.5	4.5	4.4	4.4	4.4	4.5	4.7	5.0	5.2
175°	4.5	4.5	4.4	4.3	4.3	4.4	4.3	4.5	4.7	5.0	5.2
175.5°	4.4	4.4	4.3	4.2	4.2	4.3	4.4	4.5	4.8	5.0	5.2
176°	4.3	4.2	4.2	4.1	4.2	4.2	4.4	4.6	4.8	5.0	5.2
176.5°	4.2	4.2	4.1	4.1	4.1	4.2	4.4	4.6	4.8	5.0	5.2
177°	4.2	4.2	4.1	4.0	4.1	4.2	4.4	4.6	4.8	5.0	5.2
177.5°	4.2	4.2	4.1	4.1	4.1	4.2	4.4	4.5	4.7	5.0	5.2
178°	4.2	4.2	4.1	4.1	4.1	4.2	4.3	4.5	4.7	4.9	5.1
178.5°	4.3	4.3	4.2	4.1	4.1	4.2	4.3	4.5	4.7	4.9	5.1
179°	4.3	4.3	4.2	4.1	4.2	4.2	4.4	4.5	4.7	4.9	5.0
179.5°	4.4	4.4	4.3	4.2	4.2	4.3	4.4	4.6	4.7	4.8	5.0



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CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
180°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5



REPORT NUMBER: P973044

CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8
0.5°	4270.6	4260.1	4252.8	4250.5	4252.7	4251.2	4251.3	4222.8	4221.7	4224.2	4229.5
1°	4255.4	4246.7	4251.7	4259.5	4271.3	4279.7	4282.8	4217.0	4215.3	4214.3	4212.7
1.5°	4235.5	4242.8	4269.3	4299.6	4327.1	4342.5	4344.1	4271.7	4266.4	4258.8	4250.5
2°	4232.8	4262.3	4304.5	4345.9	4376.2	4392.6	4401.2	4335.5	4327.4	4318.5	4305.4
2.5°	4231.6	4288.9	4346.3	4383.8	4405.9	4408.5	4408.4	4366.7	4359.4	4357.3	4350.5
3°	4241.3	4312.9	4367.3	4395.2	4390.2	4366.2	4351.4	4342.0	4342.7	4355.4	4361.1
3.5°	4249.6	4332.6	4374.3	4363.8	4321.2	4279.8	4263.2	4253.9	4261.7	4283.7	4331.9
4°	4263.4	4338.6	4353.6	4292.5	4232.8	4213.3	4215.5	4184.6	4183.3	4202.2	4250.2
4.5°	4270.4	4334.6	4307.3	4215.0	4189.7	4195.4	4212.6	4167.8	4161.8	4165.1	4184.1
5°	4275.4	4315.3	4231.4	4165.6	4178.6	4207.0	4222.3	4186.0	4172.7	4161.1	4155.8
5.5°	4270.1	4280.6	4165.5	4146.6	4181.9	4192.8	4183.2	4168.0	4167.2	4167.2	4160.6
6°	4260.9	4227.8	4127.9	4142.6	4158.3	4115.3	4066.7	4079.0	4089.3	4134.5	4164.7
6.5°	4251.3	4168.0	4104.7	4128.8	4085.0	3979.8	3910.4	3932.3	3955.0	4036.5	4124.3
7°	4235.9	4115.4	4094.3	4084.1	3959.7	3827.5	3775.9	3786.4	3807.3	3892.5	4035.4
7.5°	4210.3	4077.0	4073.3	3996.1	3815.9	3718.0	3713.8	3697.7	3697.1	3753.4	3900.6
8°	4173.4	4048.4	4041.0	3884.2	3707.1	3679.6	3703.8	3682.0	3672.1	3670.4	3764.9
8.5°	4140.9	4017.5	3980.7	3760.5	3643.9	3666.8	3668.5	3665.9	3667.5	3653.3	3672.6
9°	4094.7	3993.1	3905.2	3660.1	3624.0	3621.1	3565.8	3578.1	3602.0	3640.3	3649.5
9.5°	4057.0	3966.6	3809.0	3598.1	3599.0	3510.7	3405.2	3437.0	3471.0	3577.0	3645.9
10°	4021.3	3933.1	3710.1	3563.6	3521.9	3354.9	3242.9	3259.5	3301.0	3437.8	3615.1
10.5°	3987.0	3894.4	3624.3	3539.0	3401.0	3201.5	3132.8	3135.0	3152.4	3269.0	3532.4
11°	3963.3	3844.3	3551.5	3491.6	3263.3	3096.8	3074.8	3069.7	3071.9	3126.9	3376.9
11.5°	3938.9	3787.5	3496.5	3405.5	3131.5	3035.8	3006.1	3013.9	3022.3	3053.7	3217.1
12°	3917.4	3727.3	3465.0	3298.9	3035.6	2971.9	2895.9	2912.3	2946.1	3010.4	3100.1
12.5°	3896.2	3659.4	3434.0	3187.8	2980.4	2869.0	2748.6	2767.3	2820.2	2946.3	3038.6
13°	3877.7	3596.7	3391.4	3069.6	2909.5	2729.6	2595.1	2603.3	2658.3	2830.7	3001.0
13.5°	3852.7	3541.5	3334.8	2981.3	2816.5	2583.1	2474.0	2472.3	2512.7	2678.2	2943.5
14°	3822.3	3491.1	3262.5	2918.4	2701.1	2460.6	2376.1	2375.2	2402.1	2524.2	2838.9
14.5°	3790.9	3445.3	3175.8	2850.0	2566.8	2357.8	2276.6	2285.6	2315.2	2409.9	2695.1
15°	3751.7	3407.1	3091.6	2775.1	2445.2	2265.6	2168.9	2173.9	2219.3	2324.0	2540.3
15.5°	3708.4	3370.9	3004.9	2687.8	2343.5	2164.5	2040.7	2039.1	2104.7	2240.3	2416.2
16°	3667.2	3335.2	2927.0	2582.6	2253.6	2048.9	1895.4	1895.6	1963.2	2138.2	2325.4
16.5°	3623.4	3294.2	2866.2	2472.0	2160.6	1916.5	1750.5	1751.9	1813.0	2016.5	2255.9
17°	3582.3	3243.0	2804.2	2375.4	2063.8	1783.2	1629.6	1626.3	1672.4	1863.2	2169.1
17.5°	3542.8	3189.5	2737.8	2278.9	1952.3	1652.3	1530.3	1565.1	1605.0	1718.8	2060.3
18°	3500.8	3133.8	2674.1	2187.7	1822.6	1543.6	1459.1	1503.9	1537.6	1597.4	1931.4
18.5°	3460.6	3066.6	2600.6	2103.7	1705.2	1463.0	1404.5	1442.8	1470.2	1532.3	1795.1
19°	3419.6	3005.8	2516.5	2017.5	1592.7	1400.7	1358.9	1381.6	1402.8	1467.3	1661.3
19.5°	3372.6	2938.9	2429.9	1920.6	1493.4	1349.7	1316.8	1320.5	1336.1	1402.2	1591.9
20°	3327.8	2867.5	2339.5	1824.4	1419.4	1308.2	1275.9	1279.3	1292.8	1337.7	1522.6
20.5°	3285.7	2796.0	2240.8	1715.4	1357.0	1265.3	1231.6	1237.6	1251.4	1297.2	1453.3
21°	3237.1	2736.6	2157.0	1610.8	1308.5	1225.0	1189.4	1193.9	1208.9	1257.0	1384.0
21.5°	3193.3	2673.3	2076.0	1520.8	1267.1	1184.9	1146.7	1150.3	1166.2	1214.9	1316.0
22°	3154.8	2619.6	1996.8	1434.6	1227.3	1142.8	1101.2	1106.2	1122.7	1174.5	1276.7



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
22.5°	3113.0	2574.2	1929.9	1366.7	1188.4	1101.1	1058.1	1063.5	1079.6	1134.6	1238.6
23°	3079.9	2529.6	1858.3	1313.5	1151.2	1060.4	1017.1	1020.6	1038.6	1093.4	1201.5
23.5°	3046.0	2477.5	1772.4	1265.2	1112.3	1017.5	974.4	980.5	999.0	1054.3	1164.9
24°	3014.3	2424.6	1692.7	1225.9	1072.9	978.2	933.7	939.1	956.9	1014.5	1128.2
24.5°	2980.1	2362.3	1611.0	1190.4	1036.9	941.2	895.8	900.0	918.4	975.8	1092.3
25°	2946.3	2288.5	1524.6	1154.4	997.9	901.4	855.3	860.8	880.2	939.1	1055.9
25.5°	2911.8	2217.2	1452.1	1119.5	959.4	862.3	816.2	821.4	840.8	902.0	1019.6
26°	2876.4	2138.5	1390.4	1088.2	925.8	827.5	780.7	784.0	803.7	865.6	984.5
26.5°	2841.0	2065.7	1329.1	1055.0	890.2	791.2	743.0	748.4	767.9	829.6	951.1
27°	2798.8	2003.1	1282.9	1021.3	854.3	755.4	707.5	711.3	729.7	794.1	916.1
27.5°	2755.2	1942.9	1241.1	989.6	821.4	720.6	684.9	675.6	694.2	758.3	882.1
28°	2709.7	1888.1	1202.9	958.1	788.1	689.3	650.1	642.3	661.0	725.1	848.1
28.5°	2663.8	1838.2	1169.4	925.3	753.8	658.3	614.6	609.6	627.1	691.3	815.5
29°	2621.9	1789.4	1140.7	895.7	723.5	627.4	579.1	577.3	593.9	659.0	782.8
29.5°	2584.3	1741.0	1109.6	865.0	693.0	596.4	543.7	548.1	563.6	629.0	751.2
30°	2545.0	1693.2	1082.1	833.9	664.2	565.5	515.3	520.1	534.4	599.4	720.0
30.5°	2513.7	1640.6	1055.2	806.0	635.5	534.6	490.1	494.0	507.4	569.9	689.9
31°	2486.8	1588.8	1025.3	777.1	606.7	507.2	464.7	469.3	482.0	543.2	660.6
31.5°	2460.4	1544.0	998.3	747.4	577.9	481.1	441.0	446.3	457.0	517.7	633.5
32°	2442.7	1496.2	972.3	721.6	549.2	458.6	420.7	425.0	434.4	493.0	607.3
32.5°	2422.5	1453.4	945.3	694.4	524.1	435.4	400.1	405.6	413.4	469.6	581.8
33°	2401.3	1418.3	922.2	669.8	499.9	413.7	381.0	387.1	393.4	447.9	557.4
33.5°	2380.6	1383.1	900.2	645.3	478.1	394.4	364.1	370.3	375.4	427.0	534.2
34°	2357.8	1353.6	875.1	620.7	457.0	375.9	348.4	354.5	357.7	406.8	511.9
34.5°	2330.8	1329.5	852.6	596.2	436.1	357.6	333.5	339.6	341.5	387.8	490.7
35°	2306.4	1307.7	831.7	571.7	417.5	342.0	320.8	326.2	327.1	370.4	470.3
35.5°	2279.3	1288.3	809.4	549.5	399.8	327.2	308.5	313.6	313.9	353.6	449.0
36°	2250.3	1273.6	789.5	527.4	381.7	312.9	296.8	302.1	301.3	338.3	429.6
36.5°	2224.3	1257.6	770.6	508.2	365.3	300.2	286.3	291.4	290.4	323.9	411.3
37°	2197.3	1242.8	749.6	488.6	350.1	288.3	276.2	280.9	279.9	310.7	393.0
37.5°	2172.8	1230.2	731.4	470.1	334.6	277.4	266.3	271.2	270.0	298.5	375.5
38°	2150.2	1215.0	714.1	453.2	320.8	267.4	257.2	261.8	260.8	287.1	359.3
38.5°	2129.7	1201.0	695.1	437.1	307.7	258.0	248.5	252.7	251.8	276.5	343.9
39°	2111.1	1188.9	679.0	421.2	294.9	249.1	240.0	244.6	243.5	267.3	330.0
39.5°	2094.7	1175.0	663.0	407.1	283.3	240.9	232.2	236.4	235.5	257.5	316.0
40°	2076.1	1160.8	646.9	392.5	272.4	232.9	224.8	229.2	228.2	248.6	303.3
40.5°	2057.3	1149.6	630.9	378.9	261.7	225.2	217.1	222.1	221.0	240.3	291.7
41°	2041.6	1135.7	614.9	367.0	252.4	218.2	210.8	215.5	214.3	232.1	280.5
41.5°	2025.0	1121.7	599.1	355.2	243.7	211.5	204.6	209.1	208.0	224.5	270.2
42°	2007.7	1109.6	585.0	342.9	234.6	204.8	198.4	203.0	202.0	217.5	260.9
42.5°	1993.5	1096.1	572.1	332.6	226.8	198.8	192.8	197.2	196.2	210.8	251.9
43°	1977.8	1084.2	557.8	322.5	219.6	193.0	187.1	191.5	190.4	204.5	243.2
43.5°	1960.7	1072.3	544.2	312.0	212.1	187.2	181.4	186.0	184.8	198.3	235.1
44°	1946.4	1059.7	531.8	302.4	205.4	181.8	176.2	180.7	179.4	192.3	227.6
44.5°	1932.8	1047.7	518.4	293.8	199.2	176.6	171.3	175.6	174.2	186.9	220.1



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
45°	1917.8	1035.4	506.0	284.9	193.0	171.5	166.3	171.0	169.2	181.2	213.2
45.5°	1904.7	1022.6	494.7	276.8	187.3	166.6	161.8	166.4	164.4	175.7	206.4
46°	1892.6	1011.8	481.9	268.5	182.1	162.0	157.3	162.0	160.4	170.6	200.2
46.5°	1878.3	1002.5	471.0	260.7	176.7	157.5	152.9	158.0	156.3	165.4	194.1
47°	1866.1	991.4	460.8	253.5	171.7	153.0	148.7	154.0	152.3	161.2	188.5
47.5°	1853.2	982.3	450.3	246.3	166.9	148.7	144.6	150.0	148.2	157.0	183.0
48°	1838.0	973.9	441.2	239.2	162.3	144.5	140.5	146.0	144.2	152.7	177.8
48.5°	1824.2	963.2	432.0	233.0	157.9	140.5	136.6	141.8	140.2	148.5	172.4
49°	1806.6	951.9	422.5	226.8	153.5	136.5	132.6	137.9	136.5	144.3	167.5
49.5°	1786.9	942.3	414.1	220.9	149.2	132.6	128.5	133.9	132.6	140.3	162.8
50°	1770.9	930.0	406.1	215.5	145.0	128.9	124.6	129.9	128.8	136.4	158.5
50.5°	1754.5	915.1	397.4	210.4	141.1	125.3	120.9	126.1	125.0	132.7	154.3
51°	1735.3	900.7	389.6	205.1	136.9	121.6	117.2	122.2	121.3	129.0	150.0
51.5°	1720.6	885.9	382.9	200.5	133.1	118.1	113.6	118.5	117.9	125.3	145.7
52°	1703.6	870.4	375.2	195.9	129.4	114.8	110.3	115.1	114.5	121.7	141.7
52.5°	1684.7	857.7	369.0	191.3	125.6	111.4	107.1	111.6	111.1	118.0	137.7
53°	1668.1	844.4	362.8	186.9	121.9	108.0	104.0	108.3	107.9	114.5	133.9
53.5°	1646.8	829.3	355.6	182.7	118.6	104.9	101.2	105.0	104.7	111.0	130.2
54°	1624.5	814.5	349.3	178.3	115.1	101.7	98.1	102.0	101.5	107.4	126.7
54.5°	1602.9	799.7	343.4	174.2	111.7	98.6	95.2	99.0	98.6	104.1	123.2
55°	1583.5	786.2	336.9	170.1	108.6	95.7	92.4	96.0	95.7	101.0	120.0
55.5°	1564.8	773.0	331.3	166.1	105.4	92.8	89.5	93.1	92.7	97.6	116.8
56°	1547.5	758.4	325.8	162.1	102.2	89.8	86.8	90.4	89.8	94.3	113.5
56.5°	1531.0	744.4	320.1	158.2	99.3	86.9	84.3	87.7	87.0	91.1	110.3
57°	1514.7	730.9	313.9	154.1	96.2	84.0	81.8	85.2	84.3	87.9	107.0
57.5°	1501.8	719.0	308.2	150.5	93.2	81.3	79.3	82.7	81.8	84.8	103.7
58°	1485.9	706.6	301.2	146.7	90.2	78.6	76.7	80.0	79.3	81.7	100.4
58.5°	1470.6	696.0	294.6	142.9	87.1	76.0	73.8	77.2	76.4	78.8	97.2
59°	1456.7	685.6	288.4	139.1	83.9	73.3	70.7	74.3	73.6	76.2	93.8
59.5°	1442.8	673.6	281.8	135.4	80.9	70.6	67.3	71.2	70.6	73.4	90.5
60°	1431.2	661.6	275.4	131.5	78.0	67.3	63.8	67.5	67.4	70.4	87.2
60.5°	1420.9	649.6	268.7	127.8	75.1	64.1	60.4	63.0	63.4	67.3	84.0
61°	1405.0	637.6	261.5	124.2	72.5	60.8	57.0	58.8	59.1	64.2	81.0
61.5°	1382.4	627.1	255.1	120.3	69.4	57.6	53.5	55.6	55.3	60.6	78.1
62°	1362.8	615.3	249.7	116.6	66.6	54.3	49.6	51.5	52.0	56.7	75.1
62.5°	1344.7	602.4	244.0	112.9	63.8	50.9	43.9	42.9	47.3	52.8	72.0
63°	1327.6	588.7	238.2	109.2	61.0	47.2	33.3	34.3	37.8	49.3	68.7
63.5°	1308.1	573.7	232.1	105.6	58.2	42.2	21.5	25.8	28.4	43.4	65.2
64°	1286.2	557.8	224.9	102.1	55.1	33.4	9.7	17.2	18.9	34.7	61.8
64.5°	1262.5	542.6	218.0	98.5	51.9	22.2	7.6	8.6	9.4	26.0	58.3
65°	1234.1	525.5	210.7	95.0	48.5	11.2	5.7	0.2	0.4	17.3	54.3
65.5°	1207.9	509.3	202.8	91.4	43.4	2.8	3.9	0.2	0.2	8.6	48.8
66°	1179.4	493.6	196.2	87.6	35.1	2.0	2.1	0.2	0.2	0.3	40.3
66.5°	1150.9	475.2	190.7	84.1	26.0	1.4	0.2	0.2	0.2	0.2	30.7
67°	1123.4	460.1	185.2	80.7	18.1	0.8	0.2	0.2	0.2	0.2	22.0



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
67.5°	1090.5	445.4	179.1	76.8	13.8	0.2	0.2	0.2	0.2	0.2	18.6
68°	1056.9	428.6	172.6	71.7	12.9	0.2	0.2	0.2	0.2	0.2	18.1
68.5°	1027.4	414.2	165.6	66.9	12.5	0.2	0.2	0.2	0.2	0.2	17.7
69°	995.5	400.3	159.1	62.2	12.2	0.2	0.2	0.2	0.2	0.2	17.4
69.5°	962.5	385.5	152.8	57.5	11.9	0.2	0.2	0.2	0.2	0.2	17.1
70°	929.0	371.9	145.6	52.7	11.7	0.2	0.2	0.2	0.2	0.2	16.8
70.5°	896.2	358.5	139.0	48.0	11.5	0.2	0.2	0.2	0.2	0.2	16.5
71°	861.4	344.2	132.0	46.7	11.4	0.2	0.2	0.2	0.2	0.2	16.3
71.5°	824.4	329.3	123.1	45.7	11.2	0.2	0.2	0.2	0.2	0.2	16.1
72°	789.9	314.8	114.7	44.6	11.1	0.2	0.2	0.2	0.2	0.2	15.8
72.5°	754.7	298.7	107.8	43.6	10.9	0.2	0.2	0.2	0.2	0.2	15.6
73°	721.6	282.5	102.8	42.7	10.8	0.2	0.2	0.2	0.2	0.2	15.4
73.5°	688.9	269.4	98.9	41.7	10.7	0.2	0.2	0.2	0.2	0.3	15.2
74°	662.1	257.3	95.5	40.9	10.5	0.2	0.2	0.3	0.3	0.3	14.9
74.5°	635.2	246.5	91.9	40.0	10.4	0.2	0.2	0.3	0.3	0.3	14.7
75°	608.4	238.1	88.7	39.1	10.3	0.2	0.2	0.3	0.3	0.3	14.4
75.5°	581.6	230.1	85.7	38.2	10.1	0.2	0.2	0.3	0.3	0.3	14.1
76°	554.8	221.5	82.6	37.3	10.0	0.2	0.2	0.3	0.3	0.3	13.9
76.5°	531.2	213.1	79.8	36.4	9.8	0.2	0.2	0.3	0.3	0.3	13.6
77°	509.3	206.1	77.2	35.4	9.7	0.2	0.2	0.3	0.3	0.3	13.4
77.5°	487.3	197.6	74.5	34.4	9.5	0.3	0.2	0.3	0.3	0.3	13.1
78°	465.0	189.3	71.9	33.4	9.3	0.3	0.2	0.3	0.3	0.3	12.8
78.5°	442.3	180.2	69.1	32.5	9.1	0.3	0.3	0.3	0.3	0.3	12.5
79°	419.4	172.4	67.1	31.6	8.9	0.3	0.3	0.3	0.3	0.4	12.3
79.5°	396.8	164.9	65.2	30.6	8.7	0.3	0.3	0.4	0.4	0.4	12.0
80°	376.5	158.4	63.2	29.6	8.5	0.3	0.3	0.4	0.4	0.4	11.7
80.5°	355.8	151.7	61.3	28.6	8.3	0.3	0.3	0.4	0.4	0.4	11.4
81°	335.2	145.0	59.1	27.6	8.1	0.3	0.3	0.4	0.4	0.4	11.2
81.5°	315.0	138.2	56.8	26.5	7.9	0.3	0.3	0.4	0.4	0.4	10.9
82°	294.6	130.4	54.3	25.5	7.7	0.3	0.3	0.4	0.4	0.4	10.7
82.5°	275.7	121.9	51.7	24.5	7.5	0.3	0.3	0.5	0.5	0.5	10.4
83°	257.3	113.7	49.3	23.5	7.3	0.3	0.3	0.5	0.5	0.5	10.2
83.5°	238.0	106.5	46.7	22.6	7.1	0.3	0.3	0.5	0.5	0.5	9.9
84°	217.7	99.4	44.2	21.6	6.9	0.3	0.3	0.5	0.5	0.5	9.7
84.5°	199.4	92.0	41.8	20.7	6.7	0.4	0.4	0.5	0.5	0.6	9.4
85°	183.3	85.3	39.4	19.8	6.6	0.4	0.4	0.6	0.6	0.6	9.2
85.5°	168.2	79.2	37.3	19.0	6.4	0.4	0.4	0.6	0.6	0.6	8.9
86°	153.5	73.3	35.4	18.2	6.2	0.4	0.4	0.6	0.6	0.6	8.7
86.5°	139.3	68.0	33.4	17.4	6.1	0.4	0.4	0.6	0.6	0.7	8.5
87°	126.6	63.7	31.7	16.7	5.9	0.5	0.5	0.7	0.7	0.7	8.2
87.5°	115.3	59.4	30.1	16.1	5.8	0.5	0.5	0.7	0.7	0.7	8.0
88°	104.6	55.0	28.6	15.5	5.6	0.5	0.5	0.7	0.7	0.7	7.8
88.5°	95.4	50.7	27.2	14.9	5.5	0.5	0.5	0.8	0.8	0.8	7.6
89°	86.9	47.4	26.0	14.4	5.3	0.6	0.5	0.8	0.8	0.8	7.3
89.5°	79.9	44.4	24.8	13.8	5.2	0.6	0.6	0.8	0.8	0.8	7.1



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
90°	73.8	41.8	23.8	13.3	5.0	0.6	0.6	0.9	0.9	0.9	6.9
90.5°	68.0	39.5	22.9	12.8	4.9	0.6	0.6	0.9	0.9	0.9	6.7
91°	64.6	37.5	21.9	12.3	4.7	0.6	0.6	0.9	0.9	0.9	6.5
91.5°	61.3	35.9	21.1	11.9	4.6	0.7	0.7	1.0	1.0	1.0	6.4
92°	58.0	34.5	20.3	11.6	4.5	0.7	0.7	1.0	1.0	1.0	6.2
92.5°	54.8	33.3	19.7	11.3	4.4	0.7	0.7	1.0	1.0	1.0	6.1
93°	52.7	32.3	19.2	11.0	4.3	0.7	0.8	1.1	1.1	1.1	5.9
93.5°	51.0	31.6	18.8	10.7	4.2	0.8	0.8	1.1	1.1	1.1	5.8
94°	49.5	31.2	18.5	10.4	4.1	0.8	0.8	1.1	1.1	1.2	5.6
94.5°	48.5	30.8	18.1	10.2	4.0	0.8	0.8	1.2	1.2	1.2	5.5
95°	47.8	30.4	17.7	10.0	3.9	0.9	0.9	1.2	1.2	1.2	5.4
95.5°	47.3	30.1	17.3	9.8	3.8	0.9	0.9	1.2	1.3	1.3	5.3
96°	46.7	29.7	17.0	9.6	3.7	0.9	0.9	1.3	1.3	1.3	5.2
96.5°	46.3	29.3	16.7	9.5	3.6	0.9	0.9	1.3	1.3	1.3	5.1
97°	45.8	29.0	16.5	9.3	3.6	1.0	1.0	1.4	1.4	1.4	5.0
97.5°	45.2	28.7	16.2	9.2	3.5	1.0	1.0	1.4	1.4	1.4	5.0
98°	44.5	28.3	16.0	9.0	3.5	1.0	1.0	1.4	1.5	1.4	4.9
98.5°	43.9	27.9	15.7	8.9	3.4	1.1	1.1	1.5	1.5	1.5	4.8
99°	43.2	27.5	15.5	8.7	3.3	1.1	1.1	1.5	1.5	1.5	4.7
99.5°	42.5	27.1	15.2	8.6	3.3	1.1	1.1	1.6	1.6	1.6	4.7
100°	41.8	26.6	15.0	8.5	3.2	1.2	1.2	1.6	1.6	1.6	4.6
100.5°	41.2	26.1	14.8	8.5	3.2	1.2	1.2	1.6	1.6	1.6	4.5
101°	40.6	25.6	14.6	8.4	3.2	1.2	1.2	1.7	1.7	1.7	4.5
101.5°	40.0	25.2	14.5	8.3	3.1	1.2	1.3	1.7	1.7	1.7	4.4
102°	39.4	24.8	14.4	8.2	3.1	1.3	1.3	1.8	1.8	1.8	4.3
102.5°	38.9	24.4	14.3	8.1	3.1	1.3	1.3	1.8	1.8	1.8	4.2
103°	38.4	24.1	14.1	8.0	3.1	1.3	1.4	1.9	1.8	1.8	4.1
103.5°	38.1	23.8	14.0	7.9	3.0	1.4	1.4	1.9	1.9	1.9	4.1
104°	37.8	23.5	13.9	7.9	3.0	1.4	1.4	2.0	1.9	1.9	4.0
104.5°	37.5	23.3	13.7	7.8	3.0	1.4	1.5	2.0	2.0	2.0	3.9
105°	37.4	23.1	13.6	7.7	3.0	1.5	1.5	2.1	2.1	2.0	3.9
105.5°	37.2	23.0	13.4	7.6	3.0	1.5	1.5	2.1	2.1	2.1	3.9
106°	37.1	22.9	13.3	7.6	2.9	1.6	1.6	2.2	2.2	2.1	3.9
106.5°	37.1	22.8	13.2	7.5	2.9	1.6	1.6	2.2	2.2	2.2	3.9
107°	37.1	22.8	13.1	7.3	2.9	1.6	1.7	2.3	2.3	2.2	3.9
107.5°	37.1	22.8	12.9	7.2	2.9	1.7	1.7	2.3	2.3	2.3	3.9
108°	37.1	22.7	12.9	7.1	2.9	1.7	1.8	2.4	2.4	2.3	3.9
108.5°	37.1	22.7	12.8	7.0	2.9	1.8	1.8	2.4	2.4	2.4	3.9
109°	37.2	22.7	12.7	6.9	2.9	1.8	1.8	2.5	2.4	2.4	3.9
109.5°	37.2	22.7	12.7	6.9	2.9	1.8	1.9	2.5	2.5	2.4	3.9
110°	37.2	22.7	12.6	6.8	3.0	1.9	1.9	2.5	2.5	2.5	3.9
110.5°	37.3	22.6	12.6	6.7	3.0	1.9	2.0	2.6	2.6	2.5	3.9
111°	37.3	22.6	12.7	6.7	3.0	2.0	2.0	2.6	2.6	2.5	4.0
111.5°	37.3	22.5	12.7	6.6	3.1	2.0	2.1	2.7	2.6	2.6	4.0
112°	37.4	22.5	12.7	6.6	3.1	2.1	2.1	2.7	2.7	2.6	4.0



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
112.5°	37.4	22.4	12.8	6.6	3.2	2.1	2.2	2.7	2.7	2.6	4.0
113°	37.4	22.4	12.8	6.6	3.2	2.2	2.2	2.8	2.7	2.7	4.0
113.5°	37.5	22.3	12.8	6.6	3.2	2.2	2.3	2.8	2.8	2.7	4.0
114°	37.5	22.3	12.7	6.6	3.3	2.3	2.3	2.8	2.8	2.7	4.1
114.5°	37.5	22.2	12.7	6.7	3.4	2.3	2.4	2.9	2.8	2.8	4.1
115°	37.5	22.2	12.7	6.7	3.4	2.4	2.4	2.9	2.9	2.8	4.1
115.5°	37.5	22.2	12.6	6.8	3.5	2.4	2.5	2.9	2.9	2.9	4.1
116°	37.5	22.1	12.6	6.9	3.6	2.5	2.5	3.0	2.9	2.9	4.2
116.5°	37.6	22.1	12.5	7.0	3.6	2.6	2.6	3.0	3.0	2.9	4.2
117°	37.7	22.0	12.5	7.1	3.7	2.6	2.6	3.0	3.0	2.9	4.2
117.5°	37.8	22.0	12.5	7.2	3.8	2.7	2.7	3.1	3.0	3.0	4.2
118°	37.8	21.9	12.5	7.3	3.9	2.8	2.8	3.1	3.1	3.0	4.3
118.5°	37.9	21.9	12.5	7.4	3.9	2.8	2.9	3.1	3.1	3.1	4.3
119°	38.0	21.9	12.5	7.5	4.0	2.9	2.9	3.2	3.1	3.1	4.3
119.5°	38.0	21.8	12.5	7.6	4.1	3.0	3.0	3.2	3.2	3.1	4.4
120°	38.1	21.8	12.5	7.6	4.1	3.0	3.1	3.3	3.2	3.2	4.4
120.5°	38.1	21.8	12.5	7.7	4.2	3.1	3.1	3.3	3.3	3.2	4.4
121°	38.1	21.8	12.5	7.8	4.3	3.2	3.2	3.3	3.3	3.3	4.5
121.5°	38.2	21.8	12.6	7.9	4.3	3.2	3.3	3.4	3.4	3.3	4.5
122°	38.2	21.8	12.6	7.9	4.4	3.3	3.3	3.4	3.4	3.3	4.5
122.5°	38.2	21.8	12.7	8.0	4.4	3.4	3.4	3.5	3.4	3.4	4.6
123°	38.2	21.9	12.7	8.1	4.4	3.4	3.4	3.5	3.5	3.4	4.6
123.5°	38.2	21.9	12.8	8.1	4.5	3.5	3.5	3.5	3.5	3.5	4.7
124°	38.3	22.0	12.9	8.2	4.5	3.5	3.6	3.6	3.6	3.5	4.7
124.5°	38.3	22.1	13.0	8.2	4.6	3.6	3.6	3.6	3.6	3.6	4.8
125°	38.4	22.2	13.0	8.3	4.6	3.6	3.7	3.7	3.7	3.6	4.9
125.5°	38.5	22.4	13.1	8.3	4.7	3.7	3.7	3.8	3.7	3.7	5.0
126°	38.7	22.5	13.2	8.4	4.7	3.8	3.8	3.8	3.8	3.7	5.0
126.5°	38.8	22.7	13.3	8.4	4.7	3.8	3.8	3.9	3.8	3.8	5.1
127°	39.0	22.8	13.4	8.5	4.7	3.9	3.9	4.0	3.9	3.9	5.2
127.5°	39.3	23.0	13.5	8.5	4.8	3.9	4.0	4.0	4.0	3.9	5.3
128°	39.5	23.1	13.6	8.5	4.8	4.0	4.0	4.1	4.1	4.0	5.3
128.5°	39.8	23.3	13.7	8.6	4.9	4.0	4.1	4.2	4.1	4.1	5.4
129°	40.1	23.5	13.8	8.6	4.9	4.1	4.1	4.2	4.2	4.1	5.5
129.5°	40.4	23.6	13.9	8.6	4.9	4.1	4.2	4.3	4.3	4.2	5.5
130°	40.7	23.8	14.0	8.7	5.0	4.2	4.2	4.4	4.3	4.2	5.6
130.5°	41.0	24.0	14.1	8.7	5.0	4.2	4.3	4.4	4.4	4.3	5.6
131°	41.4	24.2	14.2	8.7	5.0	4.3	4.4	4.5	4.5	4.4	5.6
131.5°	41.7	24.4	14.3	8.8	5.1	4.3	4.4	4.6	4.5	4.4	5.7
132°	42.0	24.5	14.4	8.8	5.1	4.4	4.5	4.6	4.6	4.5	5.7
132.5°	42.3	24.7	14.5	8.8	5.1	4.4	4.5	4.7	4.7	4.6	5.7
133°	42.6	24.9	14.6	8.9	5.2	4.5	4.6	4.8	4.7	4.6	5.8
133.5°	42.9	25.0	14.7	8.9	5.2	4.5	4.6	4.8	4.8	4.7	5.8
134°	43.2	25.2	14.7	8.9	5.2	4.5	4.6	4.9	4.9	4.8	5.9
134.5°	43.5	25.3	14.8	8.9	5.2	4.6	4.7	5.0	4.9	4.8	5.9



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
135°	43.8	25.4	14.9	8.9	5.3	4.6	4.7	5.0	5.0	4.9	5.9
135.5°	44.0	25.5	14.9	9.0	5.3	4.7	4.7	5.1	5.1	5.0	6.0
136°	44.2	25.6	14.9	9.0	5.3	4.7	4.8	5.2	5.1	5.0	6.0
136.5°	44.5	25.7	15.0	9.0	5.3	4.7	4.8	5.2	5.2	5.1	6.0
137°	44.7	25.7	15.0	9.0	5.3	4.8	4.8	5.3	5.2	5.2	6.1
137.5°	44.8	25.8	15.0	9.0	5.3	4.8	4.9	5.3	5.3	5.2	6.1
138°	45.0	25.8	15.0	9.0	5.4	4.8	4.9	5.4	5.4	5.3	6.1
138.5°	45.1	25.8	15.0	9.0	5.4	4.9	5.0	5.4	5.4	5.3	6.1
139°	45.2	25.9	15.0	8.9	5.4	4.9	5.0	5.5	5.5	5.4	6.1
139.5°	45.2	25.8	15.0	8.9	5.4	4.9	5.0	5.5	5.5	5.4	6.2
140°	45.2	25.8	15.0	8.9	5.4	5.0	5.1	5.6	5.5	5.5	6.2
140.5°	45.2	25.8	14.9	8.9	5.4	5.0	5.1	5.6	5.6	5.5	6.2
141°	45.1	25.7	14.9	8.8	5.4	5.0	5.1	5.6	5.6	5.6	6.2
141.5°	45.0	25.7	14.8	8.8	5.4	5.0	5.1	5.7	5.7	5.6	6.2
142°	44.8	25.6	14.8	8.8	5.4	5.0	5.2	5.7	5.7	5.6	6.2
142.5°	44.6	25.5	14.7	8.7	5.4	5.1	5.2	5.8	5.7	5.7	6.2
143°	44.3	25.4	14.6	8.7	5.4	5.1	5.2	5.8	5.8	5.7	6.2
143.5°	44.1	25.3	14.5	8.6	5.4	5.1	5.2	5.8	5.8	5.7	6.2
144°	43.7	25.2	14.4	8.5	5.4	5.1	5.2	5.8	5.8	5.8	6.2
144.5°	43.3	25.0	14.3	8.5	5.4	5.1	5.2	5.9	5.9	5.8	6.2
145°	42.9	24.9	14.2	8.4	5.4	5.1	5.2	5.9	5.9	5.8	6.2
145.5°	42.4	24.7	14.1	8.4	5.4	5.1	5.2	5.9	5.9	5.8	6.2
146°	41.9	24.5	14.0	8.3	5.4	5.2	5.3	5.9	5.9	5.9	6.2
146.5°	41.3	24.3	13.8	8.2	5.3	5.2	5.3	5.9	5.9	5.9	6.2
147°	40.7	24.1	13.7	8.1	5.3	5.2	5.3	5.9	5.9	5.9	6.1
147.5°	40.0	23.9	13.5	8.1	5.3	5.2	5.3	5.9	5.9	5.9	6.1
148°	39.2	23.7	13.4	8.0	5.3	5.2	5.3	5.9	5.9	5.9	6.1
148.5°	38.5	23.4	13.3	7.9	5.3	5.2	5.3	5.9	5.9	5.9	6.1
149°	37.7	23.2	13.1	7.8	5.3	5.2	5.3	5.9	5.9	5.9	6.0
149.5°	36.8	22.9	13.0	7.7	5.3	5.2	5.3	5.9	5.9	5.9	6.0
150°	35.9	22.5	12.8	7.7	5.2	5.2	5.4	5.9	5.9	5.9	5.9
150.5°	35.0	22.2	12.7	7.6	5.2	5.2	5.4	5.9	5.9	5.8	5.9
151°	34.1	21.8	12.5	7.5	5.2	5.3	5.4	5.8	5.9	5.8	5.8
151.5°	33.2	21.5	12.4	7.4	5.2	5.3	5.4	5.8	5.8	5.8	5.8
152°	32.2	21.1	12.2	7.3	5.2	5.3	5.4	5.8	5.8	5.8	5.8
152.5°	31.2	20.7	12.0	7.2	5.1	5.3	5.4	5.8	5.8	5.8	5.7
153°	30.2	20.2	11.8	7.1	5.1	5.3	5.4	5.8	5.8	5.8	5.7
153.5°	29.2	19.8	11.6	7.0	5.1	5.3	5.4	5.8	5.8	5.7	5.6
154°	28.1	19.3	11.4	6.9	5.1	5.3	5.4	5.7	5.7	5.7	5.6
154.5°	27.1	18.8	11.2	6.7	5.0	5.2	5.4	5.7	5.7	5.7	5.5
155°	26.1	18.3	11.0	6.6	5.0	5.2	5.4	5.7	5.7	5.7	5.5
155.5°	25.1	17.8	10.8	6.5	5.0	5.3	5.4	5.6	5.6	5.6	5.5
156°	24.0	17.3	10.5	6.3	5.0	5.3	5.4	5.6	5.6	5.6	5.4
156.5°	23.0	16.7	10.3	6.2	5.0	5.3	5.4	5.6	5.6	5.6	5.4
157°	22.0	16.2	10.0	6.1	5.0	5.3	5.4	5.6	5.6	5.6	5.4



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
157.5°	21.1	15.7	9.8	5.9	5.1	5.3	5.5	5.6	5.6	5.5	5.4
158°	20.1	15.1	9.6	5.8	5.1	5.4	5.5	5.6	5.5	5.5	5.4
158.5°	19.2	14.5	9.3	5.6	5.1	5.4	5.5	5.6	5.5	5.5	5.3
159°	18.2	13.9	9.0	5.5	5.1	5.4	5.5	5.5	5.5	5.5	5.3
159.5°	17.3	13.3	8.7	5.3	5.1	5.4	5.6	5.5	5.5	5.5	5.3
160°	16.4	12.7	8.4	5.2	5.2	5.5	5.6	5.5	5.5	5.4	5.3
160.5°	15.5	12.1	8.0	5.2	5.2	5.5	5.6	5.5	5.5	5.4	5.3
161°	14.6	11.5	7.7	5.2	5.2	5.5	5.6	5.5	5.4	5.4	5.2
161.5°	13.8	10.9	7.3	5.1	5.2	5.4	5.6	5.4	5.4	5.4	5.2
162°	12.9	10.3	7.0	5.0	5.2	5.4	5.6	5.4	5.4	5.3	5.2
162.5°	12.1	9.7	6.7	5.0	5.2	5.4	5.6	5.4	5.3	5.3	5.1
163°	11.4	9.1	6.3	4.9	5.2	5.4	5.6	5.3	5.3	5.3	5.1
163.5°	10.6	8.6	6.0	4.9	5.2	5.5	5.6	5.3	5.3	5.2	5.1
164°	9.9	8.1	5.8	5.0	5.2	5.5	5.6	5.3	5.3	5.2	5.1
164.5°	9.3	7.6	5.6	5.0	5.3	5.5	5.7	5.2	5.2	5.2	5.0
165°	8.7	7.2	5.4	5.1	5.3	5.6	5.7	5.2	5.2	5.2	5.0
165.5°	8.1	6.7	5.2	5.1	5.4	5.6	5.8	5.2	5.2	5.1	5.0
166°	7.6	6.3	5.1	5.2	5.5	5.7	5.8	5.2	5.2	5.1	5.0
166.5°	7.1	5.9	5.1	5.3	5.5	5.8	5.9	5.2	5.2	5.2	5.0
167°	6.6	5.6	5.2	5.4	5.6	5.8	6.0	5.2	5.2	5.2	5.1
167.5°	6.1	5.3	5.2	5.4	5.6	5.8	6.0	5.2	5.2	5.2	5.0
168°	5.7	5.1	5.3	5.4	5.6	5.9	6.0	5.2	5.2	5.1	5.0
168.5°	5.2	5.1	5.3	5.4	5.7	5.9	6.0	5.2	5.2	5.1	5.0
169°	4.9	5.1	5.3	5.5	5.7	5.9	6.1	5.1	5.1	5.1	5.0
169.5°	4.9	5.1	5.3	5.5	5.7	5.9	6.1	5.1	5.1	5.1	5.0
170°	4.9	5.1	5.3	5.5	5.7	5.9	6.1	5.1	5.1	5.0	4.9
170.5°	4.9	5.1	5.3	5.5	5.7	6.0	6.2	5.1	5.1	5.0	4.9
171°	4.9	5.2	5.4	5.6	5.8	6.0	6.2	5.1	5.0	5.0	4.9
171.5°	5.0	5.2	5.4	5.6	5.8	6.1	6.3	5.0	5.0	5.0	4.8
172°	5.1	5.3	5.5	5.7	5.9	6.2	6.4	5.0	5.0	4.9	4.8
172.5°	5.2	5.4	5.6	5.8	6.0	6.3	6.4	5.0	5.0	4.9	4.8
173°	5.3	5.5	5.7	5.9	6.1	6.4	6.5	5.0	5.0	4.9	4.7
173.5°	5.4	5.6	5.8	6.0	6.2	6.4	6.6	5.0	4.9	4.8	4.7
174°	5.4	5.6	5.8	6.0	6.2	6.4	6.6	4.9	4.9	4.8	4.7
174.5°	5.4	5.6	5.8	6.0	6.2	6.4	6.6	4.9	4.9	4.8	4.7
175°	5.4	5.6	5.8	6.0	6.2	6.4	6.6	4.9	4.9	4.8	4.7
175.5°	5.4	5.6	5.8	6.0	6.2	6.4	6.6	4.8	4.8	4.8	4.6
176°	5.4	5.6	5.8	6.0	6.1	6.4	6.5	4.8	4.8	4.7	4.6
176.5°	5.4	5.6	5.8	5.9	6.1	6.3	6.5	4.7	4.7	4.7	4.5
177°	5.4	5.6	5.7	5.9	6.1	6.3	6.4	4.7	4.7	4.6	4.5
177.5°	5.4	5.5	5.7	5.8	6.0	6.2	6.4	4.7	4.6	4.6	4.5
178°	5.3	5.5	5.6	5.8	5.9	6.1	6.3	4.6	4.6	4.5	4.4
178.5°	5.3	5.4	5.6	5.7	5.9	6.1	6.3	4.6	4.5	4.5	4.4
179°	5.2	5.4	5.5	5.7	5.8	6.0	6.2	4.5	4.5	4.4	4.3
179.5°	5.2	5.3	5.5	5.6	5.8	6.0	6.1	4.5	4.4	4.4	4.3



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
180°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5



REPORT NUMBER: P973044

CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8	4291.8
0.5°	4235.9	4241.9	4252.9	4265.2	4276.7	4290.5	4305.8	4319.7	4329.5	4339.7	4352.6
1°	4215.0	4218.0	4232.5	4251.2	4268.2	4291.4	4320.3	4349.8	4377.6	4391.5	4402.4
1.5°	4244.3	4232.0	4225.0	4233.6	4258.2	4292.4	4330.7	4377.1	4398.2	4392.5	4371.7
2°	4285.5	4259.1	4241.7	4228.8	4247.2	4289.4	4346.4	4390.5	4379.2	4336.1	4275.9
2.5°	4326.4	4294.7	4269.3	4236.8	4238.1	4287.1	4357.1	4388.1	4331.8	4231.8	4122.7
3°	4357.6	4329.3	4290.0	4250.0	4232.1	4282.4	4364.7	4365.7	4248.5	4105.0	3980.8
3.5°	4363.2	4349.6	4313.5	4264.8	4228.5	4282.4	4373.3	4325.1	4159.4	3990.9	3901.5
4°	4318.5	4353.1	4335.5	4279.3	4233.8	4283.0	4376.9	4286.7	4067.7	3903.9	3871.8
4.5°	4243.8	4333.2	4356.1	4304.3	4237.2	4280.1	4375.1	4228.2	3970.9	3870.2	3889.1
5°	4182.8	4282.2	4361.6	4323.3	4242.5	4275.6	4371.5	4158.2	3910.5	3871.8	3903.9
5.5°	4153.1	4221.6	4347.6	4337.2	4235.2	4271.0	4355.1	4087.7	3869.8	3889.1	3862.0
6°	4157.1	4175.3	4313.2	4339.9	4235.4	4264.5	4334.9	4011.4	3853.9	3896.9	3757.2
6.5°	4174.1	4155.9	4263.2	4339.6	4234.9	4255.6	4310.8	3939.0	3860.8	3860.5	3620.5
7°	4159.1	4159.7	4211.1	4338.6	4233.3	4250.0	4280.2	3891.9	3871.6	3763.8	3513.0
7.5°	4104.0	4164.3	4160.5	4331.3	4236.5	4243.9	4244.9	3854.5	3875.5	3637.1	3487.6
8°	4010.6	4160.1	4135.0	4310.6	4242.2	4232.6	4207.1	3828.1	3849.4	3532.7	3549.1
8.5°	3882.7	4127.2	4124.0	4279.6	4242.0	4221.0	4166.0	3820.2	3797.2	3468.2	3669.4
9°	3751.1	4067.6	4125.5	4237.8	4243.3	4212.7	4124.0	3819.5	3710.6	3475.6	3785.7
9.5°	3671.7	3977.7	4123.6	4196.1	4244.2	4201.0	4070.0	3815.8	3616.8	3526.3	3849.0
10°	3637.1	3863.6	4119.2	4148.9	4242.4	4191.5	4027.6	3823.2	3527.1	3627.3	3832.9
10.5°	3633.2	3755.5	4100.1	4113.1	4241.7	4183.3	3986.8	3819.9	3449.2	3728.4	3758.9
11°	3618.6	3660.1	4064.5	4083.1	4240.3	4170.5	3940.6	3803.7	3423.9	3793.5	3695.0
11.5°	3576.9	3606.0	4009.2	4060.1	4234.2	4161.9	3901.9	3775.1	3434.9	3818.8	3677.3
12°	3464.7	3580.2	3936.3	4049.5	4226.9	4148.9	3858.1	3734.4	3476.7	3777.9	3738.2
12.5°	3322.1	3575.0	3855.0	4040.7	4216.3	4134.3	3816.7	3673.6	3541.0	3716.8	3854.7
13°	3172.7	3567.1	3757.7	4032.3	4204.4	4119.0	3781.3	3613.5	3609.5	3667.5	4017.9
13.5°	3065.7	3530.3	3666.0	4018.2	4178.3	4103.4	3752.6	3543.7	3673.8	3650.0	4142.9
14°	3005.1	3455.7	3592.6	4004.7	4160.9	4088.4	3722.6	3468.6	3710.9	3677.8	4187.9
14.5°	2970.0	3347.1	3527.7	3982.9	4134.9	4066.4	3700.5	3416.2	3720.5	3752.0	4166.1
15°	2925.2	3207.5	3488.1	3956.7	4110.5	4049.0	3677.9	3369.4	3701.3	3865.6	4100.8
15.5°	2846.8	3085.7	3467.7	3923.7	4082.6	4031.9	3663.1	3341.2	3654.6	3973.3	4039.1
16°	2727.0	2989.1	3449.8	3887.0	4053.3	4014.4	3646.2	3329.2	3608.6	4055.9	4029.3
16.5°	2588.8	2926.7	3433.5	3845.3	4022.9	3996.8	3632.2	3334.7	3572.8	4090.1	4081.1
17°	2454.7	2889.6	3412.3	3800.8	3994.0	3974.9	3618.4	3352.1	3559.9	4079.6	4159.2
17.5°	2343.2	2856.4	3366.0	3740.8	3960.9	3954.4	3600.2	3372.2	3568.0	4037.2	4236.9
18°	2260.6	2803.8	3295.1	3676.7	3925.9	3934.3	3586.0	3403.4	3603.6	3974.2	4293.1
18.5°	2190.4	2725.4	3200.8	3607.2	3890.2	3912.4	3565.6	3432.4	3658.5	3933.5	4324.6
19°	2118.1	2617.4	3091.9	3528.4	3851.0	3892.3	3549.4	3454.9	3717.7	3928.2	4349.4
19.5°	2029.7	2499.0	2990.2	3458.0	3818.9	3867.5	3529.7	3475.9	3784.9	3959.2	4383.5
20°	1926.7	2381.3	2903.1	3391.4	3782.4	3848.5	3502.2	3487.0	3832.2	4014.9	4454.1
20.5°	1807.6	2284.1	2825.4	3333.0	3752.9	3823.5	3476.3	3479.0	3861.5	4076.2	4569.0
21°	1691.8	2204.6	2771.0	3284.2	3723.2	3799.2	3444.8	3461.2	3875.0	4135.6	4726.8
21.5°	1620.7	2141.0	2732.0	3244.0	3692.3	3768.3	3407.9	3437.9	3863.3	4177.0	4894.0
22°	1549.5	2081.3	2693.3	3208.3	3665.2	3739.3	3374.1	3409.4	3831.7	4204.2	5062.6



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CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
22.5°	1478.4	2011.1	2650.7	3182.6	3641.7	3713.4	3342.7	3384.5	3785.6	4219.4	5205.7
23°	1407.3	1937.4	2599.0	3158.3	3616.8	3685.1	3307.2	3359.1	3742.3	4239.3	5289.6
23.5°	1337.8	1857.3	2533.2	3137.5	3597.1	3660.9	3270.9	3343.5	3710.9	4278.1	5354.4
24°	1297.9	1766.2	2453.4	3111.6	3572.9	3632.7	3230.9	3329.0	3696.9	4354.1	5429.5
24.5°	1263.1	1678.9	2374.1	3078.7	3549.4	3608.8	3188.6	3320.0	3703.8	4452.9	5512.4
25°	1229.8	1596.1	2292.2	3038.1	3526.6	3588.2	3153.0	3316.3	3725.2	4573.9	5623.3
25.5°	1195.8	1541.2	2219.2	2987.0	3505.3	3564.6	3117.4	3321.2	3759.0	4713.1	5756.4
26°	1163.3	1486.3	2149.9	2932.3	3480.7	3544.5	3081.6	3337.5	3790.5	4814.0	5852.2
26.5°	1130.7	1431.4	2086.6	2869.3	3461.0	3524.8	3056.6	3351.8	3818.3	4894.3	5916.4
27°	1098.5	1376.5	2032.8	2813.1	3437.9	3508.9	3032.4	3378.5	3848.3	4959.3	5948.2
27.5°	1065.7	1322.2	1978.7	2749.7	3415.9	3489.0	3011.7	3404.9	3866.1	4997.1	5957.8
28°	1031.5	1288.7	1926.0	2694.1	3390.6	3473.1	2996.3	3423.6	3879.7	5027.5	5967.5
28.5°	999.3	1258.1	1877.3	2650.4	3368.8	3454.8	2979.2	3445.5	3898.1	5072.1	5991.0
29°	967.3	1229.0	1824.5	2607.7	3341.5	3440.3	2967.4	3459.9	3920.4	5127.2	6009.0
29.5°	934.5	1198.4	1770.7	2569.9	3315.8	3422.5	2957.5	3460.3	3942.9	5194.0	6006.1
30°	902.7	1169.4	1722.0	2541.0	3290.8	3405.8	2945.9	3455.2	3984.0	5273.6	5979.5
30.5°	870.3	1141.1	1671.3	2510.6	3263.4	3387.6	2937.7	3439.5	4033.7	5330.2	5937.8
31°	838.4	1111.4	1621.5	2479.9	3234.8	3371.8	2930.0	3417.9	4085.6	5354.7	5896.0
31.5°	808.2	1081.8	1575.5	2452.4	3207.9	3355.9	2923.0	3391.1	4164.4	5364.3	5862.7
32°	779.4	1052.7	1532.0	2420.7	3178.0	3340.0	2921.9	3359.5	4231.1	5355.5	5837.8
32.5°	749.6	1022.8	1500.1	2384.0	3154.1	3325.0	2920.6	3333.2	4281.4	5348.1	5806.5
33°	721.7	993.5	1468.2	2352.7	3128.4	3312.8	2922.3	3316.6	4327.1	5349.8	5766.8
33.5°	695.2	965.1	1436.3	2315.6	3105.8	3299.9	2921.9	3307.3	4359.0	5352.9	5715.3
34°	668.8	936.2	1404.4	2282.2	3079.9	3288.4	2922.3	3302.9	4375.8	5351.5	5660.9
34.5°	644.3	906.9	1372.8	2252.4	3055.1	3279.4	2921.7	3305.9	4392.3	5340.9	5611.0
35°	621.2	879.1	1350.5	2223.2	3033.3	3269.4	2922.0	3314.2	4402.6	5316.6	5570.4
35.5°	597.3	849.8	1329.8	2196.1	3015.8	3259.9	2919.1	3318.9	4407.7	5279.6	5527.2
36°	576.6	823.4	1312.5	2175.0	2999.1	3249.7	2918.9	3324.2	4422.8	5238.1	5474.1
36.5°	556.0	797.8	1295.3	2152.2	2985.4	3242.5	2917.0	3331.1	4445.8	5198.4	5411.8
37°	534.6	772.1	1277.2	2133.0	2973.5	3236.1	2909.4	3330.9	4466.9	5161.2	5349.9
37.5°	515.2	749.2	1260.5	2116.9	2961.6	3228.7	2900.3	3332.1	4487.3	5126.9	5287.4
38°	496.8	728.8	1243.6	2097.2	2953.2	3222.9	2888.5	3335.2	4503.5	5089.9	5241.0
38.5°	478.2	708.2	1226.6	2081.3	2946.5	3218.4	2874.4	3338.2	4509.3	5055.2	5200.9
39°	461.2	688.5	1210.7	2066.7	2941.9	3213.1	2863.4	3341.6	4512.3	5016.2	5152.9
39.5°	443.9	670.3	1192.1	2047.8	2935.9	3207.1	2847.9	3349.9	4508.9	4973.0	5107.8
40°	427.1	652.7	1175.1	2033.9	2930.3	3203.3	2837.9	3357.9	4496.7	4938.1	5065.2
40.5°	410.7	636.2	1158.5	2019.0	2920.4	3192.9	2827.8	3366.7	4485.2	4908.6	5024.9
41°	395.0	621.2	1140.3	2001.6	2910.0	3183.7	2818.1	3378.0	4474.4	4873.2	4987.6
41.5°	380.2	606.1	1123.0	1985.1	2899.6	3173.5	2810.6	3385.8	4464.7	4839.7	4959.5
42°	366.9	592.9	1107.0	1969.5	2885.7	3164.2	2802.9	3394.0	4460.7	4804.3	4935.5
42.5°	353.0	579.1	1089.0	1950.6	2871.0	3156.8	2797.3	3406.3	4456.9	4768.3	4909.7
43°	339.9	566.2	1072.4	1934.1	2856.6	3150.6	2793.7	3413.6	4445.0	4731.1	4878.1
43.5°	328.3	554.1	1056.8	1918.4	2843.0	3147.4	2793.2	3420.8	4429.4	4696.7	4849.0
44°	316.6	542.2	1039.9	1899.0	2830.2	3144.7	2795.8	3435.1	4406.8	4667.2	4821.6
44.5°	305.5	530.2	1023.9	1883.0	2818.9	3140.9	2798.7	3444.8	4374.6	4641.1	4805.0



REPORT NUMBER: P973044

CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
45°	295.4	519.6	1010.9	1868.2	2808.1	3139.5	2801.3	3454.6	4343.0	4614.8	4790.6
45.5°	285.7	508.8	997.8	1849.8	2798.5	3135.3	2804.0	3468.6	4317.2	4586.5	4776.7
46°	276.6	497.9	986.9	1835.1	2788.4	3132.2	2806.0	3477.0	4292.7	4553.8	4763.7
46.5°	268.4	487.9	977.6	1819.3	2776.6	3126.9	2805.3	3481.3	4272.8	4520.6	4754.1
47°	260.4	477.9	968.1	1803.2	2765.1	3121.0	2804.0	3490.1	4253.0	4488.0	4742.8
47.5°	253.1	467.5	960.9	1788.9	2753.9	3115.5	2801.7	3494.3	4230.2	4457.7	4731.9
48°	246.7	458.4	953.9	1772.8	2740.8	3108.3	2796.1	3496.8	4205.1	4427.5	4723.1
48.5°	240.0	449.0	946.6	1755.1	2729.9	3099.2	2788.8	3505.9	4178.7	4392.5	4713.4
49°	234.0	440.2	939.9	1738.7	2720.7	3091.5	2778.2	3511.8	4152.5	4356.9	4697.4
49.5°	228.3	432.0	934.0	1721.1	2709.0	3082.1	2767.9	3520.5	4131.0	4317.4	4682.4
50°	222.5	423.8	926.2	1701.8	2696.2	3072.9	2754.5	3532.0	4106.4	4276.3	4660.6
50.5°	217.1	415.9	920.3	1684.4	2684.9	3064.0	2738.8	3534.6	4080.2	4238.9	4635.3
51°	212.2	408.7	913.8	1664.0	2669.2	3054.3	2720.6	3536.5	4054.2	4197.1	4604.6
51.5°	207.0	401.0	905.3	1643.4	2654.1	3041.6	2699.4	3536.7	4021.1	4159.0	4569.7
52°	202.3	394.1	898.7	1626.3	2639.0	3024.3	2677.8	3529.0	3985.6	4125.6	4537.6
52.5°	197.8	387.0	890.0	1607.3	2623.3	3007.1	2653.0	3519.7	3946.8	4084.1	4502.1
53°	193.1	379.5	879.5	1590.0	2604.7	2985.7	2625.3	3507.0	3904.5	4043.1	4465.9
53.5°	188.8	372.4	870.5	1574.4	2586.9	2962.5	2596.8	3485.5	3860.7	4001.1	4441.6
54°	184.4	365.3	859.5	1557.6	2566.1	2934.4	2566.0	3460.0	3813.1	3957.4	4410.4
54.5°	179.8	358.0	849.2	1538.7	2543.8	2902.3	2532.8	3432.7	3766.2	3914.6	4371.8
55°	175.7	351.2	838.7	1522.7	2518.2	2864.0	2500.2	3403.2	3719.9	3874.4	4340.7
55.5°	171.4	344.4	827.0	1507.1	2492.2	2823.8	2462.8	3368.4	3672.2	3833.1	4299.4
56°	167.0	337.2	814.7	1491.3	2461.7	2779.3	2423.6	3330.0	3617.5	3788.1	4258.3
56.5°	162.9	330.8	804.2	1477.8	2432.1	2734.5	2383.1	3289.0	3567.1	3744.5	4219.8
57°	159.0	324.5	792.2	1465.0	2399.4	2683.0	2343.2	3241.5	3516.0	3701.6	4169.3
57.5°	155.0	318.0	780.1	1452.3	2367.1	2633.6	2301.2	3190.3	3467.3	3660.3	4123.4
58°	151.0	312.0	768.4	1440.4	2335.7	2582.9	2258.7	3132.5	3416.9	3610.9	4076.8
58.5°	147.1	306.1	756.3	1428.4	2304.1	2535.8	2219.8	3078.7	3364.8	3564.5	4023.9
59°	143.1	299.3	743.2	1416.5	2273.7	2488.9	2176.9	3020.5	3309.7	3513.5	3956.7
59.5°	139.0	292.4	729.8	1404.5	2240.8	2441.0	2136.5	2963.0	3255.8	3466.3	3890.6
60°	135.0	285.0	716.0	1392.5	2207.4	2392.7	2097.5	2906.2	3202.6	3422.3	3824.9
60.5°	130.9	277.3	701.0	1377.9	2174.7	2346.1	2057.8	2851.5	3150.2	3381.2	3750.6
61°	126.9	270.5	686.9	1362.9	2140.3	2297.1	2017.4	2791.9	3098.5	3339.6	3670.9
61.5°	122.9	263.8	671.0	1345.3	2106.7	2250.1	1978.5	2736.6	3043.8	3290.3	3599.0
62°	118.9	257.3	654.0	1325.7	2074.3	2203.3	1943.0	2678.3	2984.3	3234.1	3524.2
62.5°	115.2	251.0	638.0	1304.0	2040.6	2158.1	1905.8	2627.7	2925.6	3175.4	3448.1
63°	111.2	244.1	619.4	1278.9	2006.6	2116.9	1870.4	2572.5	2866.4	3111.2	3373.5
63.5°	107.5	237.2	602.1	1251.7	1972.3	2077.5	1834.6	2516.5	2808.1	3035.8	3292.7
64°	103.9	230.6	584.6	1226.4	1938.7	2035.9	1800.3	2463.3	2748.3	2958.8	3215.1
64.5°	100.4	223.4	566.5	1200.5	1901.8	1992.4	1764.7	2413.9	2689.7	2886.1	3143.8
65°	96.8	215.8	547.1	1176.0	1865.6	1949.4	1727.2	2361.3	2629.7	2811.1	3070.1
65.5°	93.4	208.5	529.9	1151.3	1825.2	1908.3	1690.6	2310.6	2569.7	2732.5	2997.0
66°	89.6	201.3	511.2	1123.0	1786.4	1863.6	1654.1	2261.3	2509.9	2661.0	2924.9
66.5°	86.0	193.8	493.3	1095.0	1747.4	1817.7	1614.1	2210.9	2447.6	2589.5	2850.5
67°	82.1	187.1	475.5	1067.6	1707.5	1773.9	1574.7	2157.0	2386.9	2516.0	2781.3



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CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
67.5°	77.8	181.0	459.0	1038.0	1665.8	1734.3	1536.8	2104.6	2323.2	2445.9	2716.3
68°	71.3	174.6	442.2	1006.7	1624.1	1694.7	1498.4	2052.4	2256.7	2374.6	2647.2
68.5°	63.9	168.4	426.5	975.8	1580.9	1652.3	1460.1	2004.2	2192.9	2311.1	2577.4
69°	55.5	162.3	411.5	943.8	1538.7	1607.1	1421.8	1950.5	2125.9	2248.0	2504.1
69.5°	50.4	156.3	396.8	912.5	1495.2	1564.1	1383.5	1900.7	2057.6	2183.1	2427.4
70°	48.9	150.3	382.6	882.2	1451.7	1517.5	1345.1	1851.8	1992.4	2122.6	2351.5
70.5°	47.7	144.3	368.8	848.2	1408.1	1470.9	1305.9	1800.7	1927.3	2061.4	2275.4
71°	46.7	138.2	355.4	818.5	1364.6	1424.3	1267.5	1747.6	1861.0	1996.5	2198.3
71.5°	45.7	130.6	343.0	791.7	1321.0	1377.7	1226.9	1696.9	1795.5	1930.1	2122.8
72°	44.7	122.0	330.3	766.4	1275.0	1331.0	1186.8	1645.8	1735.3	1870.8	2053.8
72.5°	43.7	115.7	317.5	741.2	1229.4	1282.1	1144.5	1591.6	1674.5	1805.9	1981.2
73°	42.8	111.4	303.7	715.9	1183.3	1236.7	1105.7	1532.7	1615.1	1737.8	1907.3
73.5°	41.9	106.7	290.5	691.3	1136.4	1191.4	1068.8	1473.9	1561.0	1676.6	1840.1
74°	41.1	102.1	278.3	668.5	1091.6	1143.2	1030.2	1415.0	1506.3	1609.6	1768.4
74.5°	40.2	98.0	268.1	646.7	1046.8	1095.3	990.2	1356.2	1451.6	1547.1	1700.6
75°	39.3	94.1	257.2	626.2	1003.3	1050.0	951.7	1297.3	1396.8	1484.6	1631.7
75.5°	38.5	90.3	246.3	607.4	962.5	1004.3	912.2	1233.9	1342.1	1422.0	1562.2
76°	37.7	86.9	236.2	590.4	922.9	959.8	873.3	1171.4	1287.1	1359.5	1492.7
76.5°	36.8	83.7	225.8	571.2	887.2	917.5	835.7	1116.1	1231.6	1297.2	1423.2
77°	35.9	80.6	216.3	552.2	849.9	874.8	796.4	1060.0	1173.5	1237.1	1353.7
77.5°	35.1	77.5	208.4	533.7	814.9	829.1	757.7	1003.1	1115.1	1179.0	1284.3
78°	34.1	74.4	200.2	512.4	775.4	782.5	719.7	950.6	1061.0	1123.3	1221.0
78.5°	33.2	71.5	193.4	492.4	733.7	736.8	678.6	898.9	1005.1	1064.5	1153.5
79°	32.2	68.7	186.2	471.6	690.1	693.0	637.2	847.9	951.9	1008.9	1088.4
79.5°	31.2	65.8	178.4	450.9	645.5	650.2	597.0	800.7	903.1	957.2	1023.5
80°	30.2	63.1	169.2	429.3	601.0	607.3	557.1	753.8	853.5	901.8	960.5
80.5°	29.3	60.5	159.9	407.8	560.3	565.9	518.7	707.2	803.9	847.9	897.5
81°	28.3	58.0	150.6	385.7	522.1	525.1	485.0	663.5	758.0	797.5	841.4
81.5°	27.4	55.5	141.4	363.5	486.4	484.2	449.8	621.2	711.5	744.5	782.0
82°	26.5	53.0	132.1	341.3	450.3	442.8	413.8	577.9	667.2	694.4	724.0
82.5°	25.5	50.5	122.6	317.0	417.1	404.6	378.1	537.1	622.7	646.3	671.5
83°	24.7	48.1	113.2	293.7	384.2	367.6	346.5	497.7	579.4	600.3	620.2
83.5°	23.8	45.6	103.9	271.4	351.3	331.3	317.5	460.3	536.2	554.0	572.7
84°	22.9	43.2	95.1	248.6	319.0	296.8	290.3	423.9	495.8	514.4	531.0
84.5°	22.2	41.1	87.6	226.4	287.6	263.1	263.0	388.3	454.3	473.5	488.6
85°	21.4	39.0	80.6	205.6	258.1	231.4	239.4	355.4	417.5	437.8	451.0
85.5°	20.6	37.0	73.9	188.3	229.6	207.2	215.9	323.5	383.5	404.5	416.6
86°	19.9	35.1	68.1	171.0	208.1	182.9	195.3	293.1	350.9	373.2	384.5
86.5°	19.2	33.3	63.0	153.7	186.5	158.7	179.0	266.1	321.7	345.0	354.1
87°	18.5	31.7	58.5	136.4	164.9	134.5	162.6	243.4	297.3	320.7	328.5
87.5°	17.9	30.2	54.5	119.2	143.4	110.4	146.3	220.9	273.8	297.2	303.4
88°	17.2	28.8	51.1	107.6	121.8	94.6	130.3	202.4	253.2	276.0	280.9
88.5°	16.6	27.5	48.0	96.9	107.2	80.8	119.1	186.8	235.4	257.0	261.0
89°	16.0	26.3	45.4	87.8	95.2	69.9	108.9	176.6	219.8	240.3	242.5
89.5°	15.5	25.1	43.1	80.1	84.9	61.0	100.9	166.4	206.1	224.7	226.3



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CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
90°	15.0	24.1	41.2	73.8	76.9	54.4	94.9	156.1	193.3	211.6	212.8
90.5°	14.6	23.2	39.5	68.6	70.9	49.4	90.1	145.9	181.7	199.4	200.3
91°	14.1	22.4	38.2	64.3	66.6	45.8	86.3	135.7	172.4	187.9	189.1
91.5°	13.6	21.7	37.0	60.8	63.4	43.2	83.4	130.2	166.6	177.3	178.4
92°	13.1	21.1	36.2	57.9	61.4	41.6	81.2	125.7	160.7	169.1	168.5
92.5°	12.8	20.6	35.5	55.6	60.0	40.7	79.5	121.8	154.9	163.2	162.7
93°	12.5	20.1	35.1	54.0	59.1	40.2	78.0	118.7	149.0	157.3	156.8
93.5°	12.3	19.7	34.8	53.0	58.6	40.0	76.7	115.9	143.3	151.4	151.0
94°	12.0	19.3	34.6	52.3	58.5	40.1	75.6	113.4	139.4	145.5	145.2
94.5°	11.7	18.9	34.4	52.0	58.5	40.4	74.8	111.2	136.0	141.4	141.4
95°	11.5	18.5	34.3	51.7	58.5	40.8	74.1	109.2	132.8	137.6	138.4
95.5°	11.3	18.2	34.1	51.5	58.6	41.3	73.8	107.3	129.8	134.2	135.5
96°	11.2	17.9	34.0	51.3	58.6	41.9	73.8	105.6	127.2	131.3	133.2
96.5°	11.0	17.6	33.7	51.0	58.4	42.6	73.9	104.1	124.7	128.6	131.1
97°	10.8	17.4	33.4	50.6	58.1	43.3	74.1	102.9	122.4	126.2	129.2
97.5°	10.6	17.1	33.0	50.1	57.8	44.1	74.4	102.0	120.4	124.1	127.7
98°	10.5	16.9	32.5	49.6	57.4	44.9	74.7	101.3	118.6	122.2	126.3
98.5°	10.3	16.6	31.9	48.9	56.9	45.7	75.1	100.8	117.0	120.5	125.0
99°	10.1	16.3	31.2	48.2	56.6	46.6	75.5	100.3	115.6	119.1	123.9
99.5°	9.9	16.1	30.4	47.5	56.3	47.5	76.1	100.0	114.4	117.8	123.0
100°	9.8	15.8	29.6	46.8	56.1	48.4	76.7	99.8	113.5	116.4	122.2
100.5°	9.6	15.6	28.8	46.1	56.0	49.3	77.3	99.7	112.8	115.5	121.0
101°	9.4	15.3	28.1	45.4	55.9	50.2	77.9	99.7	112.3	115.0	120.0
101.5°	9.2	15.1	27.5	44.8	56.0	51.1	78.5	99.6	111.8	114.7	119.8
102°	8.9	14.9	26.9	44.2	56.2	52.0	79.2	99.6	111.3	114.5	120.0
102.5°	8.6	14.7	26.3	43.7	56.5	53.0	79.9	99.6	110.8	114.2	119.9
103°	8.4	14.6	25.9	43.3	56.8	53.9	80.7	99.7	110.3	113.9	119.7
103.5°	8.2	14.4	25.4	42.9	57.3	54.8	81.5	99.8	109.9	113.7	119.5
104°	8.0	14.3	25.1	42.6	57.8	55.7	82.4	99.9	109.5	113.5	119.3
104.5°	7.9	14.1	24.8	42.3	58.4	56.6	83.2	100.0	109.1	113.4	119.2
105°	7.8	14.0	24.6	42.1	59.0	57.6	83.9	100.1	108.7	113.2	119.2
105.5°	7.7	13.9	24.5	41.9	59.6	58.5	84.7	100.2	108.3	113.1	119.2
106°	7.6	13.8	24.3	41.8	60.2	59.5	85.5	100.3	107.9	112.9	119.1
106.5°	7.6	13.7	24.3	41.7	60.9	60.3	86.2	100.4	107.5	112.7	119.0
107°	7.5	13.5	24.2	41.7	61.5	61.2	87.0	100.5	107.1	112.5	118.8
107.5°	7.4	13.4	24.2	41.7	62.1	62.0	87.6	100.6	106.8	112.1	118.6
108°	7.3	13.3	24.1	41.7	62.6	62.8	88.3	100.9	106.4	111.7	118.3
108.5°	7.2	13.2	24.1	41.7	63.1	63.5	89.0	101.2	106.2	111.3	117.8
109°	7.1	13.1	24.2	41.7	63.6	64.2	89.6	101.7	106.0	111.0	117.4
109.5°	7.1	13.0	24.2	41.8	64.0	64.9	90.2	102.2	105.9	110.8	116.9
110°	7.0	12.9	24.2	41.8	64.4	65.5	90.9	102.7	105.8	110.7	116.5
110.5°	6.8	12.9	24.2	41.9	64.9	66.2	91.6	103.1	105.8	110.6	116.2
111°	6.8	12.8	24.2	42.0	65.4	66.8	92.3	103.6	105.8	110.4	115.9
111.5°	6.7	12.8	24.2	42.0	65.9	67.5	93.0	104.0	105.7	110.4	115.6
112°	6.7	12.7	24.2	42.0	66.3	68.3	93.6	104.4	105.6	110.3	115.2



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CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
112.5°	6.7	12.7	24.2	42.0	66.8	68.9	94.2	104.7	105.7	110.3	114.9
113°	6.6	12.6	24.2	42.0	67.3	69.5	94.8	105.2	105.6	110.2	114.8
113.5°	6.6	12.6	24.2	42.0	67.7	70.1	95.3	105.5	105.6	110.2	114.6
114°	6.6	12.6	24.2	42.0	68.1	70.6	95.8	105.9	105.6	110.1	114.6
114.5°	6.6	12.6	24.1	41.9	68.4	71.1	96.3	106.3	105.6	109.9	114.5
115°	6.7	12.5	24.1	41.9	68.8	71.6	96.7	106.6	105.5	109.8	114.5
115.5°	6.7	12.5	24.0	41.8	69.0	72.0	97.1	106.9	105.5	109.7	114.4
116°	6.7	12.5	23.9	41.8	69.2	72.3	97.4	107.1	105.4	109.6	114.2
116.5°	6.7	12.5	23.9	41.8	69.5	72.5	97.6	107.2	105.3	109.5	114.1
117°	6.8	12.5	23.8	41.8	69.8	72.7	97.9	107.4	105.3	109.5	114.0
117.5°	6.8	12.5	23.7	41.7	70.2	72.9	98.1	107.5	105.3	109.4	113.8
118°	6.9	12.6	23.6	41.7	70.4	73.0	98.1	107.6	105.3	109.3	113.7
118.5°	6.9	12.6	23.6	41.7	70.6	73.2	98.1	107.7	105.3	109.3	113.6
119°	7.0	12.7	23.5	41.7	70.6	73.2	98.0	107.7	105.2	109.3	113.4
119.5°	7.1	12.7	23.5	41.7	70.7	73.1	97.8	107.8	105.2	109.2	113.3
120°	7.2	12.8	23.5	41.7	70.6	73.0	97.6	107.8	105.2	109.3	113.2
120.5°	7.2	12.8	23.4	41.6	70.6	72.8	97.4	107.8	105.2	109.3	113.1
121°	7.3	12.9	23.4	41.6	70.5	72.5	97.1	107.8	105.2	109.4	113.1
121.5°	7.5	13.0	23.4	41.6	70.4	72.1	96.7	107.8	105.2	109.4	113.0
122°	7.6	13.0	23.4	41.6	70.4	71.7	96.3	107.7	105.3	109.5	113.0
122.5°	7.7	13.1	23.5	41.5	70.3	71.2	95.8	107.7	105.4	109.6	113.0
123°	7.8	13.1	23.5	41.5	70.2	70.8	95.3	107.7	105.4	109.7	113.0
123.5°	7.9	13.2	23.5	41.5	70.0	70.3	94.7	107.8	105.5	109.8	113.0
124°	7.9	13.2	23.6	41.5	69.9	69.8	94.2	107.8	105.7	109.9	113.0
124.5°	8.0	13.3	23.6	41.6	69.8	69.3	93.7	108.0	105.8	110.1	113.0
125°	8.1	13.4	23.7	41.7	69.7	68.9	93.2	108.1	106.0	110.2	113.0
125.5°	8.2	13.5	23.8	41.8	69.6	68.6	92.7	108.3	106.2	110.4	113.1
126°	8.3	13.5	23.9	41.9	69.6	68.2	92.2	108.4	106.5	110.5	113.1
126.5°	8.4	13.6	24.0	42.0	69.6	67.9	91.8	108.7	106.7	110.7	113.1
127°	8.5	13.7	24.0	42.1	69.6	67.6	91.4	108.9	107.0	110.8	113.1
127.5°	8.5	13.8	24.1	42.3	69.6	67.4	91.0	109.1	107.3	111.0	113.1
128°	8.6	13.9	24.2	42.4	69.7	67.3	90.6	109.3	107.6	111.1	113.1
128.5°	8.7	14.0	24.3	42.6	69.8	67.1	90.3	109.5	107.9	111.3	113.1
129°	8.8	14.0	24.4	42.9	69.8	67.0	90.0	109.7	108.2	111.4	113.1
129.5°	8.8	14.1	24.5	43.1	69.9	66.9	89.7	109.9	108.5	111.5	113.1
130°	8.9	14.2	24.5	43.3	70.0	66.8	89.4	110.1	108.9	111.6	113.0
130.5°	8.9	14.3	24.6	43.5	70.0	66.7	89.1	110.2	109.2	111.6	112.9
131°	9.0	14.3	24.7	43.8	70.1	66.6	88.8	110.2	109.5	111.6	112.8
131.5°	9.0	14.4	24.8	44.0	70.2	66.6	88.4	110.2	109.8	111.5	112.6
132°	9.1	14.5	24.9	44.3	70.2	66.5	88.1	110.1	110.0	111.4	112.4
132.5°	9.1	14.6	25.0	44.5	70.2	66.4	87.8	110.0	110.2	111.2	112.1
133°	9.2	14.6	25.1	44.7	70.1	66.3	87.4	109.8	110.3	111.1	111.7
133.5°	9.2	14.7	25.2	45.0	70.1	66.1	86.9	109.6	110.4	110.8	111.3
134°	9.3	14.8	25.3	45.2	69.9	65.8	86.4	109.2	110.5	110.6	110.7
134.5°	9.3	14.9	25.5	45.4	69.8	65.6	85.8	108.7	110.4	110.3	110.2



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CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
135°	9.3	14.9	25.6	45.6	69.5	65.4	85.2	108.3	110.3	110.0	109.7
135.5°	9.4	15.0	25.7	45.8	69.2	65.1	84.6	107.8	110.1	109.6	109.0
136°	9.4	15.1	25.8	45.9	68.9	64.7	84.0	107.1	109.8	109.1	108.2
136.5°	9.4	15.1	25.9	46.1	68.6	64.3	83.3	106.4	109.4	108.6	107.4
137°	9.4	15.2	25.9	46.2	68.1	64.0	82.5	105.6	109.0	108.0	106.5
137.5°	9.5	15.3	26.0	46.3	67.6	63.5	81.7	104.8	108.4	107.4	105.6
138°	9.5	15.3	26.0	46.3	67.0	63.1	80.9	103.8	107.8	106.7	104.8
138.5°	9.5	15.3	26.1	46.3	66.5	62.5	80.0	102.8	107.0	106.0	103.9
139°	9.5	15.4	26.1	46.3	65.8	62.0	79.0	101.7	106.1	105.1	103.0
139.5°	9.5	15.4	26.1	46.2	65.1	61.4	78.1	100.5	105.3	104.2	102.1
140°	9.5	15.4	26.1	46.2	64.3	60.8	77.1	99.3	104.2	103.3	101.3
140.5°	9.5	15.4	26.0	46.0	63.5	60.1	76.0	97.9	103.1	102.2	100.4
141°	9.5	15.4	26.0	45.8	62.6	59.4	74.9	96.5	101.9	101.0	99.6
141.5°	9.5	15.3	25.9	45.6	61.6	58.7	73.7	95.1	100.6	99.8	98.7
142°	9.5	15.3	25.8	45.3	60.7	57.9	72.5	93.5	99.3	98.6	97.9
142.5°	9.4	15.2	25.7	45.0	59.7	57.0	71.2	91.9	97.8	97.2	97.1
143°	9.4	15.1	25.6	44.6	58.6	56.1	69.8	90.3	96.3	95.8	96.2
143.5°	9.4	15.1	25.4	44.2	57.5	55.2	68.4	88.5	94.7	94.3	95.3
144°	9.3	15.0	25.3	43.7	56.3	54.2	67.0	86.7	93.0	92.9	94.4
144.5°	9.3	14.9	25.1	43.2	55.1	53.2	65.5	84.9	91.2	91.3	93.4
145°	9.2	14.8	24.9	42.7	53.9	52.1	64.0	83.0	89.4	89.8	92.4
145.5°	9.2	14.7	24.7	42.0	52.6	51.1	62.5	81.0	87.6	88.4	91.3
146°	9.1	14.6	24.4	41.4	51.4	49.9	60.9	79.0	85.7	86.9	90.1
146.5°	9.0	14.4	24.2	40.7	50.0	48.8	59.3	76.9	83.8	85.3	88.8
147°	8.9	14.2	23.9	39.9	48.7	47.6	57.7	74.8	81.8	83.8	87.5
147.5°	8.8	14.0	23.6	39.1	47.3	46.4	56.0	72.8	79.8	82.4	86.2
148°	8.6	13.8	23.3	38.3	46.0	45.2	54.3	70.6	77.9	80.9	84.7
148.5°	8.5	13.6	23.0	37.4	44.6	44.0	52.7	68.4	76.0	79.4	83.3
149°	8.4	13.5	22.7	36.5	43.2	42.8	51.0	66.2	74.0	77.9	81.8
149.5°	8.2	13.3	22.3	35.5	41.8	41.5	49.2	63.9	72.0	76.3	80.2
150°	8.1	13.1	21.9	34.5	40.5	40.3	47.5	61.6	70.0	74.6	78.7
150.5°	7.9	12.8	21.5	33.5	39.1	39.0	45.7	59.4	67.8	73.0	77.1
151°	7.7	12.6	21.1	32.5	37.7	37.7	44.0	57.2	65.6	71.2	75.5
151.5°	7.6	12.3	20.6	31.5	36.3	36.5	42.3	55.0	63.5	69.5	73.9
152°	7.4	12.1	20.2	30.5	35.0	35.2	40.7	52.9	61.4	67.8	72.3
152.5°	7.2	11.8	19.7	29.4	33.7	34.0	39.1	50.7	59.2	66.1	70.6
153°	7.0	11.5	19.2	28.3	32.3	32.8	37.4	48.5	57.0	64.2	68.9
153.5°	6.9	11.2	18.7	27.3	31.0	31.6	35.8	46.5	54.8	62.4	67.2
154°	6.7	10.9	18.2	26.3	29.7	30.3	34.2	44.3	52.5	60.7	65.2
154.5°	6.5	10.5	17.6	25.1	28.5	29.1	32.7	42.3	50.2	58.7	63.4
155°	6.3	10.2	17.0	24.1	27.2	28.0	31.2	40.3	47.9	56.8	61.7
155.5°	6.1	9.8	16.4	23.1	26.0	26.8	29.7	38.3	45.6	54.8	59.8
156°	5.8	9.5	15.8	22.0	24.8	25.6	28.2	36.3	43.4	52.2	58.0
156.5°	5.6	9.1	15.1	21.0	23.7	24.5	26.9	34.4	41.1	49.7	56.2
157°	5.5	8.7	14.4	20.0	22.5	23.4	25.5	32.5	38.9	47.2	54.3



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CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
157.5°	5.4	8.3	13.7	19.0	21.5	22.4	24.1	30.7	36.5	44.7	52.6
158°	5.3	7.9	13.0	18.1	20.4	21.3	22.8	28.9	34.2	42.2	50.8
158.5°	5.3	7.5	12.4	17.1	19.3	20.3	21.6	27.2	32.0	39.6	48.8
159°	5.2	7.1	11.7	16.2	18.3	19.3	20.4	25.5	29.7	37.1	46.3
159.5°	5.2	6.7	11.1	15.3	17.3	18.3	19.2	23.9	27.9	34.6	43.4
160°	5.1	6.3	10.4	14.4	16.4	17.3	18.1	22.3	26.1	32.2	40.5
160.5°	5.1	6.1	9.8	13.5	15.5	16.4	17.0	20.8	24.5	29.8	37.8
161°	5.1	5.8	9.2	12.6	14.5	15.5	16.0	19.4	22.8	27.5	35.0
161.5°	5.1	5.7	8.6	11.8	13.6	14.6	15.1	18.1	21.3	25.1	32.1
162°	5.0	5.5	8.0	11.0	12.7	13.7	14.1	16.9	19.7	22.7	29.4
162.5°	5.0	5.4	7.4	10.3	11.9	12.8	13.1	15.7	18.3	20.3	26.9
163°	5.0	5.2	6.9	9.6	11.1	12.0	12.2	14.5	17.0	18.2	24.3
163.5°	4.9	5.1	6.5	8.9	10.4	11.2	11.4	13.3	15.8	16.9	21.9
164°	4.9	5.0	6.2	8.2	9.6	10.5	10.7	12.1	14.5	15.7	19.8
164.5°	4.9	4.8	5.8	7.6	9.0	9.8	10.0	11.1	13.2	14.4	17.7
165°	4.9	4.8	5.5	7.0	8.4	9.1	9.3	10.3	11.9	13.2	15.5
165.5°	4.9	4.8	5.3	6.5	7.8	8.5	8.7	9.4	10.9	12.0	13.4
166°	4.9	4.8	5.0	6.1	7.2	7.9	8.1	8.7	10.0	11.0	11.3
166.5°	4.9	4.8	4.9	5.8	6.7	7.4	7.6	8.0	9.2	10.1	10.5
167°	4.9	4.9	4.8	5.4	6.3	6.9	7.0	7.3	8.4	9.3	9.9
167.5°	4.9	4.9	4.8	5.1	5.8	6.4	6.6	6.8	7.7	8.5	9.3
168°	4.9	4.9	4.8	4.9	5.5	6.0	6.1	6.2	7.1	7.8	8.8
168.5°	4.9	4.8	4.8	4.8	5.1	5.6	5.7	5.7	6.5	7.4	8.3
169°	4.9	4.8	4.8	4.8	4.9	5.2	5.3	5.3	6.0	7.1	7.9
169.5°	4.9	4.8	4.8	4.8	4.8	4.9	5.0	4.9	5.7	6.7	7.5
170°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	5.6	6.4	7.1
170.5°	4.8	4.7	4.8	4.8	4.8	4.8	4.8	4.9	5.5	6.2	6.8
171°	4.8	4.7	4.7	4.8	4.8	4.8	4.9	4.9	5.3	6.0	6.5
171.5°	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9	5.3	5.8	6.3
172°	4.7	4.7	4.7	4.7	4.8	4.9	4.9	4.9	5.2	5.7	6.1
172.5°	4.7	4.7	4.7	4.7	4.8	4.9	4.9	5.0	5.1	5.6	5.9
173°	4.7	4.6	4.7	4.7	4.8	4.8	4.9	5.0	5.1	5.4	5.7
173.5°	4.6	4.6	4.6	4.7	4.7	4.8	4.9	5.0	5.0	5.3	5.6
174°	4.6	4.6	4.6	4.7	4.7	4.8	4.9	5.0	5.1	5.3	5.5
174.5°	4.6	4.6	4.6	4.7	4.7	4.8	4.9	5.0	5.1	5.2	5.4
175°	4.6	4.5	4.6	4.7	4.7	4.8	5.0	5.0	5.1	5.2	5.4
175.5°	4.5	4.5	4.6	4.7	4.7	4.8	5.0	5.0	5.1	5.2	5.3
176°	4.5	4.5	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3
176.5°	4.4	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.2
177°	4.4	4.4	4.4	4.5	4.6	4.8	4.9	5.0	5.1	5.2	5.3
177.5°	4.4	4.4	4.4	4.5	4.6	4.7	4.9	5.0	5.1	5.2	5.3
178°	4.3	4.3	4.4	4.5	4.6	4.7	4.8	5.0	5.1	5.2	5.3
178.5°	4.3	4.3	4.3	4.4	4.6	4.7	4.8	5.0	5.1	5.2	5.3
179°	4.3	4.2	4.3	4.4	4.6	4.7	4.8	5.0	5.1	5.2	5.3
179.5°	4.2	4.2	4.3	4.4	4.6	4.7	4.8	5.0	5.2	5.3	5.4



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CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
180°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5



REPORT NUMBER: P973044
 CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	4291.8	4291.8	4291.8	4291.8
0.5°	4362.8	4371.5	4372.8	4359.1
1°	4402.3	4402.0	4397.2	4316.0
1.5°	4345.6	4314.7	4294.3	4161.7
2°	4212.5	4155.0	4121.8	3967.6
2.5°	4033.4	3976.1	3945.5	3854.2
3°	3914.8	3886.0	3880.4	3851.2
3.5°	3876.9	3884.1	3898.5	3880.2
4°	3898.1	3916.1	3912.3	3839.9
4.5°	3911.5	3880.8	3830.8	3685.9
5°	3851.2	3748.0	3660.5	3507.9
5.5°	3708.9	3569.0	3508.2	3446.2
6°	3553.8	3487.0	3494.8	3534.7
6.5°	3489.6	3535.8	3617.9	3703.0
7°	3530.4	3679.1	3780.4	3824.2
7.5°	3659.9	3820.5	3867.2	3808.6
8°	3794.5	3861.7	3825.2	3694.0
8.5°	3868.0	3792.6	3714.6	3629.6
9°	3830.6	3701.1	3679.7	3703.2
9.5°	3746.3	3689.0	3777.2	3909.8
10°	3686.1	3798.3	3992.9	4132.8
10.5°	3721.6	3996.8	4198.7	4233.0
11°	3846.9	4189.6	4271.2	4186.4
11.5°	4040.7	4267.2	4219.4	4081.5
12°	4191.6	4220.0	4119.2	4059.9
12.5°	4244.7	4128.3	4105.4	4163.5
13°	4208.9	4094.8	4204.2	4307.4
13.5°	4123.1	4165.1	4341.5	4380.1
14°	4076.1	4282.7	4414.9	4390.7
14.5°	4122.3	4376.1	4434.7	4400.1
15°	4218.6	4422.9	4455.6	4459.9
15.5°	4310.9	4442.0	4524.8	4620.4
16°	4369.1	4482.5	4668.2	4838.3
16.5°	4401.8	4583.3	4883.1	5074.7
17°	4427.1	4752.8	5114.1	5278.4
17.5°	4476.6	4976.2	5337.6	5434.5
18°	4583.3	5197.3	5503.5	5555.2
18.5°	4747.5	5384.1	5623.8	5677.9
19°	4947.9	5525.7	5742.2	5834.0
19.5°	5153.7	5636.3	5894.9	6031.4
20°	5312.0	5744.2	6084.6	6235.6
20.5°	5439.7	5895.2	6273.4	6405.2
21°	5536.1	6074.8	6430.8	6535.0
21.5°	5632.7	6245.5	6557.1	6633.3
22°	5758.9	6372.6	6651.8	6706.6



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CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
22.5°	5908.2	6464.1	6723.7	6742.8
23°	6054.4	6543.2	6764.6	6756.2
23.5°	6176.2	6603.0	6769.3	6748.8
24°	6257.7	6645.2	6752.7	6725.7
24.5°	6300.1	6642.9	6727.0	6703.1
25°	6343.4	6621.0	6711.6	6668.9
25.5°	6392.7	6588.2	6699.3	6632.8
26°	6409.7	6570.7	6672.3	6591.4
26.5°	6408.2	6565.5	6630.2	6563.6
27°	6387.4	6546.5	6581.0	6542.4
27.5°	6348.5	6502.1	6558.1	6494.7
28°	6323.6	6436.3	6532.5	6437.7
28.5°	6306.3	6388.3	6493.8	6371.9
29°	6283.4	6374.4	6432.7	6309.9
29.5°	6250.5	6358.4	6357.4	6245.9
30°	6198.2	6305.2	6288.4	6196.0
30.5°	6139.5	6217.0	6235.0	6143.3
31°	6100.0	6145.2	6196.2	6086.2
31.5°	6070.0	6097.2	6153.8	6023.9
32°	6036.0	6067.6	6085.3	5956.7
32.5°	5973.7	6026.0	5998.6	5903.9
33°	5893.1	5961.3	5924.9	5843.8
33.5°	5832.1	5882.3	5863.8	5759.1
34°	5786.2	5810.9	5800.7	5657.6
34.5°	5740.1	5750.8	5714.2	5575.5
35°	5678.8	5704.7	5636.3	5520.4
35.5°	5603.9	5653.7	5572.5	5487.1
36°	5534.1	5592.8	5527.9	5470.1
36.5°	5477.7	5528.5	5508.5	5474.1
37°	5429.4	5480.8	5500.8	5494.7
37.5°	5391.7	5445.5	5511.1	5518.7
38°	5351.1	5431.8	5531.1	5555.3
38.5°	5307.8	5431.0	5564.0	5592.3
39°	5261.1	5435.9	5604.3	5636.1
39.5°	5218.9	5457.4	5649.9	5679.0
40°	5192.3	5486.6	5699.4	5721.7
40.5°	5175.3	5523.9	5751.3	5762.5
41°	5169.1	5563.8	5798.7	5797.4
41.5°	5168.1	5602.7	5830.4	5831.6
42°	5181.3	5633.5	5858.5	5850.9
42.5°	5196.8	5661.6	5887.8	5883.9
43°	5205.6	5682.6	5923.6	5919.9
43.5°	5219.9	5700.2	5951.5	5947.3
44°	5235.1	5722.5	5969.9	5966.7
44.5°	5246.9	5736.6	5997.0	5962.3



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CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
45°	5260.0	5747.4	6003.2	5953.9
45.5°	5271.7	5758.4	5991.5	5918.2
46°	5280.8	5761.3	5970.4	5881.4
46.5°	5282.7	5758.5	5922.0	5816.8
47°	5286.4	5737.7	5873.8	5761.8
47.5°	5282.7	5712.6	5820.0	5699.8
48°	5273.3	5663.9	5767.2	5658.5
48.5°	5263.8	5615.6	5718.0	5607.9
49°	5245.2	5562.6	5654.8	5541.5
49.5°	5224.0	5517.4	5589.2	5464.6
50°	5193.9	5460.7	5508.9	5388.5
50.5°	5168.0	5408.9	5432.7	5328.4
51°	5119.6	5349.4	5358.5	5277.4
51.5°	5071.5	5277.2	5298.4	5233.3
52°	5017.8	5206.7	5239.4	5188.0
52.5°	4968.3	5142.7	5190.8	5147.5
53°	4920.6	5085.4	5139.9	5091.5
53.5°	4869.7	5032.2	5079.5	5035.3
54°	4818.0	4973.5	5025.1	4984.7
54.5°	4757.9	4924.7	4969.9	4927.7
55°	4698.7	4870.7	4911.3	4854.8
55.5°	4644.0	4817.8	4830.5	4766.3
56°	4596.9	4748.0	4740.3	4674.3
56.5°	4545.1	4672.0	4643.0	4571.4
57°	4480.1	4585.2	4553.8	4488.9
57.5°	4407.0	4508.4	4469.0	4413.2
58°	4335.3	4415.2	4386.2	4331.2
58.5°	4266.8	4333.1	4303.7	4252.2
59°	4191.7	4247.7	4218.5	4162.3
59.5°	4106.8	4157.8	4125.5	4060.3
60°	4021.4	4064.8	4025.9	3941.5
60.5°	3935.4	3976.4	3921.2	3826.8
61°	3849.2	3874.5	3807.2	3713.3
61.5°	3766.9	3775.6	3699.9	3607.2
62°	3673.5	3671.2	3594.5	3516.3
62.5°	3584.4	3573.9	3498.9	3435.9
63°	3496.8	3480.3	3425.6	3378.2
63.5°	3406.4	3398.9	3358.5	3323.9
64°	3318.9	3315.8	3295.5	3264.5
64.5°	3240.0	3249.2	3229.9	3200.0
65°	3165.2	3183.5	3163.4	3136.1
65.5°	3090.9	3110.9	3087.6	3049.0
66°	3019.7	3033.3	3007.1	2950.6
66.5°	2948.8	2955.8	2923.3	2856.1
67°	2872.9	2870.8	2831.5	2768.0



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CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
67.5°	2799.3	2781.5	2741.8	2686.4
68°	2720.8	2693.6	2668.5	2613.3
68.5°	2635.5	2615.8	2598.9	2541.9
69°	2551.1	2537.4	2528.6	2475.7
69.5°	2473.1	2464.3	2459.0	2402.2
70°	2395.8	2388.8	2383.3	2320.4
70.5°	2320.2	2314.5	2304.7	2240.1
71°	2243.6	2240.6	2227.4	2162.1
71.5°	2169.0	2162.0	2147.7	2084.2
72°	2091.7	2086.5	2069.3	2014.2
72.5°	2017.8	2013.7	1995.2	1944.4
73°	1945.5	1934.4	1919.4	1868.0
73.5°	1874.1	1855.2	1841.8	1790.8
74°	1800.0	1782.2	1762.8	1715.3
74.5°	1722.1	1709.6	1682.6	1627.9
75°	1649.5	1627.5	1604.8	1543.0
75.5°	1575.0	1551.2	1527.0	1459.5
76°	1500.5	1474.9	1449.2	1375.9
76.5°	1425.9	1398.7	1371.4	1296.3
77°	1351.4	1322.4	1293.5	1221.1
77.5°	1277.2	1246.2	1214.0	1146.4
78°	1209.1	1173.4	1139.9	1075.5
78.5°	1140.1	1102.1	1066.5	1009.4
79°	1069.4	1031.5	997.5	945.6
79.5°	1000.2	959.4	932.2	880.6
80°	930.4	894.7	872.8	826.0
80.5°	866.0	834.0	814.3	772.4
81°	805.6	778.6	762.1	722.1
81.5°	745.8	727.9	715.7	678.0
82°	692.5	679.5	669.7	635.0
82.5°	641.0	632.0	622.9	592.1
83°	593.4	590.7	581.9	549.1
83.5°	550.3	548.3	540.8	506.2
84°	510.8	505.7	499.3	463.3
84.5°	473.9	467.6	461.0	427.4
85°	439.7	433.1	425.0	393.1
85.5°	406.9	397.9	391.7	363.8
86°	376.6	367.3	362.2	336.9
86.5°	348.7	339.6	334.0	312.5
87°	322.7	313.6	309.3	290.6
87.5°	297.4	291.4	289.1	271.9
88°	276.1	271.0	270.2	254.5
88.5°	256.1	252.6	253.0	240.0
89°	239.2	237.5	238.6	226.8
89.5°	223.5	223.4	225.2	214.8



REPORT NUMBER: P973044
 CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
90°	209.8	210.9	213.1	204.8
90.5°	197.9	200.8	203.6	195.7
91°	188.3	191.8	194.8	187.8
91.5°	179.1	183.8	187.0	181.3
92°	170.4	176.7	180.9	175.4
92.5°	165.4	169.5	174.2	168.6
93°	160.4	162.6	167.4	162.4
93.5°	155.4	159.3	162.0	158.0
94°	150.4	156.0	159.5	154.9
94.5°	145.5	152.7	157.0	152.3
95°	142.7	149.5	154.5	150.3
95.5°	140.5	147.2	152.0	148.3
96°	138.3	145.1	149.5	146.1
96.5°	136.4	143.6	147.8	144.7
97°	134.9	142.1	146.5	143.7
97.5°	133.5	140.9	145.4	142.9
98°	132.5	140.0	144.5	141.9
98.5°	131.5	139.1	143.5	140.9
99°	130.5	138.2	142.5	140.2
99.5°	129.6	137.3	141.6	139.3
100°	128.8	136.4	140.6	138.2
100.5°	128.0	135.5	139.7	137.1
101°	126.5	134.6	138.6	136.0
101.5°	125.2	132.5	136.9	133.5
102°	124.9	130.8	134.3	131.5
102.5°	125.3	130.5	132.8	130.5
103°	125.1	131.0	132.7	130.9
103.5°	124.7	130.7	133.0	130.8
104°	124.3	129.9	132.5	130.2
104.5°	123.9	129.4	131.8	129.4
105°	123.6	128.7	130.9	128.6
105.5°	123.3	128.2	130.2	127.9
106°	123.0	127.7	129.4	127.1
106.5°	122.8	127.3	128.9	126.5
107°	122.6	126.9	128.4	126.0
107.5°	122.4	126.6	127.9	125.5
108°	122.1	126.2	127.4	124.9
108.5°	121.6	125.7	126.8	124.1
109°	121.0	125.0	126.0	123.2
109.5°	120.4	124.2	125.1	122.2
110°	119.7	123.4	124.3	121.1
110.5°	119.1	122.6	123.3	120.0
111°	118.5	121.8	122.3	118.9
111.5°	117.9	121.1	121.4	117.9
112°	117.4	120.3	120.5	116.9



REPORT NUMBER: P973044
 CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
112.5°	116.9	119.6	119.6	115.9
113°	116.3	118.8	118.6	115.0
113.5°	115.9	118.0	117.8	114.2
114°	115.5	117.2	116.9	113.5
114.5°	115.3	116.6	116.2	112.8
115°	115.2	116.1	115.5	112.1
115.5°	115.1	115.7	114.8	111.3
116°	115.0	115.3	114.2	110.6
116.5°	115.0	115.1	113.7	110.0
117°	114.9	115.0	113.3	109.6
117.5°	114.9	114.9	113.0	109.2
118°	114.9	114.9	112.8	109.0
118.5°	114.9	114.8	112.7	108.8
119°	114.9	114.9	112.6	108.7
119.5°	114.8	114.9	112.6	108.7
120°	114.7	114.9	112.6	108.8
120.5°	114.6	115.0	112.7	109.0
121°	114.6	114.9	112.8	109.2
121.5°	114.6	114.9	112.9	109.3
122°	114.5	114.9	112.8	109.4
122.5°	114.5	115.0	112.8	109.5
123°	114.5	115.0	112.9	109.8
123.5°	114.5	115.0	113.0	110.0
124°	114.4	115.0	113.1	110.2
124.5°	114.4	115.1	113.2	110.4
125°	114.4	115.2	113.3	110.7
125.5°	114.4	115.3	113.4	111.0
126°	114.5	115.3	113.6	111.3
126.5°	114.6	115.5	113.8	111.6
127°	114.6	115.6	113.9	111.6
127.5°	114.6	115.8	113.9	111.6
128°	114.7	116.0	113.9	111.7
128.5°	114.8	116.1	113.9	111.7
129°	114.9	116.2	113.9	111.7
129.5°	114.9	116.3	113.8	111.6
130°	114.9	116.4	113.8	111.6
130.5°	114.9	116.4	113.8	111.5
131°	114.8	116.4	113.7	111.3
131.5°	114.7	116.4	113.6	111.2
132°	114.6	116.2	113.5	111.1
132.5°	114.5	116.0	113.2	110.7
133°	114.3	115.8	113.0	110.4
133.5°	114.0	115.5	112.5	109.9
134°	113.7	115.2	112.1	109.3
134.5°	113.4	114.8	111.5	108.6



REPORT NUMBER: P973044
 CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
135°	112.9	114.3	110.9	107.9
135.5°	112.4	113.8	110.3	107.1
136°	112.0	113.2	109.8	106.3
136.5°	111.4	112.5	109.1	105.4
137°	110.8	111.8	108.3	104.4
137.5°	110.1	111.2	107.5	103.4
138°	109.2	110.5	106.6	102.2
138.5°	108.2	109.7	105.7	101.1
139°	106.6	108.9	104.8	100.1
139.5°	105.8	108.0	104.0	99.2
140°	105.1	107.0	103.1	98.2
140.5°	104.4	105.8	102.3	97.3
141°	103.7	104.3	101.3	96.1
141.5°	103.0	102.9	100.0	94.8
142°	102.2	102.3	98.7	93.4
142.5°	101.3	101.5	96.5	90.5
143°	100.3	100.7	95.4	89.6
143.5°	99.3	100.0	94.6	89.0
144°	98.3	99.2	93.7	88.2
144.5°	97.1	98.3	92.9	87.5
145°	96.0	97.3	91.9	86.9
145.5°	94.9	96.4	91.0	86.1
146°	93.6	95.3	90.0	85.2
146.5°	92.4	94.2	89.0	84.4
147°	91.1	93.1	87.9	83.5
147.5°	89.7	91.9	86.8	82.6
148°	88.3	90.6	85.7	81.7
148.5°	87.0	89.3	84.6	80.8
149°	85.5	87.9	83.5	79.7
149.5°	84.0	86.5	82.3	78.7
150°	82.5	85.1	81.1	77.7
150.5°	80.9	83.6	79.8	76.6
151°	79.2	82.1	78.6	75.5
151.5°	77.8	80.6	77.4	74.2
152°	76.1	78.9	76.0	73.0
152.5°	74.5	77.3	74.6	71.7
153°	72.9	75.6	73.1	70.3
153.5°	71.2	73.9	71.6	69.8
154°	69.4	72.2	70.1	68.4
154.5°	67.8	70.5	68.8	67.0
155°	66.1	68.8	67.3	65.7
155.5°	64.3	67.1	65.8	64.3
156°	62.6	65.4	64.3	62.9
156.5°	60.7	63.6	62.8	61.5
157°	58.8	61.8	61.4	60.1



REPORT NUMBER: P973044
 CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
157.5°	57.0	60.0	59.9	58.6
158°	55.2	58.0	58.3	57.1
158.5°	53.4	56.2	56.7	55.5
159°	51.6	54.4	55.1	53.8
159.5°	49.8	52.5	53.4	52.1
160°	47.9	50.7	51.7	50.5
160.5°	46.0	49.0	50.1	48.8
161°	43.7	47.2	48.5	47.2
161.5°	40.5	45.3	46.9	45.6
162°	37.5	43.5	45.3	44.0
162.5°	34.4	40.9	43.5	42.2
163°	31.3	37.4	41.6	40.4
163.5°	28.5	34.3	38.8	37.4
164°	25.7	31.1	35.4	34.2
164.5°	23.2	28.0	32.1	30.9
165°	20.8	25.2	29.1	27.8
165.5°	18.6	22.5	26.0	24.9
166°	16.3	20.2	23.2	22.2
166.5°	14.1	17.9	20.7	19.7
167°	11.9	15.6	18.3	17.3
167.5°	9.7	13.2	15.9	14.9
168°	9.2	10.9	13.5	12.4
168.5°	8.8	8.7	11.1	9.8
169°	8.3	8.2	8.8	7.5
169.5°	7.9	7.9	8.2	7.1
170°	7.5	7.6	7.9	6.8
170.5°	7.1	7.3	7.6	6.4
171°	6.8	7.0	7.4	6.1
171.5°	6.6	6.8	7.2	5.8
172°	6.3	6.6	7.0	5.6
172.5°	6.1	6.4	6.8	5.3
173°	6.0	6.2	6.6	5.1
173.5°	5.8	5.9	6.4	5.0
174°	5.7	5.8	6.2	4.8
174.5°	5.6	5.7	6.0	4.7
175°	5.5	5.6	5.8	4.5
175.5°	5.4	5.6	5.7	4.4
176°	5.4	5.5	5.6	4.3
176.5°	5.3	5.5	5.6	4.2
177°	5.3	5.4	5.6	4.2
177.5°	5.3	5.5	5.6	4.2
178°	5.4	5.5	5.7	4.2
178.5°	5.4	5.5	5.7	4.3
179°	5.4	5.6	5.8	4.3
179.5°	5.5	5.7	5.9	4.4



REPORT NUMBER: P973044
CATALOG NUMBER: WP-6984-90W-4000K

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
180°	4.5	4.5	4.5	4.5

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)

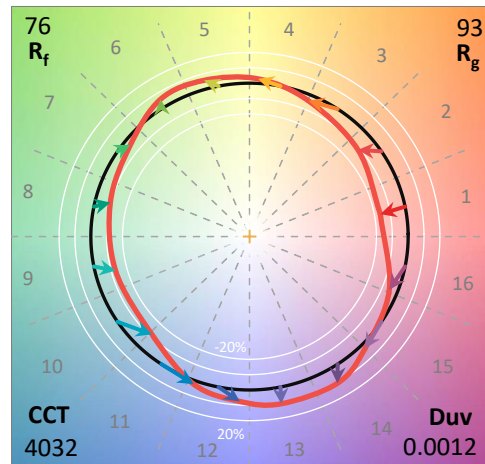
Test Information

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_f: 75.7
 R_g: 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

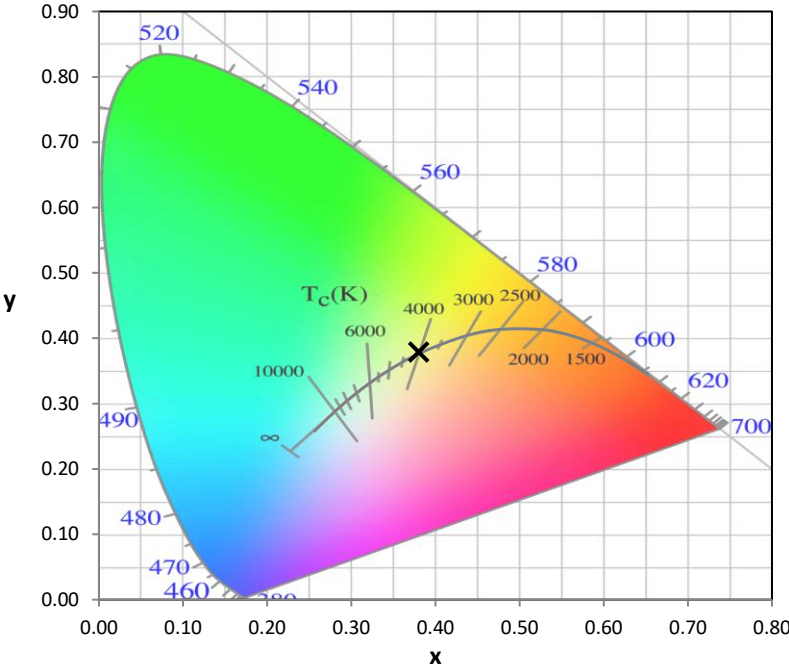
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 25.4

REPORT NUMBER: SP1-2410-249-2

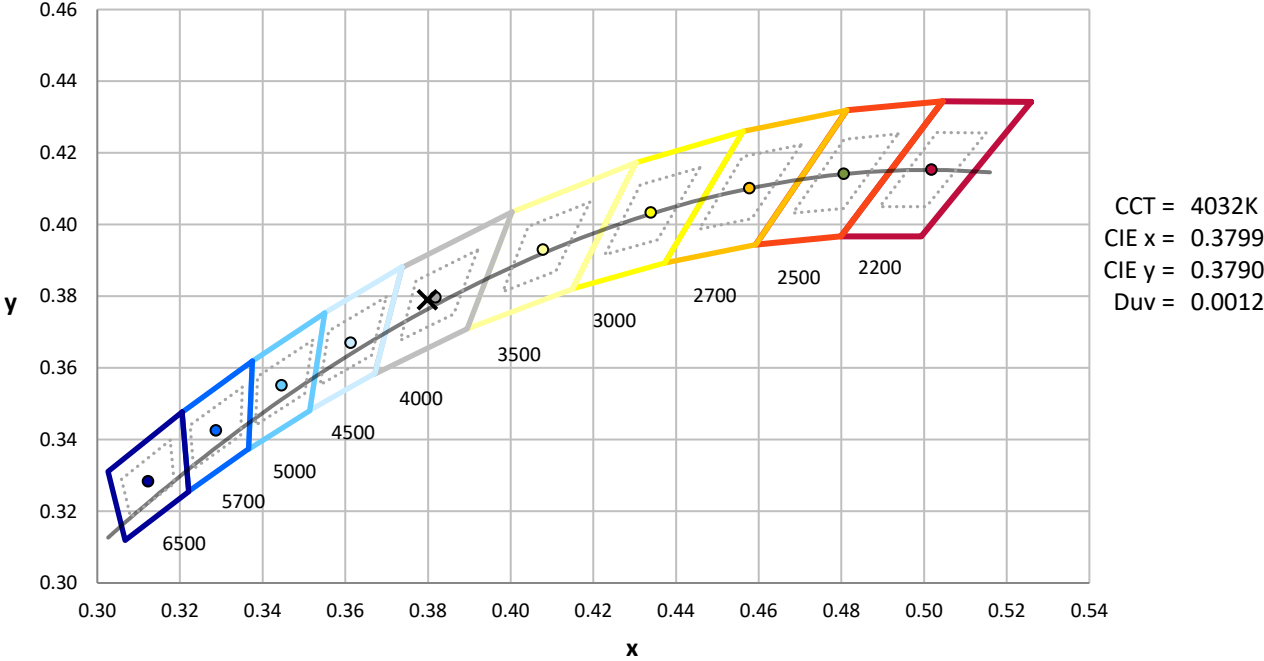
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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



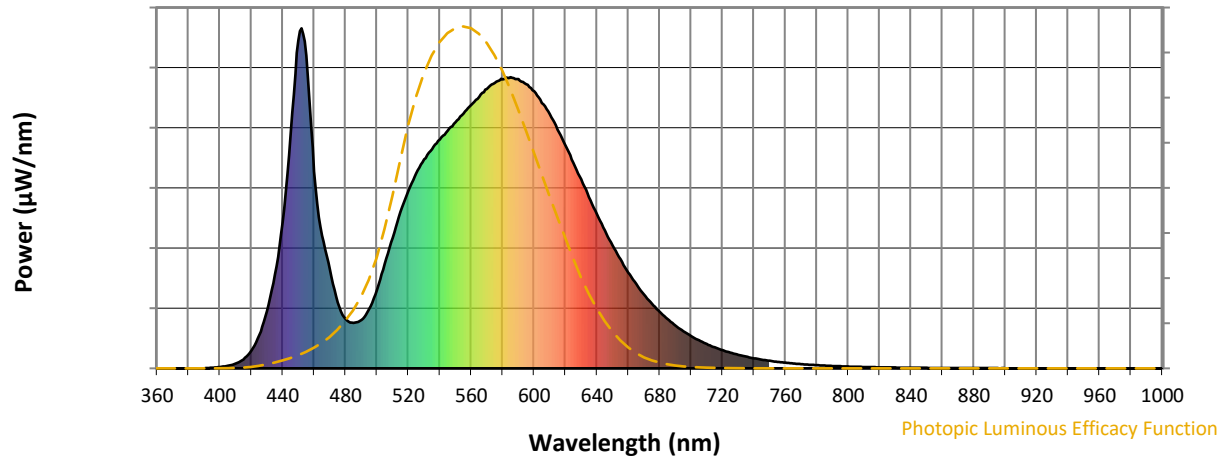
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2410-249-2

Photopic Flux vs. Wavelength

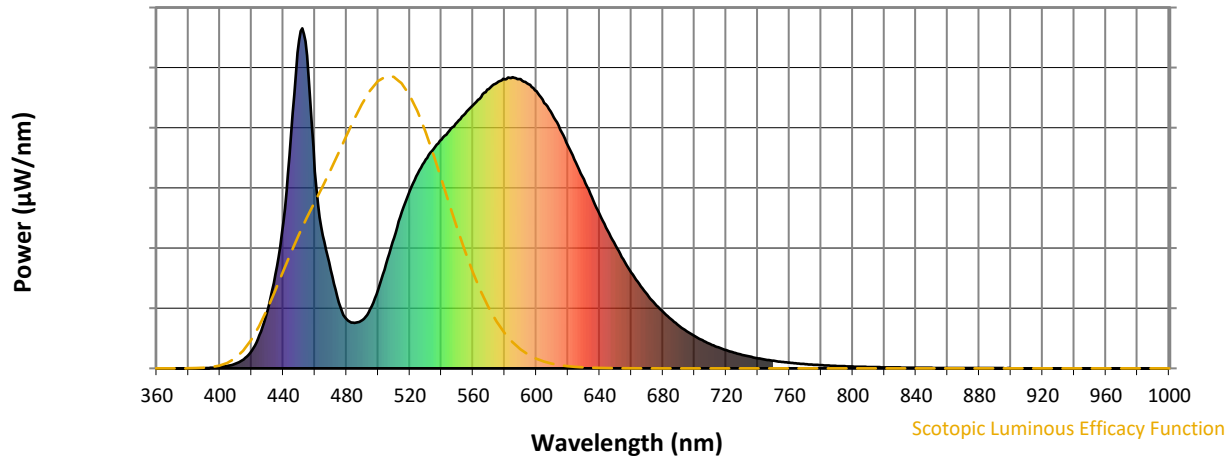


Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /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



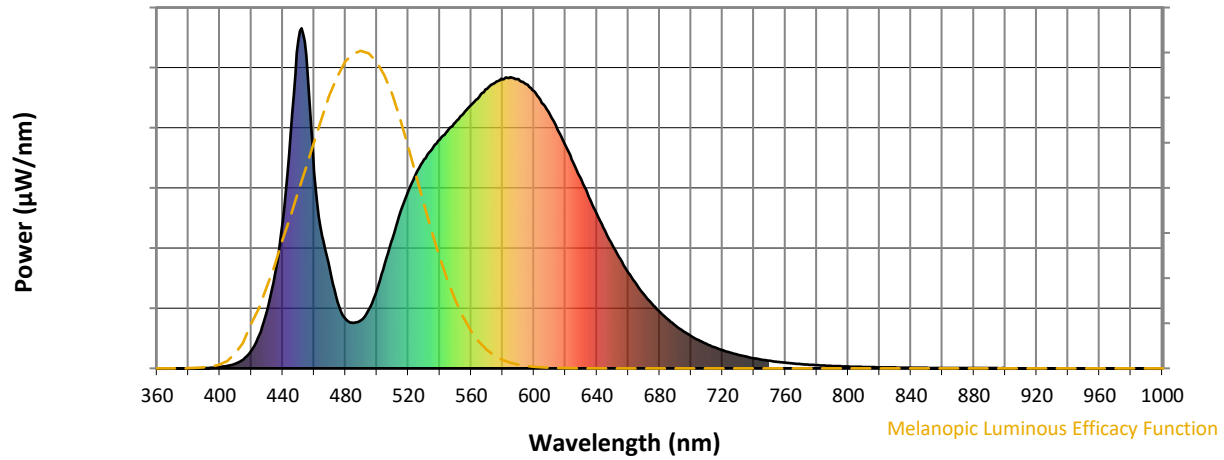
Scotopic Lumens: NR

S/P: 1.55

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /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



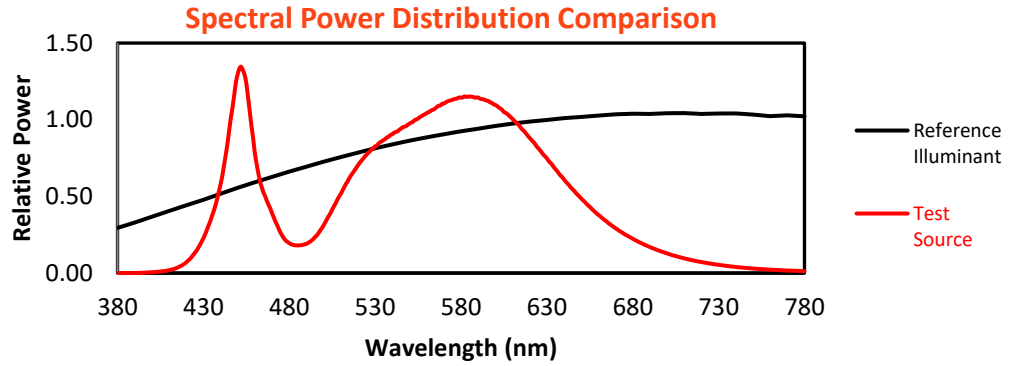
Melanopic Lumens: NR

M/P: 3.08

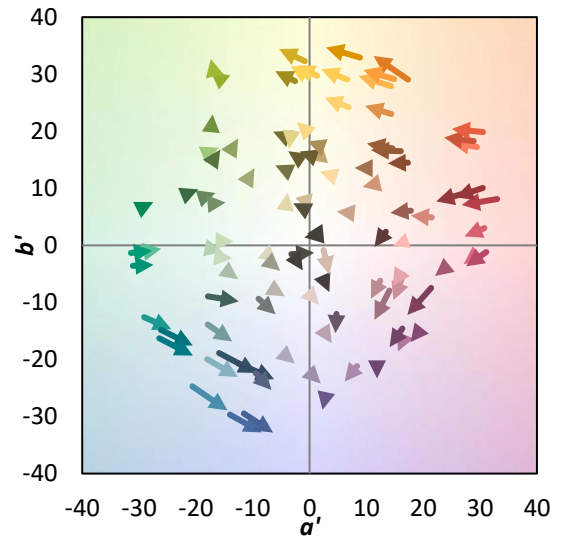
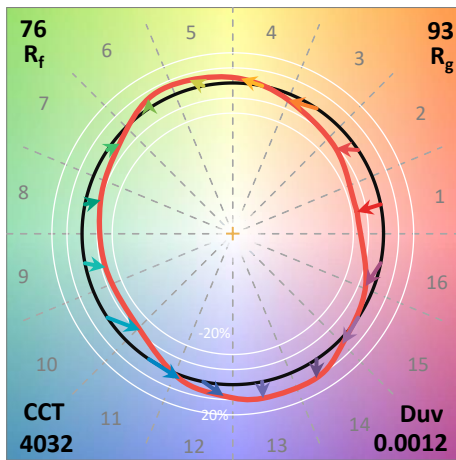
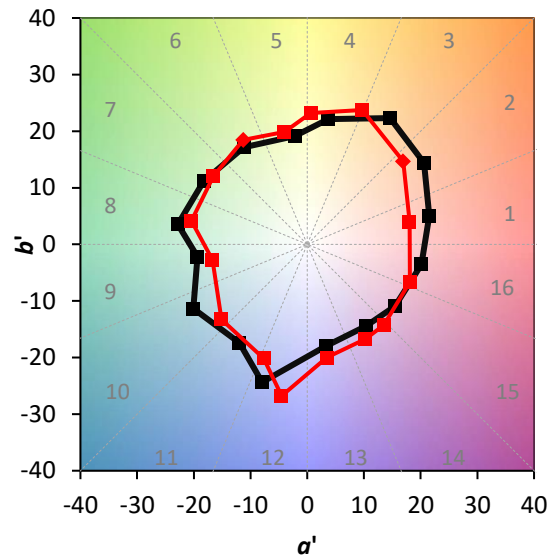
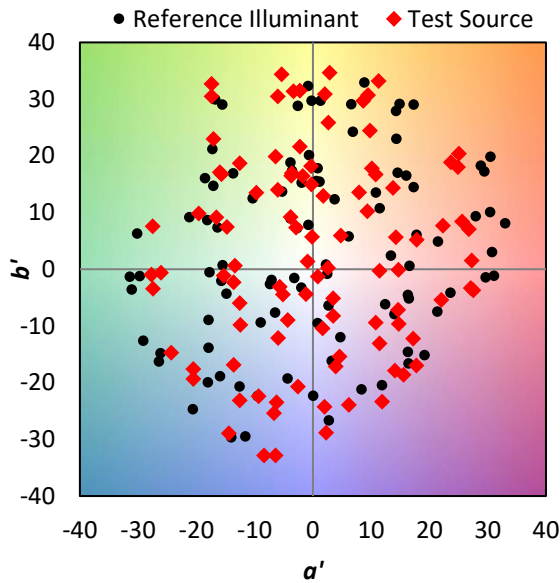
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	142	NR	620	655	NR	750	22	NR	880	1	NR
365	0	NR	495	174	NR	625	605	NR	755	19	NR	885	1	NR
370	0	NR	500	231	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 $R_a = 73.7$
 $R_g = -23.4$

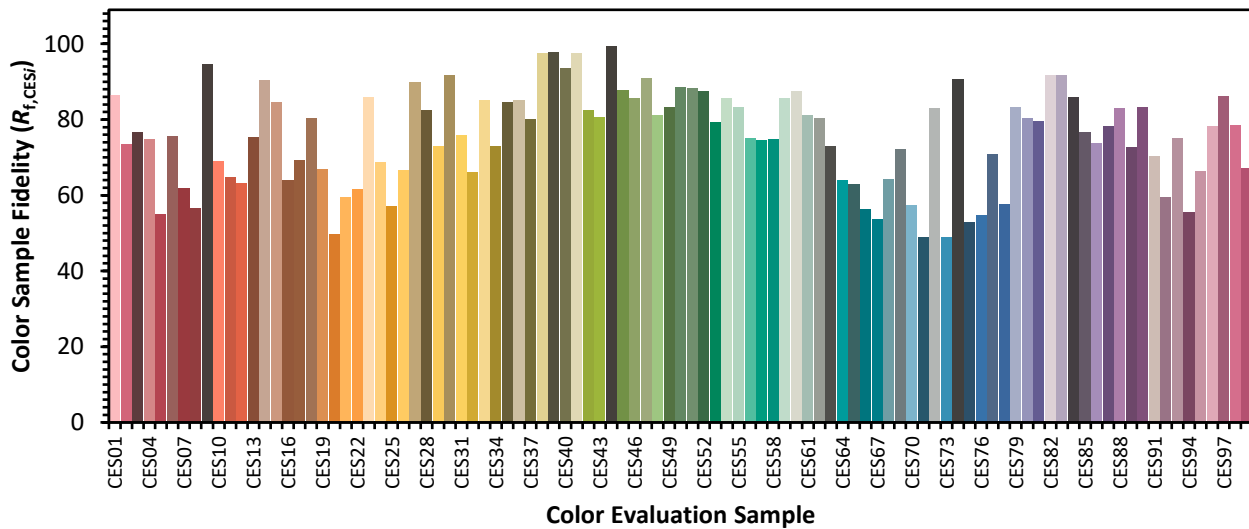


Color Vector Graphics

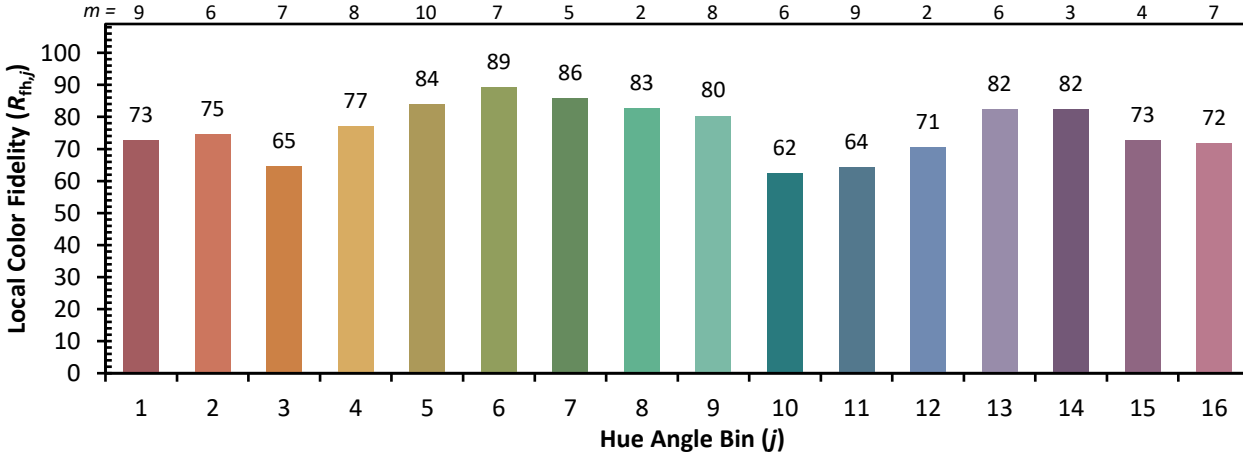
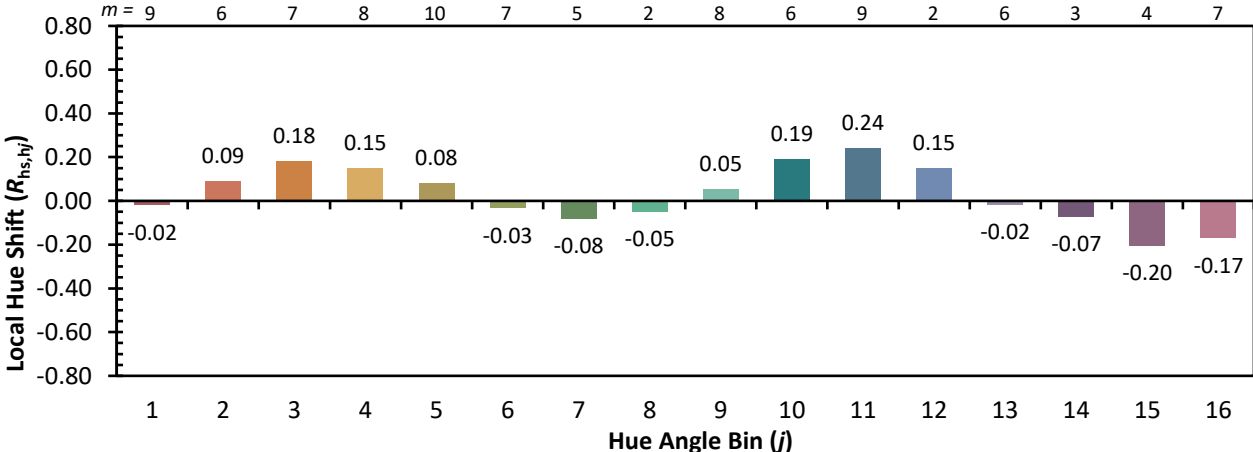
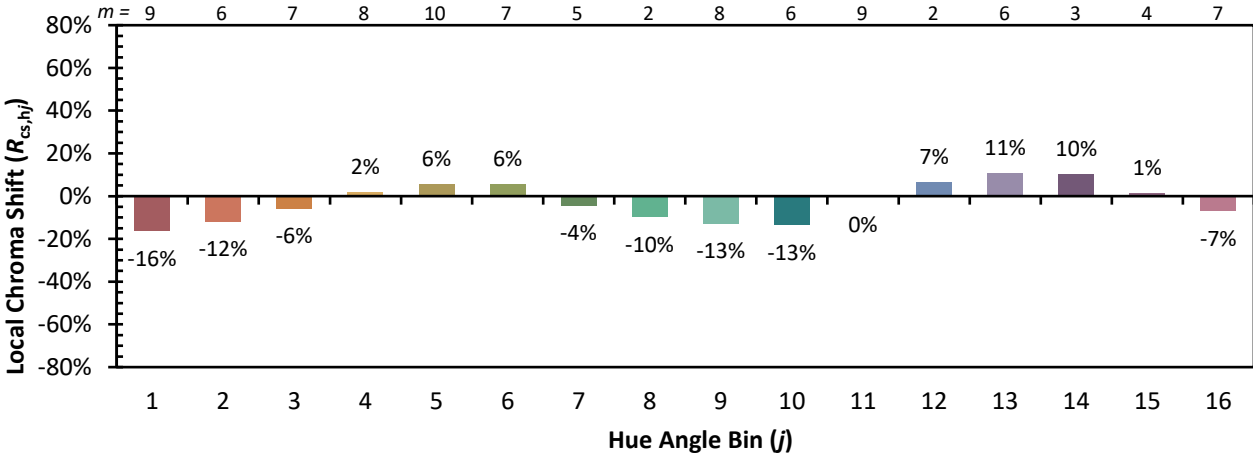


Individual Sample Fidelity Index ($R_{f,i}$)

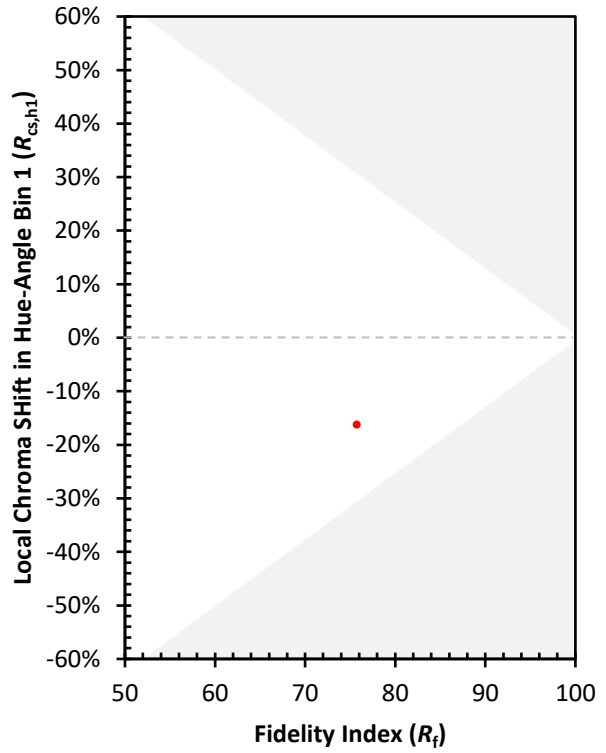
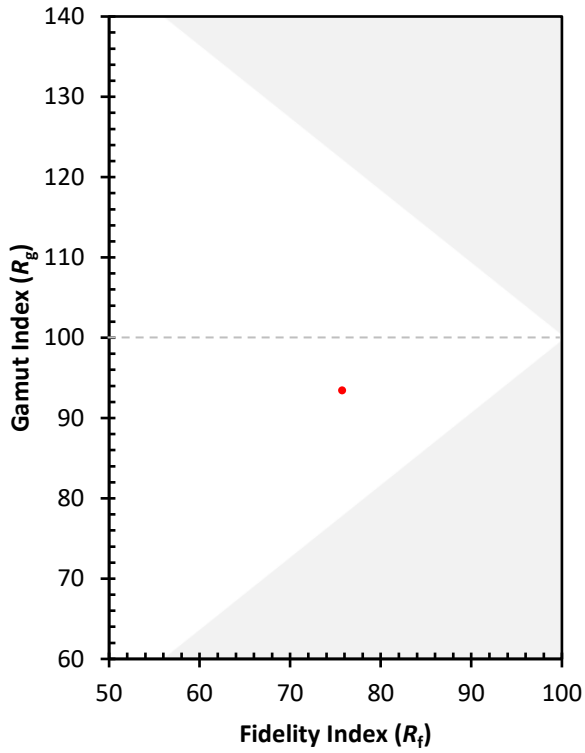
CES01 = 85	CES26 = 67	CES51 = 88	CES76 = 55
CES02 = 61	CES27 = 90	CES52 = 88	CES77 = 71
CES03 = 30	CES28 = 83	CES53 = 79	CES78 = 58
CES04 = 70	CES29 = 73	CES54 = 86	CES79 = 83
CES05 = 47	CES30 = 92	CES55 = 83	CES80 = 80
CES06 = 50	CES31 = 76	CES56 = 75	CES81 = 80
CES07 = 40	CES32 = 66	CES57 = 75	CES82 = 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)