

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: P233385

Luminaire Tested: **NFFLD-C25-D-UNV-66**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233385  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-16-1196-1)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NFFLD-C25-D-UNV-66  
Description: NIGHT FALCON LED FLOOD LIGHT  
Light Source: (2) 4000K CCT, 72 CRI LEDS  
Ballast/Driver: HATCH  
LC100-1050Z-UNV-I

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10649 lumens  
Efficiency: N/A  
Efficacy: 125.3 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 1.33' x H: 0')  
IES Classification: Type I - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

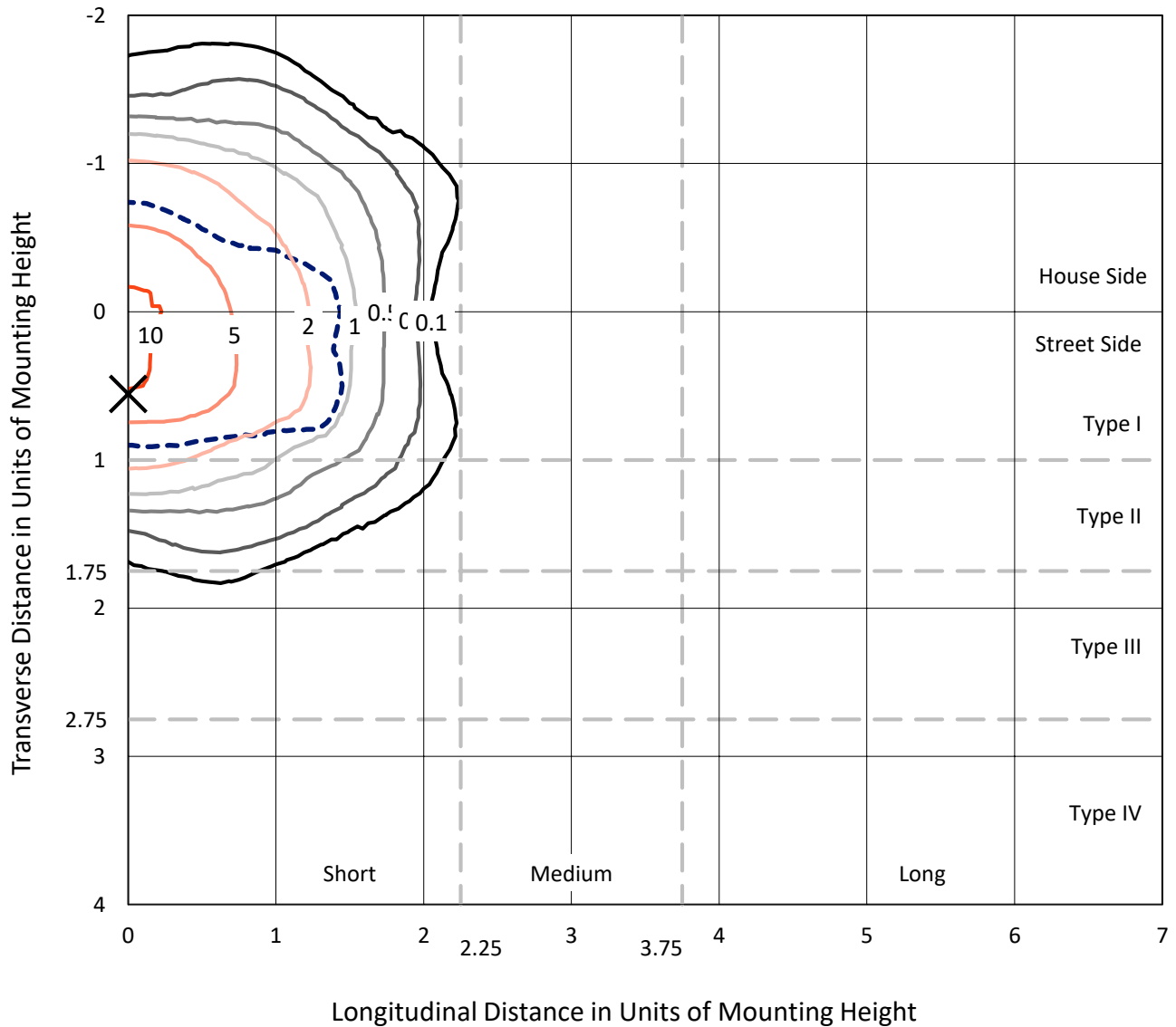


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

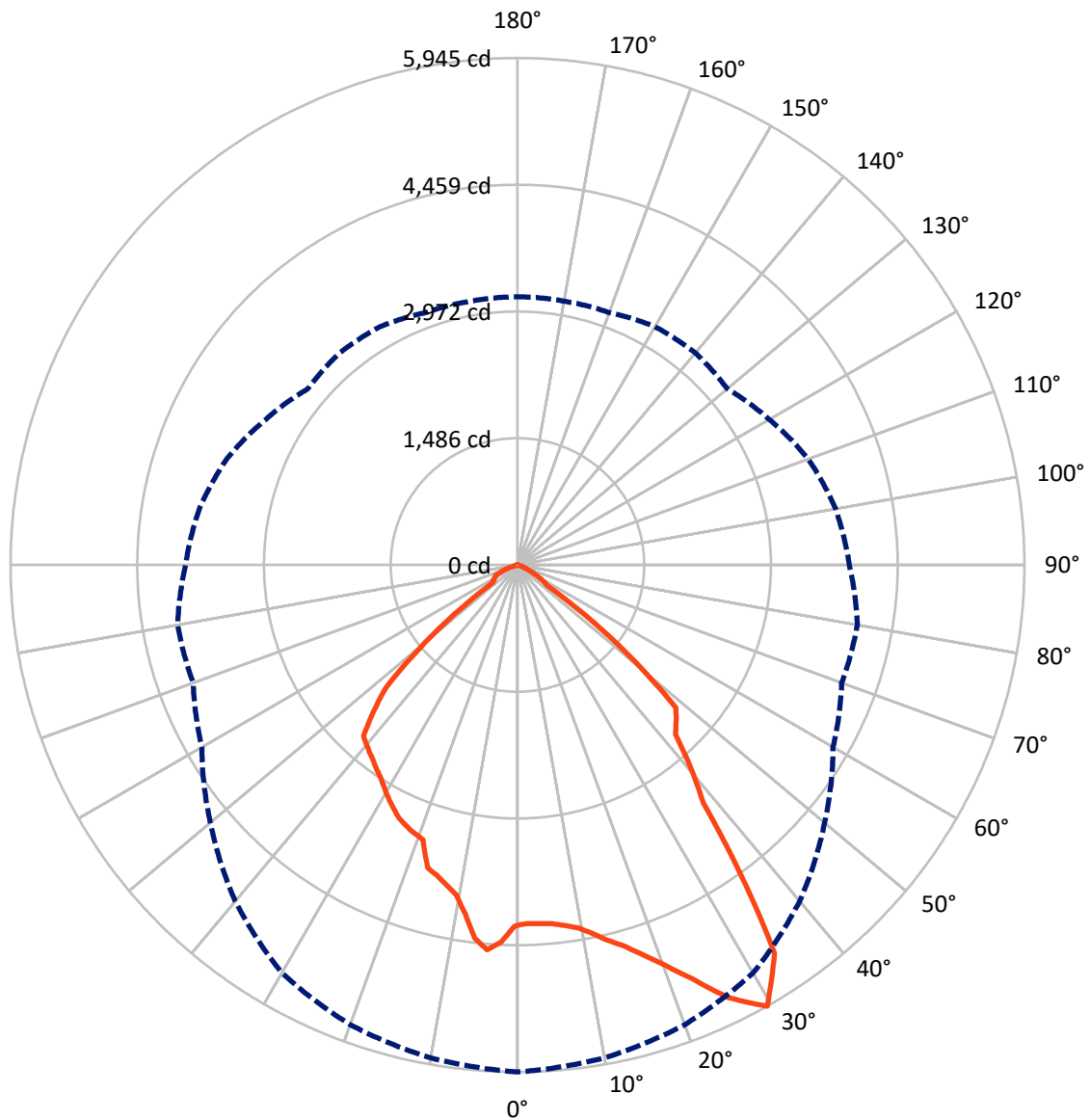


Based on 20 foot mounting height. Maximum calculated value = 10.7 fc  
 Type I - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 29-Deg Vertical

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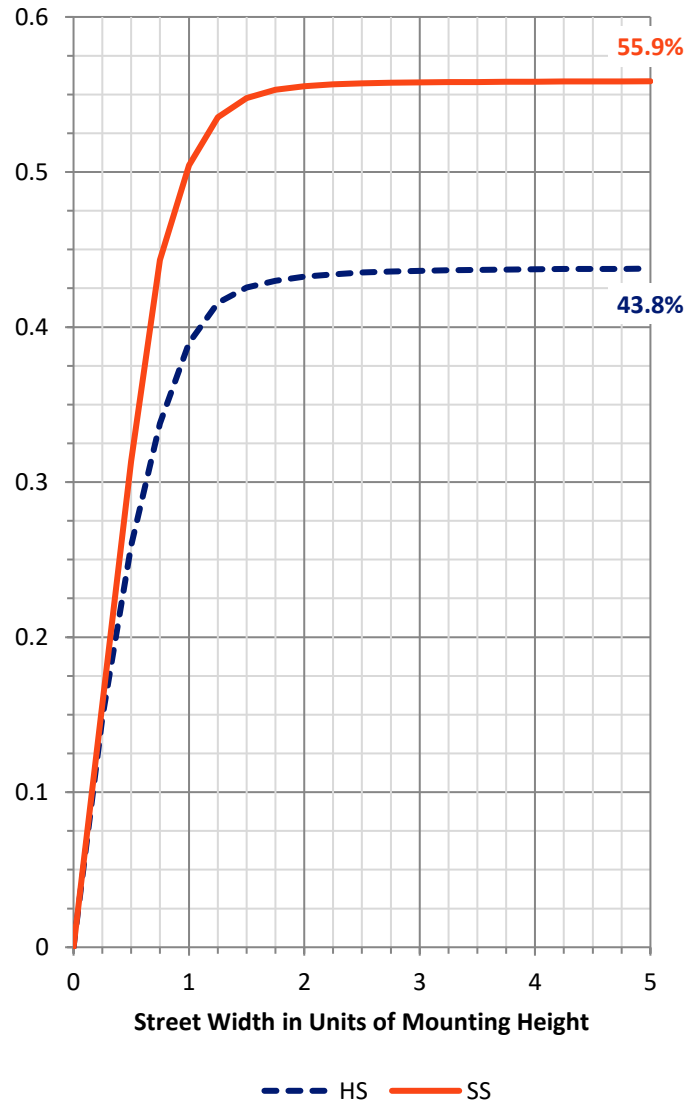
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4703.3	0.0	4703.3
	% Fixture	44.2	0.0	44.2
<b>Street Side</b>	Lumens	5945.7	0.0	5945.7
	% Fixture	55.8	0.0	55.8
<b>Total</b>	Lumens	10649.0	0.0	10649.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	410.5	3.9
10°-20°	1190.1	11.2
20°-30°	1921.8	18.0
30°-40°	2383.5	22.4
40°-50°	2367.3	22.2
50°-60°	1671.9	15.7
60°-70°	693.3	6.5
70°-80°	143.3	1.3
80°-90°	19.5	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	10649.0	100.0
0°-180°	10649.0	100.0



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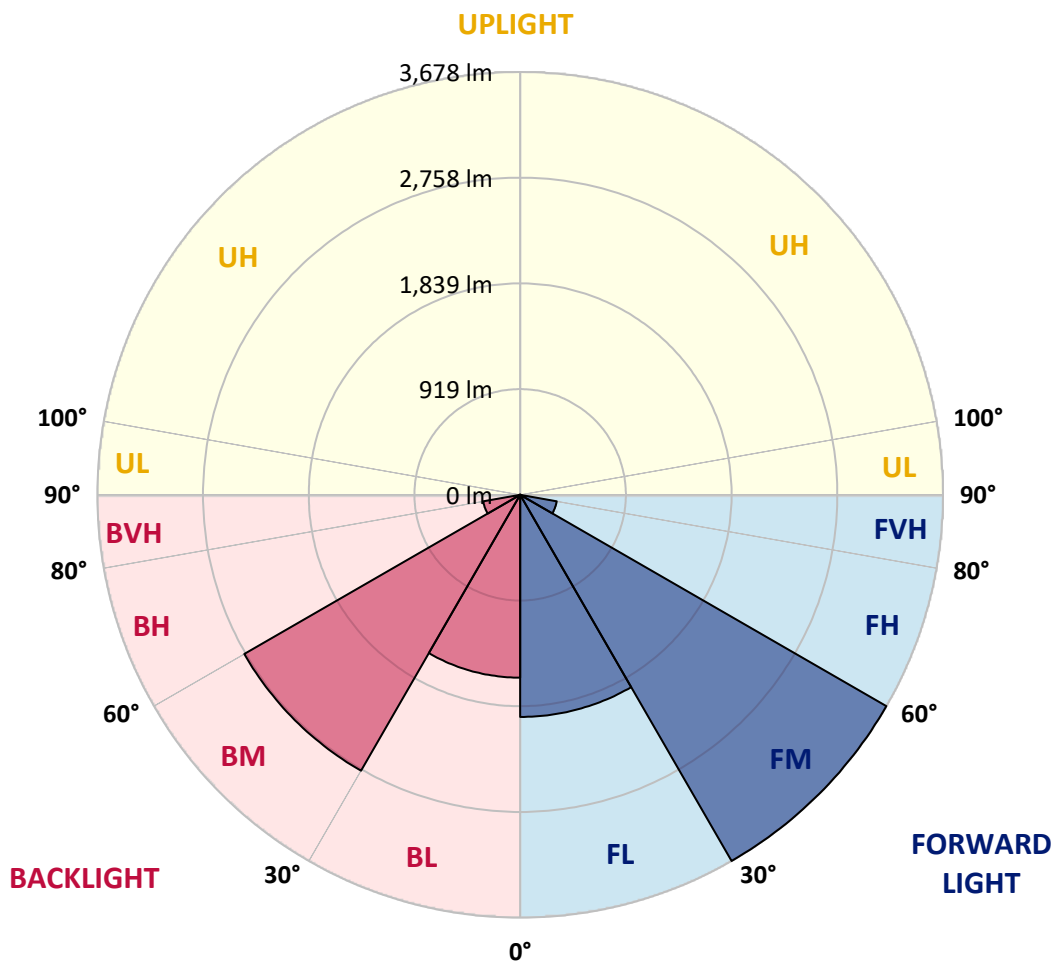
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1931.8	18.1			
FM	(30°-60°)	3678.0	34.5			
FH	(60°-80°)	323.1	3.0			G0/660
FVH	(80°-90°)	7.9	0.1			G0/10
BL	(0°-30°)	1590.2	14.9	B3/2500		
BM	(30°-60°)	2771.0	26.0	B3/5000		
BH	(60°-80°)	326.6	3.1	B1/500		G1/500
BVH	(80°-90°)	11.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4
1°	4207.6	4208.1	4208.8	4209.7	4210.9	4212.2	4213.7	4215.2	4216.8	4218.4	4222.3
3°	4211.5	4210.9	4210.5	4211.3	4212.2	4212.9	4213.5	4214.0	4220.0	4226.3	4241.0
5°	4224.3	4223.8	4222.4	4220.7	4219.0	4217.1	4217.4	4218.9	4222.3	4237.2	4268.3
7°	4264.8	4263.3	4255.5	4245.1	4233.2	4225.5	4223.1	4225.5	4232.4	4255.9	4317.6
9°	4314.1	4311.4	4298.2	4280.8	4257.8	4239.2	4228.0	4227.3	4238.3	4275.6	4366.3
11°	4408.8	4401.8	4373.1	4328.9	4283.6	4252.2	4232.2	4228.3	4246.6	4309.2	4397.4
13°	4525.2	4511.1	4468.6	4399.6	4327.1	4262.6	4228.4	4219.2	4245.7	4331.9	4384.8
15°	4630.8	4618.1	4572.0	4483.7	4387.6	4283.5	4221.5	4211.5	4244.5	4340.8	4335.5
17°	4772.9	4749.5	4686.4	4582.7	4467.4	4319.2	4223.6	4217.2	4263.5	4344.7	4264.3
19.5°	4978.1	4939.2	4849.4	4712.5	4556.1	4401.0	4254.4	4227.3	4299.9	4413.8	4175.4
22.5°	5276.0	5216.7	5093.6	4909.3	4681.0	4465.1	4285.6	4201.4	4263.7	4315.1	4042.1
25.5°	5644.0	5557.2	5402.8	5176.2	4887.8	4594.8	4282.0	4115.7	4149.5	3992.5	3885.6
29°	5944.9	5869.1	5736.4	5524.4	5147.8	4701.3	4273.4	4046.4	4047.4	3891.9	3788.5
33°	5461.5	5509.7	5615.1	5791.0	5408.6	4763.6	4304.6	4081.8	3822.9	3635.4	3522.5
37.5°	3540.7	3755.0	4262.7	4988.6	5350.2	4951.8	4355.3	4085.6	3754.6	3518.0	3323.8
42.5°	2717.9	2788.3	2979.0	3245.8	4070.2	4811.7	4523.9	4121.3	3627.3	3479.5	3206.5
47.5°	2498.9	2505.5	2506.3	2489.4	2724.8	3732.8	4671.8	4144.2	3365.9	3261.5	3161.4
55°	426.2	653.8	1034.0	1396.7	1938.1	2038.5	3408.2	3380.0	2860.5	3038.5	2806.9
65°	129.2	112.2	242.2	195.8	280.8	574.6	803.4	847.7	520.4	116.4	528.4
75°	14.8	17.9	30.5	25.5	30.1	25.6	44.9	51.7	51.5	88.8	83.4
85°	0.0	10.3	14.8	15.3	16.8	16.4	19.1	20.3	19.2	21.7	22.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4
1°	4226.0	4229.4	4232.4	4234.8	4236.7	4237.9	4238.4	4238.2	4238.4	4237.9	4236.7
3°	4256.1	4297.2	4334.0	4365.6	4390.8	4409.0	4421.4	4425.6	4421.4	4409.0	4390.8
5°	4331.3	4396.3	4444.5	4466.9	4488.9	4508.5	4523.2	4526.2	4523.2	4508.5	4488.9
7°	4404.7	4457.4	4480.9	4475.1	4440.5	4419.7	4408.8	4406.8	4408.8	4419.7	4440.5
9°	4453.6	4459.1	4410.3	4342.5	4263.5	4201.1	4157.5	4136.5	4157.5	4201.1	4263.5
11°	4421.3	4364.6	4250.7	4148.8	4060.5	4000.9	3958.2	3935.3	3958.2	4000.9	4060.5
13°	4339.1	4189.3	4076.1	3989.7	3915.4	3880.2	3856.9	3844.5	3856.9	3880.2	3915.4
15°	4216.7	4045.2	3962.4	3890.5	3831.5	3789.6	3769.9	3762.6	3769.9	3789.6	3831.5
17°	4097.9	3969.6	3898.9	3818.0	3742.5	3719.5	3715.8	3704.4	3715.8	3719.5	3742.5
19.5°	4016.9	3920.6	3827.1	3708.1	3663.6	3521.1	3435.1	3405.5	3435.1	3521.1	3663.6
22.5°	3942.5	3850.4	3686.0	3555.1	3378.7	3354.6	3352.5	3352.2	3352.5	3354.6	3378.7
25.5°	3810.0	3689.7	3498.6	3326.0	3330.3	3284.3	3274.9	3279.2	3274.9	3284.3	3330.3
29°	3629.2	3410.5	3212.1	3245.0	3225.4	3149.3	3140.7	3144.1	3140.7	3149.3	3225.4
33°	3377.3	3154.7	3053.3	3073.4	3002.2	2968.7	2978.3	2974.4	2978.3	2968.7	3002.2
37.5°	3136.2	2980.1	2888.3	2818.6	2802.3	2810.9	2834.7	2833.3	2834.7	2810.9	2802.3
42.5°	2975.1	2846.5	2672.1	2598.5	2628.7	2662.9	2691.8	2698.2	2691.8	2662.9	2628.7
47.5°	2906.3	2751.4	2438.4	2412.6	2399.1	2220.8	2099.4	2109.2	2099.4	2220.8	2399.1
55°	2563.1	2605.0	2112.3	1785.6	1169.4	715.7	436.0	355.2	436.0	715.7	1169.4
65°	863.6	694.0	340.7	254.5	339.2	296.4	277.2	277.2	277.2	296.4	339.2
75°	109.9	80.3	77.6	58.4	77.9	60.1	37.9	30.6	37.9	60.1	77.9
85°	21.1	19.7	20.0	18.5	17.9	20.1	17.3	1.0	17.3	20.1	17.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4	4216.4
1°	4234.8	4232.4	4229.4	4226.0	4222.3	4218.4	4216.8	4215.2	4213.7	4212.2	4210.9
3°	4365.6	4334.0	4297.2	4256.1	4241.0	4226.3	4220.0	4214.0	4213.5	4212.9	4212.2
5°	4466.9	4444.5	4396.3	4331.3	4268.3	4237.2	4222.3	4218.9	4217.4	4217.1	4219.0
7°	4475.1	4480.9	4457.4	4404.7	4317.6	4255.9	4232.4	4225.5	4223.1	4225.5	4233.2
9°	4342.5	4410.3	4459.1	4453.6	4366.3	4275.6	4238.3	4227.3	4228.0	4239.2	4257.8
11°	4148.8	4250.7	4364.6	4421.3	4397.4	4309.2	4246.6	4228.3	4232.2	4252.2	4283.6
13°	3989.7	4076.1	4189.3	4339.1	4384.8	4331.9	4245.7	4219.2	4228.4	4262.6	4327.1
15°	3890.5	3962.4	4045.2	4216.7	4335.5	4340.8	4244.5	4211.5	4221.5	4283.5	4387.6
17°	3818.0	3898.9	3969.6	4097.9	4264.3	4344.7	4263.5	4217.2	4223.6	4319.2	4467.4
19.5°	3708.1	3827.1	3920.6	4016.9	4175.4	4413.8	4299.9	4227.3	4254.4	4401.0	4556.1
22.5°	3555.1	3686.0	3850.4	3942.5	4042.1	4315.1	4263.7	4201.4	4285.6	4465.1	4681.0
25.5°	3326.0	3498.6	3689.7	3810.0	3885.6	3992.5	4149.5	4115.7	4282.0	4594.8	4887.8
29°	3245.0	3212.1	3410.5	3629.2	3788.5	3891.9	4047.4	4046.4	4273.4	4701.3	5147.8
33°	3073.4	3053.3	3154.7	3377.3	3522.5	3635.4	3822.9	4081.8	4304.6	4763.6	5408.6
37.5°	2818.6	2888.3	2980.1	3136.2	3323.8	3518.0	3754.6	4085.6	4355.3	4951.8	5350.2
42.5°	2598.5	2672.1	2846.5	2975.1	3206.5	3479.5	3627.3	4121.3	4523.9	4811.7	4070.2
47.5°	2412.6	2438.4	2751.4	2906.3	3161.4	3261.5	3365.9	4144.2	4671.8	3732.8	2724.8
55°	1785.6	2112.3	2605.0	2563.1	2806.9	3038.5	2860.5	3380.0	3408.2	2038.5	1938.1
65°	254.5	340.7	694.0	863.6	528.4	116.4	520.4	847.7	803.4	574.6	280.8
75°	58.4	77.6	80.3	109.9	83.4	88.8	51.5	51.7	44.9	25.6	30.1
85°	18.5	20.0	19.7	21.1	22.2	21.7	19.2	20.3	19.1	16.4	16.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
0°	4216.4	4216.4	4216.4	4216.4
1°	4209.7	4208.8	4208.1	4207.6
3°	4211.3	4210.5	4210.9	4211.5
5°	4220.7	4222.4	4223.8	4224.3
7°	4245.1	4255.5	4263.3	4264.8
9°	4280.8	4298.2	4311.4	4314.1
11°	4328.9	4373.1	4401.8	4408.8
13°	4399.6	4468.6	4511.1	4525.2
15°	4483.7	4572.0	4618.1	4630.8
17°	4582.7	4686.4	4749.5	4772.9
19.5°	4712.5	4849.4	4939.2	4978.1
22.5°	4909.3	5093.6	5216.7	5276.0
25.5°	5176.2	5402.8	5557.2	5644.0
29°	5524.4	5736.4	5869.1	5944.9
33°	5791.0	5615.1	5509.7	5461.5
37.5°	4988.6	4262.7	3755.0	3540.7
42.5°	3245.8	2979.0	2788.3	2717.9
47.5°	2489.4	2506.3	2505.5	2498.9
55°	1396.7	1034.0	653.8	426.2
65°	195.8	242.2	112.2	129.2
75°	25.5	30.5	17.9	14.8
85°	15.3	14.8	10.3	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)