

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: P233387

Luminaire Tested: **NFFLD-C25-D-UNV-66-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233387  
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-66-7050  
Description: NIGHT FALCON LED FLOOD LIGHT  
Light Source: (2) 5000K CCT, 72 CRI LEDS  
Ballast/Driver: HATCH  
LC100-1050Z-UNV-I

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10500.3 lumens  
Efficiency: N/A  
Efficacy: 123.5 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

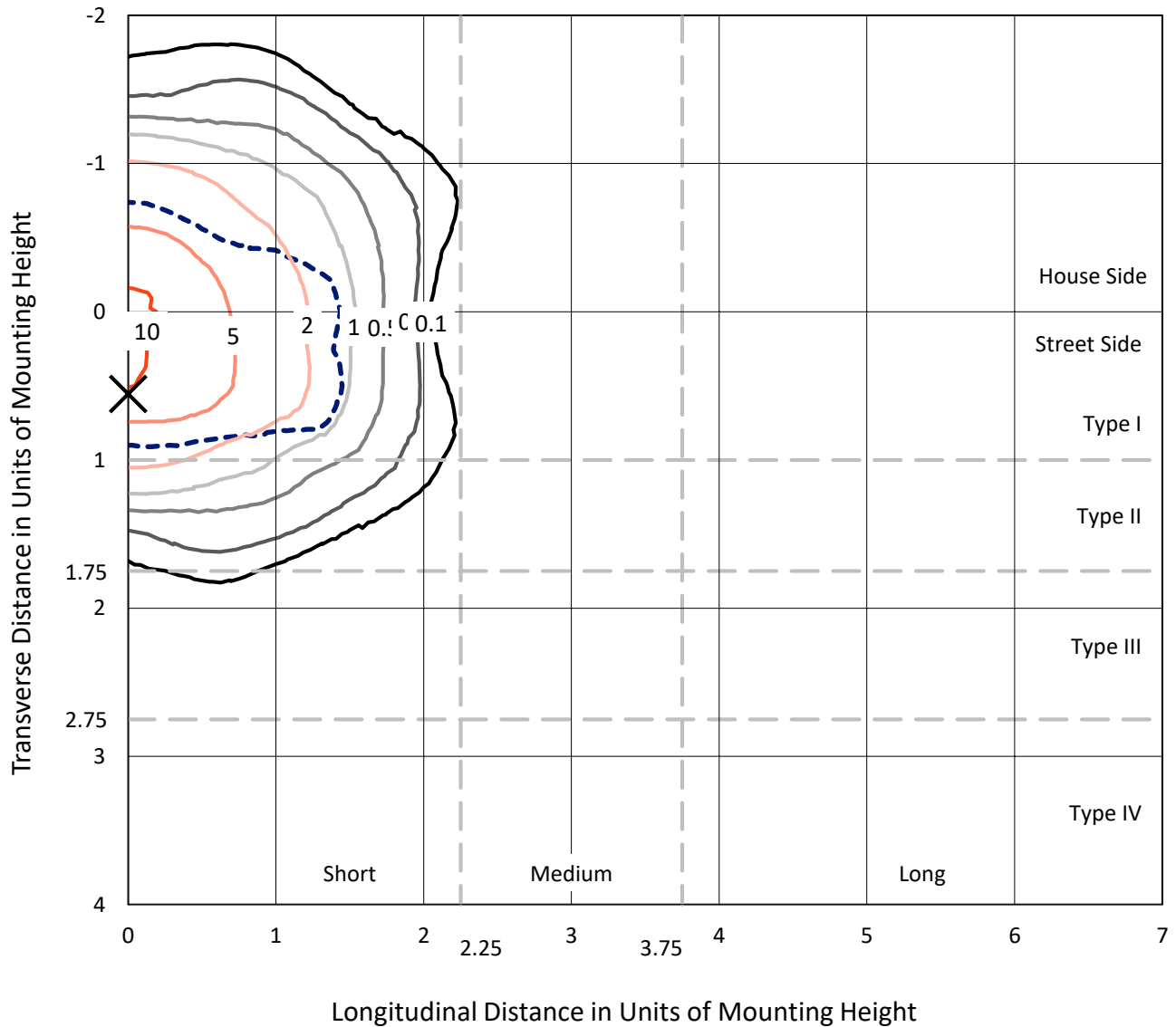


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### Iso-Footcandle Lines of Horizontal Illumination

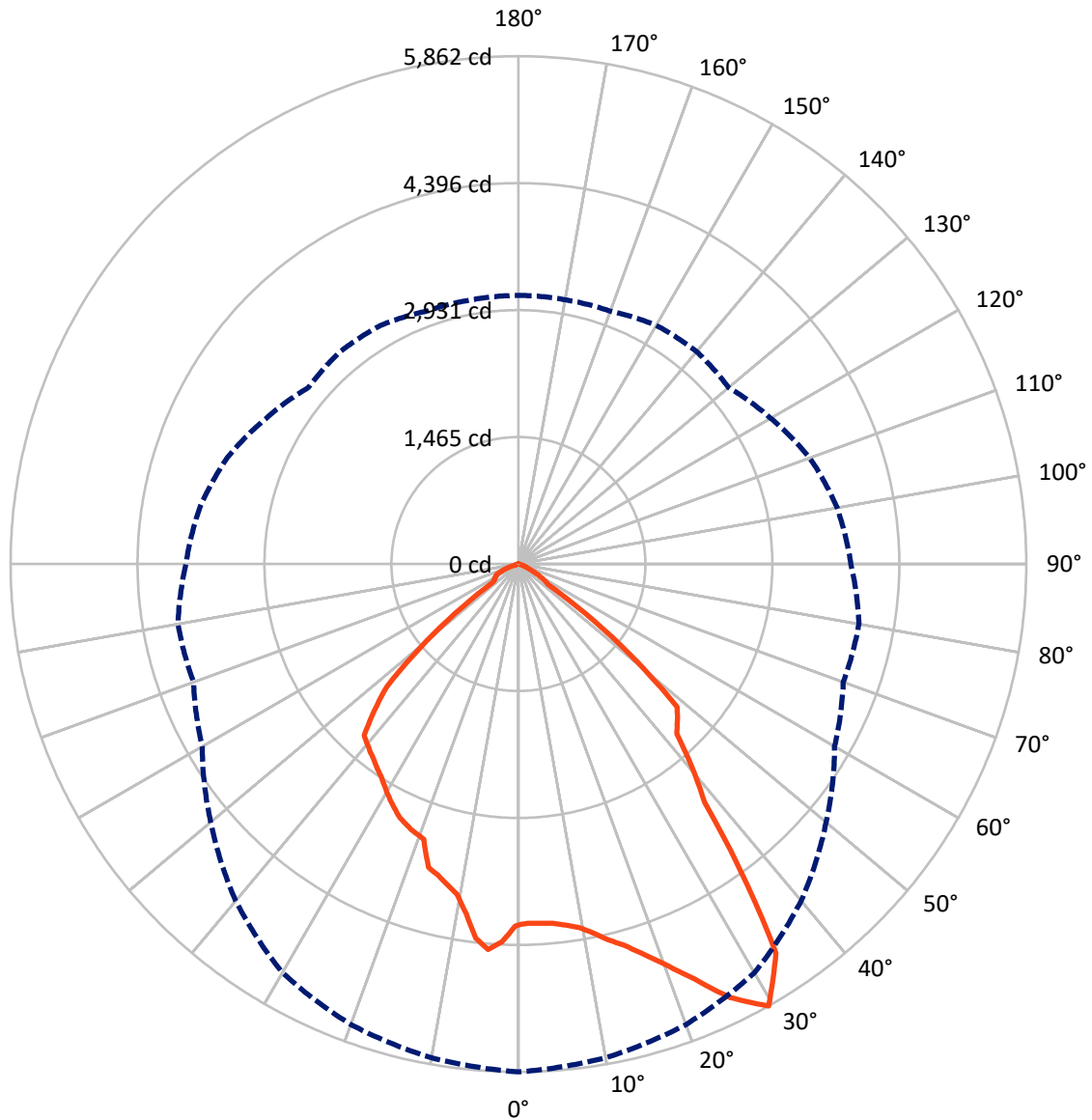
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10.6 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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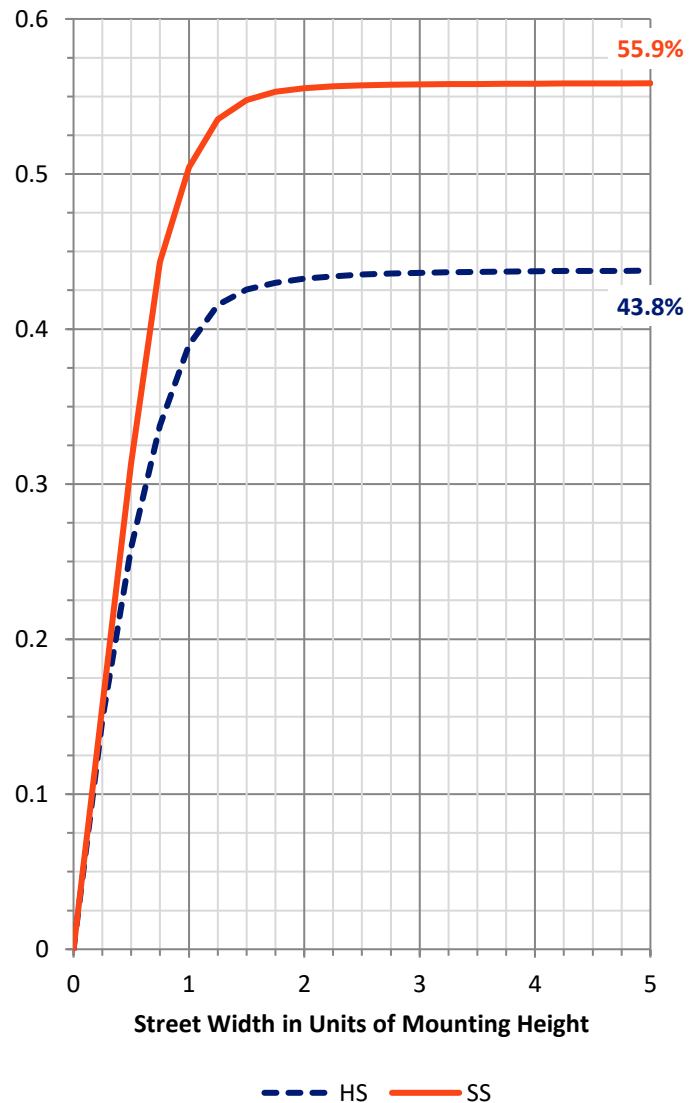
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4637.6	0.0	4637.6
	% Fixture	44.2	0.0	44.2
<b>Street Side</b>	Lumens	5862.7	0.0	5862.7
	% Fixture	55.8	0.0	55.8
<b>Total</b>	Lumens	10500.3	0.0	10500.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	404.7	3.9
10°-20°	1173.4	11.2
20°-30°	1894.9	18.0
30°-40°	2350.2	22.4
40°-50°	2334.3	22.2
50°-60°	1648.5	15.7
60°-70°	683.6	6.5
70°-80°	141.3	1.3
80°-90°	19.2	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°	10500.3	100.0
0°-180°	10500.3	100.0



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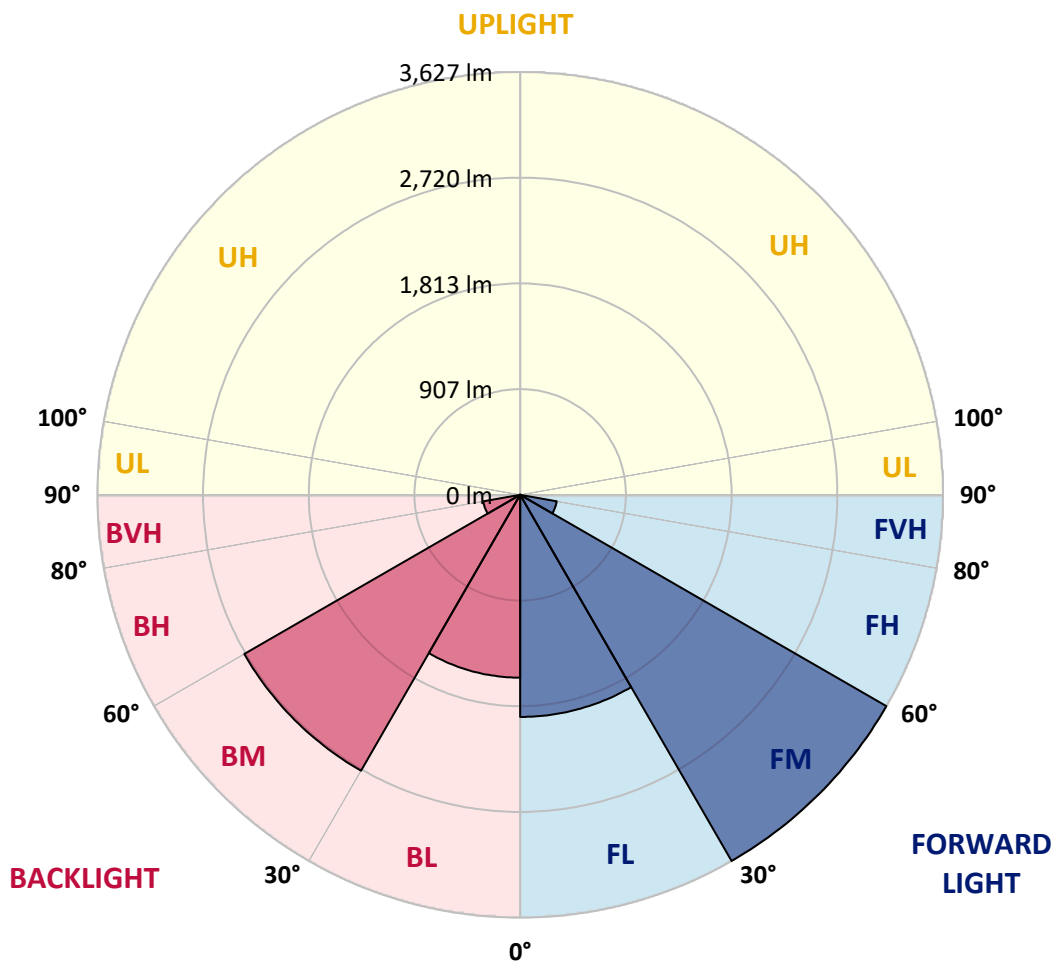
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1904.8	18.1			
FM	(30°-60°)	3626.6	34.5			
FH	(60°-80°)	318.6	3.0			G0/660
FVH	(80°-90°)	7.8	0.1			G0/10
BL	(0°-30°)	1568.0	14.9	B3/2500		
BM	(30°-60°)	2732.3	26.0	B3/5000		
BH	(60°-80°)	322.0	3.1	B1/500		G1/500
BVH	(80°-90°)	11.1	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°	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6
1°	4148.8	4149.3	4150.0	4151.0	4152.1	4153.4	4154.9	4156.4	4158.0	4159.5	4163.4
3°	4152.7	4152.1	4151.7	4152.5	4153.3	4154.1	4154.7	4155.2	4161.1	4167.3	4181.8
5°	4165.4	4164.9	4163.6	4161.8	4160.1	4158.2	4158.5	4160.0	4163.4	4178.0	4208.7
7°	4205.3	4203.8	4196.1	4185.9	4174.1	4166.5	4164.2	4166.6	4173.3	4196.5	4257.3
9°	4253.9	4251.2	4238.1	4221.0	4198.4	4180.1	4169.0	4168.3	4179.1	4216.0	4305.3
11°	4347.3	4340.3	4312.1	4268.5	4223.8	4192.8	4173.1	4169.3	4187.3	4249.0	4336.0
13°	4462.1	4448.1	4406.2	4338.2	4266.7	4203.0	4169.4	4160.2	4186.4	4271.4	4323.6
15°	4566.1	4553.7	4508.2	4421.1	4326.3	4223.7	4162.5	4152.7	4185.2	4280.2	4274.9
17°	4706.2	4683.2	4620.9	4518.7	4405.1	4258.8	4164.6	4158.3	4203.9	4284.0	4204.7
19.5°	4908.6	4870.2	4781.7	4646.7	4492.5	4339.6	4195.0	4168.3	4239.8	4352.1	4117.2
22.5°	5202.3	5143.8	5022.5	4840.8	4615.7	4402.8	4225.8	4142.8	4204.2	4254.9	3985.7
25.5°	5565.2	5479.6	5327.3	5104.0	4819.6	4530.6	4222.2	4058.2	4091.5	3936.8	3831.3
29°	5861.9	5787.1	5656.3	5447.2	5075.9	4635.7	4213.8	3989.9	3990.9	3837.5	3735.6
33°	5385.2	5432.8	5536.7	5710.1	5333.0	4697.1	4244.5	4024.9	3769.6	3584.6	3473.3
37.5°	3491.2	3702.5	4203.2	4919.0	5275.5	4882.7	4294.5	4028.6	3702.2	3468.9	3277.4
42.5°	2680.0	2749.4	2937.4	3200.4	4013.4	4744.6	4460.7	4063.8	3576.7	3430.9	3161.7
47.5°	2464.0	2470.6	2471.3	2454.6	2686.8	3680.7	4606.6	4086.3	3318.9	3216.0	3117.3
55°	420.2	644.7	1019.5	1377.2	1911.1	2010.1	3360.6	3332.8	2820.5	2996.1	2767.7
65°	127.4	110.6	238.8	193.1	276.8	566.5	792.2	835.9	513.2	114.8	521.1
75°	14.6	17.6	30.1	25.1	29.7	25.3	44.2	51.0	50.8	87.5	82.2
85°	0.0	10.2	14.6	15.1	16.6	16.2	18.9	20.0	19.0	21.4	21.9
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):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6
1°	4167.0	4170.4	4173.3	4175.7	4177.5	4178.7	4179.2	4179.0	4179.2	4178.7	4177.5
3°	4196.6	4237.2	4273.5	4304.6	4329.5	4347.5	4359.6	4363.8	4359.6	4347.5	4329.5
5°	4270.8	4334.9	4382.4	4404.6	4426.2	4445.6	4460.1	4463.0	4460.1	4445.6	4426.2
7°	4343.2	4395.2	4418.3	4412.6	4378.5	4358.0	4347.3	4345.3	4347.3	4358.0	4378.5
9°	4391.4	4396.8	4348.7	4281.9	4204.0	4142.4	4099.4	4078.8	4099.4	4142.4	4204.0
11°	4359.6	4303.7	4191.3	4090.9	4003.9	3945.1	3903.0	3880.3	3903.0	3945.1	4003.9
13°	4278.5	4130.8	4019.2	3934.0	3860.7	3826.1	3803.0	3790.9	3803.0	3826.1	3860.7
15°	4157.8	3988.7	3907.1	3836.2	3778.0	3736.7	3717.2	3710.1	3717.2	3736.7	3778.0
17°	4040.7	3914.1	3844.5	3764.6	3690.2	3667.6	3663.9	3652.7	3663.9	3667.6	3690.2
19.5°	3960.8	3865.8	3773.7	3656.4	3612.5	3472.0	3387.2	3358.0	3387.2	3472.0	3612.5
22.5°	3887.5	3796.7	3634.5	3505.5	3331.5	3307.7	3305.7	3305.4	3305.7	3307.7	3331.5
25.5°	3756.8	3638.2	3449.8	3279.5	3283.8	3238.4	3229.2	3233.5	3229.2	3238.4	3283.8
29°	3578.5	3362.8	3167.2	3199.7	3180.4	3105.3	3096.8	3100.2	3096.8	3105.3	3180.4
33°	3330.1	3110.7	3010.7	3030.4	2960.3	2927.3	2936.8	2932.9	2936.8	2927.3	2960.3
37.5°	3092.4	2938.5	2847.9	2779.3	2763.2	2771.7	2795.1	2793.8	2795.1	2771.7	2763.2
42.5°	2933.5	2806.7	2634.8	2562.2	2592.0	2625.7	2654.2	2660.5	2654.2	2625.7	2592.0
47.5°	2865.7	2713.0	2404.4	2378.9	2365.6	2189.8	2070.1	2079.8	2070.1	2189.8	2365.6
55°	2527.3	2568.6	2082.9	1760.7	1153.1	705.7	429.8	350.2	429.8	705.7	1153.1
65°	851.6	684.3	335.9	251.0	334.4	292.3	273.4	273.3	273.4	292.3	334.4
75°	108.4	79.2	76.6	57.6	76.8	59.3	37.3	30.2	37.3	59.3	76.8
85°	20.8	19.4	19.7	18.2	17.6	19.9	17.1	1.0	17.1	19.9	17.6
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°	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6	4157.6
1°	4175.7	4173.3	4170.4	4167.0	4163.4	4159.5	4158.0	4156.4	4154.9	4153.4	4152.1
3°	4304.6	4273.5	4237.2	4196.6	4181.8	4167.3	4161.1	4155.2	4154.7	4154.1	4153.3
5°	4404.6	4382.4	4334.9	4270.8	4208.7	4178.0	4163.4	4160.0	4158.5	4158.2	4160.1
7°	4412.6	4418.3	4395.2	4343.2	4257.3	4196.5	4173.3	4166.6	4164.2	4166.5	4174.1
9°	4281.9	4348.7	4396.8	4391.4	4305.3	4216.0	4179.1	4168.3	4169.0	4180.1	4198.4
11°	4090.9	4191.3	4303.7	4359.6	4336.0	4249.0	4187.3	4169.3	4173.1	4192.8	4223.8
13°	3934.0	4019.2	4130.8	4278.5	4323.6	4271.4	4186.4	4160.2	4169.4	4203.0	4266.7
15°	3836.2	3907.1	3988.7	4157.8	4274.9	4280.2	4185.2	4152.7	4162.5	4223.7	4326.3
17°	3764.6	3844.5	3914.1	4040.7	4204.7	4284.0	4203.9	4158.3	4164.6	4258.8	4405.1
19.5°	3656.4	3773.7	3865.8	3960.8	4117.2	4352.1	4239.8	4168.3	4195.0	4339.6	4492.5
22.5°	3505.5	3634.5	3796.7	3887.5	3985.7	4254.9	4204.2	4142.8	4225.8	4402.8	4615.7
25.5°	3279.5	3449.8	3638.2	3756.8	3831.3	3936.8	4091.5	4058.2	4222.2	4530.6	4819.6
29°	3199.7	3167.2	3362.8	3578.5	3735.6	3837.5	3990.9	3989.9	4213.8	4635.7	5075.9
33°	3030.4	3010.7	3110.7	3330.1	3473.3	3584.6	3769.6	4024.9	4244.5	4697.1	5333.0
37.5°	2779.3	2847.9	2938.5	3092.4	3277.4	3468.9	3702.2	4028.6	4294.5	4882.7	5275.5
42.5°	2562.2	2634.8	2806.7	2933.5	3161.7	3430.9	3576.7	4063.8	4460.7	4744.6	4013.4
47.5°	2378.9	2404.4	2713.0	2865.7	3117.3	3216.0	3318.9	4086.3	4606.6	3680.7	2686.8
55°	1760.7	2082.9	2568.6	2527.3	2767.7	2996.1	2820.5	3332.8	3360.6	2010.1	1911.1
65°	251.0	335.9	684.3	851.6	521.1	114.8	513.2	835.9	792.2	566.5	276.8
75°	57.6	76.6	79.2	108.4	82.2	87.5	50.8	51.0	44.2	25.3	29.7
85°	18.2	19.7	19.4	20.8	21.9	21.4	19.0	20.0	18.9	16.2	16.6
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°	4157.6	4157.6	4157.6	4157.6
1°	4151.0	4150.0	4149.3	4148.8
3°	4152.5	4151.7	4152.1	4152.7
5°	4161.8	4163.6	4164.9	4165.4
7°	4185.9	4196.1	4203.8	4205.3
9°	4221.0	4238.1	4251.2	4253.9
11°	4268.5	4312.1	4340.3	4347.3
13°	4338.2	4406.2	4448.1	4462.1
15°	4421.1	4508.2	4553.7	4566.1
17°	4518.7	4620.9	4683.2	4706.2
19.5°	4646.7	4781.7	4870.2	4908.6
22.5°	4840.8	5022.5	5143.8	5202.3
25.5°	5104.0	5327.3	5479.6	5565.2
29°	5447.2	5656.3	5787.1	5861.9
33°	5710.1	5536.7	5432.8	5385.2
37.5°	4919.0	4203.2	3702.5	3491.2
42.5°	3200.4	2937.4	2749.4	2680.0
47.5°	2454.6	2471.3	2470.6	2464.0
55°	1377.2	1019.5	644.7	420.2
65°	193.1	238.8	110.6	127.4
75°	25.1	30.1	17.6	14.6
85°	15.1	14.6	10.2	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)