

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: P212889

Luminaire Tested: **NFFLD-C40-D-UNV-33-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P212889  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-16-1196-4)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NFFLD-C40-D-UNV-33-7060  
Description: NIGHT FALCON LED FLOOD LIGHT  
Light Source: (8) 5700K CCT, 72 CRI LEDS  
CLU028-1204C4-40ALK3  
Ballast/Driver: OSRAM  
OT180/UNV/1250C/2DIMLT2

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13838.3 lumens  
Efficiency: N/A  
Efficacy: 96.9 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 1.33' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G1

Input Watts (W): 142.8  
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

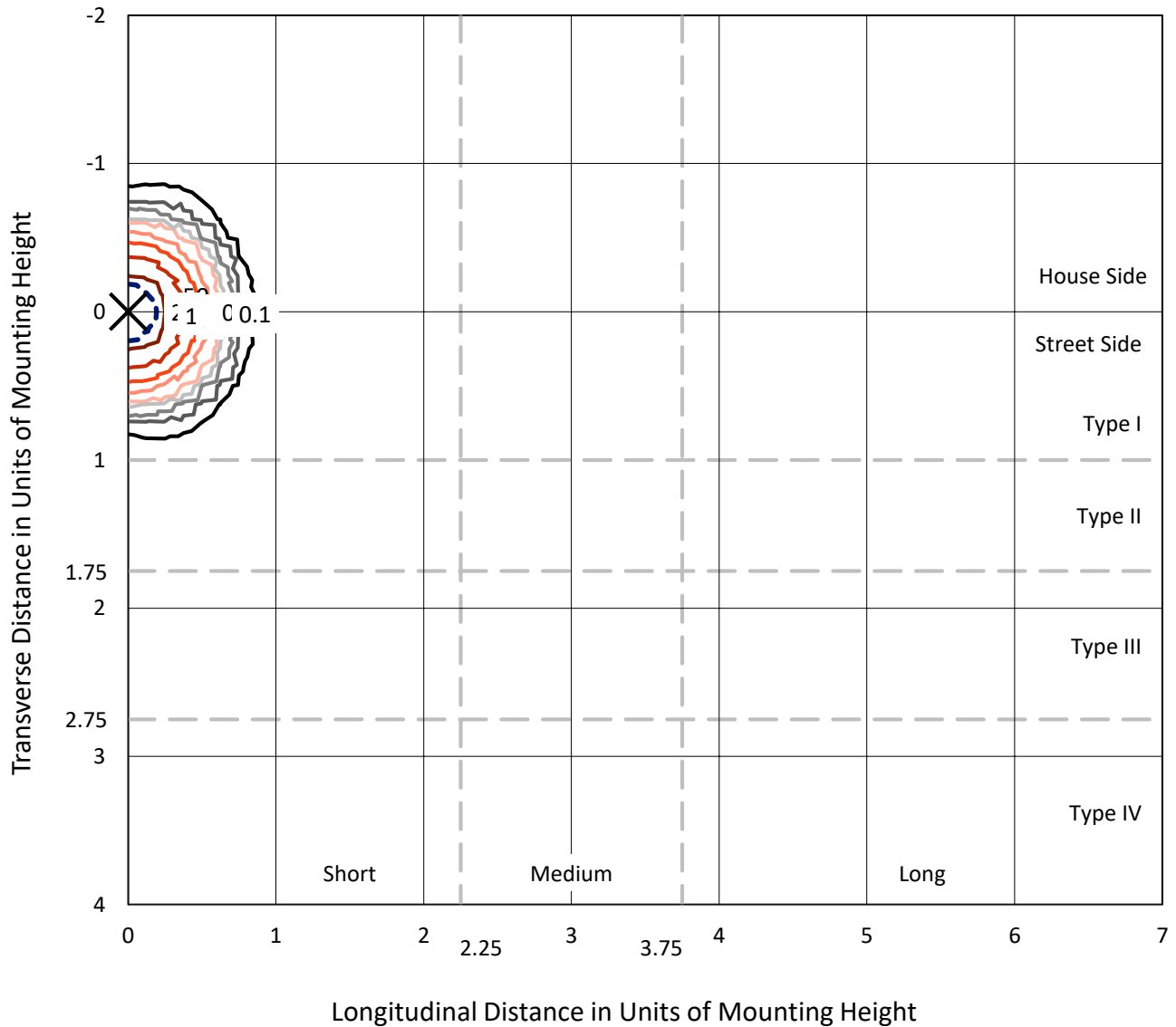


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### Iso-Footcandle Lines of Horizontal Illumination

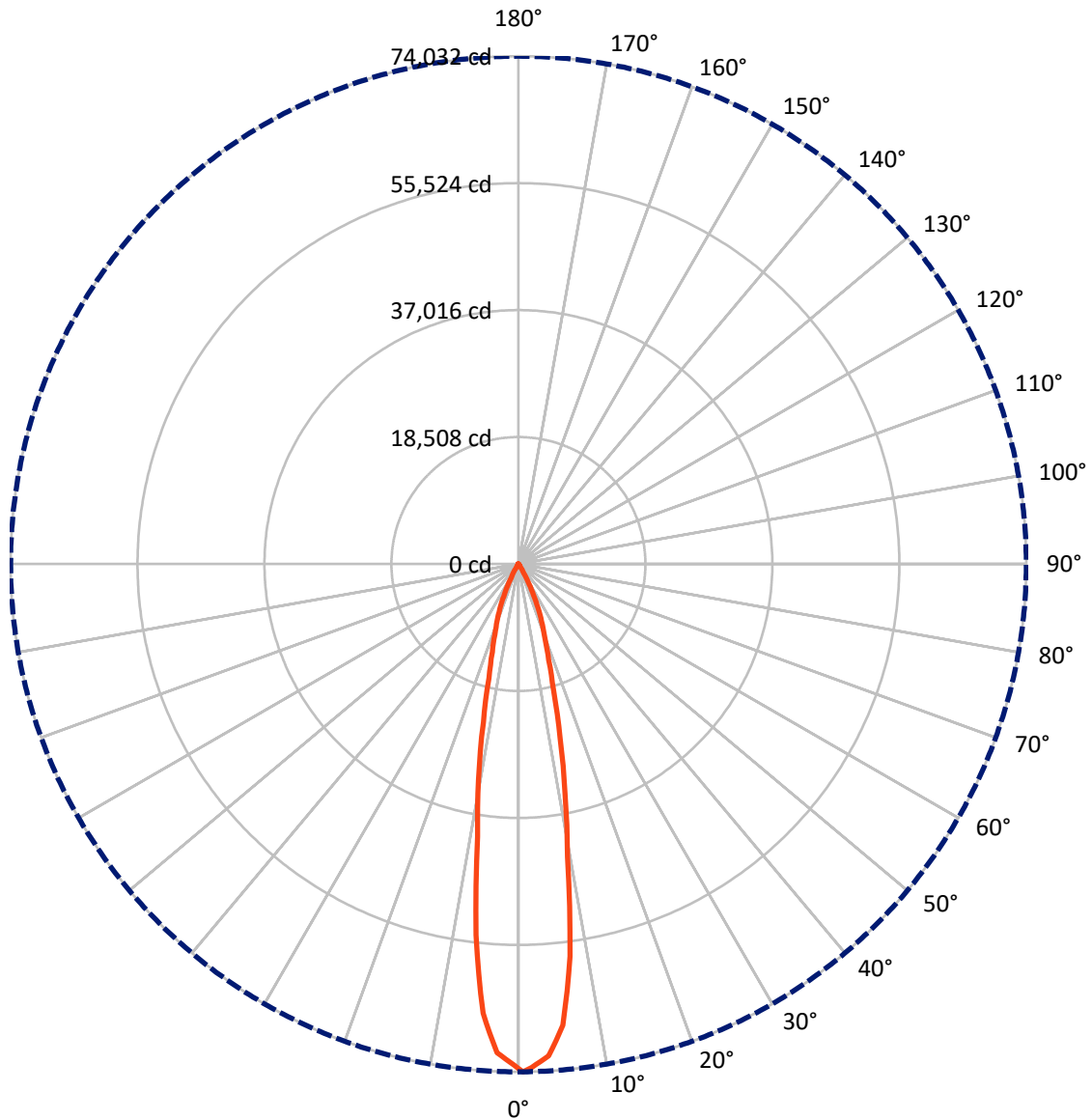
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 185.1 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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

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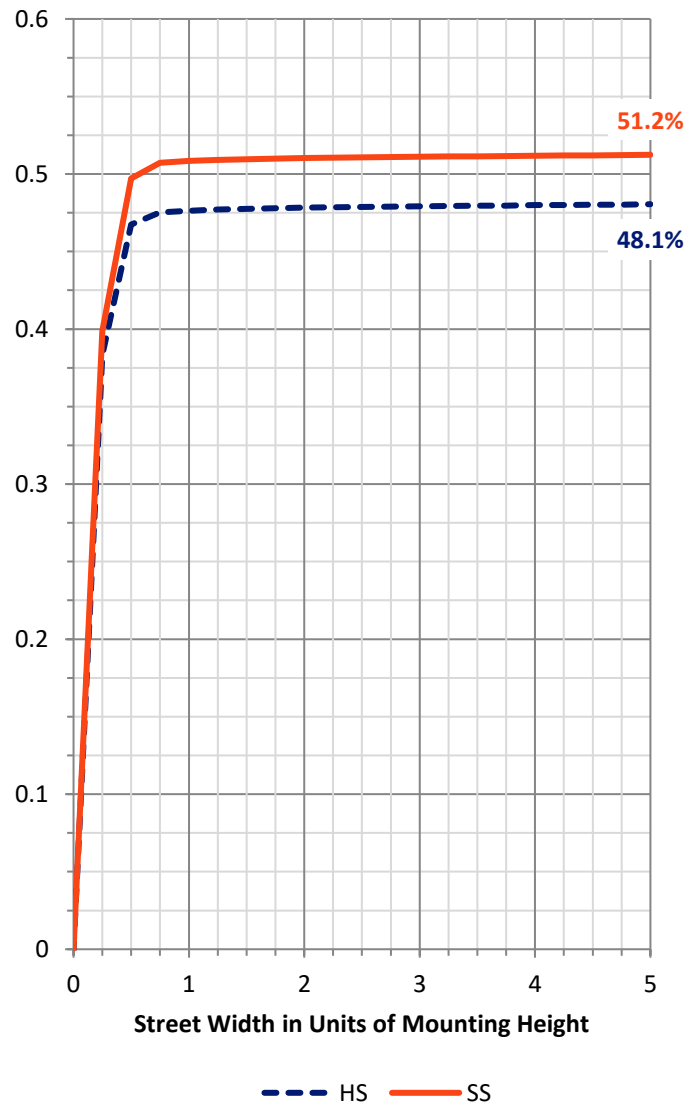
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6761.2	0.0	6761.2
	% Fixture	48.9	0.0	48.9
<b>Street Side</b>	Lumens	7077.0	0.0	7077.0
	% Fixture	51.1	0.0	51.1
<b>Total</b>	Lumens	13838.3	0.0	13838.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	5284.0	38.2
10°-20°	5468.4	39.5
20°-30°	2586.2	18.7
30°-40°	479.5	3.5
40°-50°	55.4	0.4
50°-60°	32.9	0.2
60°-70°	27.9	0.2
70°-80°	51.7	0.4
80°-90°	36.5	0.3
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°	13838.3	100.0
0°-180°	13838.3	100.0



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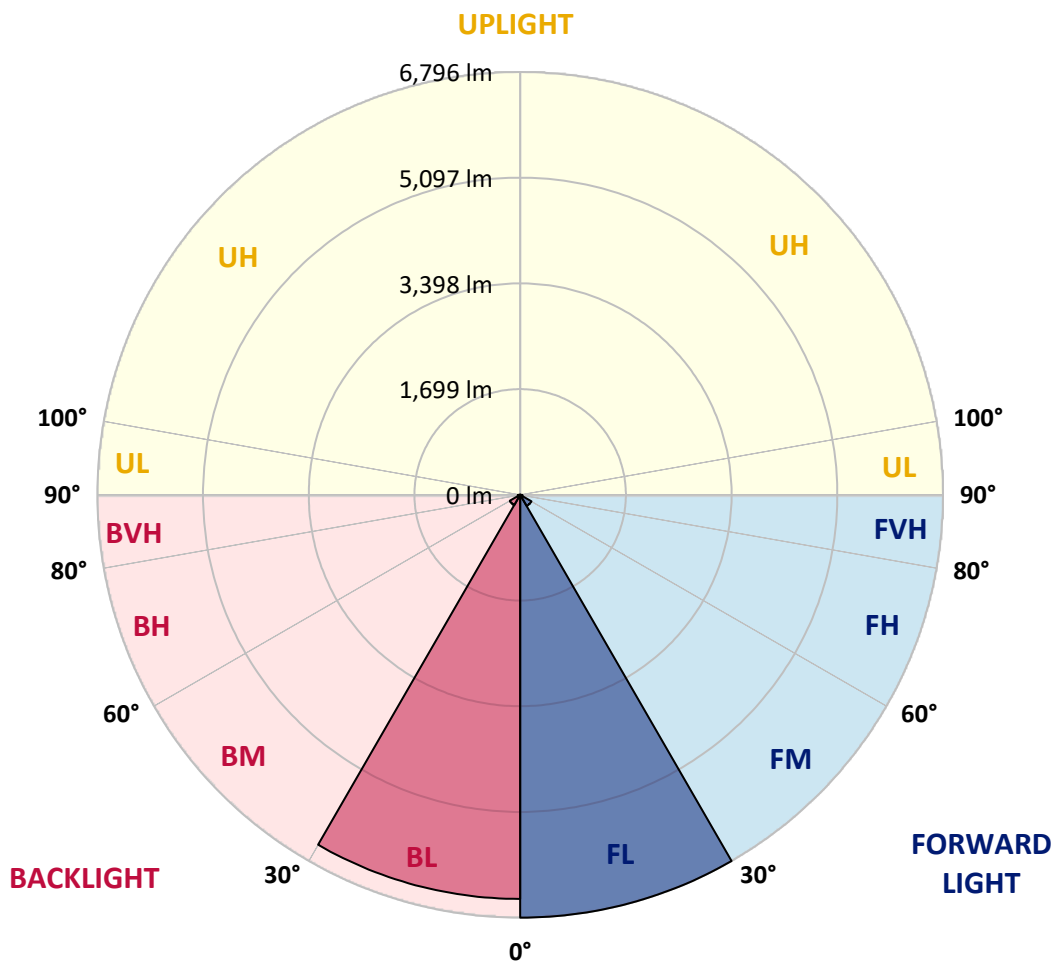
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6796.3	49.1			
FM (30°-60°)	209.0	1.5			
FH (60°-80°)	35.3	0.3			G0/660
FVH (80°-90°)	35.4	0.3			G1/100
BL (0°-30°)	6495.6	46.9	B5		
BM (30°-60°)	191.9	1.4	B0/220		
BH (60°-80°)	36.4	0.3	B0/110		G0/660
BVH (80°-90°)	36.3	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9
1°	73406.2	73406.9	73427.4	73467.8	73527.3	73604.4	73696.8	73801.4	73914.5	74031.9	73853.0
3°	71832.7	71751.3	71733.3	71404.6	71200.1	71127.1	71187.8	71379.7	71344.0	71376.3	71222.1
5°	67551.5	67505.6	66849.1	66549.7	66456.1	66241.0	65977.5	65942.2	66334.1	66365.8	66128.9
7°	57665.0	57567.2	56924.5	56591.6	56576.8	56448.1	55997.6	55836.2	56015.8	55953.3	55370.6
9°	43234.3	43395.0	43922.7	43731.3	43526.7	43671.9	43663.6	43470.4	42712.7	42574.7	42202.3
11°	34130.2	33989.3	34049.7	33831.3	34163.6	33995.0	33755.6	33770.1	33549.5	33424.2	33115.2
13°	26084.1	26007.5	26100.6	26169.6	26103.9	26017.4	25975.5	25840.8	25546.2	25442.9	25074.5
15°	19125.0	19272.4	19368.0	19228.6	19308.1	19243.7	18964.8	19028.9	18632.1	18367.7	18267.9
17°	14662.9	14756.3	14756.6	14699.8	14671.3	14531.7	14495.9	14392.0	14228.5	14006.2	14012.5
19.5°	11008.3	11049.7	11151.6	11140.8	11145.7	11086.1	10975.9	10949.4	10784.9	10898.0	10637.0
22.5°	8014.2	8002.5	8010.3	8130.0	8151.5	8134.6	8080.9	8005.3	7960.2	8225.0	7848.1
25.5°	5043.3	5082.1	5217.9	5409.0	5486.7	5489.8	5455.6	5422.0	5360.4	5309.3	5259.5
29°	2057.9	2161.8	2409.9	2485.8	2617.1	2607.2	2641.0	2674.9	2492.6	2358.7	2398.9
33°	308.5	398.4	625.4	509.2	632.9	623.0	680.4	723.8	551.2	403.3	529.7
37.5°	74.5	101.1	129.6	117.4	118.9	116.3	127.3	114.6	112.0	92.8	111.2
42.5°	70.6	87.1	91.6	94.8	92.2	80.3	77.5	70.9	76.8	82.2	71.4
47.5°	31.9	61.8	64.6	73.8	66.2	61.6	54.3	51.9	57.1	62.9	48.2
55°	3.9	42.5	39.7	37.9	26.5	19.6	14.3	15.1	13.2	11.6	17.0
65°	3.9	42.6	47.7	28.2	21.5	21.8	19.8	17.7	22.1	21.3	20.7
75°	0.0	39.4	33.1	32.8	22.1	30.2	41.7	38.7	53.7	41.6	54.8
85°	3.9	23.0	45.8	104.5	109.7	122.0	122.6	133.0	136.3	146.0	129.1
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°	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9
1°	73680.2	73519.3	73375.8	73254.1	73157.9	73090.1	73052.1	73044.5	73052.1	73090.1	73157.9
3°	71126.0	70735.6	70529.2	70520.8	70710.6	71084.7	71154.3	71305.7	71154.3	71084.7	70710.6
5°	65422.4	65126.4	65032.4	64796.2	64625.9	64837.5	65509.8	65690.8	65509.8	64837.5	64625.9
7°	54679.6	54517.0	54730.1	54411.9	53514.6	53251.6	53965.0	54446.6	53965.0	53251.6	53514.6
9°	42391.9	42038.1	41563.6	41313.1	41266.0	40623.4	40113.2	40181.2	40113.2	40623.4	41266.0
11°	32893.7	32547.4	32332.4	32077.8	31995.2	31564.8	31560.0	31914.6	31560.0	31564.8	31995.2
13°	24927.9	24684.6	24412.7	24152.7	23975.8	23798.4	23412.0	23645.1	23412.0	23798.4	23975.8
15°	18310.7	17962.9	17943.3	17777.9	17433.7	17634.7	17301.0	17145.4	17301.0	17634.7	17433.7
17°	13973.0	13855.6	13699.6	13677.9	13599.8	13591.7	13521.7	13396.0	13521.7	13591.7	13599.8
19.5°	10693.4	10609.0	10532.9	10428.5	10371.2	10392.6	10321.9	10237.5	10321.9	10392.6	10371.2
22.5°	7799.3	7789.2	7805.9	7700.0	7657.8	7576.3	7558.7	7506.5	7558.7	7576.3	7657.8
25.5°	5230.2	5158.9	5115.6	5080.6	4949.4	4922.0	4765.5	4693.2	4765.5	4922.0	4949.4
29°	2518.4	2388.5	2301.6	2302.1	2178.2	2207.2	1984.7	1858.7	1984.7	2207.2	2178.2
33°	660.1	582.5	515.8	521.2	410.1	534.3	339.5	228.2	339.5	534.3	410.1
37.5°	115.6	106.9	104.2	107.2	108.7	126.2	107.6	102.5	107.6	126.2	108.7
42.5°	69.8	65.7	78.3	95.0	97.2	95.6	85.7	70.6	85.7	95.6	97.2
47.5°	49.3	42.1	57.4	69.4	80.7	69.3	59.7	39.7	59.7	69.3	80.7
55°	7.5	13.6	22.5	36.4	36.4	45.6	40.8	11.6	40.8	45.6	36.4
65°	13.3	16.6	29.7	25.0	33.1	41.5	42.5	3.9	42.5	41.5	33.1
75°	35.3	40.1	41.0	25.2	40.1	29.4	41.6	0.0	41.6	29.4	40.1
85°	133.1	124.4	124.8	116.6	97.8	54.2	41.1	0.0	41.1	54.2	97.8
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):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9	74031.9
1°	73254.1	73375.8	73519.3	73680.2	73853.0	74031.9	73914.5	73801.4	73696.8	73604.4	73527.3
3°	70520.8	70529.2	70735.6	71126.0	71222.1	71376.3	71344.0	71379.7	71187.8	71127.1	71200.1
5°	64796.2	65032.4	65126.4	65422.4	66128.9	66365.8	66334.1	65942.2	65977.5	66241.0	66456.1
7°	54411.9	54730.1	54517.0	54679.6	55370.6	55953.3	56015.8	55836.2	55997.6	56448.1	56576.8
9°	41313.1	41563.6	42038.1	42391.9	42202.3	42574.7	42712.7	43470.4	43663.6	43671.9	43526.7
11°	32077.8	32332.4	32547.4	32893.7	33115.2	33424.2	33549.5	33770.1	33755.6	33995.0	34163.6
13°	24152.7	24412.7	24684.6	24927.9	25074.5	25442.9	25546.2	25840.8	25975.5	26017.4	26103.9
15°	17777.9	17943.3	17962.9	18310.7	18267.9	18367.7	18632.1	19028.9	18964.8	19243.7	19308.1
17°	13677.9	13699.6	13855.6	13973.0	14012.5	14006.2	14228.5	14392.0	14495.9	14531.7	14671.3
19.5°	10428.5	10532.9	10609.0	10693.4	10637.0	10898.0	10784.9	10949.4	10975.9	11086.1	11145.7
22.5°	7700.0	7805.9	7789.2	7799.3	7848.1	8225.0	7960.2	8005.3	8080.9	8134.6	8151.5
25.5°	5080.6	5115.6	5158.9	5230.2	5259.5	5309.3	5360.4	5422.0	5455.6	5489.8	5486.7
29°	2302.1	2301.6	2388.5	2518.4	2398.9	2358.7	2492.6	2674.9	2641.0	2607.2	2617.1
33°	521.2	515.8	582.5	660.1	529.7	403.3	551.2	723.8	680.4	623.0	632.9
37.5°	107.2	104.2	106.9	115.6	111.2	92.8	112.0	114.6	127.3	116.3	118.9
42.5°	95.0	78.3	65.7	69.8	71.4	82.2	76.8	70.9	77.5	80.3	92.2
47.5°	69.4	57.4	42.1	49.3	48.2	62.9	57.1	51.9	54.3	61.6	66.2
55°	36.4	22.5	13.6	7.5	17.0	11.6	13.2	15.1	14.3	19.6	26.5
65°	25.0	29.7	16.6	13.3	20.7	21.3	22.1	17.7	19.8	21.8	21.5
75°	25.2	41.0	40.1	35.3	54.8	41.6	53.7	38.7	41.7	30.2	22.1
85°	116.6	124.8	124.4	133.1	129.1	146.0	136.3	133.0	122.6	122.0	109.7
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°	74031.9	74031.9	74031.9	74031.9
1°	73467.8	73427.4	73406.9	73406.2
3°	71404.6	71733.3	71751.3	71832.7
5°	66549.7	66849.1	67505.6	67551.5
7°	56591.6	56924.5	57567.2	57665.0
9°	43731.3	43922.7	43395.0	43234.3
11°	33831.3	34049.7	33989.3	34130.2
13°	26169.6	26100.6	26007.5	26084.1
15°	19228.6	19368.0	19272.4	19125.0
17°	14699.8	14756.6	14756.3	14662.9
19.5°	11140.8	11151.6	11049.7	11008.3
22.5°	8130.0	8010.3	8002.5	8014.2
25.5°	5409.0	5217.9	5082.1	5043.3
29°	2485.8	2409.9	2161.8	2057.9
33°	509.2	625.4	398.4	308.5
37.5°	117.4	129.6	101.1	74.5
42.5°	94.8	91.6	87.1	70.6
47.5°	73.8	64.6	61.8	31.9
55°	37.9	39.7	42.5	3.9
65°	28.2	47.7	42.6	3.9
75°	32.8	33.1	39.4	0.0
85°	104.5	45.8	23.0	3.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)