

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: P212888

Luminaire Tested: **NFFLD-C40-D-UNV-33-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P212888  
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-33-7050  
Description: NIGHT FALCON LED FLOOD LIGHT  
Light Source: (8) 5000K CCT, 72 CRI LEDS  
CLU028-1204C4-40ALK3  
Ballast/Driver: OSRAM  
OT180/UNV/1250C/2DIMLT2

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14062.5 lumens  
Efficiency: N/A  
Efficacy: 98.5 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 (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

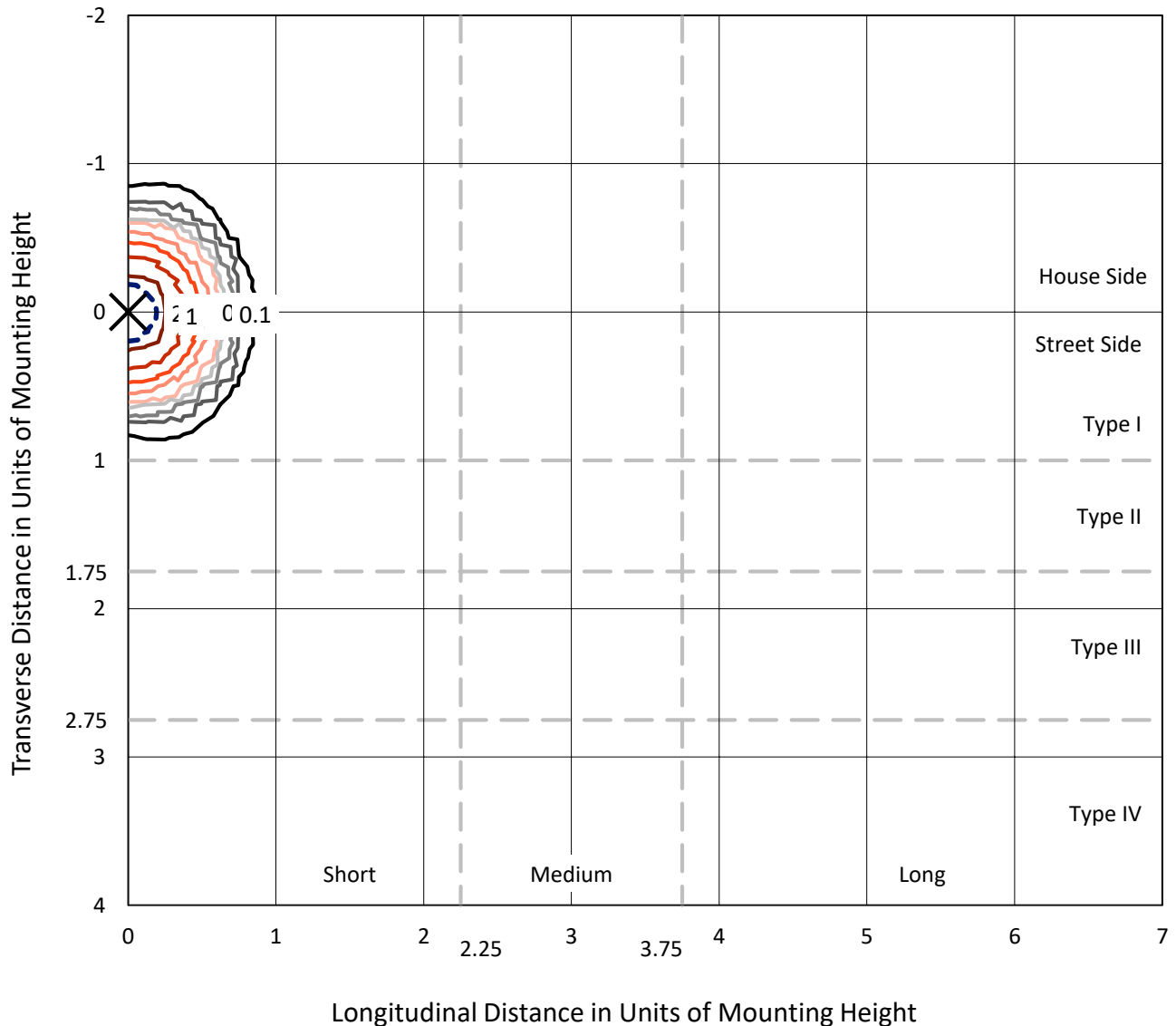


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### Iso-Footcandle Lines of Horizontal Illumination

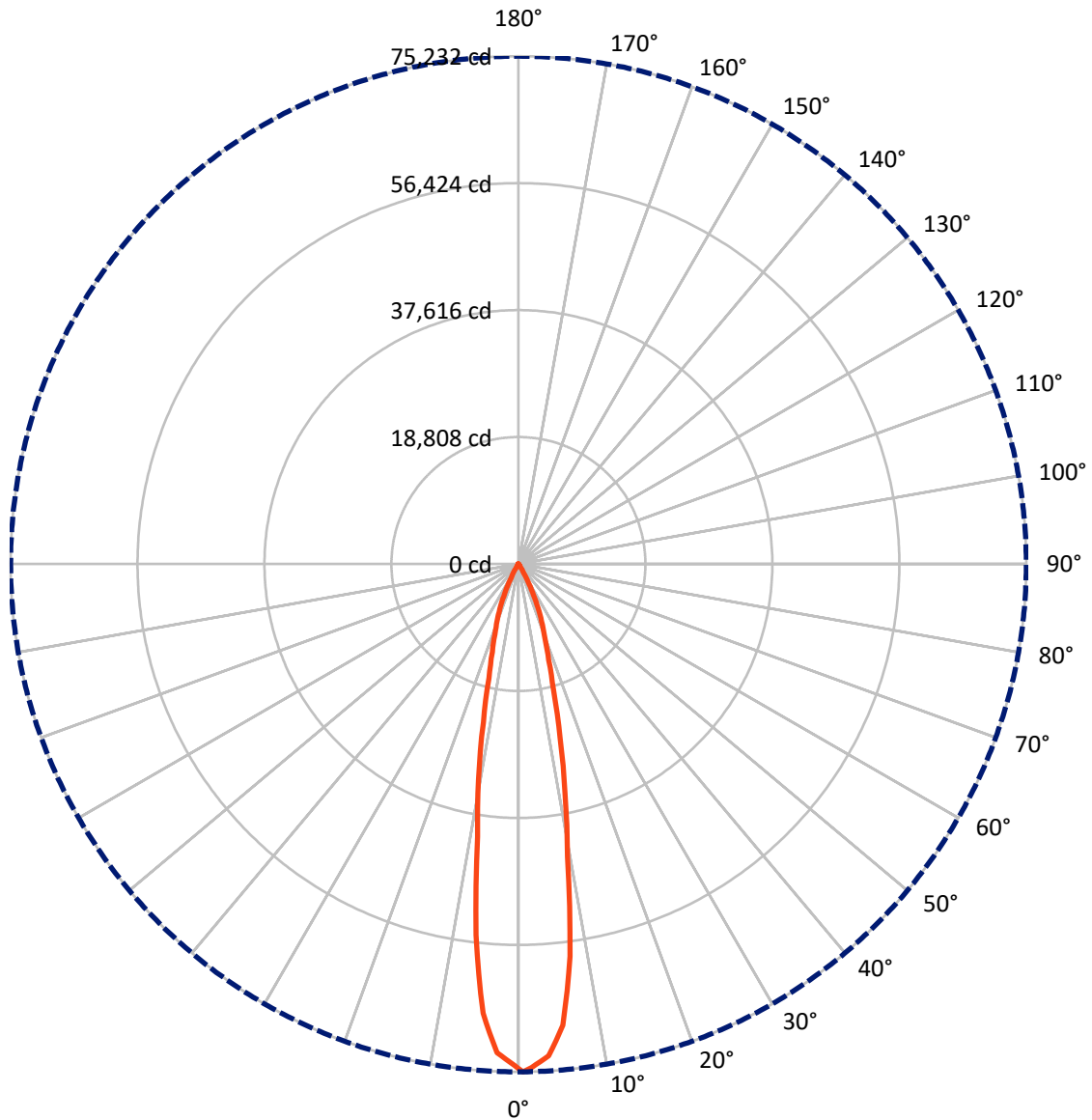
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 188.1 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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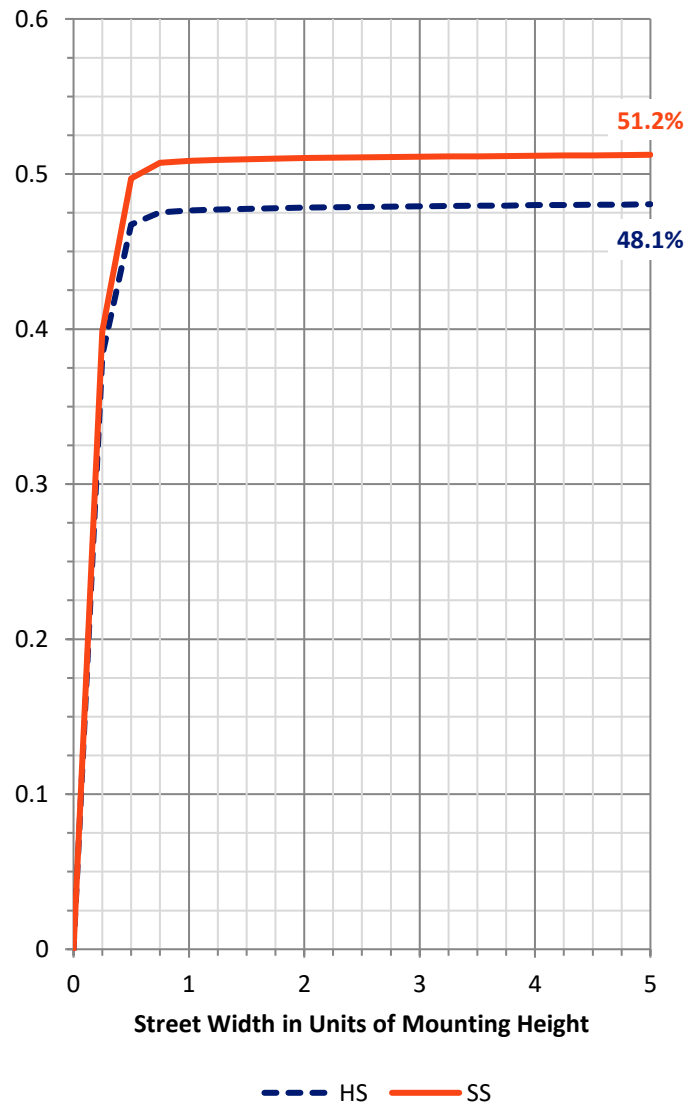
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6870.8	0.0	6870.8
	% Fixture	48.9	0.0	48.9
<b>Street Side</b>	Lumens	7191.7	0.0	7191.7
	% Fixture	51.1	0.0	51.1
<b>Total</b>	Lumens	14062.5	0.0	14062.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	5369.7	38.2
10°-20°	5557.0	39.5
20°-30°	2628.1	18.7
30°-40°	487.3	3.5
40°-50°	56.3	0.4
50°-60°	33.4	0.2
60°-70°	28.4	0.2
70°-80°	52.5	0.4
80°-90°	37.1	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°	14062.5	100.0
0°-180°	14062.5	100.0



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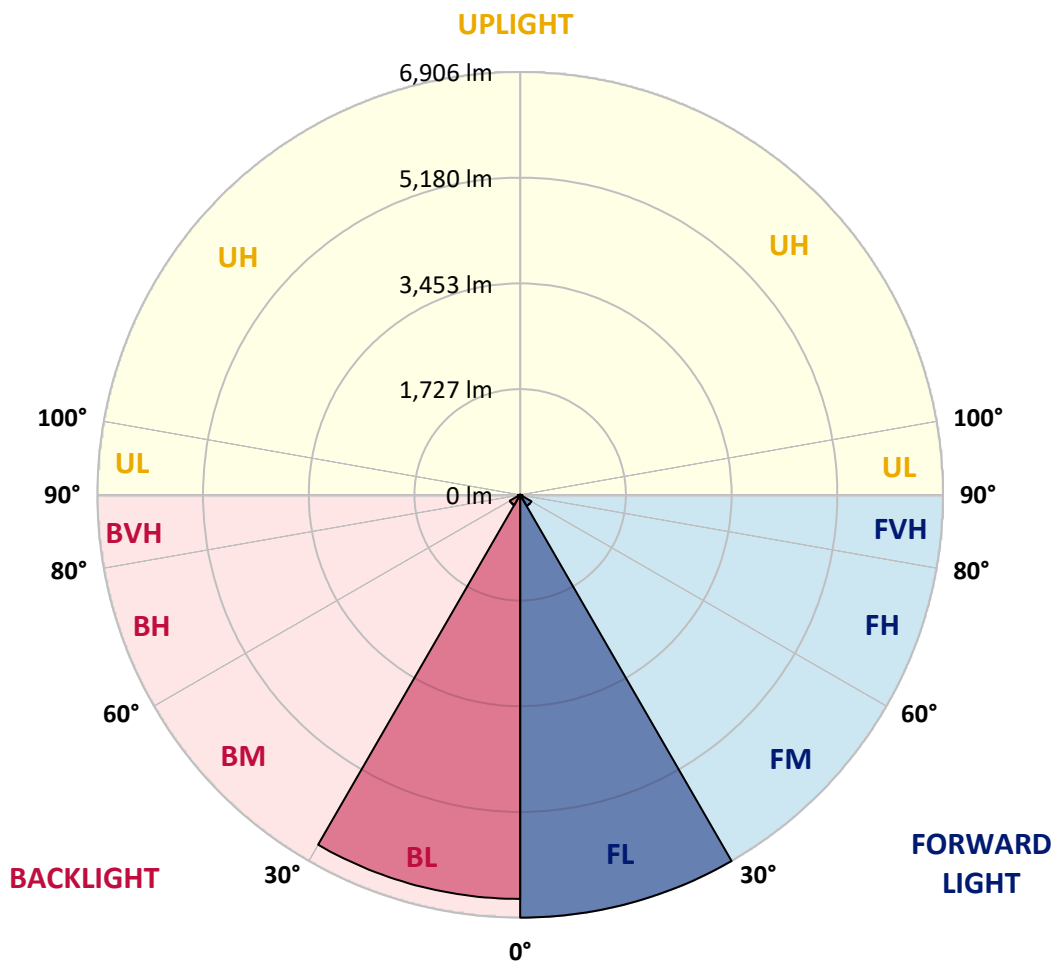
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6906.5	49.1			
FM	(30°-60°)	212.3	1.5			
FH	(60°-80°)	35.8	0.3			G0/660
FVH	(80°-90°)	35.9	0.3			G1/100
BL	(0°-30°)	6600.9	46.9	B5		
BM	(30°-60°)	195.0	1.4	B0/220		
BH	(60°-80°)	37.0	0.3	B0/110		G0/660
BVH	(80°-90°)	36.9	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°	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0
1°	74596.2	74596.9	74617.8	74658.8	74719.3	74797.6	74891.5	74997.8	75112.7	75232.0	75050.2
3°	72997.2	72914.4	72896.2	72562.2	72354.4	72280.2	72341.9	72536.9	72500.7	72533.4	72376.7
5°	68646.6	68600.0	67932.9	67628.6	67533.4	67314.8	67047.1	67011.2	67409.4	67441.7	67200.9
7°	58599.9	58500.4	57847.4	57509.0	57494.0	57363.2	56905.4	56741.4	56923.8	56860.4	56268.2
9°	43935.1	44098.4	44634.7	44440.2	44232.3	44379.9	44371.4	44175.1	43405.2	43264.9	42886.4
11°	34683.5	34540.3	34601.7	34379.7	34717.4	34546.2	34302.9	34317.6	34093.4	33966.1	33652.1
13°	26506.9	26429.2	26523.7	26593.8	26527.1	26439.2	26396.6	26259.7	25960.4	25855.4	25481.0
15°	19435.0	19584.7	19681.9	19540.3	19621.1	19555.7	19272.3	19337.5	18934.2	18665.5	18564.0
17°	14900.6	14995.6	14995.8	14938.1	14909.0	14767.3	14730.9	14625.3	14459.2	14233.3	14239.6
19.5°	11186.7	11228.9	11332.3	11321.5	11326.4	11265.8	11153.8	11126.9	10959.7	11074.7	10809.4
22.5°	8144.1	8132.2	8140.1	8261.9	8283.6	8266.5	8211.9	8135.1	8089.2	8358.4	7975.3
25.5°	5125.1	5164.5	5302.4	5496.7	5575.7	5578.7	5544.0	5509.9	5447.3	5395.3	5344.8
29°	2091.3	2196.9	2448.9	2526.2	2659.5	2649.5	2683.9	2718.3	2533.0	2396.9	2437.8
33°	313.5	404.9	635.5	517.4	643.1	633.1	691.4	735.5	560.1	409.8	538.3
37.5°	75.7	102.7	131.7	119.3	120.8	118.2	129.3	116.5	113.8	94.3	113.0
42.5°	71.7	88.5	93.1	96.3	93.7	81.6	78.7	72.1	78.0	83.5	72.6
47.5°	32.4	62.8	65.6	75.0	67.3	62.6	55.2	52.7	57.9	63.9	49.0
55°	3.9	43.1	40.3	38.5	27.0	19.9	14.5	15.4	13.4	11.8	17.3
65°	3.9	43.2	48.5	28.6	22.0	22.2	20.1	18.0	22.4	21.6	21.1
75°	0.0	40.1	33.6	33.3	22.5	30.6	42.4	39.3	54.6	42.3	55.6
85°	3.9	23.4	46.5	106.2	111.4	123.9	124.6	135.1	138.4	148.4	131.1
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°	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0
1°	74874.6	74711.1	74565.2	74441.6	74343.9	74274.9	74236.3	74228.6	74236.3	74274.9	74343.9
3°	72279.1	71882.4	71672.6	71664.1	71856.9	72237.1	72307.7	72461.6	72307.7	72237.1	71856.9
5°	66483.0	66182.2	66086.7	65846.7	65673.6	65888.6	66571.9	66755.8	66571.9	65888.6	65673.6
7°	55566.0	55400.9	55617.3	55293.9	54382.2	54114.9	54839.9	55329.2	54839.9	54114.9	54382.2
9°	43079.1	42719.6	42237.5	41982.9	41935.0	41282.0	40763.6	40832.6	40763.6	41282.0	41935.0
11°	33426.9	33075.0	32856.5	32597.9	32514.0	32076.5	32071.5	32432.0	32071.5	32076.5	32514.0
13°	25332.0	25084.7	24808.5	24544.3	24364.5	24184.2	23791.6	24028.4	23791.6	24184.2	24364.5
15°	18607.5	18254.1	18234.3	18066.1	17716.3	17920.6	17581.5	17423.3	17581.5	17920.6	17716.3
17°	14199.5	14080.2	13921.7	13899.6	13820.2	13812.1	13740.9	13613.2	13740.9	13812.1	13820.2
19.5°	10866.8	10781.0	10703.6	10597.6	10539.3	10561.0	10489.2	10403.5	10489.2	10561.0	10539.3
22.5°	7925.7	7915.5	7932.5	7824.8	7781.9	7699.1	7681.2	7628.2	7681.2	7699.1	7781.9
25.5°	5314.9	5242.5	5198.5	5163.0	5029.7	5001.8	4842.8	4769.3	4842.8	5001.8	5029.7
29°	2559.2	2427.2	2338.8	2339.4	2213.5	2243.0	2016.8	1888.9	2016.8	2243.0	2213.5
33°	670.8	591.9	524.1	529.7	416.7	543.0	345.0	231.9	345.0	543.0	416.7
37.5°	117.4	108.7	105.9	109.0	110.5	128.3	109.3	104.2	109.3	128.3	110.5
42.5°	71.0	66.7	79.5	96.5	98.7	97.2	87.1	71.7	87.1	97.2	98.7
47.5°	50.1	42.8	58.3	70.5	82.0	70.3	60.7	40.3	60.7	70.3	82.0
55°	7.6	13.9	22.9	37.0	36.9	46.3	41.4	11.8	41.4	46.3	36.9
65°	13.5	16.9	30.2	25.4	33.6	42.1	43.1	3.9	43.1	42.1	33.6
75°	35.8	40.8	41.6	25.6	40.8	29.9	42.2	0.0	42.2	29.9	40.8
85°	135.2	126.4	126.8	118.5	99.4	55.2	41.8	0.0	41.8	55.2	99.4
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°	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0	75232.0
1°	74441.6	74565.2	74711.1	74874.6	75050.2	75232.0	75112.7	74997.8	74891.5	74797.6	74719.3
3°	71664.1	71672.6	71882.4	72279.1	72376.7	72533.4	72500.7	72536.9	72341.9	72280.2	72354.4
5°	65846.7	66086.7	66182.2	66483.0	67200.9	67441.7	67409.4	67011.2	67047.1	67314.8	67533.4
7°	55293.9	55617.3	55400.9	55566.0	56268.2	56860.4	56923.8	56741.4	56905.4	57363.2	57494.0
9°	41982.9	42237.5	42719.6	43079.1	42886.4	43264.9	43405.2	44175.1	44371.4	44379.9	44232.3
11°	32597.9	32856.5	33075.0	33426.9	33652.1	33966.1	34093.4	34317.6	34302.9	34546.2	34717.4
13°	24544.3	24808.5	25084.7	25332.0	25481.0	25855.4	25960.4	26259.7	26396.6	26439.2	26527.1
15°	18066.1	18234.3	18254.1	18607.5	18564.0	18665.5	18934.2	19337.5	19272.3	19555.7	19621.1
17°	13899.6	13921.7	14080.2	14199.5	14239.6	14233.3	14459.2	14625.3	14730.9	14767.3	14909.0
19.5°	10597.6	10703.6	10781.0	10866.8	10809.4	11074.7	10959.7	11126.9	11153.8	11265.8	11326.4
22.5°	7824.8	7932.5	7915.5	7925.7	7975.3	8358.4	8089.2	8135.1	8211.9	8266.5	8283.6
25.5°	5163.0	5198.5	5242.5	5314.9	5344.8	5395.3	5447.3	5509.9	5544.0	5578.7	5575.7
29°	2339.4	2338.8	2427.2	2559.2	2437.8	2396.9	2533.0	2718.3	2683.9	2649.5	2659.5
33°	529.7	524.1	591.9	670.8	538.3	409.8	560.1	735.5	691.4	633.1	643.1
37.5°	109.0	105.9	108.7	117.4	113.0	94.3	113.8	116.5	129.3	118.2	120.8
42.5°	96.5	79.5	66.7	71.0	72.6	83.5	78.0	72.1	78.7	81.6	93.7
47.5°	70.5	58.3	42.8	50.1	49.0	63.9	57.9	52.7	55.2	62.6	67.3
55°	37.0	22.9	13.9	7.6	17.3	11.8	13.4	15.4	14.5	19.9	27.0
65°	25.4	30.2	16.9	13.5	21.1	21.6	22.4	18.0	20.1	22.2	22.0
75°	25.6	41.6	40.8	35.8	55.6	42.3	54.6	39.3	42.4	30.6	22.5
85°	118.5	126.8	126.4	135.2	131.1	148.4	138.4	135.1	124.6	123.9	111.4
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°	75232.0	75232.0	75232.0	75232.0
1°	74658.8	74617.8	74596.9	74596.2
3°	72562.2	72896.2	72914.4	72997.2
5°	67628.6	67932.9	68600.0	68646.6
7°	57509.0	57847.4	58500.4	58599.9
9°	44440.2	44634.7	44098.4	43935.1
11°	34379.7	34601.7	34540.3	34683.5
13°	26593.8	26523.7	26429.2	26506.9
15°	19540.3	19681.9	19584.7	19435.0
17°	14938.1	14995.8	14995.6	14900.6
19.5°	11321.5	11332.3	11228.9	11186.7
22.5°	8261.9	8140.1	8132.2	8144.1
25.5°	5496.7	5302.4	5164.5	5125.1
29°	2526.2	2448.9	2196.9	2091.3
33°	517.4	635.5	404.9	313.5
37.5°	119.3	131.7	102.7	75.7
42.5°	96.3	93.1	88.5	71.7
47.5°	75.0	65.6	62.8	32.4
55°	38.5	40.3	43.1	3.9
65°	28.6	48.5	43.2	3.9
75°	33.3	33.6	40.1	0.0
85°	106.2	46.5	23.4	3.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)