

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: P189785

Luminaire Tested: **NFFLD-S-C15-D-UNV-66-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P189785  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-16-1017-2)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NFFLD-S-C15-D-UNV-66-7050  
Description: LOW WATTAGE LED FLOODLIGHT  
Light Source: (1) CITIZEN 5000 70  
CLU038-1208C4-50AL7K3  
Ballast/Driver: XENERQI ELECTRONIC DRIVER  
XEL-A050A-042-C1X20

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6135.7 lumens  
Efficiency: N/A  
Efficacy: 119.8 lumens/watt  
Luminous Opening: (L: 0 ' x W: 0.46 ' x H: 0.33 '  
IES Classification: Type I - Short - Full Cutoff  
BUG Rating: B2 - U0 - G1

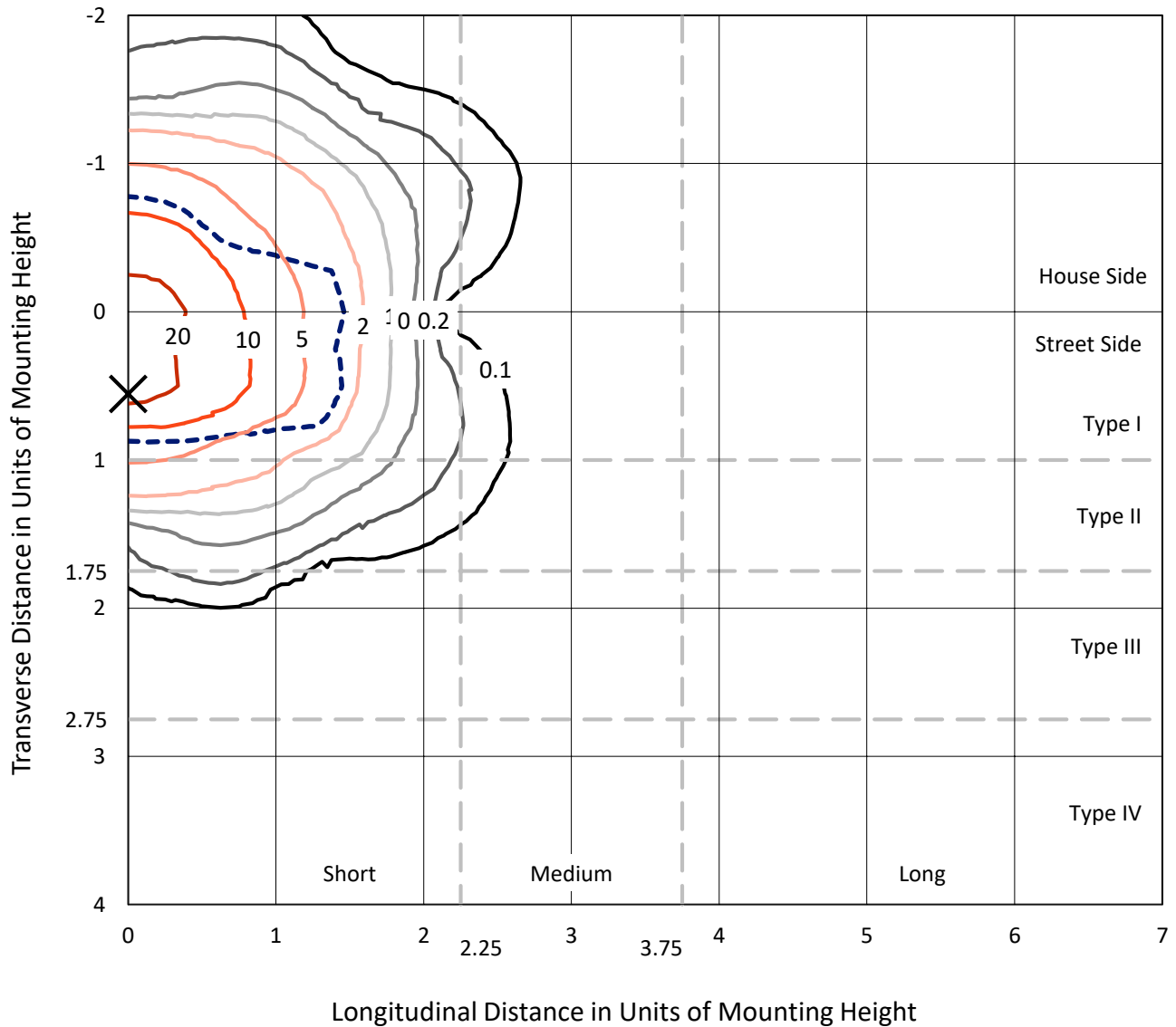
Input Watts (W): 51.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

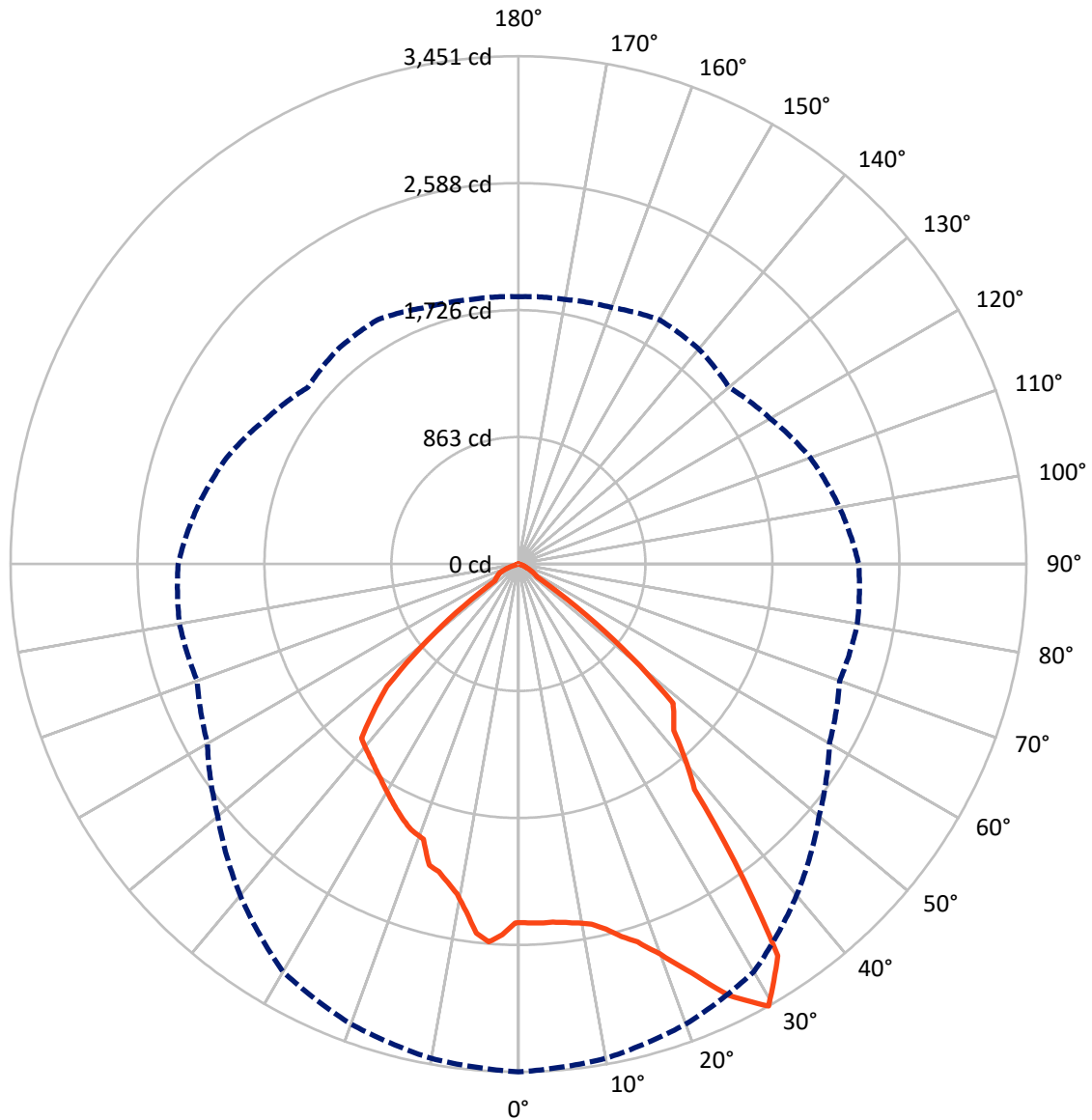
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 24.6 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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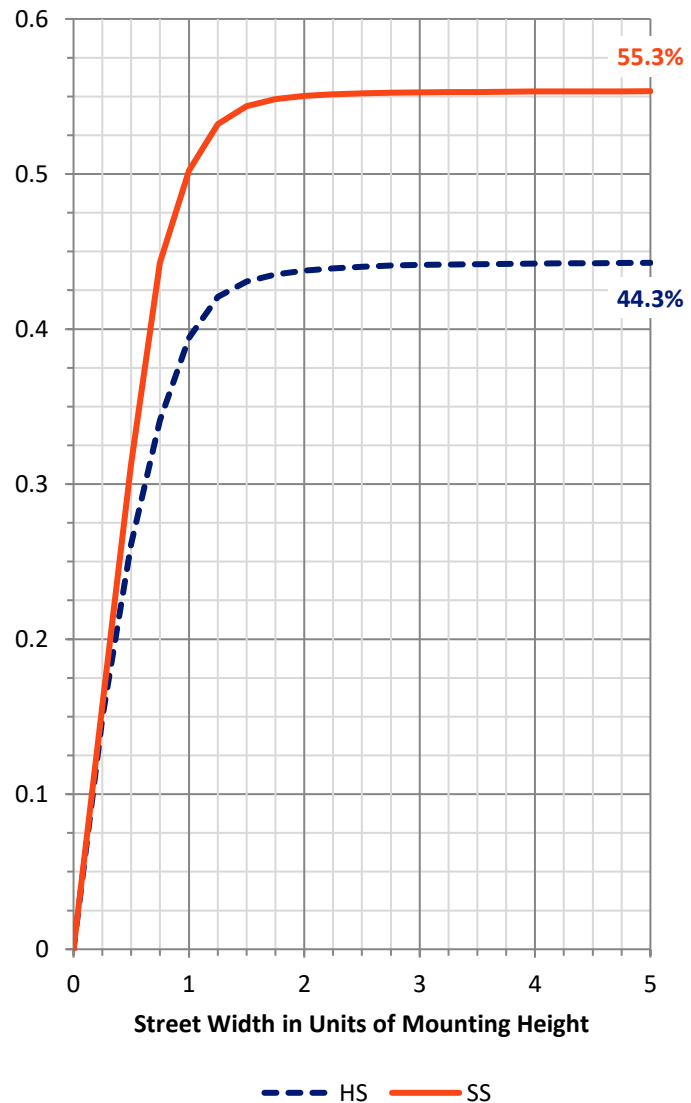
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2741.0	0.0	2741.0
	% Fixture	44.7	0.0	44.7
<b>Street Side</b>	Lumens	3394.7	0.0	3394.7
	% Fixture	55.3	0.0	55.3
<b>Total</b>	Lumens	6135.7	0.0	6135.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	236.6	3.9
10°-20°	684.3	11.2
20°-30°	1110.7	18.1
30°-40°	1379.2	22.5
40°-50°	1364.5	22.2
50°-60°	958.4	15.6
60°-70°	393.7	6.4
70°-80°	81.6	1.3
80°-90°	12.3	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°	6135.7	100.0
0°-180°	6135.7	100.0



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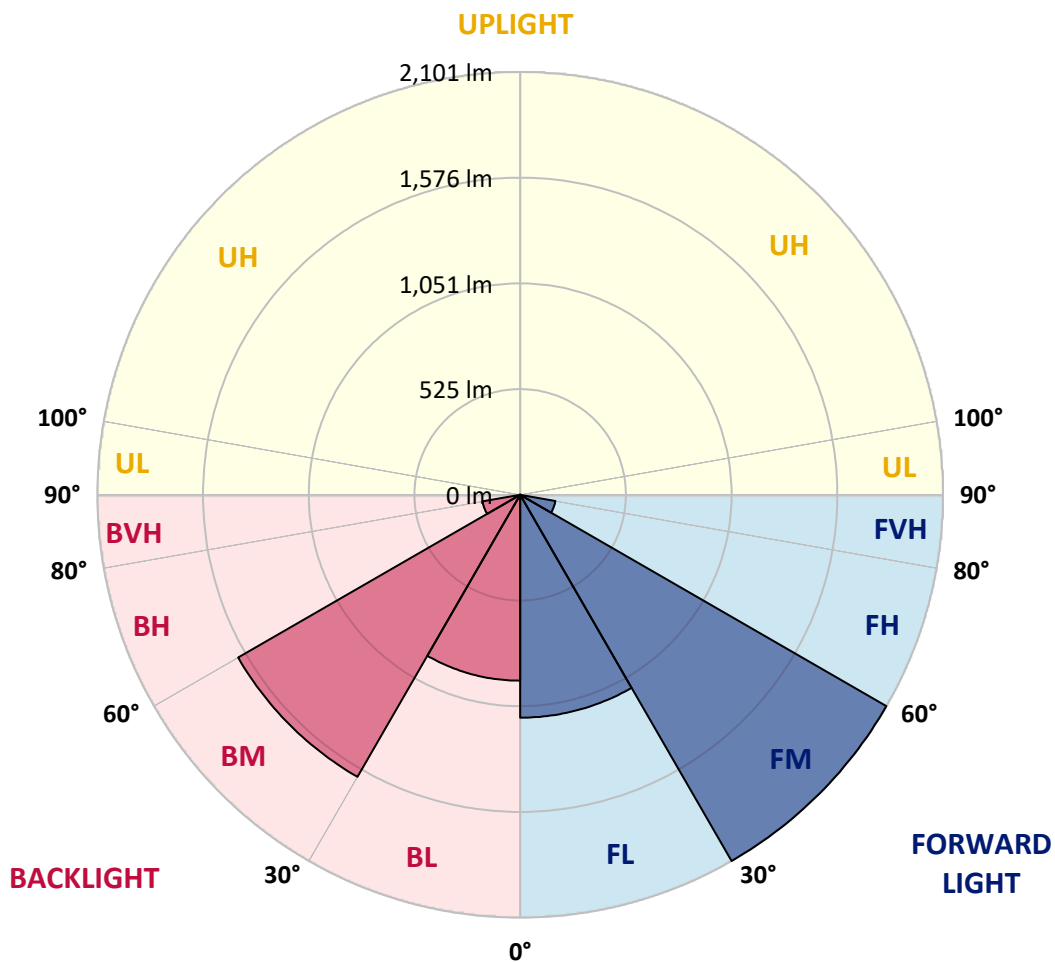
CATALOG NUMBER: NFFLD-S-C15-D-UNV-66-7050

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1107.6	18.1			
FM	(30°-60°)	2101.3	34.2			
FH	(60°-80°)	177.4	2.9			G0/660
FVH	(80°-90°)	5.6	0.1			G0/10
BL	(0°-30°)	923.5	15.1	B2/1000		
BM	(30°-60°)	1617.9	26.4	B2/2500		
BH	(60°-80°)	189.8	3.1	B1/500		G1/500
BVH	(80°-90°)	7.3	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G1**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3
1°	2440.5	2440.6	2440.6	2440.4	2440.2	2439.8	2439.3	2438.7	2438.1	2437.4	2437.6
3°	2444.6	2445.0	2445.3	2446.0	2446.4	2446.4	2446.0	2445.3	2444.0	2442.5	2445.6
5°	2444.6	2446.4	2447.4	2448.6	2450.0	2451.0	2450.5	2449.5	2448.6	2448.7	2459.1
7°	2457.0	2457.2	2454.8	2453.0	2451.0	2450.1	2450.4	2450.8	2452.4	2459.0	2485.0
9°	2473.5	2472.4	2468.8	2463.3	2455.8	2450.6	2449.7	2452.6	2459.9	2477.6	2515.3
11°	2497.2	2497.2	2489.7	2476.2	2461.0	2449.8	2449.0	2455.4	2469.0	2498.3	2530.5
13°	2550.9	2546.4	2528.8	2496.6	2469.6	2449.8	2442.3	2450.8	2472.4	2512.7	2527.1
15°	2626.3	2617.9	2590.7	2539.5	2490.1	2453.2	2432.7	2436.8	2464.7	2518.9	2505.5
17°	2692.4	2683.5	2653.4	2599.8	2528.6	2464.6	2425.0	2423.3	2457.3	2497.2	2452.4
19.5°	2821.4	2802.5	2748.0	2659.1	2586.5	2500.7	2427.4	2413.6	2465.3	2514.8	2400.0
22.5°	3018.6	2986.5	2905.8	2783.8	2650.4	2552.8	2438.2	2404.9	2459.0	2431.2	2342.1
25.5°	3261.2	3211.2	3105.2	2955.0	2773.4	2606.5	2449.3	2362.7	2413.6	2361.0	2275.6
29°	3451.1	3411.4	3326.9	3199.4	2940.5	2667.2	2440.2	2322.9	2338.6	2312.5	2215.7
33°	3193.0	3211.0	3279.2	3375.8	3138.3	2734.2	2449.4	2336.0	2209.8	2141.1	2051.4
37.5°	1943.9	2078.7	2430.8	2893.4	3128.3	2879.6	2498.7	2333.4	2169.8	2030.6	1923.6
42.5°	1547.5	1569.9	1676.7	1804.9	2323.6	2794.3	2612.7	2358.6	2111.7	2020.3	1868.4
47.5°	1414.3	1420.8	1419.3	1418.4	1523.3	2103.5	2704.4	2377.2	1935.8	1890.2	1828.5
55°	155.9	313.6	541.5	776.3	1083.4	1143.2	1887.3	1946.0	1686.8	1812.8	1677.6
65°	65.0	58.7	121.7	97.9	129.1	279.0	437.2	465.7	307.8	66.1	316.5
75°	8.3	10.5	18.8	17.0	20.7	18.4	26.4	32.8	34.7	56.8	58.9
85°	0.0	8.2	11.4	11.4	12.2	12.5	13.7	14.4	14.2	16.5	15.8
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):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3
1°	2437.7	2437.8	2438.0	2438.1	2438.2	2438.3	2438.4	2438.4	2438.4	2438.3	2438.2
3°	2448.8	2466.5	2482.1	2495.2	2505.6	2512.7	2518.6	2521.0	2518.6	2512.7	2505.6
5°	2486.9	2515.5	2536.8	2548.9	2559.6	2567.2	2571.8	2575.7	2571.8	2567.2	2559.6
7°	2522.5	2549.8	2566.1	2564.8	2551.4	2542.2	2533.0	2524.1	2533.0	2542.2	2551.4
9°	2550.3	2562.9	2546.4	2512.2	2465.8	2433.3	2406.8	2389.9	2406.8	2433.3	2465.8
11°	2542.6	2522.9	2471.0	2413.7	2356.9	2320.1	2293.7	2280.5	2293.7	2320.1	2356.9
13°	2508.8	2437.1	2376.6	2324.2	2274.3	2245.4	2227.5	2216.4	2227.5	2245.4	2274.3
15°	2446.6	2360.6	2308.7	2262.6	2220.7	2187.9	2170.1	2159.7	2170.1	2187.9	2220.7
17°	2375.2	2308.0	2263.6	2217.6	2170.2	2149.8	2143.9	2133.9	2143.9	2149.8	2170.2
19.5°	2324.7	2267.8	2217.2	2164.5	2131.3	2050.3	2000.5	1979.0	2000.5	2050.3	2131.3
22.5°	2290.6	2227.8	2140.5	2083.3	1987.6	1964.9	1951.5	1947.0	1951.5	1964.9	1987.6
25.5°	2227.5	2141.5	2041.5	1958.3	1970.7	1923.6	1898.5	1890.2	1898.5	1923.6	1970.7
29°	2110.6	1976.3	1868.0	1906.8	1916.5	1854.5	1824.8	1816.9	1824.8	1854.5	1916.5
33°	1950.2	1811.7	1771.8	1807.3	1790.1	1757.2	1743.4	1737.4	1743.4	1757.2	1790.1
37.5°	1807.9	1705.5	1669.4	1654.5	1661.9	1667.9	1663.1	1662.1	1663.1	1667.9	1661.9
42.5°	1715.9	1631.3	1551.2	1528.0	1556.6	1583.6	1592.1	1592.9	1592.1	1583.6	1556.6
47.5°	1660.1	1577.3	1427.6	1433.5	1417.6	1306.5	1229.8	1219.2	1229.8	1306.5	1417.6
55°	1466.2	1501.7	1251.8	1042.2	688.3	418.6	254.3	194.1	254.3	418.6	688.3
65°	513.0	406.3	202.0	153.5	190.9	159.6	142.2	141.4	142.2	159.6	190.9
75°	69.8	42.5	46.6	35.6	43.8	30.1	16.5	11.4	16.5	30.1	43.8
85°	15.4	14.2	13.9	12.6	12.5	13.4	11.3	1.0	11.3	13.4	12.5
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°	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3	2436.3
1°	2438.1	2438.0	2437.8	2437.7	2437.6	2437.4	2438.1	2438.7	2439.3	2439.8	2440.2
3°	2495.2	2482.1	2466.5	2448.8	2445.6	2442.5	2444.0	2445.3	2446.0	2446.4	2446.4
5°	2548.9	2536.8	2515.5	2486.9	2459.1	2448.7	2448.6	2449.5	2450.5	2451.0	2450.0
7°	2564.8	2566.1	2549.8	2522.5	2485.0	2459.0	2452.4	2450.8	2450.4	2450.1	2451.0
9°	2512.2	2546.4	2562.9	2550.3	2515.3	2477.6	2459.9	2452.6	2449.7	2450.6	2455.8
11°	2413.7	2471.0	2522.9	2542.6	2530.5	2498.3	2469.0	2455.4	2449.0	2449.8	2461.0
13°	2324.2	2376.6	2437.1	2508.8	2527.1	2512.7	2472.4	2450.8	2442.3	2449.8	2469.6
15°	2262.6	2308.7	2360.6	2446.6	2505.5	2518.9	2464.7	2436.8	2432.7	2453.2	2490.1
17°	2217.6	2263.6	2308.0	2375.2	2452.4	2497.2	2457.3	2423.3	2425.0	2464.6	2528.6
19.5°	2164.5	2217.2	2267.8	2324.7	2400.0	2514.8	2465.3	2413.6	2427.4	2500.7	2586.5
22.5°	2083.3	2140.5	2227.8	2290.6	2342.1	2431.2	2459.0	2404.9	2438.2	2552.8	2650.4
25.5°	1958.3	2041.5	2141.5	2227.5	2275.6	2361.0	2413.6	2362.7	2449.3	2606.5	2773.4
29°	1906.8	1868.0	1976.3	2110.6	2215.7	2312.5	2338.6	2322.9	2440.2	2667.2	2940.5
33°	1807.3	1771.8	1811.7	1950.2	2051.4	2141.1	2209.8	2336.0	2449.4	2734.2	3138.3
37.5°	1654.5	1669.4	1705.5	1807.9	1923.6	2030.6	2169.8	2333.4	2498.7	2879.6	3128.3
42.5°	1528.0	1551.2	1631.3	1715.9	1868.4	2020.3	2111.7	2358.6	2612.7	2794.3	2323.6
47.5°	1433.5	1427.6	1577.3	1660.1	1828.5	1890.2	1935.8	2377.2	2704.4	2103.5	1523.3
55°	1042.2	1251.8	1501.7	1466.2	1677.6	1812.8	1686.8	1946.0	1887.3	1143.2	1083.4
65°	153.5	202.0	406.3	513.0	316.5	66.1	307.8	465.7	437.2	279.0	129.1
75°	35.6	46.6	42.5	69.8	58.9	56.8	34.7	32.8	26.4	18.4	20.7
85°	12.6	13.9	14.2	15.4	15.8	16.5	14.2	14.4	13.7	12.5	12.2
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):**

	330°	340°	350°	360°
0°	2436.3	2436.3	2436.3	2436.3
1°	2440.4	2440.6	2440.6	2440.5
3°	2446.0	2445.3	2445.0	2444.6
5°	2448.6	2447.4	2446.4	2444.6
7°	2453.0	2454.8	2457.2	2457.0
9°	2463.3	2468.8	2472.4	2473.5
11°	2476.2	2489.7	2497.2	2497.2
13°	2496.6	2528.8	2546.4	2550.9
15°	2539.5	2590.7	2617.9	2626.3
17°	2599.8	2653.4	2683.5	2692.4
19.5°	2659.1	2748.0	2802.5	2821.4
22.5°	2783.8	2905.8	2986.5	3018.6
25.5°	2955.0	3105.2	3211.2	3261.2
29°	3199.4	3326.9	3411.4	3451.1
33°	3375.8	3279.2	3211.0	3193.0
37.5°	2893.4	2430.8	2078.7	1943.9
42.5°	1804.9	1676.7	1569.9	1547.5
47.5°	1418.4	1419.3	1420.8	1414.3
55°	776.3	541.5	313.6	155.9
65°	97.9	121.7	58.7	65.0
75°	17.0	18.8	10.5	8.3
85°	11.4	11.4	8.2	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)