

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: P189784

Luminaire Tested: **NFFLD-S-C15-D-UNV-66-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189784
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-66-7030
Description: LOW WATTAGE LED FLOODLIGHT
Light Source: (1) CITIZEN 3000 70
CLU038-1208C4-30AL7K3
Ballast/Driver: XENERQI ELECTRONIC DRIVER
XEL-A050A-042-C1X20

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5851.5 lumens
Efficiency: N/A
Efficacy: 114.3 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

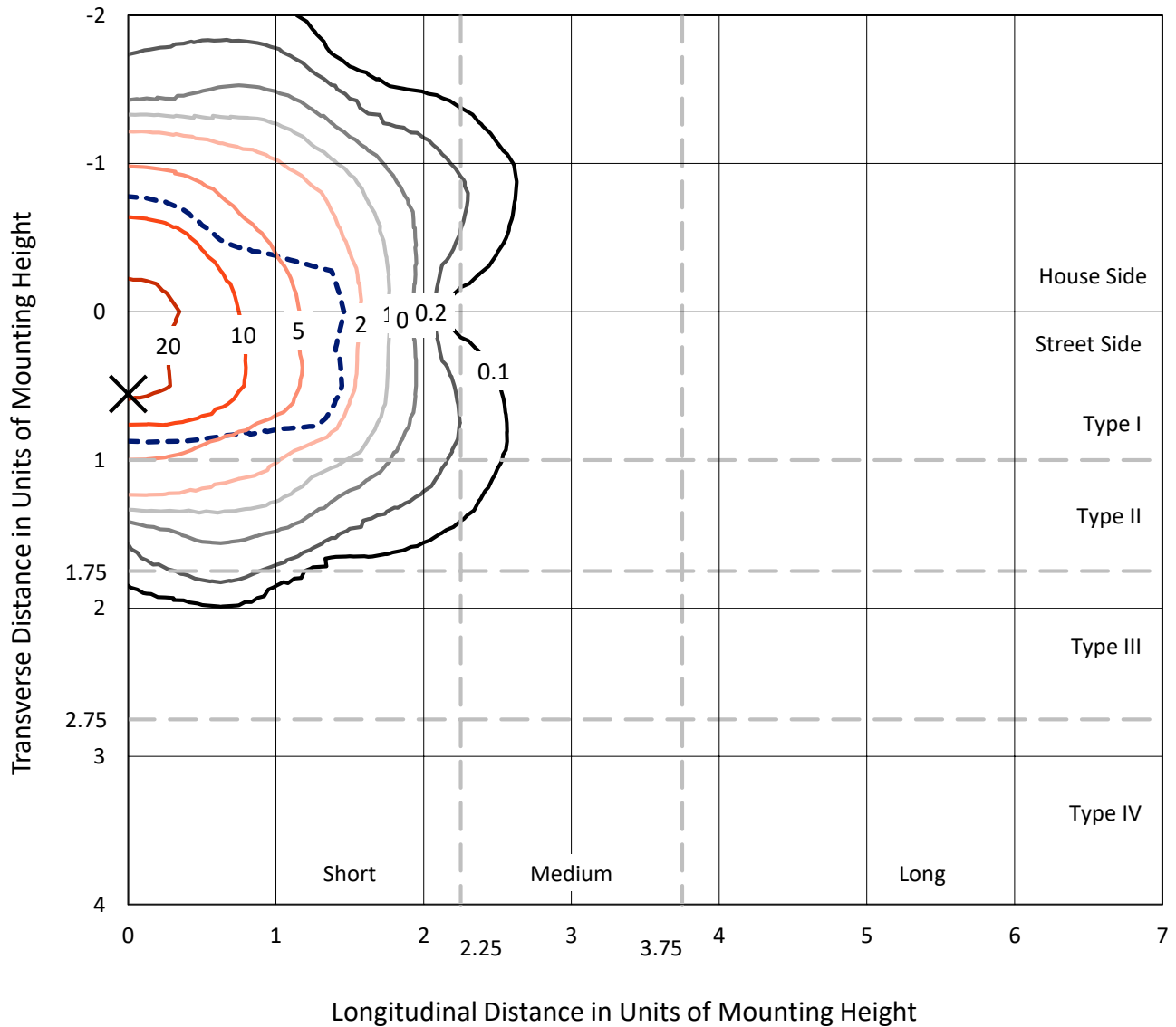
Input Watts (W): 51.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

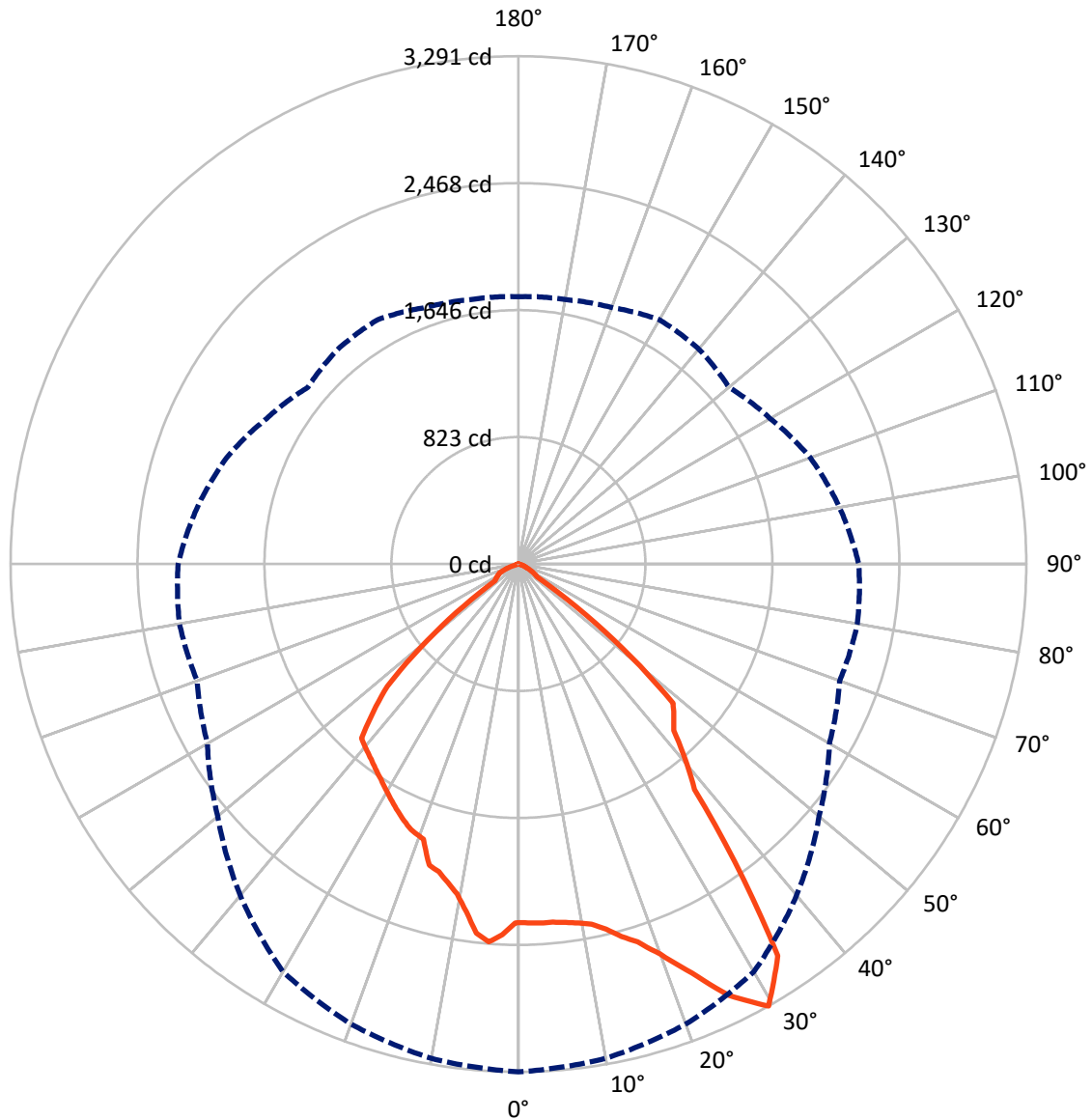
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 23.4 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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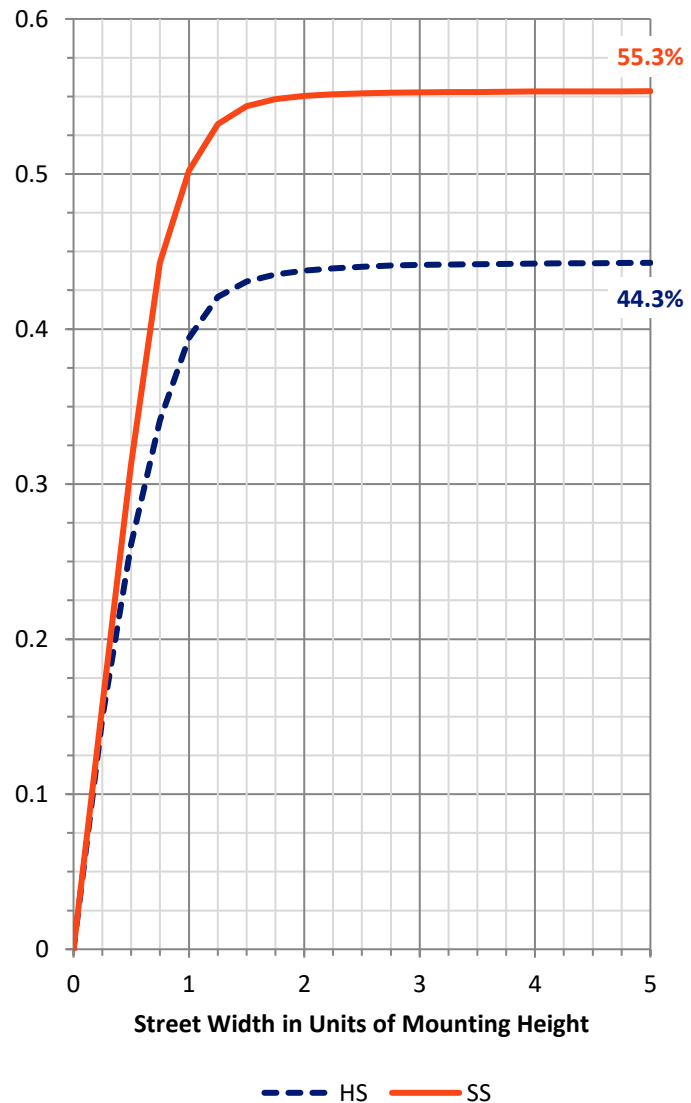
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2614.1	0.0	2614.1
	% Fixture	44.7	0.0	44.7
Street Side	Lumens	3237.4	0.0	3237.4
	% Fixture	55.3	0.0	55.3
Total	Lumens	5851.5	0.0	5851.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.7	3.9
10°-20°	652.6	11.2
20°-30°	1059.3	18.1
30°-40°	1315.3	22.5
40°-50°	1301.3	22.2
50°-60°	914.0	15.6
60°-70°	375.5	6.4
70°-80°	77.8	1.3
80°-90°	11.8	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°	5851.5	100.0
0°-180°	5851.5	100.0



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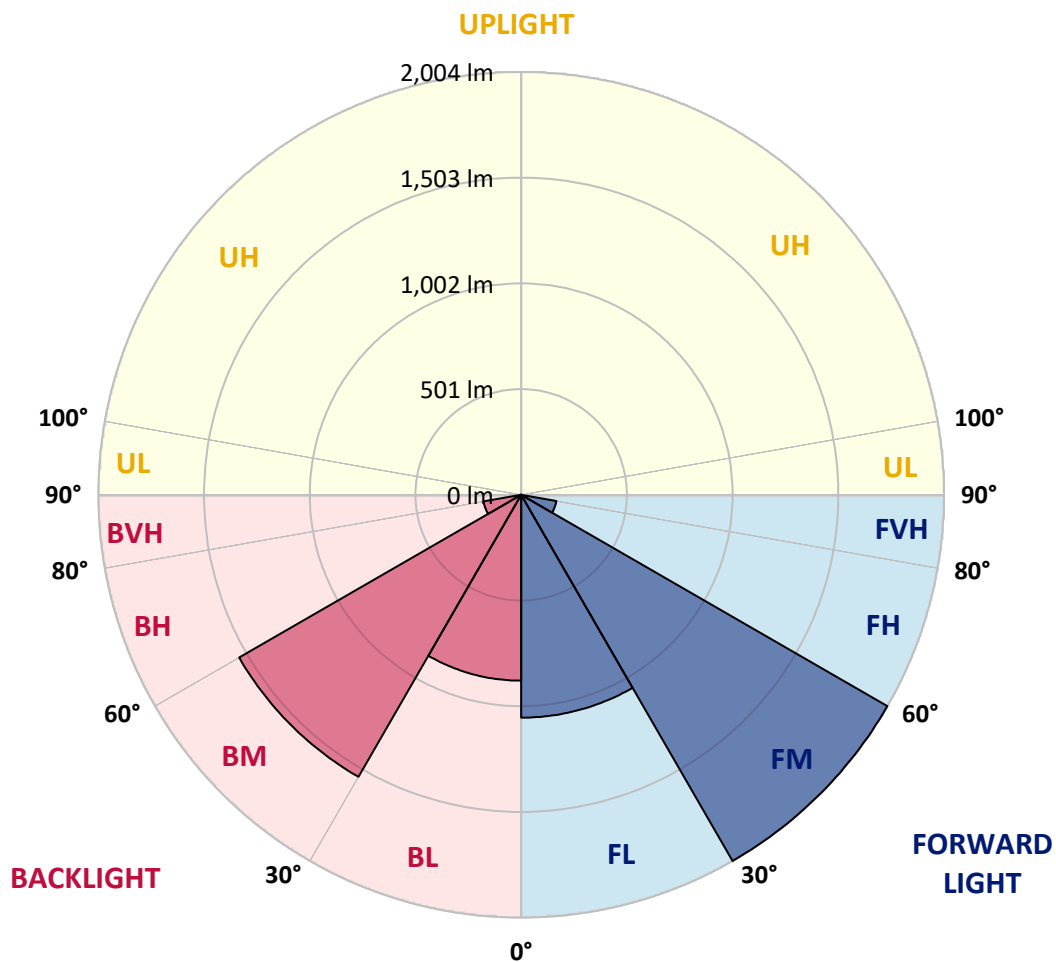
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1056.3	18.1			
FM	(30°-60°)	2003.9	34.2			
FH	(60°-80°)	169.2	2.9			G0/660
FVH	(80°-90°)	5.4	0.1			G0/10
BL	(0°-30°)	880.7	15.1	B2/1000		
BM	(30°-60°)	1543.0	26.4	B2/2500		
BH	(60°-80°)	181.0	3.1	B1/500		G1/500
BVH	(80°-90°)	7.0	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°	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5
1°	2327.4	2327.5	2327.5	2327.4	2327.1	2326.8	2326.3	2325.8	2325.2	2324.5	2324.6
3°	2331.4	2331.8	2332.0	2332.7	2333.1	2333.1	2332.7	2332.0	2330.8	2329.4	2332.3
5°	2331.4	2333.0	2334.0	2335.2	2336.6	2337.5	2337.0	2336.0	2335.2	2335.3	2345.2
7°	2343.2	2343.4	2341.1	2339.4	2337.5	2336.5	2336.8	2337.2	2338.7	2345.1	2369.9
9°	2358.9	2357.9	2354.4	2349.3	2342.0	2337.0	2336.2	2339.0	2346.0	2362.9	2398.8
11°	2381.6	2381.5	2374.3	2361.5	2347.0	2336.3	2335.5	2341.6	2354.6	2382.5	2413.3
13°	2432.8	2428.4	2411.7	2380.9	2355.2	2336.3	2329.2	2337.3	2357.9	2396.3	2410.0
15°	2504.6	2496.6	2470.8	2421.9	2374.7	2339.6	2320.1	2324.0	2350.5	2402.2	2389.4
17°	2567.6	2559.2	2530.5	2479.5	2411.5	2350.5	2312.8	2311.0	2343.5	2381.6	2338.8
19.5°	2690.7	2672.7	2620.6	2535.9	2466.7	2384.9	2315.0	2301.8	2351.2	2398.3	2288.8
22.5°	2878.7	2848.1	2771.2	2654.8	2527.6	2434.6	2325.3	2293.5	2345.2	2318.6	2233.6
25.5°	3110.1	3062.4	2961.3	2818.1	2644.9	2485.8	2335.9	2253.3	2301.7	2251.6	2170.2
29°	3291.3	3253.4	3172.8	3051.2	2804.3	2543.6	2327.1	2215.3	2230.2	2205.3	2113.0
33°	3045.1	3062.2	3127.4	3219.4	2992.9	2607.5	2335.9	2227.8	2107.5	2041.9	1956.4
37.5°	1853.9	1982.4	2318.2	2759.4	2983.3	2746.2	2383.0	2225.3	2069.3	1936.6	1834.5
42.5°	1475.8	1497.1	1599.0	1721.3	2215.9	2664.9	2491.7	2249.4	2013.9	1926.7	1781.8
47.5°	1348.8	1355.0	1353.5	1352.7	1452.7	2006.0	2579.2	2267.1	1846.1	1802.7	1743.8
55°	148.7	299.1	516.4	740.4	1033.2	1090.2	1799.9	1855.9	1608.7	1728.8	1599.9
65°	62.0	56.0	116.0	93.4	123.2	266.1	416.9	444.2	293.5	63.0	301.9
75°	7.9	10.1	17.9	16.2	19.8	17.5	25.2	31.3	33.1	54.1	56.1
85°	0.0	7.9	10.8	10.8	11.6	11.8	13.0	13.8	13.5	15.8	15.1
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°	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5
1°	2324.8	2324.9	2325.0	2325.1	2325.2	2325.3	2325.4	2325.4	2325.4	2325.3	2325.2
3°	2335.4	2352.2	2367.1	2379.6	2389.5	2396.3	2401.9	2404.2	2401.9	2396.3	2389.5
5°	2371.7	2398.9	2419.2	2430.8	2441.0	2448.3	2452.7	2456.4	2452.7	2448.3	2441.0
7°	2405.6	2431.7	2447.2	2446.0	2433.2	2424.5	2415.7	2407.2	2415.7	2424.5	2433.2
9°	2432.2	2444.1	2428.4	2395.8	2351.5	2320.6	2295.3	2279.2	2295.3	2320.6	2351.5
11°	2424.8	2406.0	2356.5	2301.9	2247.7	2212.7	2187.5	2174.8	2187.5	2212.7	2247.7
13°	2392.6	2324.2	2266.5	2216.5	2169.0	2141.4	2124.3	2113.8	2124.3	2141.4	2169.0
15°	2333.2	2251.2	2201.8	2157.8	2117.9	2086.5	2069.6	2059.6	2069.6	2086.5	2117.9
17°	2265.1	2201.1	2158.7	2115.0	2069.6	2050.2	2044.6	2035.0	2044.6	2050.2	2069.6
19.5°	2217.1	2162.7	2114.4	2064.2	2032.6	1955.4	1907.9	1887.3	1907.9	1955.4	2032.6
22.5°	2184.6	2124.6	2041.3	1986.7	1895.5	1874.0	1861.1	1856.8	1861.1	1874.0	1895.5
25.5°	2124.3	2042.3	1946.9	1867.6	1879.4	1834.5	1810.6	1802.7	1810.6	1834.5	1879.4
29°	2012.8	1884.7	1781.5	1818.4	1827.8	1768.5	1740.3	1732.8	1740.3	1768.5	1827.8
33°	1859.8	1727.8	1689.7	1723.6	1707.2	1675.8	1662.7	1657.0	1662.7	1675.8	1707.2
37.5°	1724.1	1626.5	1592.0	1577.9	1584.9	1590.6	1586.1	1585.1	1586.1	1590.6	1584.9
42.5°	1636.4	1555.7	1479.4	1457.2	1484.5	1510.3	1518.3	1519.1	1518.3	1510.3	1484.5
47.5°	1583.1	1504.2	1361.5	1367.1	1352.0	1246.0	1172.8	1162.7	1172.8	1246.0	1352.0
55°	1398.3	1432.1	1193.9	994.0	656.4	399.3	242.5	185.1	242.5	399.3	656.4
65°	489.2	387.5	192.6	146.3	182.1	152.2	135.6	134.9	135.6	152.2	182.1
75°	66.5	40.6	44.5	34.0	41.8	28.7	15.8	10.8	15.8	28.7	41.8
85°	14.7	13.5	13.2	12.0	11.9	12.8	10.8	1.0	10.8	12.8	11.9
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°	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5	2323.5
1°	2325.1	2325.0	2324.9	2324.8	2324.6	2324.5	2325.2	2325.8	2326.3	2326.8	2327.1
3°	2379.6	2367.1	2352.2	2335.4	2332.3	2329.4	2330.8	2332.0	2332.7	2333.1	2333.1
5°	2430.8	2419.2	2398.9	2371.7	2345.2	2335.3	2335.2	2336.0	2337.0	2337.5	2336.6
7°	2446.0	2447.2	2431.7	2405.6	2369.9	2345.1	2338.7	2337.2	2336.8	2336.5	2337.5
9°	2395.8	2428.4	2444.1	2432.2	2398.8	2362.9	2346.0	2339.0	2336.2	2337.0	2342.0
11°	2301.9	2356.5	2406.0	2424.8	2413.3	2382.5	2354.6	2341.6	2335.5	2336.3	2347.0
13°	2216.5	2266.5	2324.2	2392.6	2410.0	2396.3	2357.9	2337.3	2329.2	2336.3	2355.2
15°	2157.8	2201.8	2251.2	2333.2	2389.4	2402.2	2350.5	2324.0	2320.1	2339.6	2374.7
17°	2115.0	2158.7	2201.1	2265.1	2338.8	2381.6	2343.5	2311.0	2312.8	2350.5	2411.5
19.5°	2064.2	2114.4	2162.7	2217.1	2288.8	2398.3	2351.2	2301.8	2315.0	2384.9	2466.7
22.5°	1986.7	2041.3	2124.6	2184.6	2233.6	2318.6	2345.2	2293.5	2325.3	2434.6	2527.6
25.5°	1867.6	1946.9	2042.3	2124.3	2170.2	2251.6	2301.7	2253.3	2335.9	2485.8	2644.9
29°	1818.4	1781.5	1884.7	2012.8	2113.0	2205.3	2230.2	2215.3	2327.1	2543.6	2804.3
33°	1723.6	1689.7	1727.8	1859.8	1956.4	2041.9	2107.5	2227.8	2335.9	2607.5	2992.9
37.5°	1577.9	1592.0	1626.5	1724.1	1834.5	1936.6	2069.3	2225.3	2383.0	2746.2	2983.3
42.5°	1457.2	1479.4	1555.7	1636.4	1781.8	1926.7	2013.9	2249.4	2491.7	2664.9	2215.9
47.5°	1367.1	1361.5	1504.2	1583.1	1743.8	1802.7	1846.1	2267.1	2579.2	2006.0	1452.7
55°	994.0	1193.9	1432.1	1398.3	1599.9	1728.8	1608.7	1855.9	1799.9	1090.2	1033.2
65°	146.3	192.6	387.5	489.2	301.9	63.0	293.5	444.2	416.9	266.1	123.2
75°	34.0	44.5	40.6	66.5	56.1	54.1	33.1	31.3	25.2	17.5	19.8
85°	12.0	13.2	13.5	14.7	15.1	15.8	13.5	13.8	13.0	11.8	11.6
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°	2323.5	2323.5	2323.5	2323.5
1°	2327.4	2327.5	2327.5	2327.4
3°	2332.7	2332.0	2331.8	2331.4
5°	2335.2	2334.0	2333.0	2331.4
7°	2339.4	2341.1	2343.4	2343.2
9°	2349.3	2354.4	2357.9	2358.9
11°	2361.5	2374.3	2381.5	2381.6
13°	2380.9	2411.7	2428.4	2432.8
15°	2421.9	2470.8	2496.6	2504.6
17°	2479.5	2530.5	2559.2	2567.6
19.5°	2535.9	2620.6	2672.7	2690.7
22.5°	2654.8	2771.2	2848.1	2878.7
25.5°	2818.1	2961.3	3062.4	3110.1
29°	3051.2	3172.8	3253.4	3291.3
33°	3219.4	3127.4	3062.2	3045.1
37.5°	2759.4	2318.2	1982.4	1853.9
42.5°	1721.3	1599.0	1497.1	1475.8
47.5°	1352.7	1353.5	1355.0	1348.8
55°	740.4	516.4	299.1	148.7
65°	93.4	116.0	56.0	62.0
75°	16.2	17.9	10.1	7.9
85°	10.8	10.8	7.9	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)