

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: STREETWORKS

Report Number: P265637

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265637
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-160-D-U-T2U-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18168.2 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 162
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: 28.75 FT

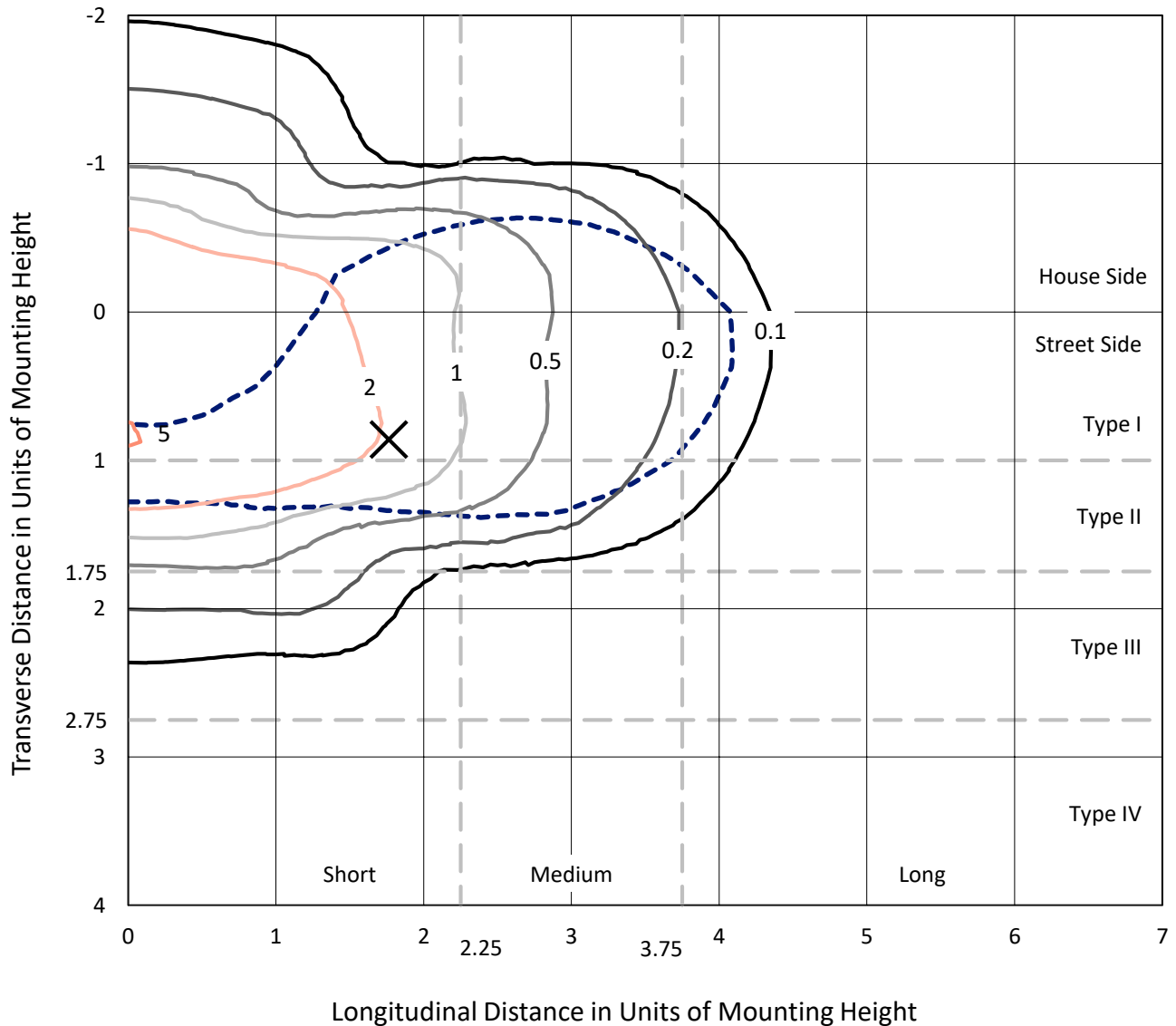


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

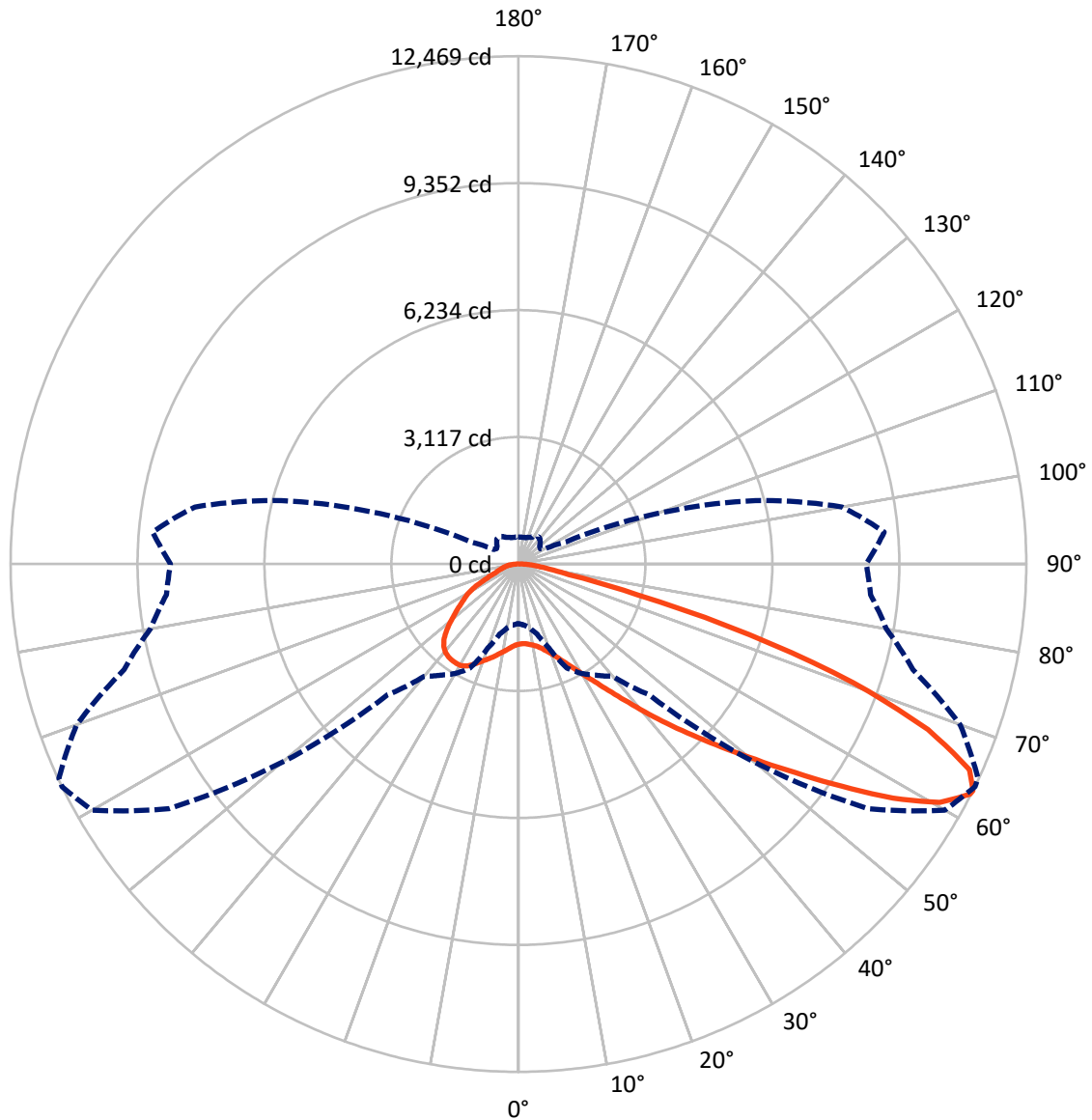


Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5340.8	0.0	5340.8
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	12827.4	0.0	12827.4
	% Fixture	70.6	0.0	70.6
Total	Lumens	18168.2	0.0	18168.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.4	1.1
10°-20°	654.3	3.6
20°-30°	1228.3	6.8
30°-40°	2058.7	11.3
40°-50°	3454.0	19.0
50°-60°	4378.7	24.1
60°-70°	3862.6	21.3
70°-80°	1994.0	11.0
80°-90°	341.2	1.9
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°	18168.2	100.0
0°-180°	18168.2	100.0



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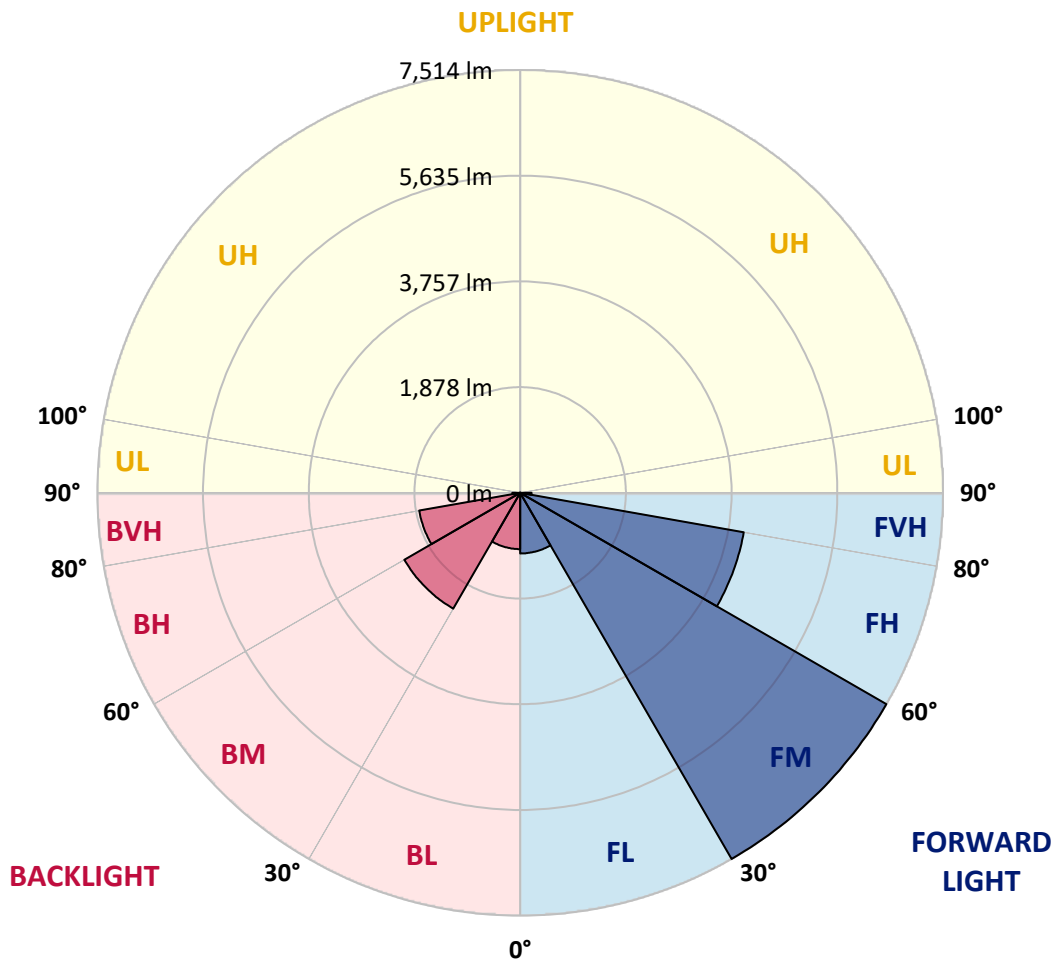
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1078.3	5.9			
FM (30°-60°)	7513.9	41.4			
FH (60°-80°)	4034.4	22.2			G2/5000
FVH (80°-90°)	200.8	1.1			G2/225
BL (0°-30°)	1000.7	5.5	B3/2500		
BM (30°-60°)	2377.5	13.1	B2/2500		
BH (60°-80°)	1822.2	10.0	B3/2500		G3/2500
BVH (80°-90°)	140.4	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6
2.5°	1955.4	1952.3	1952.3	1952.3	1952.3	1949.3	1952.3	1958.5	1955.4	1952.3	1958.5
5°	1961.4	1958.5	1958.5	1958.5	1961.4	1958.5	1961.4	1970.6	1964.6	1964.6	1970.6
7.5°	1976.7	1973.7	1976.7	1973.7	1973.7	1973.7	1976.7	1985.9	1982.7	1985.9	1995.0
10°	1995.0	1995.0	1995.0	1995.0	1995.0	1995.0	2001.1	2007.2	2010.1	2013.2	2025.4
12.5°	2049.8	2049.8	2049.8	2046.7	2046.7	2037.5	2049.8	2055.9	2061.9	2068.0	2077.2
15°	2165.3	2165.3	2162.2	2150.1	2150.1	2131.9	2134.9	2137.8	2137.8	2144.0	2150.1
17.5°	2317.4	2314.4	2308.3	2299.1	2286.9	2265.6	2259.5	2253.5	2244.3	2241.4	2241.4
20°	2530.3	2527.2	2515.1	2490.7	2475.5	2442.0	2417.7	2393.4	2384.2	2369.0	2366.0
22.5°	2834.3	2834.3	2810.0	2773.4	2761.3	2691.4	2621.4	2569.7	2551.5	2530.3	2530.3
25°	3202.3	3199.3	3165.7	3123.2	3071.6	2998.5	2913.5	2843.4	2797.9	2749.2	2730.9
27.5°	3643.3	3634.2	3588.5	3536.8	3439.5	3348.3	3247.9	3174.9	3095.9	3035.1	2980.2
30°	4160.3	4151.2	4072.0	3974.7	3874.4	3783.1	3637.1	3549.1	3424.2	3351.3	3290.5
32.5°	4759.4	4750.2	4607.2	4513.1	4406.5	4294.1	4120.7	3980.7	3822.6	3719.3	3634.2
35°	5522.7	5486.2	5282.5	5151.7	4984.4	4871.9	4689.4	4500.9	4315.4	4169.5	4044.7
37.5°	6346.9	6304.2	6124.9	5930.3	5766.0	5629.0	5370.6	5133.5	4914.4	4713.8	4558.7
40°	7207.6	7095.0	6903.4	6760.5	6647.8	6517.2	6246.5	5997.2	5653.5	5428.4	5194.2
42.5°	7803.5	7694.1	7560.2	7466.0	7411.2	7310.9	7158.9	6942.9	6635.7	6641.8	6024.5
45°	8195.9	8034.7	7943.4	7949.6	7970.8	7970.8	7943.4	7909.9	7776.2	7867.4	7350.4
47.5°	8055.9	7949.6	7891.7	8013.4	8165.5	8317.4	8493.8	8685.4	8904.4	9162.9	8527.3
50°	7234.8	7274.4	7301.8	7560.2	7885.6	8232.3	8636.8	9159.8	9771.1	9889.7	9582.6
52.5°	5924.1	6009.2	6100.5	6495.9	6924.7	7523.8	8232.3	9096.0	9917.1	10400.7	10370.3
55°	4601.2	4707.7	4902.3	5197.2	5538.0	6103.5	6979.4	8311.4	9591.7	10361.1	10829.4
57.5°	3275.3	3430.4	3685.8	4096.5	4397.5	4716.8	5364.6	6842.5	8244.6	9676.8	10753.4
60°	2177.4	2250.4	2417.7	2928.7	3436.5	3770.9	4230.2	4765.5	5911.9	7885.6	9968.9
62.5°	1544.8	1593.6	1697.0	1928.1	2387.2	2992.4	3269.2	3515.5	3883.6	5072.5	8004.3
63°	1459.7	1502.3	1587.5	1782.1	2195.6	2822.1	3105.0	3330.0	3597.6	4537.3	7572.4
65°	1210.3	1228.6	1274.2	1368.5	1590.4	2110.6	2572.7	2709.6	2755.2	2916.4	4744.2
67.5°	1021.8	1033.9	1049.2	1076.6	1164.7	1404.9	1919.0	2092.3	2040.6	1931.1	2344.7
70°	888.1	897.1	921.4	954.9	985.4	1046.2	1319.9	1578.3	1520.7	1371.5	1435.4
72.5°	708.7	723.8	751.2	809.0	869.7	948.8	1015.8	1176.9	1140.4	997.5	1012.7
75°	559.6	568.6	593.1	635.6	693.4	784.6	915.5	970.1	869.7	735.9	735.9
77.5°	444.0	453.1	474.5	507.9	544.4	608.2	699.5	842.4	781.5	553.4	550.4
80°	334.4	343.6	364.9	395.3	431.8	477.4	532.2	596.0	717.7	517.0	413.6
82.5°	246.3	249.4	285.9	307.1	319.3	355.8	401.5	438.0	492.7	477.4	367.9
85°	185.5	182.4	206.8	222.1	225.0	234.2	261.5	298.1	322.3	310.2	285.9
87.5°	103.3	91.3	106.4	121.6	121.6	124.7	130.8	152.1	173.4	167.3	152.1
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6
2.5°	1958.5	1958.5	1955.4	1955.4	1958.5	1958.5	1955.4	1964.6	1970.6	1970.6	1973.7
5°	1967.6	1970.6	1967.6	1967.6	1970.6	1970.6	1973.7	1982.7	1991.9	1998.0	2007.2
7.5°	1995.0	1998.0	1995.0	1995.0	1998.0	2001.1	2007.2	2019.3	2025.4	2037.5	2052.7
10°	2025.4	2028.5	2025.4	2028.5	2031.4	2034.5	2043.6	2052.7	2061.9	2074.0	2098.4
12.5°	2080.1	2083.2	2077.2	2080.1	2089.3	2089.3	2095.3	2101.4	2116.6	2131.9	2156.1
15°	2156.1	2156.1	2150.1	2153.1	2162.2	2162.2	2165.3	2171.4	2189.6	2207.9	2232.2
17.5°	2244.3	2250.4	2247.4	2250.4	2256.5	2259.5	2259.5	2265.6	2277.8	2290.0	2314.4
20°	2362.9	2366.0	2359.8	2366.0	2372.1	2366.0	2359.8	2356.9	2362.9	2369.0	2396.4
22.5°	2524.1	2521.2	2505.9	2505.9	2505.9	2493.8	2478.6	2460.3	2460.3	2451.1	2472.4
25°	2715.8	2706.7	2685.4	2688.4	2667.1	2648.8	2621.4	2594.0	2569.7	2560.6	2563.7
27.5°	2940.8	2922.5	2901.3	2895.1	2873.9	2840.4	2794.7	2743.2	2703.5	2673.1	2667.1
30°	3223.6	3184.0	3147.7	3141.6	3108.0	3053.2	2980.2	2910.4	2843.4	2791.8	2773.4
32.5°	3558.1	3497.3	3439.5	3433.4	3378.6	3305.8	3217.5	3120.3	3022.8	2940.8	2901.3
35°	3950.4	3859.2	3804.4	3789.2	3710.2	3618.9	3521.6	3396.9	3260.0	3144.5	3071.6
37.5°	4427.8	4333.7	4239.3	4242.3	4132.9	4026.5	3895.7	3743.6	3570.3	3409.1	3305.8
40°	5017.8	4884.1	4762.5	4735.1	4640.7	4491.7	4348.9	4172.4	3959.5	3746.7	3597.6
42.5°	5732.5	5513.5	5346.4	5322.0	5197.2	5014.8	4841.4	4607.2	4391.4	4132.9	3953.5
45°	6544.5	6194.8	5994.1	5957.6	5756.9	5571.4	5361.5	5112.2	4847.6	4555.7	4342.8
47.5°	7554.1	7055.4	6714.8	6653.9	6377.2	6133.9	5915.0	5638.2	5322.0	4996.6	4762.5
50°	8731.0	7995.2	7535.9	7441.6	7070.6	6784.8	6504.9	6158.3	5820.7	5480.1	5209.5
52.5°	9911.0	9120.3	8509.0	8393.6	7846.1	7462.8	7095.0	6748.2	6349.8	6012.3	5705.1
55°	10859.9	10333.7	9625.2	9464.1	8679.3	8159.3	7675.7	7280.5	6885.1	6617.5	6255.5
57.5°	11431.7	11404.3	10844.7	10622.6	9549.2	8779.8	8241.5	7791.4	7408.2	7295.7	6815.3
60°	11416.4	12125.0	11884.8	11717.4	10428.1	9415.3	8715.9	8229.4	7913.0	8040.8	7377.8
62.5°	10720.0	12155.3	12444.3	12398.6	11364.6	9926.2	9105.1	8603.3	8436.2	8816.2	7961.7
63°	10467.6	12085.4	12468.7	12450.4	11544.1	10023.6	9172.1	8676.3	8539.5	9014.0	8068.0
65°	8846.7	11474.2	12173.7	12255.8	11930.3	10358.0	9327.1	8861.8	8846.7	9454.9	8320.6
67.5°	5391.9	9695.0	10844.7	11002.8	11385.9	10464.5	9239.0	8798.0	9016.9	9518.7	8244.6
70°	2305.2	6398.5	8715.9	8971.4	9907.9	9935.3	8986.6	8536.5	8977.4	9020.1	7703.1
72.5°	1365.5	3016.8	5933.2	6489.7	7840.0	8548.6	8408.8	8080.3	8457.4	7922.2	6559.8
75°	967.0	1411.1	3013.8	3606.8	5458.8	6526.2	7064.5	7216.7	7201.4	6282.9	4923.6
77.5°	693.4	906.3	1271.2	1499.4	3047.2	4190.7	4847.6	5291.6	5148.6	4205.9	3035.1
80°	483.6	626.5	778.6	827.2	1414.1	2153.1	2554.5	2749.2	2664.1	2101.4	1359.3
82.5°	349.7	410.5	501.9	532.2	711.6	994.5	1183.0	1043.1	1000.5	775.4	587.0
85°	270.7	264.6	313.1	325.4	416.6	519.9	532.2	413.6	361.8	322.3	328.4
87.5°	191.6	164.2	167.3	173.4	216.0	276.8	270.7	170.3	146.0	155.0	176.3
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6	1967.6
2.5°	1979.8	1982.7	1988.8	1991.9	1998.0	1998.0	2004.1	2007.2	2013.2	2019.3	2022.4
5°	2016.2	2025.4	2037.5	2043.6	2055.9	2064.9	2077.2	2083.2	2095.3	2104.5	2116.6
7.5°	2071.0	2086.3	2101.4	2119.7	2137.8	2153.1	2165.3	2180.5	2201.7	2216.9	2226.1
10°	2122.8	2144.0	2171.4	2192.7	2220.0	2241.4	2259.5	2286.9	2311.2	2332.5	2344.7
12.5°	2189.6	2216.9	2244.3	2277.8	2314.4	2341.6	2369.0	2405.5	2439.0	2463.3	2475.5
15°	2268.7	2302.1	2332.5	2372.1	2414.6	2451.1	2490.7	2530.3	2554.5	2554.5	2548.4
17.5°	2350.8	2378.2	2414.6	2460.3	2518.0	2563.7	2585.0	2591.0	2581.9	2560.6	2545.3
20°	2432.9	2457.3	2496.7	2551.5	2612.4	2621.4	2600.1	2572.7	2545.3	2509.0	2484.6
22.5°	2499.9	2533.3	2594.0	2657.9	2661.0	2609.2	2551.5	2505.9	2463.3	2420.8	2375.1
25°	2578.9	2624.5	2706.7	2730.9	2651.8	2554.5	2472.4	2405.5	2335.7	2265.6	2214.0
27.5°	2676.2	2743.2	2825.2	2755.2	2600.1	2463.3	2350.8	2250.4	2159.2	2061.9	2004.1
30°	2779.5	2883.0	2901.3	2718.8	2512.0	2335.7	2183.5	2031.4	1915.9	1827.7	1794.3
32.5°	2904.3	3038.1	2928.7	2654.9	2393.4	2162.2	1958.5	1775.9	1678.8	1624.0	1608.8
35°	3092.9	3202.3	2943.8	2587.9	2256.5	1955.4	1700.0	1554.0	1493.3	1456.7	1438.5
37.5°	3363.4	3360.4	2940.8	2505.9	2098.4	1730.5	1493.3	1389.8	1341.1	1310.7	1277.3
40°	3679.7	3482.1	2922.5	2387.2	1885.5	1514.5	1350.2	1253.0	1207.3	1170.9	1131.2
42.5°	3993.0	3564.1	2870.9	2210.9	1620.9	1359.3	1246.8	1158.6	1110.0	1070.5	1015.8
45°	4263.6	3597.6	2770.5	1967.6	1383.7	1237.8	1180.0	1103.9	1046.2	985.4	942.7
47.5°	4476.6	3591.6	2609.2	1681.7	1225.6	1152.5	1125.1	1073.6	1003.5	927.5	872.9
50°	4655.9	3546.0	2390.3	1429.4	1119.2	1076.6	1067.5	1052.3	939.6	875.8	842.4
52.5°	4820.1	3479.0	2156.1	1259.1	1027.9	991.4	1009.7	994.5	915.5	860.7	827.2
55°	5045.2	3433.4	1925.1	1128.2	921.4	912.4	927.5	948.8	900.2	848.4	812.0
57.5°	5309.8	3457.8	1748.6	982.2	821.1	827.2	878.9	909.4	885.0	830.3	793.7
60°	5613.9	3530.8	1593.6	842.4	738.9	754.1	830.3	872.9	869.7	805.9	763.3
62.5°	5954.5	3606.8	1347.2	735.9	669.1	693.4	772.5	827.2	836.3	781.5	729.9
63°	6021.3	3612.9	1283.4	714.6	656.9	684.2	757.2	815.0	827.2	775.4	723.8
65°	6185.6	3558.1	1033.9	656.9	608.2	638.6	711.6	763.3	787.6	742.0	699.5
67.5°	6048.7	3111.1	778.6	587.0	568.6	589.9	653.8	702.6	723.8	702.6	660.0
70°	5531.9	2262.7	608.2	523.1	526.0	541.3	589.9	635.6	660.0	653.8	614.4
72.5°	4455.2	1283.4	507.9	468.3	477.4	495.8	529.1	571.7	593.1	589.9	562.6
75°	2934.8	656.9	428.9	419.7	425.7	441.0	465.3	498.7	523.1	519.9	507.9
77.5°	1453.6	456.2	367.9	371.0	374.1	386.2	404.4	434.9	450.1	453.1	450.1
80°	599.1	355.8	316.3	319.3	322.3	331.5	343.6	371.0	380.2	386.2	389.2
82.5°	358.9	270.7	252.5	258.5	261.5	270.7	279.8	304.2	313.1	322.3	322.3
85°	237.2	188.6	182.4	188.6	194.7	200.7	203.7	218.9	234.2	246.3	252.5
87.5°	127.6	112.5	109.5	112.5	112.5	118.5	124.7	139.9	158.1	170.3	176.3
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):

	160°	165°	170°	175°	180°
0°	1967.6	1967.6	1967.6	1967.6	1967.6
2.5°	2016.2	2019.3	2016.2	2019.3	2022.4
5°	2116.6	2122.8	2119.7	2119.7	2131.9
7.5°	2232.2	2244.3	2244.3	2250.4	2256.5
10°	2356.9	2369.0	2378.2	2378.2	2387.2
12.5°	2481.6	2487.6	2496.7	2496.7	2496.7
15°	2545.3	2542.5	2539.4	2536.4	2536.4
17.5°	2536.4	2524.1	2518.0	2512.0	2515.1
20°	2469.4	2448.2	2442.0	2432.9	2439.0
22.5°	2353.7	2323.5	2311.2	2296.1	2302.1
25°	2180.5	2144.0	2137.8	2119.7	2128.9
27.5°	1979.8	1961.4	1958.5	1955.4	1970.6
30°	1791.2	1797.2	1800.4	1806.4	1821.7
32.5°	1617.8	1630.1	1633.1	1636.2	1657.5
35°	1447.6	1432.3	1447.6	1441.5	1459.7
37.5°	1262.1	1249.9	1237.8	1222.6	1234.7
40°	1107.0	1085.7	1049.2	1031.0	1033.9
42.5°	985.4	958.0	927.5	909.4	909.4
45°	906.3	872.9	845.5	833.3	833.3
47.5°	845.5	830.3	815.0	805.9	805.9
50°	821.1	802.8	793.7	787.6	787.6
52.5°	802.8	784.6	775.4	769.4	763.3
55°	787.6	760.2	751.2	748.1	748.1
57.5°	766.3	742.0	729.9	726.8	726.8
60°	732.8	714.6	702.6	699.5	699.5
62.5°	699.5	681.3	669.1	669.1	669.1
63°	693.4	672.1	662.9	662.9	662.9
65°	666.1	644.8	635.6	635.6	632.5
67.5°	629.5	608.2	602.1	602.1	596.0
70°	587.0	568.6	562.6	565.7	553.4
72.5°	544.4	526.0	517.0	517.0	504.8
75°	495.8	477.4	465.3	462.3	450.1
77.5°	441.0	425.7	413.6	401.5	395.3
80°	383.1	371.0	355.8	346.7	337.6
82.5°	322.3	310.2	301.1	313.1	267.6
85°	252.5	240.2	228.1	246.3	191.6
87.5°	185.5	179.4	167.3	146.0	127.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)