

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: P265619

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2U-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265619  
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-AF72-140-D-U-T2U-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16383.9 lumens  
Efficiency: N/A  
Efficacy: 114.6 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

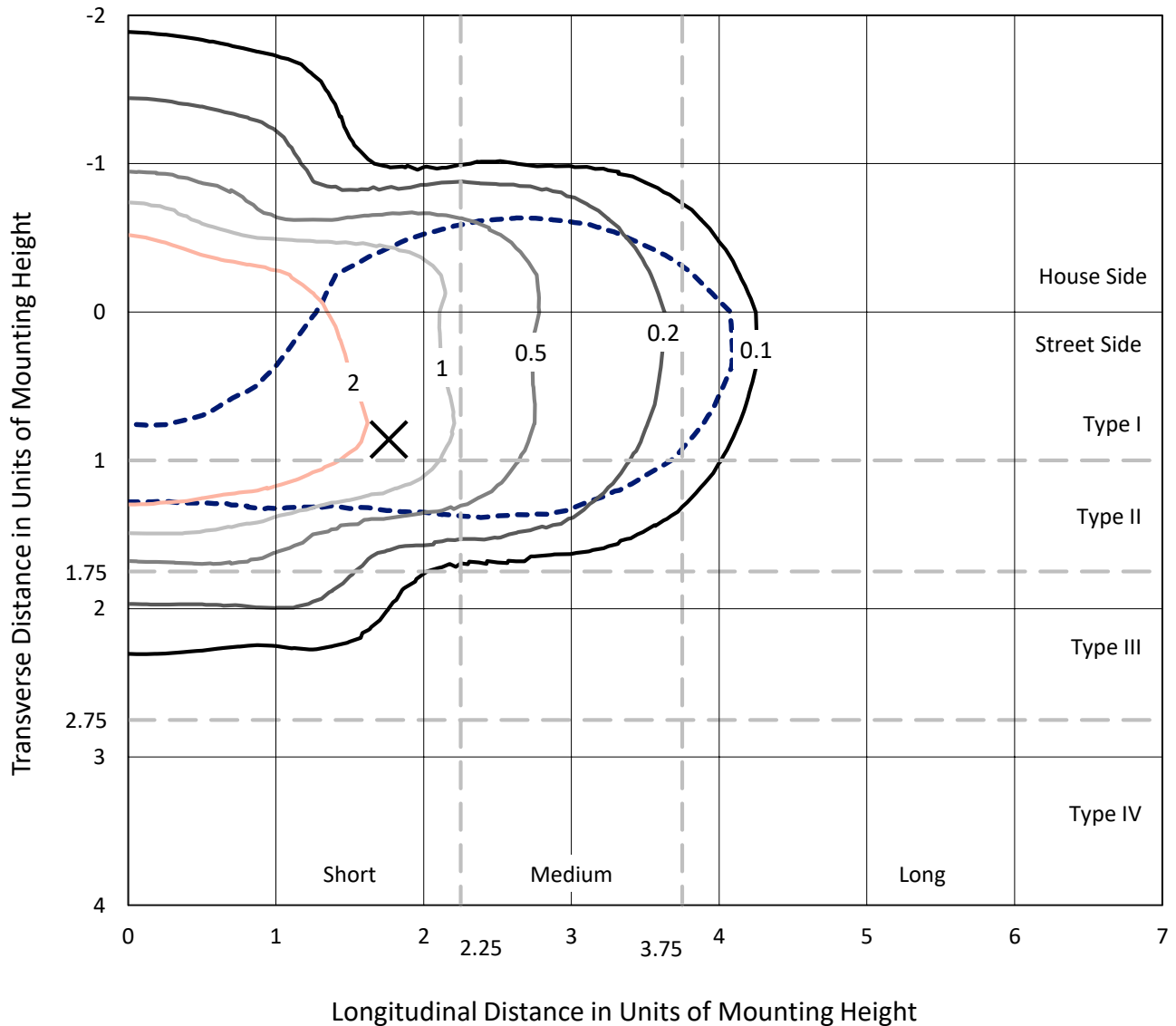
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

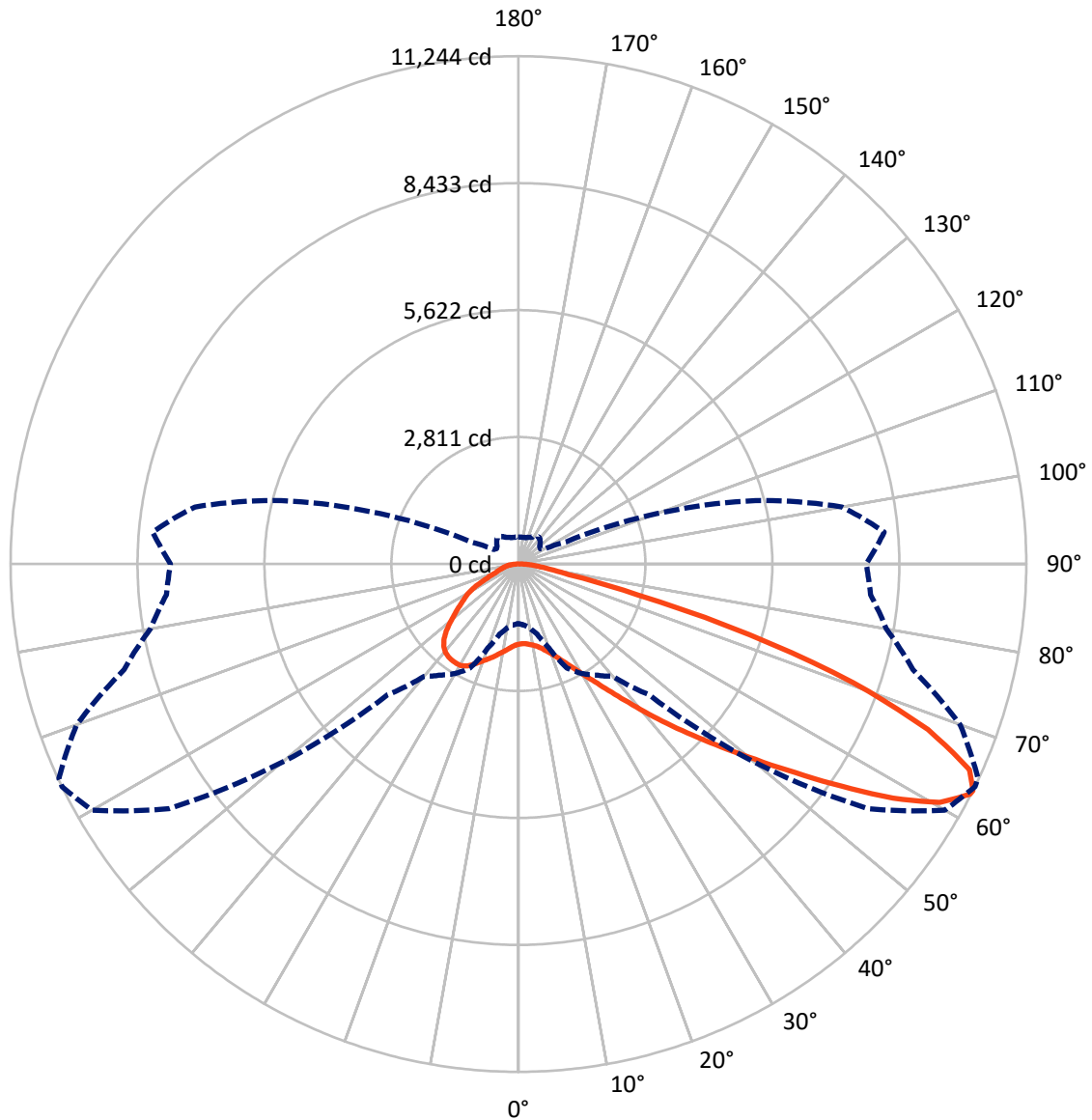


Based on 25 foot mounting height. Maximum calculated value = 4.6 fc  
 Type II - Short - Semi-Cutoff

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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
<b>House Side</b>	Lumens	4816.3	0.0	4816.3
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	11567.6	0.0	11567.6
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	16383.9	0.0	16383.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.2	1.1
10°-20°	590.1	3.6
20°-30°	1107.6	6.8
30°-40°	1856.5	11.3
40°-50°	3114.8	19.0
50°-60°	3948.6	24.1
60°-70°	3483.3	21.3
70°-80°	1798.1	11.0
80°-90°	307.7	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°	16383.9	100.0
0°-180°	16383.9	100.0

**Coefficient of Utilization**



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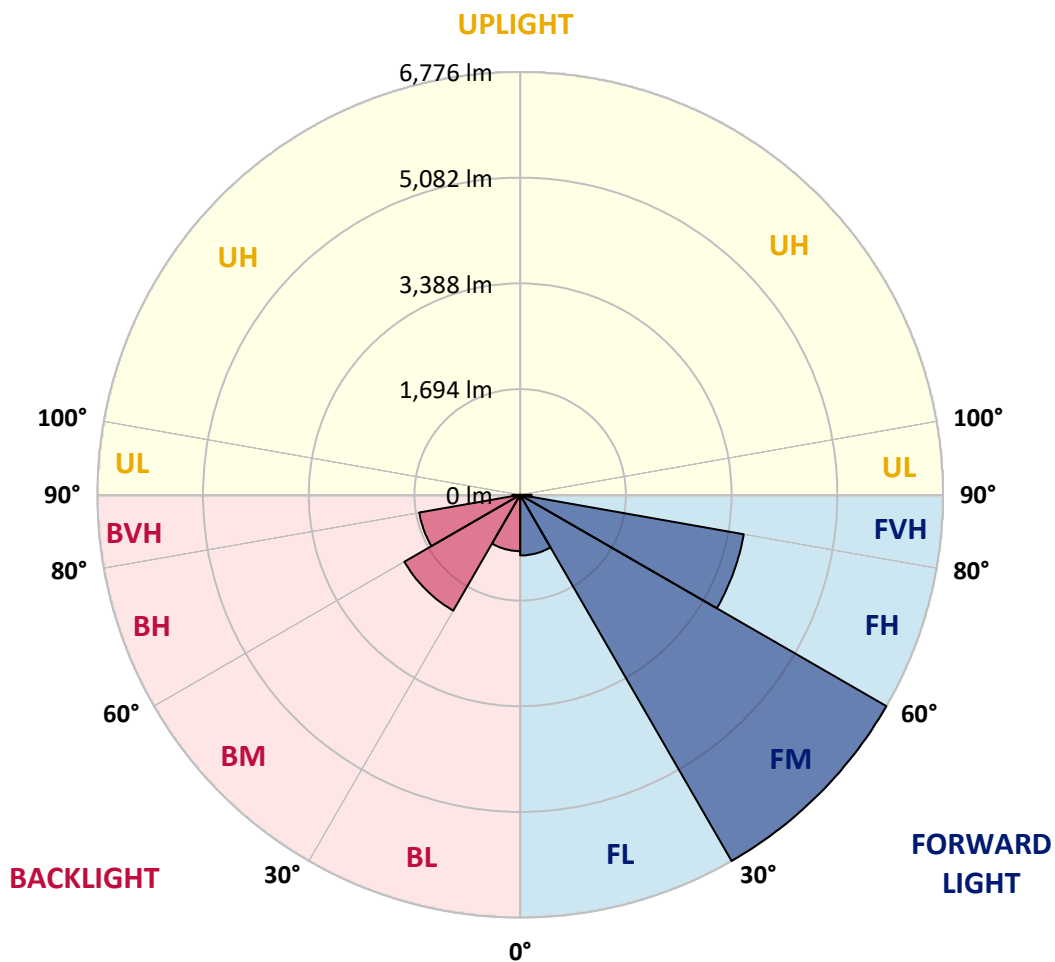
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	972.4	5.9			
FM	(30°-60°)	6775.9	41.4			
FH	(60°-80°)	3638.1	22.2			G2/5000
FVH	(80°-90°)	181.1	1.1			G2/225
BL	(0°-30°)	902.4	5.5	B2/1000		
BM	(30°-60°)	2144.0	13.1	B2/2500		
BH	(60°-80°)	1643.3	10.0	B3/2500		G3/2500
BVH	(80°-90°)	126.6	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°	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3
2.5°	1763.5	1760.7	1760.7	1760.7	1760.7	1758.0	1760.7	1766.2	1763.5	1760.7	1766.2
5°	1768.9	1766.2	1766.2	1766.2	1768.9	1766.2	1768.9	1777.0	1771.6	1771.6	1777.0
7.5°	1782.5	1779.8	1782.5	1779.8	1779.8	1779.8	1782.5	1790.9	1788.0	1790.9	1799.0
10°	1799.0	1799.0	1799.0	1799.0	1799.0	1799.0	1804.5	1810.1	1812.8	1815.6	1826.4
12.5°	1848.4	1848.4	1848.4	1845.7	1845.7	1837.5	1848.4	1853.9	1859.4	1864.9	1873.1
15°	1952.6	1952.6	1950.0	1938.9	1938.9	1922.5	1925.2	1927.9	1927.9	1933.4	1938.9
17.5°	2089.7	2087.0	2081.6	2073.3	2062.2	2043.1	2037.6	2032.1	2023.9	2021.1	2021.1
20°	2281.8	2279.0	2268.0	2246.0	2232.4	2202.1	2180.2	2158.3	2150.1	2136.3	2133.7
22.5°	2555.9	2555.9	2533.9	2501.2	2490.1	2427.1	2364.0	2317.4	2300.9	2281.8	2281.8
25°	2887.8	2885.0	2855.0	2816.5	2769.8	2704.1	2627.3	2564.2	2523.1	2479.2	2462.8
27.5°	3285.5	3277.2	3236.1	3189.5	3101.7	3019.5	2929.0	2863.1	2791.8	2737.0	2687.5
30°	3751.7	3743.4	3672.1	3584.3	3493.9	3411.7	3280.0	3200.4	3088.1	3022.2	2967.3
32.5°	4291.9	4283.7	4154.8	4069.9	3973.8	3872.4	3716.0	3589.8	3447.2	3354.0	3277.2
35°	4980.4	4947.3	4763.6	4645.8	4494.8	4393.4	4229.0	4058.8	3891.5	3759.9	3647.5
37.5°	5723.6	5685.2	5523.3	5347.8	5199.7	5076.3	4843.2	4629.2	4431.8	4250.8	4111.0
40°	6499.5	6398.2	6225.3	6096.4	5995.0	5877.2	5633.0	5408.2	5098.2	4895.3	4684.1
42.5°	7037.1	6938.4	6817.7	6732.7	6683.4	6592.8	6455.7	6260.9	5984.0	5989.4	5432.8
45°	7391.0	7245.5	7163.3	7168.7	7188.0	7188.0	7163.3	7133.1	7012.4	7094.8	6628.6
47.5°	7264.8	7168.7	7116.6	7226.3	7363.4	7500.6	7659.7	7832.4	8029.9	8263.0	7689.9
50°	6524.3	6560.0	6584.7	6817.7	7111.3	7423.9	7788.6	8260.3	8811.6	8918.5	8641.4
52.5°	5342.3	5419.0	5501.4	5857.8	6244.6	6784.8	7423.9	8202.7	8943.2	9379.3	9351.7
55°	4149.4	4245.3	4420.7	4686.8	4993.9	5504.2	6294.0	7495.1	8649.7	9343.5	9765.8
57.5°	2953.5	3093.6	3323.9	3694.1	3965.6	4253.6	4837.7	6170.5	7434.8	8726.5	9697.4
60°	1963.5	2029.5	2180.2	2640.9	3099.0	3400.7	3814.7	4297.4	5331.4	7111.3	8989.8
62.5°	1393.2	1437.1	1530.4	1738.7	2152.8	2698.6	2948.1	3170.3	3502.1	4574.3	7218.2
63°	1316.3	1354.7	1431.5	1607.1	1980.0	2545.0	2800.0	3002.9	3244.3	4091.7	6828.6
65°	1091.5	1108.0	1149.1	1234.1	1434.4	1903.2	2320.1	2443.5	2484.6	2630.0	4278.2
67.5°	921.4	932.4	946.2	970.8	1050.4	1267.0	1730.5	1886.8	1840.2	1741.5	2114.4
70°	800.7	809.1	830.9	861.1	888.6	943.4	1190.3	1423.4	1371.3	1236.8	1294.5
72.5°	639.0	652.7	677.4	729.6	784.3	855.6	916.0	1061.3	1028.4	899.6	913.2
75°	504.6	512.8	534.9	573.2	625.3	707.5	825.5	874.8	784.3	663.7	663.7
77.5°	400.5	408.5	427.9	458.0	491.0	548.4	630.8	759.6	704.8	499.1	496.4
80°	301.7	309.8	329.0	356.4	389.4	430.6	480.0	537.5	647.1	466.2	372.9
82.5°	222.2	224.8	257.9	276.9	287.9	320.9	361.9	395.0	444.3	430.6	331.8
85°	167.3	164.6	186.5	200.2	202.9	211.2	235.9	268.8	290.7	279.7	257.9
87.5°	93.2	82.3	95.9	109.8	109.8	112.5	117.9	137.1	156.3	150.8	137.1
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°	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3
2.5°	1766.2	1766.2	1763.5	1763.5	1766.2	1766.2	1763.5	1771.6	1777.0	1777.0	1779.8
5°	1774.3	1777.0	1774.3	1774.3	1777.0	1777.0	1779.8	1788.0	1796.3	1801.8	1810.1
7.5°	1799.0	1801.8	1799.0	1799.0	1801.8	1804.5	1810.1	1821.0	1826.4	1837.5	1851.1
10°	1826.4	1829.2	1826.4	1829.2	1832.0	1834.7	1843.0	1851.1	1859.4	1870.4	1892.3
12.5°	1875.8	1878.5	1873.1	1875.8	1884.0	1884.0	1889.6	1895.1	1908.8	1922.5	1944.4
15°	1944.4	1944.4	1938.9	1941.6	1950.0	1950.0	1952.6	1958.1	1974.6	1991.1	2012.9
17.5°	2023.9	2029.5	2026.7	2029.5	2034.9	2037.6	2037.6	2043.1	2054.2	2065.1	2087.0
20°	2130.9	2133.7	2128.2	2133.7	2139.1	2133.7	2128.2	2125.4	2130.9	2136.3	2161.1
22.5°	2276.2	2273.5	2259.7	2259.7	2259.7	2248.7	2235.2	2218.6	2218.6	2210.4	2229.7
25°	2449.0	2440.8	2421.7	2424.3	2405.1	2388.7	2364.0	2339.2	2317.4	2309.2	2311.9
27.5°	2651.9	2635.4	2616.4	2610.8	2591.6	2561.4	2520.4	2473.8	2438.0	2410.6	2405.1
30°	2906.9	2871.3	2838.5	2833.0	2802.8	2753.5	2687.5	2624.5	2564.2	2517.6	2501.2
32.5°	3208.7	3153.8	3101.7	3096.2	3047.0	2981.0	2901.5	2813.8	2725.9	2651.9	2616.4
35°	3562.5	3480.2	3430.7	3417.2	3345.7	3263.5	3175.8	3063.3	2940.0	2835.7	2769.8
37.5°	3993.0	3907.9	3822.9	3825.7	3727.0	3630.9	3513.1	3376.0	3219.6	3074.3	2981.0
40°	4525.0	4404.4	4294.6	4270.1	4184.9	4050.5	3921.7	3762.6	3570.7	3378.6	3244.3
42.5°	5169.6	4972.1	4821.3	4799.3	4686.8	4522.2	4366.0	4154.8	3960.1	3727.0	3565.3
45°	5901.8	5586.4	5405.5	5372.5	5191.5	5024.2	4834.9	4610.0	4371.4	4108.2	3916.3
47.5°	6812.2	6362.4	6055.4	6000.5	5750.9	5531.6	5334.0	5084.4	4799.3	4505.9	4294.6
50°	7873.6	7209.8	6795.8	6710.8	6376.2	6118.4	5866.1	5553.4	5249.1	4941.8	4697.9
52.5°	8937.6	8224.6	7673.4	7569.2	7075.5	6730.0	6398.2	6085.5	5726.2	5421.8	5144.9
55°	9793.3	9318.8	8679.9	8534.4	7826.9	7357.9	6922.0	6565.4	6208.9	5967.6	5641.3
57.5°	10308.9	10284.2	9779.6	9579.3	8611.3	7917.4	7432.0	7026.2	6680.6	6579.1	6145.8
60°	10295.1	10934.2	10717.5	10566.7	9403.8	8490.6	7859.9	7421.1	7135.9	7251.1	6653.1
62.5°	9667.1	10961.6	11222.2	11180.9	10248.6	8951.4	8210.9	7758.4	7607.6	7950.4	7179.8
63°	9439.5	10898.4	11244.1	11227.6	10410.4	9039.1	8271.2	7824.1	7700.8	8128.7	7275.7
65°	7977.8	10347.2	10978.0	11052.0	10758.6	9340.8	8411.1	7991.5	7977.8	8526.4	7503.4
67.5°	4862.3	8742.9	9779.6	9922.1	10267.7	9436.8	8331.6	7933.9	8131.4	8583.8	7434.8
70°	2078.8	5770.2	7859.9	8090.2	8934.9	8959.5	8103.9	7698.0	8095.7	8134.2	6946.7
72.5°	1231.3	2720.4	5350.6	5852.4	7070.0	7709.1	7583.0	7286.7	7626.8	7144.1	5915.5
75°	872.2	1272.4	2717.7	3252.6	4922.7	5885.2	6370.7	6507.9	6494.1	5665.9	4440.1
77.5°	625.3	817.3	1146.3	1351.9	2747.9	3779.1	4371.4	4771.8	4643.0	3792.9	2737.0
80°	436.0	564.9	702.0	746.0	1275.2	1941.6	2303.7	2479.2	2402.3	1895.1	1225.8
82.5°	315.3	370.2	452.4	480.0	641.7	896.8	1066.7	940.6	902.3	699.3	529.3
85°	244.1	238.6	282.4	293.4	375.8	468.9	480.0	372.9	326.4	290.7	296.3
87.5°	172.7	148.1	150.8	156.3	194.8	249.5	244.1	153.6	131.6	139.9	159.1
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):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3	1774.3
2.5°	1785.3	1788.0	1793.6	1796.3	1801.8	1801.8	1807.3	1810.1	1815.6	1821.0	1823.6
5°	1818.3	1826.4	1837.5	1843.0	1853.9	1862.1	1873.1	1878.5	1889.6	1897.8	1908.8
7.5°	1867.5	1881.3	1895.1	1911.6	1927.9	1941.6	1952.6	1966.3	1985.6	1999.3	2007.5
10°	1914.2	1933.4	1958.1	1977.3	2002.1	2021.1	2037.6	2062.2	2084.2	2103.4	2114.4
12.5°	1974.6	1999.3	2023.9	2054.2	2087.0	2111.6	2136.3	2169.2	2199.4	2221.4	2232.4
15°	2045.9	2076.1	2103.4	2139.1	2177.5	2210.4	2246.0	2281.8	2303.7	2303.7	2298.1
17.5°	2119.9	2144.7	2177.5	2218.6	2270.7	2311.9	2331.1	2336.6	2328.3	2309.2	2295.3
20°	2194.0	2215.8	2251.5	2300.9	2355.7	2364.0	2344.8	2320.1	2295.3	2262.6	2240.6
22.5°	2254.2	2284.5	2339.2	2396.9	2399.6	2353.0	2300.9	2259.7	2221.4	2183.1	2141.9
25°	2325.6	2366.8	2440.8	2462.8	2391.4	2303.7	2229.7	2169.2	2106.2	2043.1	1996.6
27.5°	2413.3	2473.8	2547.8	2484.6	2344.8	2221.4	2119.9	2029.5	1947.2	1859.4	1807.3
30°	2506.6	2599.9	2616.4	2451.7	2265.3	2106.2	1969.1	1832.0	1727.7	1648.2	1618.0
32.5°	2619.1	2739.7	2640.9	2394.2	2158.3	1950.0	1766.2	1601.6	1513.9	1464.4	1450.8
35°	2789.1	2887.8	2654.8	2333.8	2034.9	1763.5	1533.0	1401.4	1346.6	1313.6	1297.2
37.5°	3033.1	3030.4	2651.9	2259.7	1892.3	1560.4	1346.6	1253.2	1209.4	1182.0	1151.8
40°	3318.3	3140.1	2635.4	2152.8	1700.3	1365.8	1217.7	1129.9	1088.7	1055.9	1020.1
42.5°	3600.9	3214.1	2588.8	1993.8	1461.7	1225.8	1124.4	1044.9	1001.0	965.4	916.0
45°	3844.9	3244.3	2498.4	1774.3	1247.8	1116.1	1064.0	995.5	943.4	888.6	850.2
47.5°	4037.0	3238.7	2353.0	1516.6	1105.3	1039.3	1014.7	968.2	905.0	836.4	787.0
50°	4198.7	3197.6	2155.6	1289.0	1009.2	970.8	962.7	948.9	847.5	789.8	759.6
52.5°	4346.8	3137.4	1944.4	1135.4	927.0	894.1	910.5	896.8	825.5	776.1	746.0
55°	4549.7	3096.2	1736.0	1017.4	830.9	822.8	836.4	855.6	811.8	765.1	732.3
57.5°	4788.3	3118.1	1577.0	885.8	740.5	746.0	792.6	820.1	798.1	748.6	715.8
60°	5062.6	3184.0	1437.1	759.6	666.5	680.1	748.6	787.0	784.3	726.8	688.3
62.5°	5369.7	3252.6	1214.9	663.7	603.3	625.3	696.5	746.0	754.1	704.8	658.2
63°	5430.1	3258.1	1157.3	644.4	592.3	617.0	682.9	735.0	746.0	699.3	652.7
65°	5578.1	3208.7	932.4	592.3	548.4	576.0	641.7	688.3	710.3	669.1	630.8
67.5°	5454.8	2805.5	702.0	529.3	512.8	532.1	589.6	633.6	652.7	633.6	595.0
70°	4988.5	2040.4	548.4	471.7	474.5	488.1	532.1	573.2	595.0	589.6	554.0
72.5°	4017.7	1157.3	458.0	422.4	430.6	447.0	477.2	515.5	534.9	532.1	507.4
75°	2646.4	592.3	386.7	378.5	383.9	397.7	419.6	449.7	471.7	468.9	458.0
77.5°	1310.8	411.3	331.8	334.6	337.4	348.4	364.7	392.2	405.9	408.5	405.9
80°	540.3	320.9	285.2	287.9	290.7	299.0	309.8	334.6	342.9	348.4	351.1
82.5°	323.6	244.1	227.6	233.1	235.9	244.1	252.3	274.3	282.4	290.7	290.7
85°	213.8	170.0	164.6	170.0	175.4	181.0	183.8	197.4	211.2	222.2	227.6
87.5°	115.3	101.5	98.8	101.5	101.5	107.0	112.5	126.1	142.7	153.6	159.1
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):**

	160°	165°	170°	175°	180°
0°	1774.3	1774.3	1774.3	1774.3	1774.3
2.5°	1818.3	1821.0	1818.3	1821.0	1823.6
5°	1908.8	1914.2	1911.6	1911.6	1922.5
7.5°	2012.9	2023.9	2023.9	2029.5	2034.9
10°	2125.4	2136.3	2144.7	2144.7	2152.8
12.5°	2237.9	2243.3	2251.5	2251.5	2251.5
15°	2295.3	2292.7	2290.0	2287.3	2287.3
17.5°	2287.3	2276.2	2270.7	2265.3	2268.0
20°	2226.9	2207.7	2202.1	2194.0	2199.4
22.5°	2122.7	2095.2	2084.2	2070.6	2076.1
25°	1966.3	1933.4	1927.9	1911.6	1919.7
27.5°	1785.3	1768.9	1766.2	1763.5	1777.0
30°	1615.3	1620.8	1623.5	1629.0	1642.7
32.5°	1458.9	1469.9	1472.7	1475.5	1494.6
35°	1305.3	1291.8	1305.3	1299.8	1316.3
37.5°	1138.2	1127.2	1116.1	1102.5	1113.4
40°	998.2	979.1	946.2	929.7	932.4
42.5°	888.6	863.9	836.4	820.1	820.1
45°	817.3	787.0	762.4	751.4	751.4
47.5°	762.4	748.6	735.0	726.8	726.8
50°	740.5	724.0	715.8	710.3	710.3
52.5°	724.0	707.5	699.3	693.9	688.3
55°	710.3	685.5	677.4	674.6	674.6
57.5°	691.1	669.1	658.2	655.5	655.5
60°	661.0	644.4	633.6	630.8	630.8
62.5°	630.8	614.4	603.3	603.3	603.3
63°	625.3	606.0	597.8	597.8	597.8
65°	600.5	581.5	573.2	573.2	570.5
67.5°	567.6	548.4	543.0	543.0	537.5
70°	529.3	512.8	507.4	510.1	499.1
72.5°	491.0	474.5	466.2	466.2	455.3
75°	447.0	430.6	419.6	416.9	405.9
77.5°	397.7	383.9	372.9	361.9	356.4
80°	345.6	334.6	320.9	312.6	304.4
82.5°	290.7	279.7	271.5	282.4	241.4
85°	227.6	216.6	205.7	222.2	172.7
87.5°	167.3	161.9	150.8	131.6	115.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)