

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: INVUE

Report Number: P676206

Luminaire Tested: **CCW-SA-2E-840-U-T1**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676206  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-2E-840-U-T1  
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @1050mA w/  
T1 distribution lens  
Light Source: (32) 4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

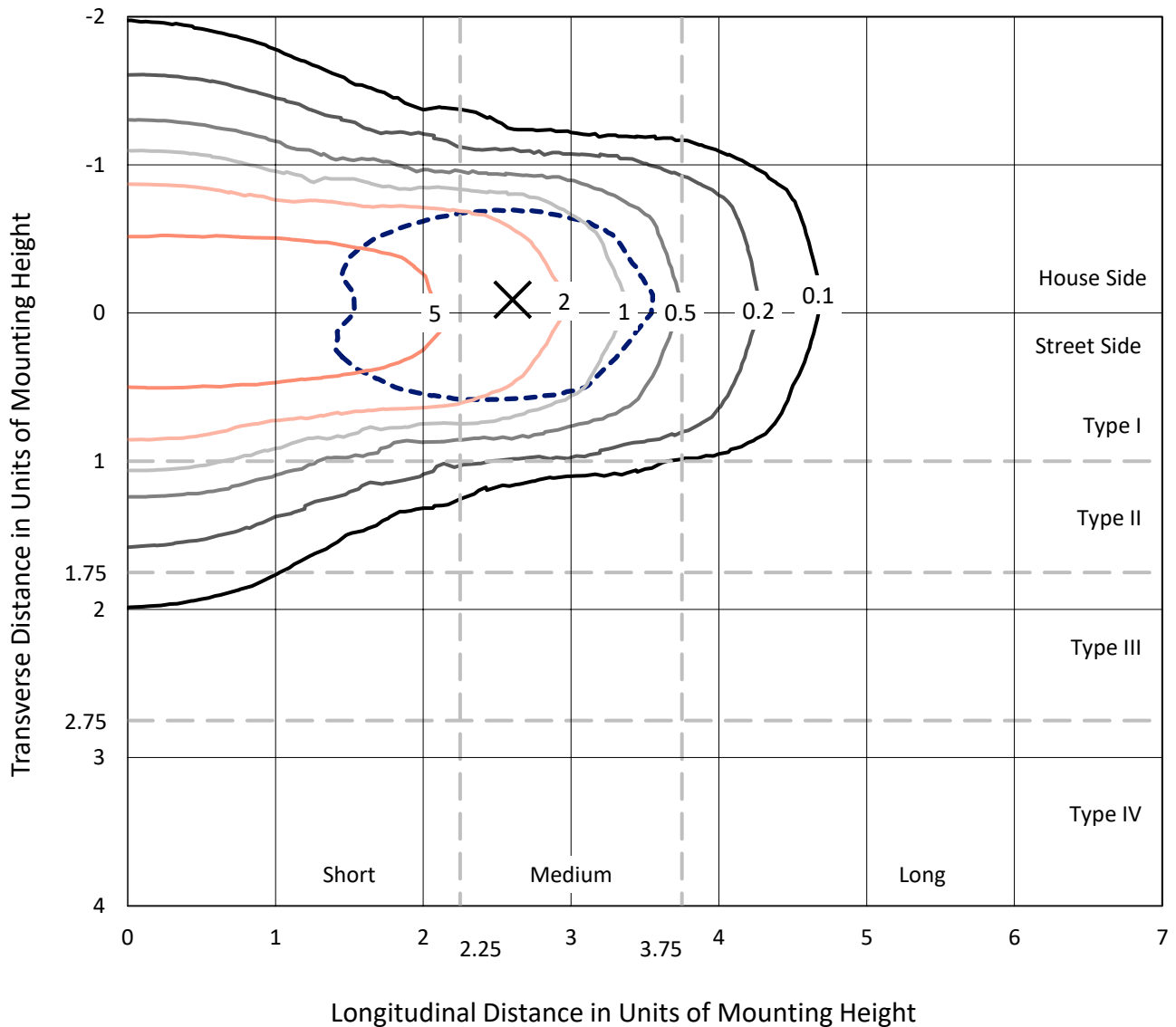
Lumens per Lamp: N/A  
Luminaire Lumens: 11352 lumens  
Efficiency: N/A  
Efficacy: 106.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B3 - U0 - G3

Input Watts (W): 106.6  
Input Voltage (V): 120  
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

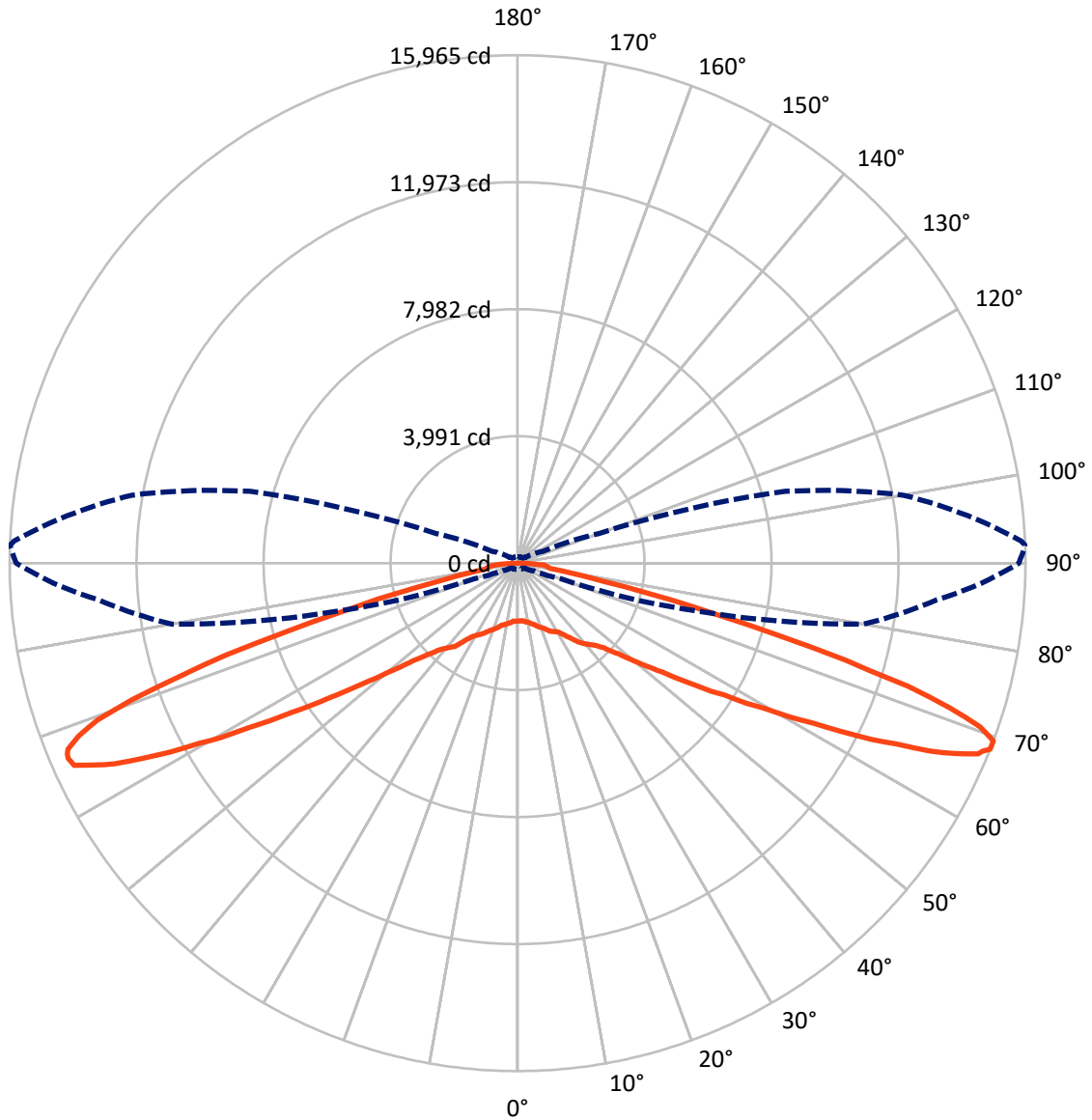
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 8.8 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 92-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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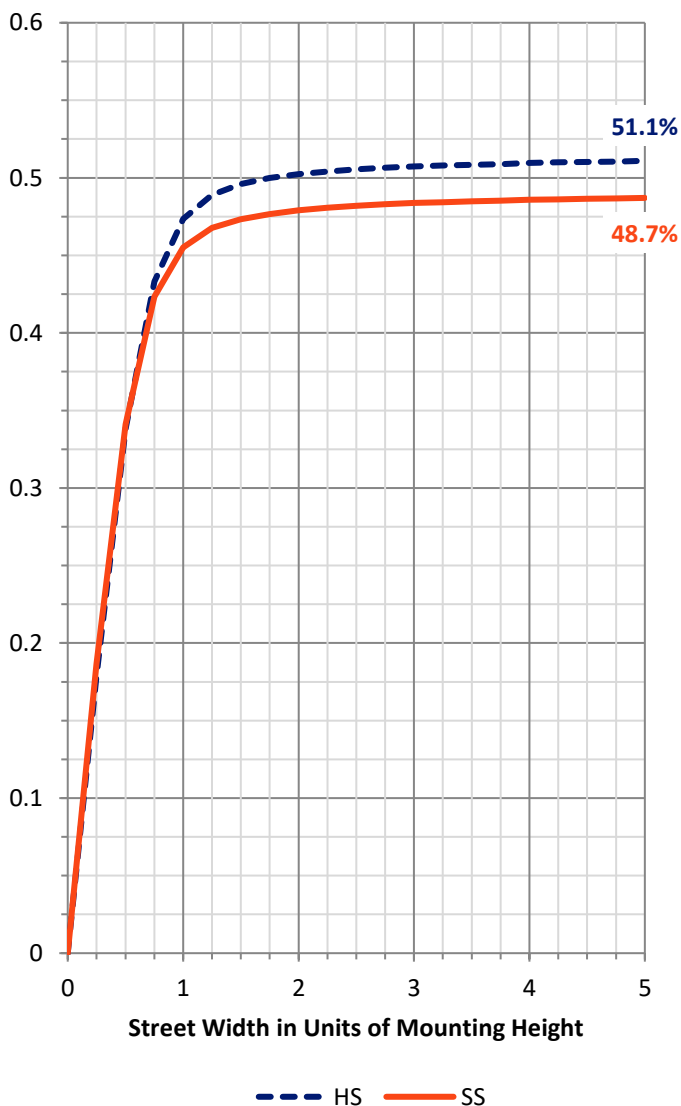
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5846.1	0.0	5846.1
	% Fixture	51.5	0.0	51.5
<b>Street Side</b>	Lumens	5505.9	0.0	5505.9
	% Fixture	48.5	0.0	48.5
<b>Total</b>	Lumens	11352.0	0.0	11352.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.8	1.6
10°-20°	588.9	5.2
20°-30°	1005.0	8.9
30°-40°	1403.2	12.4
40°-50°	1785.0	15.7
50°-60°	2256.9	19.9
60°-70°	2783.4	24.5
70°-80°	1215.9	10.7
80°-90°	131.9	1.2
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°	11352.0	100.0
0°-180°	11352.0	100.0



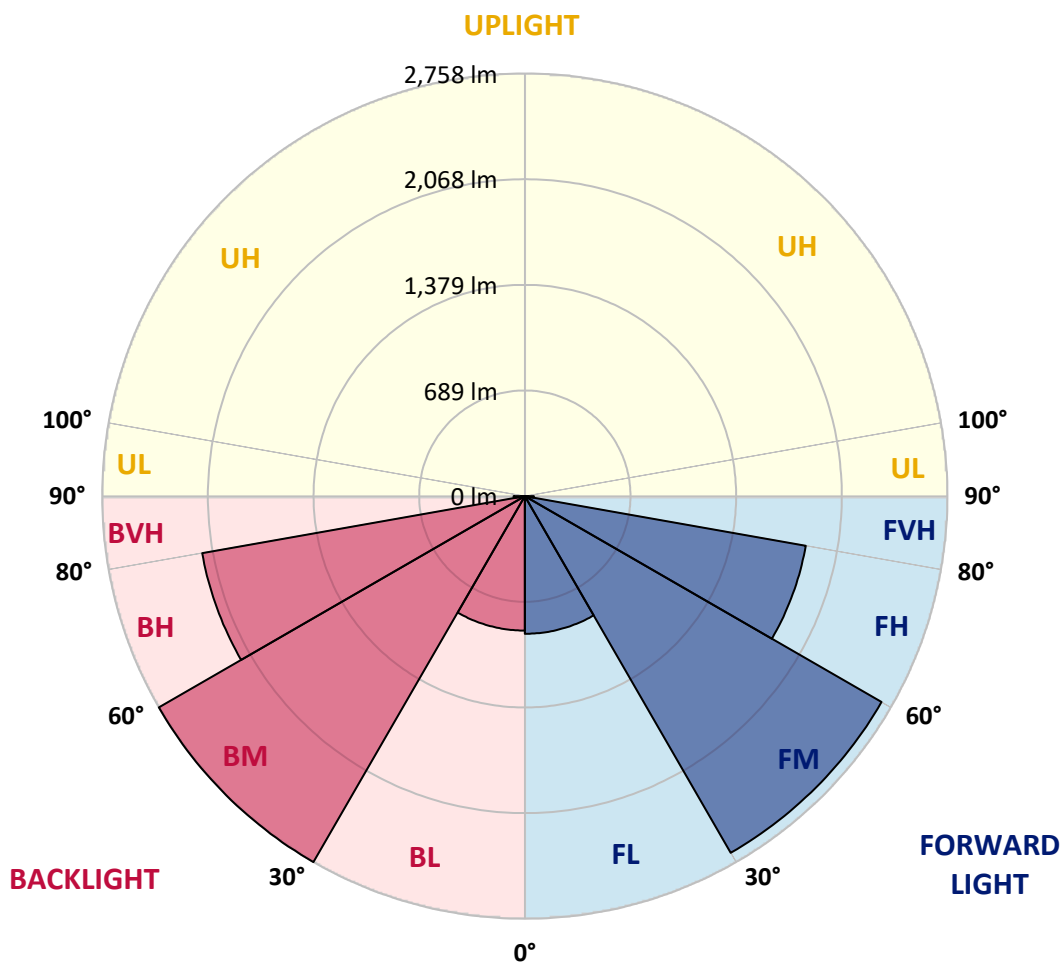
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	898.4	7.9			
FM (30°-60°)	2687.5	23.7			
FH (60°-80°)	1861.5	16.4			G2/5000
FVH (80°-90°)	58.5	0.5			G1/100
BL (0°-30°)	877.3	7.7	B2/1000		
BM (30°-60°)	2757.6	24.3	B3/5000		
BH (60°-80°)	2137.8	18.8	B3/2500		G3/2500
BVH (80°-90°)	73.4	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
0°	1815.3	1815.3	1815.3	1815.3	1815.3	1815.3	1815.3	1815.3	1815.3	1815.3	1815.3
2.5°	1853.6	1851.5	1857.9	1862.1	1843.0	1849.4	1845.1	1840.8	1825.9	1819.5	1806.8
5°	1904.8	1911.2	1932.5	1913.3	1921.8	1911.2	1877.1	1887.7	1868.5	1864.3	1851.5
7.5°	1994.2	1981.5	2011.3	1990.0	1996.4	1975.1	1960.2	1941.0	1936.7	1906.9	1909.0
10°	2013.4	2039.0	2051.8	2047.5	2051.8	2062.4	2034.7	2004.9	1964.4	1955.9	1926.1
12.5°	2000.6	2024.1	2058.2	2085.9	2105.0	2109.3	2098.6	2092.3	2075.2	2026.2	2024.1
15°	1987.9	1970.8	1992.1	2088.0	2151.9	2194.5	2209.4	2173.2	2177.5	2113.6	2088.0
17.5°	1902.6	1877.1	1960.2	2053.9	2132.7	2226.5	2298.9	2288.3	2288.3	2237.1	2200.9
20°	1789.7	1832.3	1874.9	1994.2	2139.1	2279.7	2418.2	2411.8	2386.3	2371.4	2292.5
22.5°	1693.8	1713.0	1791.8	1917.5	2098.6	2294.7	2458.7	2575.9	2516.2	2456.6	2409.7
25°	1627.8	1610.7	1710.9	1840.8	2060.3	2269.1	2535.4	2656.9	2688.8	2644.1	2554.6
27.5°	1534.0	1534.0	1612.9	1736.4	1936.7	2256.3	2610.0	2795.4	2842.2	2776.2	2646.2
30°	1427.5	1440.3	1508.5	1649.1	1845.1	2162.6	2639.8	2955.1	2993.5	2936.0	2801.7
32.5°	1344.4	1344.4	1421.1	1570.3	1781.2	2119.9	2620.6	3112.8	3185.3	3142.6	3004.1
35°	1254.9	1248.5	1303.9	1468.0	1678.9	2036.9	2614.2	3238.5	3400.4	3402.6	3257.7
37.5°	1127.1	1152.7	1223.0	1352.9	1598.0	1955.9	2595.1	3389.8	3679.6	3728.6	3628.4
40°	1041.9	1052.5	1116.4	1259.2	1472.2	1860.0	2567.4	3513.4	3864.9	4033.2	3894.7
42.5°	918.3	933.2	982.2	1159.0	1350.8	1723.7	2445.9	3600.7	4129.1	4320.9	4203.7
45°	788.3	796.8	869.3	1014.2	1220.8	1561.7	2316.0	3741.3	4384.8	4776.8	4708.6
47.5°	632.8	637.1	698.8	850.1	1065.3	1399.8	2115.7	3734.9	4591.4	5232.8	5424.5
50°	494.3	505.0	551.8	675.4	877.8	1201.7	1883.5	3683.8	4851.4	5752.6	6129.7
52.5°	394.2	396.3	426.1	524.1	677.5	1003.5	1634.2	3521.9	5096.4	6261.8	6994.8
55°	326.0	326.0	343.0	402.7	519.9	762.8	1342.3	3253.4	5126.2	6824.3	7938.6
56°	313.2	308.9	323.9	375.0	468.7	688.2	1205.9	3072.3	5168.8	7084.3	8411.6
57°	296.2	298.3	306.8	343.0	421.9	609.4	1054.6	2895.5	5139.0	7297.3	8761.0
58°	287.6	283.4	300.4	323.9	372.9	541.2	950.2	2686.7	5092.1	7472.0	9270.3
59°	274.8	272.7	283.4	304.7	347.3	481.5	822.4	2460.8	5000.5	7697.9	9649.5
60°	270.6	268.5	272.7	289.8	319.6	421.9	724.4	2196.7	4755.5	7930.1	10120.4
61°	257.8	259.9	268.5	279.1	302.5	379.2	652.0	1926.1	4595.7	8126.1	10640.2
62°	259.9	255.7	259.9	268.5	285.5	349.4	571.0	1659.7	4310.2	8347.7	11030.1
63°	247.1	245.0	251.4	262.1	270.6	315.3	498.6	1433.9	3986.4	8398.8	11360.4
64°	242.9	240.8	242.9	257.8	259.9	296.2	441.0	1225.1	3517.6	8486.2	11784.4
65°	232.2	232.2	236.5	242.9	251.4	279.1	394.2	1063.2	3051.0	8256.1	11914.3
66°	223.7	225.8	225.8	236.5	242.9	259.9	362.2	903.4	2603.6	7889.6	12040.0
67°	217.3	217.3	219.5	228.0	234.4	245.0	326.0	781.9	2196.7	7452.8	11846.2
67.5°	213.1	215.2	215.2	223.7	230.1	245.0	311.1	741.4	1964.4	6973.5	11701.3
68°	206.7	208.8	208.8	217.3	223.7	236.5	300.4	677.5	1811.0	6662.4	11432.8
69°	202.4	200.3	200.3	208.8	217.3	225.8	279.1	592.3	1440.3	5793.1	11040.8
70°	189.6	189.6	193.9	200.3	206.7	215.2	257.8	522.0	1218.7	4796.0	10030.9
71°	183.2	181.1	183.2	189.6	196.0	206.7	236.5	462.3	997.1	3982.1	9038.0
72°	170.4	174.7	174.7	181.1	187.5	193.9	221.6	402.7	837.3	3183.1	7945.0
72.5°	168.3	168.3	170.4	176.8	181.1	191.8	213.1	385.6	764.9	2806.0	7486.9
73°	161.9	161.9	164.1	170.4	174.7	185.4	206.7	347.3	696.7	2497.1	6630.4
74°	155.5	153.4	153.4	161.9	164.1	174.7	193.9	306.8	583.8	1881.3	5322.2
75°	144.9	144.9	147.0	151.3	153.4	161.9	179.0	272.7	492.2	1459.5	4163.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
77.5°	119.3	121.4	123.6	127.8	127.8	134.2	147.0	189.6	300.4	739.3	1911.2
80°	87.4	91.6	98.0	104.4	102.3	102.3	115.1	136.4	179.0	332.4	732.9
82.5°	70.3	74.6	68.2	76.7	76.7	72.4	83.1	100.1	121.4	164.1	262.1
85°	46.9	49.0	40.5	46.9	44.7	44.7	55.4	59.7	74.6	91.6	130.0
87.5°	21.3	21.3	17.0	19.2	19.2	19.2	27.7	21.3	32.0	44.7	76.7
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):**

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
0°	1815.3	1815.3	1815.3	1815.3	1815.3	1815.3	1815.3	1815.3	1815.3	1815.3	1815.3
2.5°	1819.5	1828.1	1828.1	1819.5	1813.1	1819.5	1815.3	1804.6	1815.3	1819.5	1821.7
5°	1845.1	1828.1	1836.6	1817.4	1830.2	1828.1	1823.8	1834.4	1836.6	1836.6	1851.5
7.5°	1872.8	1894.1	1866.4	1868.5	1874.9	1849.4	1857.9	1862.1	1853.6	1870.7	1883.5
10°	1921.8	1930.3	1921.8	1889.8	1911.2	1894.1	1887.7	1906.9	1902.6	1906.9	1926.1
12.5°	1966.5	1981.5	1958.0	1955.9	1945.2	1930.3	1938.8	1936.7	1966.5	1970.8	1994.2
15°	2058.2	2019.8	2011.3	2009.2	2004.9	1998.5	2002.8	2004.9	2043.2	2049.6	2105.0
17.5°	2137.0	2130.6	2083.7	2100.8	2100.8	2075.2	2064.6	2100.8	2130.6	2162.6	2200.9
20°	2218.0	2211.6	2160.4	2162.6	2143.4	2166.8	2154.0	2188.1	2239.3	2249.9	2284.0
22.5°	2313.8	2286.1	2249.9	2254.2	2260.6	2243.5	2235.0	2281.9	2333.0	2362.8	2365.0
25°	2465.1	2394.8	2365.0	2369.2	2360.7	2347.9	2354.3	2414.0	2439.5	2503.5	2490.7
27.5°	2546.1	2505.6	2484.3	2435.3	2437.4	2418.2	2443.8	2533.3	2584.4	2633.4	2535.4
30°	2644.1	2618.5	2524.8	2507.7	2505.6	2497.1	2543.9	2659.0	2735.7	2763.4	2622.8
32.5°	2835.8	2733.6	2710.1	2695.2	2661.1	2671.8	2695.2	2846.5	2967.9	2961.5	2703.7
35°	3055.3	2985.0	2918.9	2906.1	2901.9	2872.1	2912.5	3089.4	3183.1	3155.4	2733.6
37.5°	3406.8	3300.3	3210.8	3161.8	3153.3	3132.0	3227.9	3368.5	3489.9	3381.3	2757.0
40°	3579.4	3460.1	3377.0	3347.2	3353.6	3383.4	3477.1	3692.3	3745.6	3545.3	2776.2
42.5°	3826.6	3696.6	3532.5	3517.6	3498.4	3513.4	3694.5	3984.2	4029.0	3766.9	2703.7
45°	4265.5	4069.5	3879.8	3794.6	3798.9	3839.3	4120.6	4438.0	4355.0	3920.3	2588.7
47.5°	4819.4	4531.8	4378.4	4263.3	4318.7	4274.0	4721.4	4975.0	4691.6	4114.2	2448.1
50°	5652.5	5249.8	5041.0	4902.5	4926.0	4964.3	5418.1	5633.3	5064.4	4207.9	2232.9
52.5°	6702.9	6185.1	5878.3	5693.0	5710.0	5793.1	6379.0	6313.0	5490.6	4286.8	1945.2
55°	7959.9	7427.3	6832.8	6756.1	6737.0	6935.1	7580.7	7024.6	5874.1	4161.1	1647.0
56°	8624.7	8057.9	7440.1	7282.4	7235.5	7374.0	8132.5	7380.4	6006.2	4020.4	1504.2
57°	9189.3	8648.1	7970.6	7702.1	7761.8	8021.7	8680.1	7714.9	6127.6	3875.6	1370.0
58°	9964.8	9347.0	8631.1	8426.5	8373.3	8579.9	9270.3	8051.5	6168.1	3726.4	1246.4
59°	10738.2	9996.8	9351.2	8978.4	8993.3	9370.4	9851.9	8452.1	6229.9	3536.8	1088.7
60°	11326.3	10953.4	10090.5	9811.4	9773.1	10318.5	10431.4	8720.6	6295.9	3281.1	977.9
61°	12159.3	11673.6	10870.3	10510.3	10614.7	11051.4	11057.8	9057.2	6197.9	2957.3	841.6
62°	12758.0	12630.2	11786.5	11443.5	11411.5	11991.0	11709.8	9353.3	6112.7	2650.5	743.6
63°	13459.0	13459.0	12689.9	12421.4	12436.3	12894.4	11993.2	9649.5	6014.7	2311.7	654.1
64°	13823.3	14281.4	13571.9	13194.8	13292.8	13689.1	12498.1	9843.4	5712.1	1968.7	575.3
65°	14138.7	14826.9	14432.7	14258.0	14108.9	14343.2	12934.9	10024.5	5249.8	1674.7	511.3
66°	14405.0	15340.3	15210.4	15022.9	15008.0	14954.7	13020.1	10018.1	4772.5	1414.7	447.4
67°	14270.8	15351.0	15587.5	15666.3	15642.9	15080.4	12871.0	9790.1	4161.1	1195.3	398.4
67.5°	14149.3	15263.6	15813.3	15768.6	15866.6	15186.9	12896.5	9511.0	3726.4	1082.3	375.0
68°	14042.8	15146.5	15904.9	15962.5	15913.5	15199.7	12755.9	9289.4	3430.3	1016.3	353.7
69°	13235.3	14590.4	15757.9	15964.6	15838.9	14711.8	12308.5	8712.0	2725.0	867.2	326.0
70°	12425.7	13870.2	15044.2	15423.4	15267.9	13768.0	11743.9	7793.7	2247.8	741.4	294.0
71°	11305.0	12532.2	14093.9	14321.9	14134.4	12694.1	10576.3	6824.3	1749.2	628.5	262.1
72°	9783.7	10825.6	12317.0	12868.8	12591.9	11149.4	9396.0	5639.7	1416.9	528.4	238.6
72.5°	9029.5	10096.9	11535.1	11579.8	11633.1	10478.3	8895.3	4953.7	1235.7	490.0	232.2
73°	8313.6	9359.7	10604.0	10761.7	10535.8	9347.0	8147.4	4429.5	1129.2	447.4	223.7
74°	6737.0	7333.5	8364.7	8518.1	8320.0	7621.2	6658.1	3396.2	899.1	385.6	204.5
75°	5300.9	5629.1	6562.3	6468.5	6172.4	5927.3	5162.5	2595.1	728.7	338.8	189.6



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**CANDELA DISTRIBUTION (continued):**

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
77.5°	2382.0	2580.2	2735.7	2735.7	2752.7	2627.0	2379.9	1191.0	449.6	245.0	155.5
80°	907.6	1016.3	1050.4	1052.5	1067.4	1105.8	1029.1	585.9	266.3	174.7	125.7
82.5°	658.4	920.4	990.7	939.6	943.9	852.2	394.2	259.9	168.3	121.4	91.6
85°	596.6	801.1	848.0	841.6	843.7	788.3	232.2	127.8	98.0	76.7	63.9
87.5°	289.8	283.4	300.4	338.8	330.2	428.3	196.0	63.9	42.6	32.0	32.0
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):**

	135°	145°	155°	165°	175°	180°
0°	1815.3	1815.3	1815.3	1815.3	1815.3	1815.3
2.5°	1804.6	1802.5	1832.3	1802.5	1819.5	1806.8
5°	1825.9	1834.4	1840.8	1853.6	1823.8	1853.6
7.5°	1889.8	1898.4	1900.5	1911.2	1898.4	1896.2
10°	1938.8	1960.2	1972.9	1930.3	1955.9	1953.8
12.5°	2034.7	2013.4	2011.3	2002.8	1979.3	1970.8
15°	2102.9	2070.9	2051.8	2017.7	1990.0	1979.3
17.5°	2198.8	2137.0	2058.2	1987.9	1938.8	1900.5
20°	2258.4	2147.6	1990.0	1906.9	1832.3	1849.4
22.5°	2296.8	2137.0	1928.2	1821.7	1747.1	1768.4
25°	2309.6	2083.7	1885.6	1753.5	1681.0	1666.1
27.5°	2273.4	2021.9	1802.5	1653.3	1589.4	1602.2
30°	2256.3	1932.5	1725.8	1578.8	1493.6	1506.3
32.5°	2211.6	1840.8	1623.5	1474.4	1412.6	1391.3
35°	2147.6	1764.1	1525.5	1384.9	1310.3	1293.3
37.5°	2068.8	1668.3	1440.3	1269.8	1203.8	1191.0
40°	1951.6	1553.2	1316.7	1169.7	1093.0	1090.9
42.5°	1849.4	1442.4	1201.7	1050.4	973.7	977.9
45°	1719.4	1293.3	1069.6	939.6	862.9	867.2
47.5°	1553.2	1154.8	943.9	799.0	735.1	730.8
50°	1357.2	997.1	790.5	666.9	613.6	603.0
52.5°	1169.7	837.3	647.7	536.9	492.2	487.9
55°	933.2	652.0	505.0	421.9	387.8	389.9
56°	848.0	600.8	460.2	385.6	360.1	360.1
57°	767.0	532.7	417.6	355.8	332.4	332.4
58°	677.5	468.7	379.2	321.7	311.1	302.5
59°	615.7	426.1	343.0	304.7	287.6	285.5
60°	543.3	383.5	319.6	285.5	272.7	270.6
61°	481.5	345.2	294.0	266.3	262.1	262.1
62°	430.4	319.6	272.7	257.8	255.7	249.3
63°	385.6	294.0	262.1	245.0	238.6	245.0
64°	345.2	270.6	253.5	240.8	232.2	236.5
65°	313.2	259.9	242.9	234.4	225.8	228.0
66°	291.9	242.9	234.4	223.7	219.5	221.6
67°	264.2	234.4	225.8	215.2	213.1	215.2
67.5°	255.7	228.0	221.6	210.9	208.8	210.9
68°	249.3	223.7	219.5	208.8	206.7	204.5
69°	232.2	215.2	208.8	204.5	200.3	198.1
70°	217.3	206.7	202.4	196.0	191.8	189.6
71°	208.8	196.0	193.9	187.5	183.2	181.1
72°	198.1	189.6	185.4	176.8	174.7	176.8
72.5°	196.0	185.4	183.2	174.7	172.6	172.6
73°	189.6	176.8	179.0	170.4	166.2	170.4
74°	176.8	172.6	168.3	161.9	159.8	159.8
75°	166.2	161.9	157.7	153.4	153.4	153.4



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82.5°	85.2	87.4	91.6	85.2	81.0	76.7
85°	55.4	57.5	57.5	51.1	59.7	55.4
87.5°	27.7	29.8	27.7	25.6	29.8	29.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)