

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: P676211

Luminaire Tested: **CCW-SA-1E-850-U-T1**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676211  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1E-850-U-T1  
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @1050mA w/  
T1 distribution lens  
Light Source: (16) 5000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

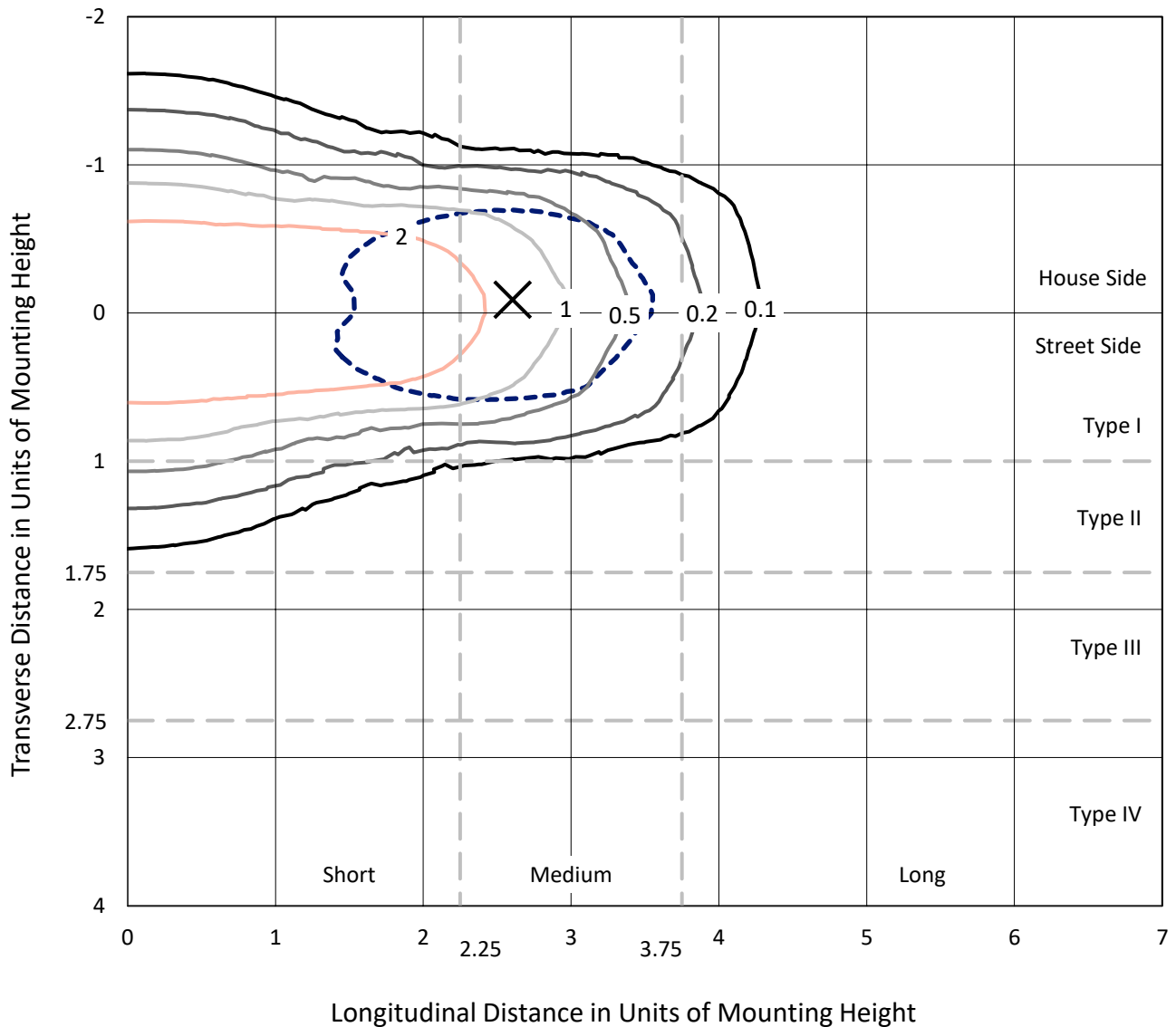
Lumens per Lamp: N/A  
Luminaire Lumens: 5809.6 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B3 - U0 - G3

Input Watts (W): 56.1  
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

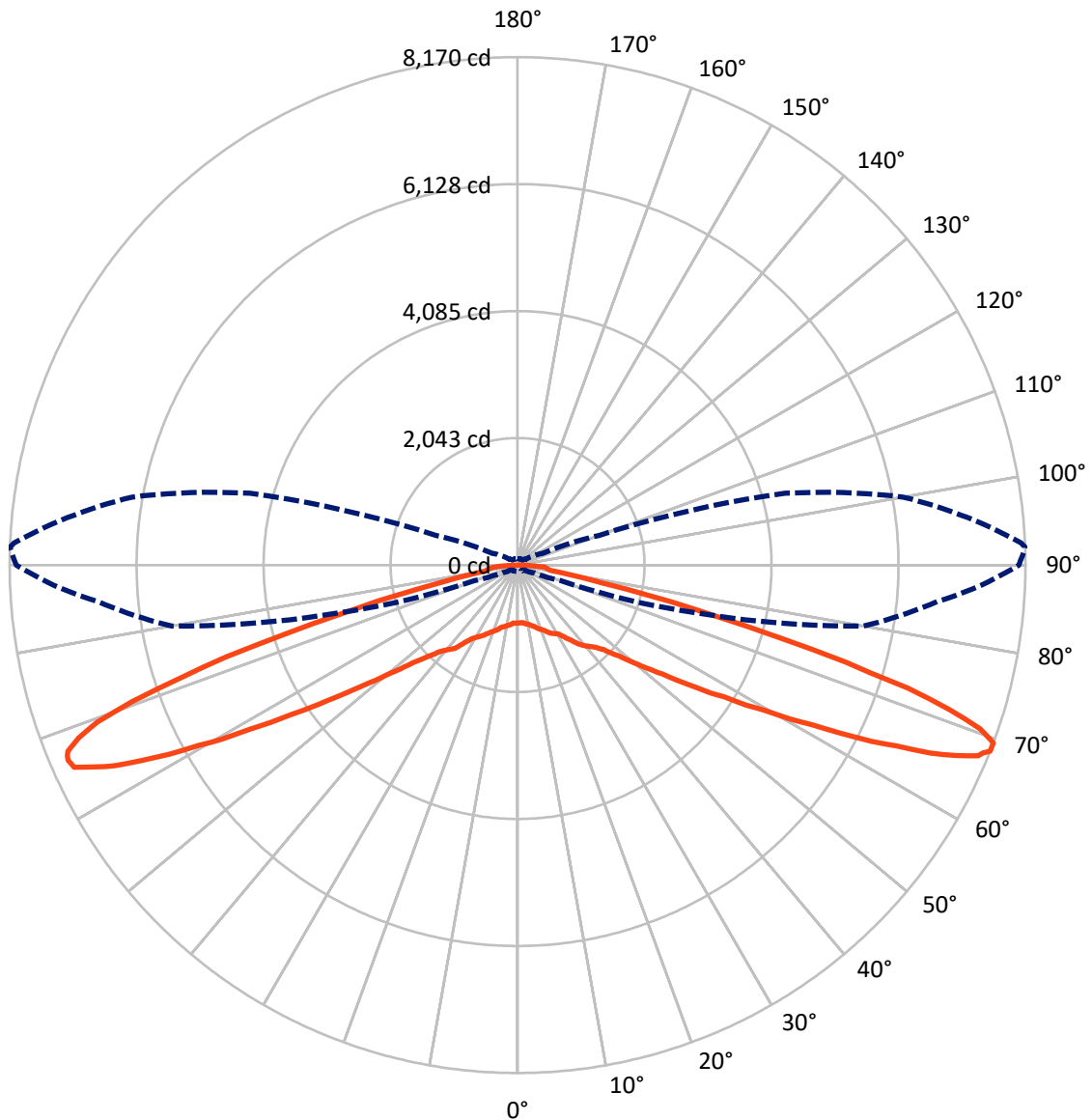
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 4.5 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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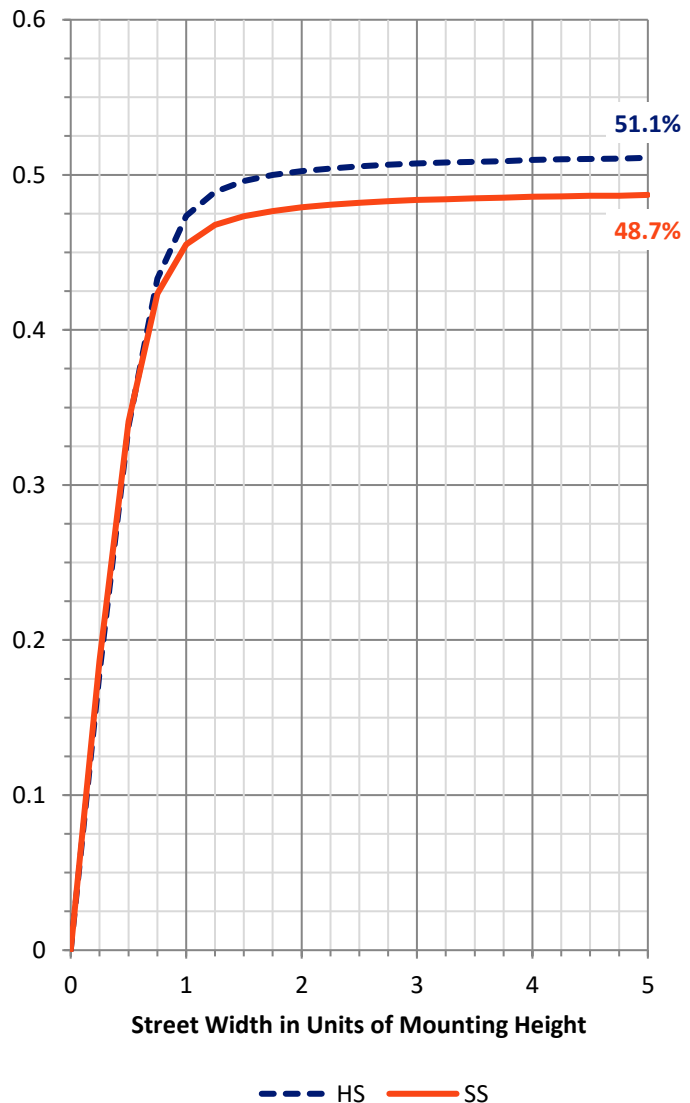
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2991.8	0.0	2991.8
	% Fixture	51.5	0.0	51.5
<b>Street Side</b>	Lumens	2817.7	0.0	2817.7
	% Fixture	48.5	0.0	48.5
<b>Total</b>	Lumens	5809.6	0.0	5809.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.1	1.6
10°-20°	301.4	5.2
20°-30°	514.3	8.9
30°-40°	718.1	12.4
40°-50°	913.5	15.7
50°-60°	1155.0	19.9
60°-70°	1424.4	24.5
70°-80°	622.2	10.7
80°-90°	67.5	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°	5809.6	100.0
0°-180°	5809.6	100.0



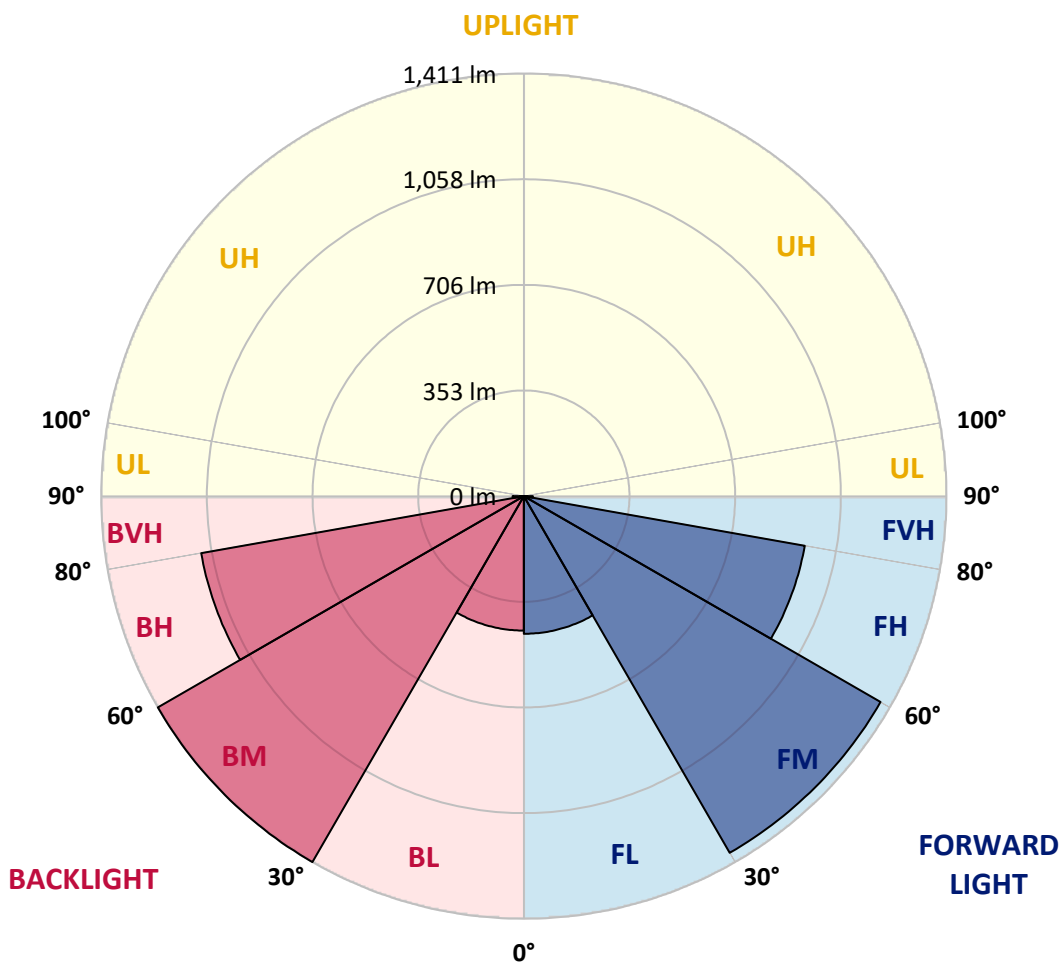
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	459.8	7.9			
FM (30°-60°)	1375.4	23.7			
FH (60°-80°)	952.7	16.4			G1/1800
FVH (80°-90°)	29.9	0.5			G1/100
BL (0°-30°)	449.0	7.7	B1/500		
BM (30°-60°)	1411.3	24.3	B2/2500		
BH (60°-80°)	1094.0	18.8	B3/2500		G3/2500
BVH (80°-90°)	37.6	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°	929.0	929.0	929.0	929.0	929.0	929.0	929.0	929.0	929.0	929.0	929.0
2.5°	948.6	947.5	950.8	953.0	943.2	946.4	944.3	942.1	934.4	931.2	924.6
5°	974.8	978.1	989.0	979.2	983.5	978.1	960.6	966.1	956.3	954.1	947.5
7.5°	1020.6	1014.0	1029.3	1018.4	1021.7	1010.8	1003.1	993.3	991.1	975.9	977.0
10°	1030.4	1043.5	1050.0	1047.8	1050.0	1055.5	1041.3	1026.0	1005.3	1001.0	985.7
12.5°	1023.9	1035.9	1053.3	1067.5	1077.3	1079.5	1074.0	1070.7	1062.0	1036.9	1035.9
15°	1017.3	1008.6	1019.5	1068.6	1101.3	1123.1	1130.7	1112.2	1114.4	1081.6	1068.6
17.5°	973.7	960.6	1003.1	1051.1	1091.5	1139.4	1176.5	1171.1	1171.1	1144.9	1126.4
20°	915.9	937.7	959.5	1020.6	1094.7	1166.7	1237.6	1234.3	1221.2	1213.6	1173.2
22.5°	866.8	876.7	917.0	981.3	1074.0	1174.3	1258.3	1318.3	1287.7	1257.2	1233.2
25°	833.0	824.3	875.6	942.1	1054.4	1161.2	1297.5	1359.7	1376.0	1353.2	1307.4
27.5°	785.1	785.1	825.4	888.7	991.1	1154.7	1335.7	1430.6	1454.6	1420.8	1354.2
30°	730.5	737.1	772.0	843.9	944.3	1106.7	1351.0	1512.3	1532.0	1502.5	1433.8
32.5°	688.0	688.0	727.3	803.6	911.5	1084.9	1341.2	1593.0	1630.1	1608.3	1537.4
35°	642.2	639.0	667.3	751.3	859.2	1042.4	1337.9	1657.4	1740.2	1741.3	1667.2
37.5°	576.8	589.9	625.9	692.4	817.8	1001.0	1328.1	1734.8	1883.1	1908.1	1856.9
40°	533.2	538.6	571.4	644.4	753.4	951.9	1313.9	1798.0	1977.9	2064.1	1993.2
42.5°	469.9	477.6	502.7	593.2	691.3	882.1	1251.7	1842.7	2113.1	2211.3	2151.3
45°	403.4	407.8	444.9	519.0	624.8	799.2	1185.2	1914.7	2244.0	2444.6	2409.7
47.5°	323.8	326.0	357.6	435.1	545.2	716.4	1082.7	1911.4	2349.7	2678.0	2776.1
50°	253.0	258.4	282.4	345.6	449.2	615.0	963.9	1885.3	2482.8	2944.0	3137.0
52.5°	201.7	202.8	218.1	268.2	346.7	513.6	836.3	1802.4	2608.2	3204.6	3579.7
55°	166.8	166.8	175.5	206.1	266.1	390.4	686.9	1665.0	2623.4	3492.5	4062.7
56°	160.3	158.1	165.7	191.9	239.9	352.2	617.1	1572.3	2645.2	3625.5	4304.8
57°	151.6	152.7	157.0	175.5	215.9	311.8	539.7	1481.8	2630.0	3734.5	4483.6
58°	147.2	145.0	153.7	165.7	190.8	277.0	486.3	1375.0	2606.0	3823.9	4744.2
59°	140.7	139.6	145.0	155.9	177.7	246.4	420.9	1259.4	2559.1	3939.5	4938.3
60°	138.5	137.4	139.6	148.3	163.6	215.9	370.7	1124.2	2433.7	4058.4	5179.3
61°	131.9	133.0	137.4	142.8	154.8	194.1	333.7	985.7	2351.9	4158.7	5445.3
62°	133.0	130.8	133.0	137.4	146.1	178.8	292.2	849.4	2205.8	4272.1	5644.8
63°	126.5	125.4	128.7	134.1	138.5	161.4	255.1	733.8	2040.1	4298.2	5813.9
64°	124.3	123.2	124.3	131.9	133.0	151.6	225.7	627.0	1800.2	4342.9	6030.8
65°	118.9	118.9	121.0	124.3	128.7	142.8	201.7	544.1	1561.4	4225.2	6097.4
66°	114.5	115.6	115.6	121.0	124.3	133.0	185.4	462.3	1332.4	4037.6	6161.7
67°	111.2	111.2	112.3	116.7	119.9	125.4	166.8	400.2	1124.2	3814.1	6062.5
67.5°	109.0	110.1	110.1	114.5	117.8	125.4	159.2	379.4	1005.3	3568.8	5988.3
68°	105.8	106.9	106.9	111.2	114.5	121.0	153.7	346.7	926.8	3409.6	5850.9
69°	103.6	102.5	102.5	106.9	111.2	115.6	142.8	303.1	737.1	2964.7	5650.3
70°	97.0	97.0	99.2	102.5	105.8	110.1	131.9	267.1	623.7	2454.4	5133.5
71°	93.8	92.7	93.8	97.0	100.3	105.8	121.0	236.6	510.3	2037.9	4625.4
72°	87.2	89.4	89.4	92.7	96.0	99.2	113.4	206.1	428.5	1629.0	4066.0
72.5°	86.1	86.1	87.2	90.5	92.7	98.1	109.0	197.4	391.4	1436.0	3831.6
73°	82.9	82.9	84.0	87.2	89.4	94.9	105.8	177.7	356.6	1277.9	3393.2
74°	79.6	78.5	78.5	82.9	84.0	89.4	99.2	157.0	298.8	962.8	2723.7
75°	74.1	74.1	75.2	77.4	78.5	82.9	91.6	139.6	251.9	746.9	2130.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
77.5°	61.1	62.2	63.2	65.4	65.4	68.7	75.2	97.0	153.7	378.4	978.1
80°	44.7	46.9	50.2	53.4	52.3	52.3	58.9	69.8	91.6	170.1	375.1
82.5°	36.0	38.2	34.9	39.3	39.3	37.1	42.5	51.2	62.2	84.0	134.1
85°	24.0	25.1	20.7	24.0	22.9	22.9	28.3	30.5	38.2	46.9	66.5
87.5°	10.9	10.9	8.7	9.8	9.8	9.8	14.2	10.9	16.4	22.9	39.3
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):**

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
0°	929.0	929.0	929.0	929.0	929.0	929.0	929.0	929.0	929.0	929.0	929.0
2.5°	931.2	935.5	935.5	931.2	927.9	931.2	929.0	923.5	929.0	931.2	932.3
5°	944.3	935.5	939.9	930.1	936.6	935.5	933.4	938.8	939.9	939.9	947.5
7.5°	958.4	969.3	955.2	956.3	959.5	946.4	950.8	953.0	948.6	957.3	963.9
10°	983.5	987.9	983.5	967.2	978.1	969.3	966.1	975.9	973.7	975.9	985.7
12.5°	1006.4	1014.0	1002.1	1001.0	995.5	987.9	992.2	991.1	1006.4	1008.6	1020.6
15°	1053.3	1033.7	1029.3	1028.2	1026.0	1022.8	1024.9	1026.0	1045.7	1048.9	1077.3
17.5°	1093.6	1090.4	1066.4	1075.1	1075.1	1062.0	1056.6	1075.1	1090.4	1106.7	1126.4
20°	1135.1	1131.8	1105.6	1106.7	1096.9	1108.9	1102.4	1119.8	1146.0	1151.4	1168.9
22.5°	1184.1	1170.0	1151.4	1153.6	1156.9	1148.2	1143.8	1167.8	1194.0	1209.2	1210.3
25°	1261.6	1225.6	1210.3	1212.5	1208.1	1201.6	1204.9	1235.4	1248.5	1281.2	1274.6
27.5°	1303.0	1282.3	1271.4	1246.3	1247.4	1237.6	1250.7	1296.5	1322.6	1347.7	1297.5
30°	1353.2	1340.1	1292.1	1283.4	1282.3	1277.9	1301.9	1360.8	1400.0	1414.2	1342.2
32.5°	1451.3	1398.9	1387.0	1379.3	1361.9	1367.3	1379.3	1456.7	1518.9	1515.6	1383.7
35°	1563.6	1527.6	1493.8	1487.3	1485.1	1469.8	1490.5	1581.0	1629.0	1614.8	1398.9
37.5°	1743.5	1689.0	1643.2	1618.1	1613.7	1602.8	1651.9	1723.9	1786.0	1730.4	1410.9
40°	1831.8	1770.8	1728.2	1713.0	1716.2	1731.5	1779.5	1889.6	1916.9	1814.4	1420.8
42.5°	1958.3	1891.8	1807.8	1800.2	1790.4	1798.0	1890.7	2039.0	2061.9	1927.8	1383.7
45°	2182.9	2082.6	1985.6	1942.0	1944.1	1964.8	2108.8	2271.2	2228.7	2006.3	1324.8
47.5°	2466.4	2319.2	2240.7	2181.8	2210.2	2187.3	2416.3	2546.0	2401.0	2105.5	1252.8
50°	2892.8	2686.7	2579.8	2508.9	2520.9	2540.6	2772.8	2882.9	2591.8	2153.5	1142.7
52.5°	3430.3	3165.3	3008.3	2913.5	2922.2	2964.7	3264.6	3230.8	2809.9	2193.8	995.5
55°	4073.6	3801.0	3496.8	3457.6	3447.8	3549.2	3879.5	3595.0	3006.2	2129.5	842.9
56°	4413.8	4123.8	3807.6	3726.9	3702.9	3773.8	4161.9	3777.0	3073.8	2057.5	769.8
57°	4702.8	4425.8	4079.1	3941.7	3972.2	4105.2	4442.2	3948.2	3135.9	1983.4	701.1
58°	5099.7	4783.5	4417.1	4312.4	4285.2	4390.9	4744.2	4120.5	3156.6	1907.1	637.9
59°	5495.5	5116.0	4785.6	4594.8	4602.5	4795.5	5041.9	4325.5	3188.2	1810.0	557.2
60°	5796.4	5605.6	5164.0	5021.2	5001.5	5280.7	5338.5	4462.9	3222.0	1679.2	500.5
61°	6222.7	5974.1	5563.1	5378.8	5432.2	5655.8	5659.0	4635.2	3171.9	1513.4	430.7
62°	6529.1	6463.7	6031.9	5856.4	5840.0	6136.6	5992.7	4786.7	3128.3	1356.4	380.5
63°	6887.9	6887.9	6494.2	6356.9	6364.5	6598.9	6137.7	4938.3	3078.1	1183.1	334.7
64°	7074.3	7308.8	6945.7	6752.7	6802.8	7005.6	6396.1	5037.5	2923.3	1007.5	294.4
65°	7235.7	7587.9	7386.2	7296.8	7220.4	7340.4	6619.6	5130.2	2686.7	857.0	261.7
66°	7372.0	7850.7	7784.2	7688.2	7680.6	7653.3	6663.3	5126.9	2442.4	724.0	229.0
67°	7303.3	7856.1	7977.2	8017.5	8005.5	7717.6	6586.9	5010.3	2129.5	611.7	203.9
67.5°	7241.2	7811.4	8092.7	8069.8	8120.0	7772.2	6600.0	4867.4	1907.1	553.9	191.9
68°	7186.6	7751.4	8139.6	8169.1	8144.0	7778.7	6528.0	4754.0	1755.5	520.1	181.0
69°	6773.4	7466.9	8064.4	8170.1	8105.8	7529.0	6299.1	4458.5	1394.6	443.8	166.8
70°	6359.0	7098.3	7699.1	7893.2	7813.6	7046.0	6010.1	3988.6	1150.3	379.4	150.5
71°	5785.5	6413.6	7212.8	7329.5	7233.5	6496.4	5412.6	3492.5	895.2	321.7	134.1
72°	5007.0	5540.2	6303.4	6585.8	6444.1	5705.9	4808.5	2886.2	725.1	270.4	122.1
72.5°	4621.0	5167.3	5903.3	5926.2	5953.4	5362.4	4552.3	2535.1	632.4	250.8	118.9
73°	4254.6	4790.0	5426.8	5507.5	5391.9	4783.5	4169.6	2266.9	577.9	229.0	114.5
74°	3447.8	3753.1	4280.8	4359.3	4257.9	3900.3	3407.4	1738.1	460.1	197.4	104.7
75°	2712.8	2880.8	3358.3	3310.4	3158.8	3033.4	2642.0	1328.1	372.9	173.4	97.0



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**CANDELA DISTRIBUTION (continued):**

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
77.5°	1219.0	1320.4	1400.0	1400.0	1408.8	1344.4	1217.9	609.5	230.1	125.4	79.6
80°	464.5	520.1	537.6	538.6	546.3	565.9	526.6	299.9	136.3	89.4	64.3
82.5°	336.9	471.0	507.0	480.9	483.0	436.1	201.7	133.0	86.1	62.2	46.9
85°	305.3	410.0	434.0	430.7	431.8	403.4	118.9	65.4	50.2	39.3	32.7
87.5°	148.3	145.0	153.7	173.4	169.0	219.2	100.3	32.7	21.8	16.4	16.4
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°	929.0	929.0	929.0	929.0	929.0	929.0
2.5°	923.5	922.5	937.7	922.5	931.2	924.6
5°	934.4	938.8	942.1	948.6	933.4	948.6
7.5°	967.2	971.5	972.6	978.1	971.5	970.4
10°	992.2	1003.1	1009.7	987.9	1001.0	999.9
12.5°	1041.3	1030.4	1029.3	1024.9	1013.0	1008.6
15°	1076.2	1059.8	1050.0	1032.6	1018.4	1013.0
17.5°	1125.3	1093.6	1053.3	1017.3	992.2	972.6
20°	1155.8	1099.1	1018.4	975.9	937.7	946.4
22.5°	1175.4	1093.6	986.8	932.3	894.1	905.0
25°	1182.0	1066.4	965.0	897.4	860.3	852.7
27.5°	1163.4	1034.8	922.5	846.1	813.4	820.0
30°	1154.7	989.0	883.2	808.0	764.3	770.9
32.5°	1131.8	942.1	830.9	754.5	722.9	712.0
35°	1099.1	902.8	780.7	708.7	670.6	661.9
37.5°	1058.7	853.8	737.1	649.9	616.1	609.5
40°	998.8	794.9	673.8	598.6	559.4	558.3
42.5°	946.4	738.2	615.0	537.6	498.3	500.5
45°	879.9	661.9	547.4	480.9	441.6	443.8
47.5°	794.9	591.0	483.0	408.9	376.2	374.0
50°	694.6	510.3	404.5	341.3	314.0	308.6
52.5°	598.6	428.5	331.5	274.8	251.9	249.7
55°	477.6	333.7	258.4	215.9	198.4	199.5
56°	434.0	307.5	235.5	197.4	184.3	184.3
57°	392.5	272.6	213.7	182.1	170.1	170.1
58°	346.7	239.9	194.1	164.6	159.2	154.8
59°	315.1	218.1	175.5	155.9	147.2	146.1
60°	278.0	196.3	163.6	146.1	139.6	138.5
61°	246.4	176.6	150.5	136.3	134.1	134.1
62°	220.3	163.6	139.6	131.9	130.8	127.6
63°	197.4	150.5	134.1	125.4	122.1	125.4
64°	176.6	138.5	129.8	123.2	118.9	121.0
65°	160.3	133.0	124.3	119.9	115.6	116.7
66°	149.4	124.3	119.9	114.5	112.3	113.4
67°	135.2	119.9	115.6	110.1	109.0	110.1
67.5°	130.8	116.7	113.4	107.9	106.9	107.9
68°	127.6	114.5	112.3	106.9	105.8	104.7
69°	118.9	110.1	106.9	104.7	102.5	101.4
70°	111.2	105.8	103.6	100.3	98.1	97.0
71°	106.9	100.3	99.2	96.0	93.8	92.7
72°	101.4	97.0	94.9	90.5	89.4	90.5
72.5°	100.3	94.9	93.8	89.4	88.3	88.3
73°	97.0	90.5	91.6	87.2	85.0	87.2
74°	90.5	88.3	86.1	82.9	81.8	81.8
75°	85.0	82.9	80.7	78.5	78.5	78.5



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	135°	145°	155°	165°	175°	180°
77.5°	72.0	70.9	72.0	67.6	66.5	65.4
80°	57.8	57.8	58.9	55.6	53.4	52.3
82.5°	43.6	44.7	46.9	43.6	41.4	39.3
85°	28.3	29.4	29.4	26.2	30.5	28.3
87.5°	14.2	15.3	14.2	13.1	15.3	15.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)