

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: P677332

Luminaire Tested: **CCW-SA-2A-830-U-SLL-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677332  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-2A-830-U-SLL-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @350mA w/  
SLL distribution lens and House Side Shield  
Light Source: (32) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

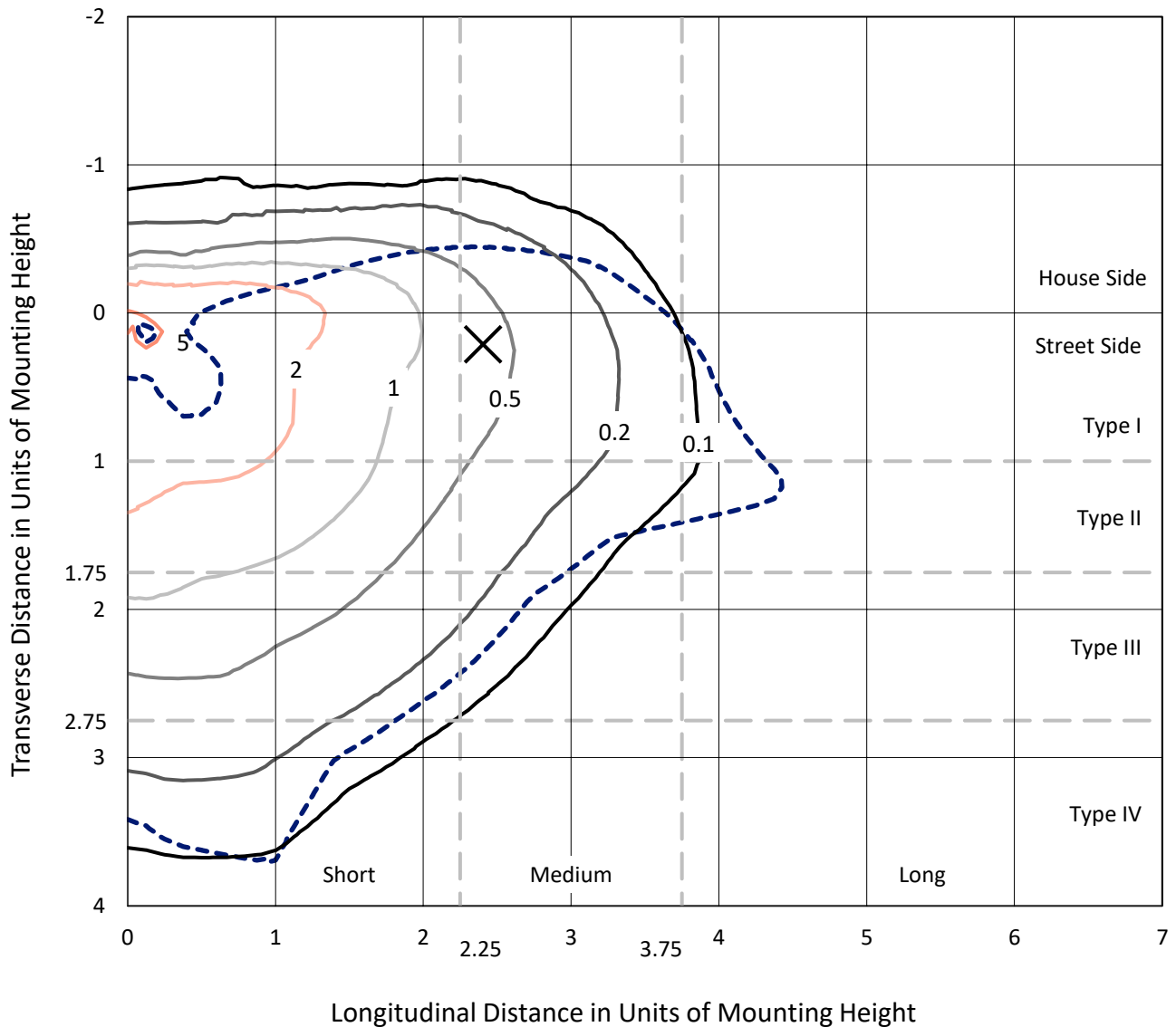
Lumens per Lamp: N/A  
Luminaire Lumens: 3154.5 lumens  
Efficiency: N/A  
Efficacy: 87.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1

Input Watts (W): 36.2  
Input Voltage (V): 120  
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

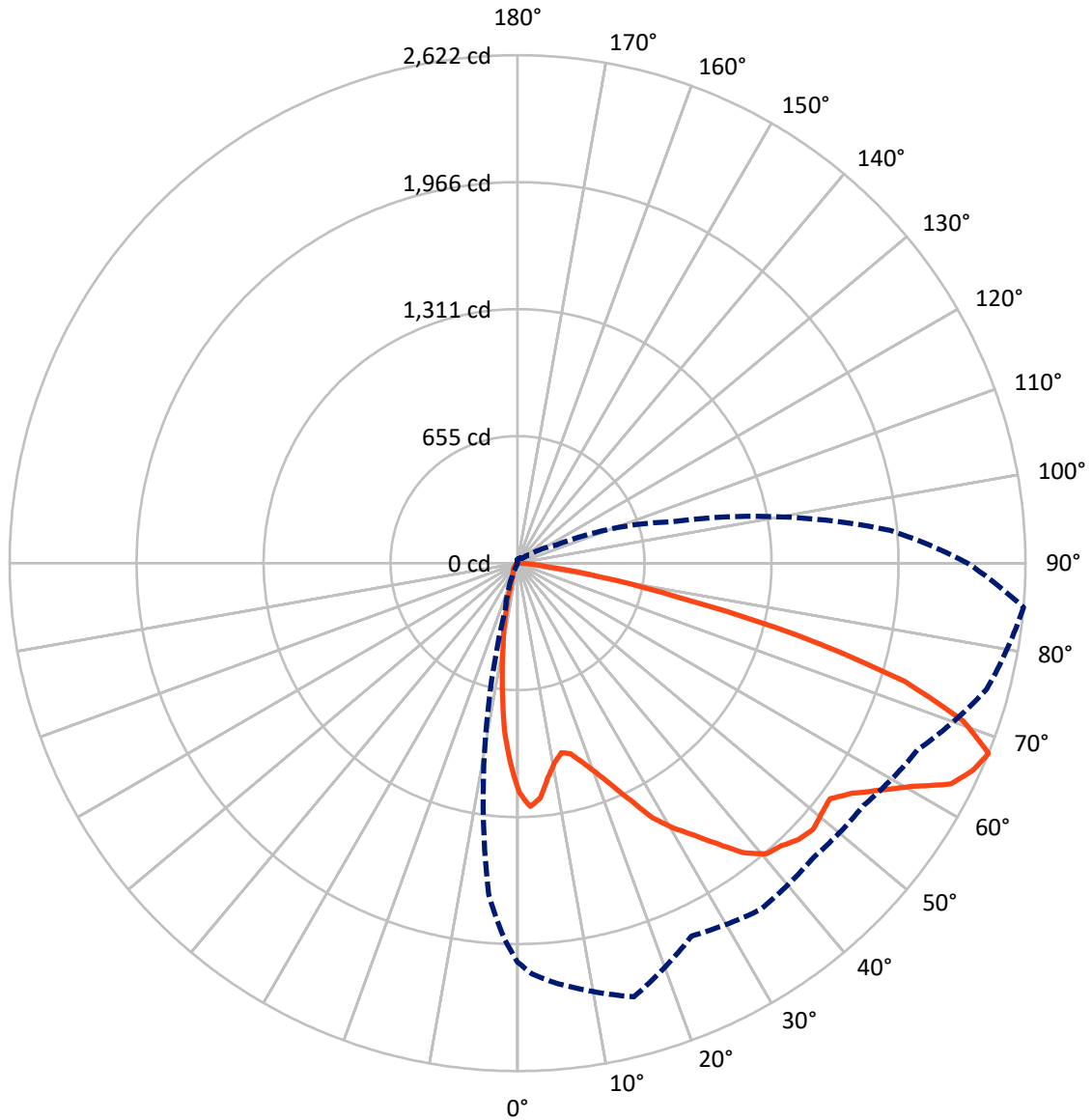
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.9 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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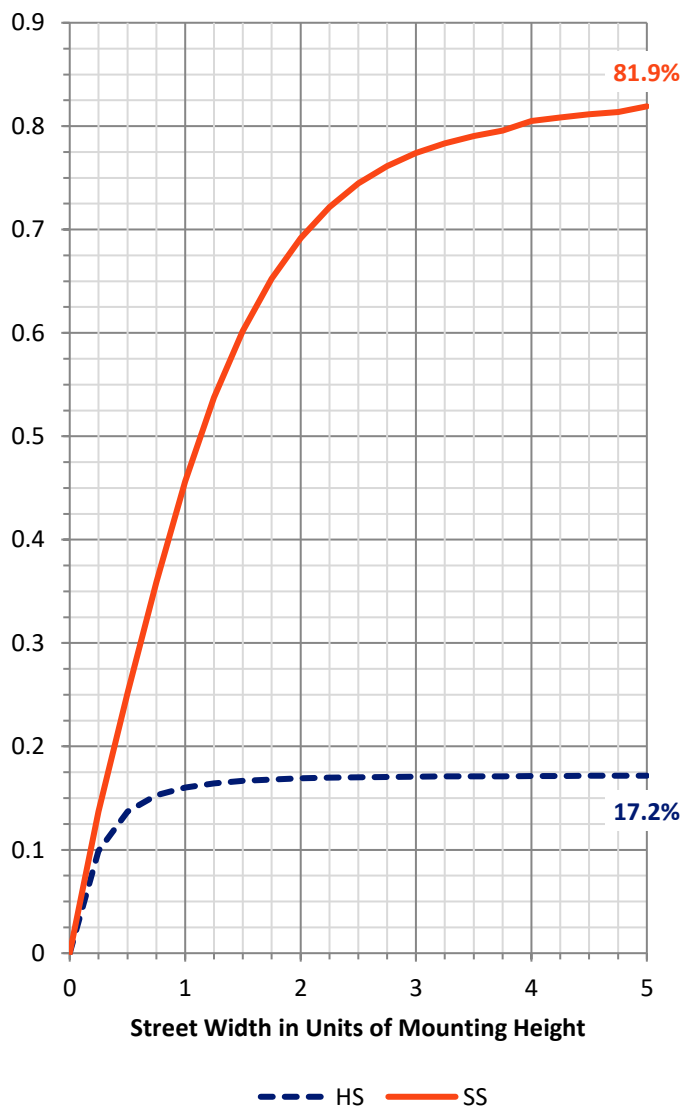
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	547.7	0.0	547.7
	% Fixture	17.4	0.0	17.4
<b>Street Side</b>	Lumens	2606.8	0.0	2606.8
	% Fixture	82.6	0.0	82.6
<b>Total</b>	Lumens	3154.5	0.0	3154.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.1	2.9
10°-20°	176.7	5.6
20°-30°	244.5	7.8
30°-40°	345.6	11.0
40°-50°	470.5	14.9
50°-60°	623.1	19.8
60°-70°	723.5	22.9
70°-80°	409.7	13.0
80°-90°	70.8	2.2
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°	3154.5	100.0
0°-180°	3154.5	100.0



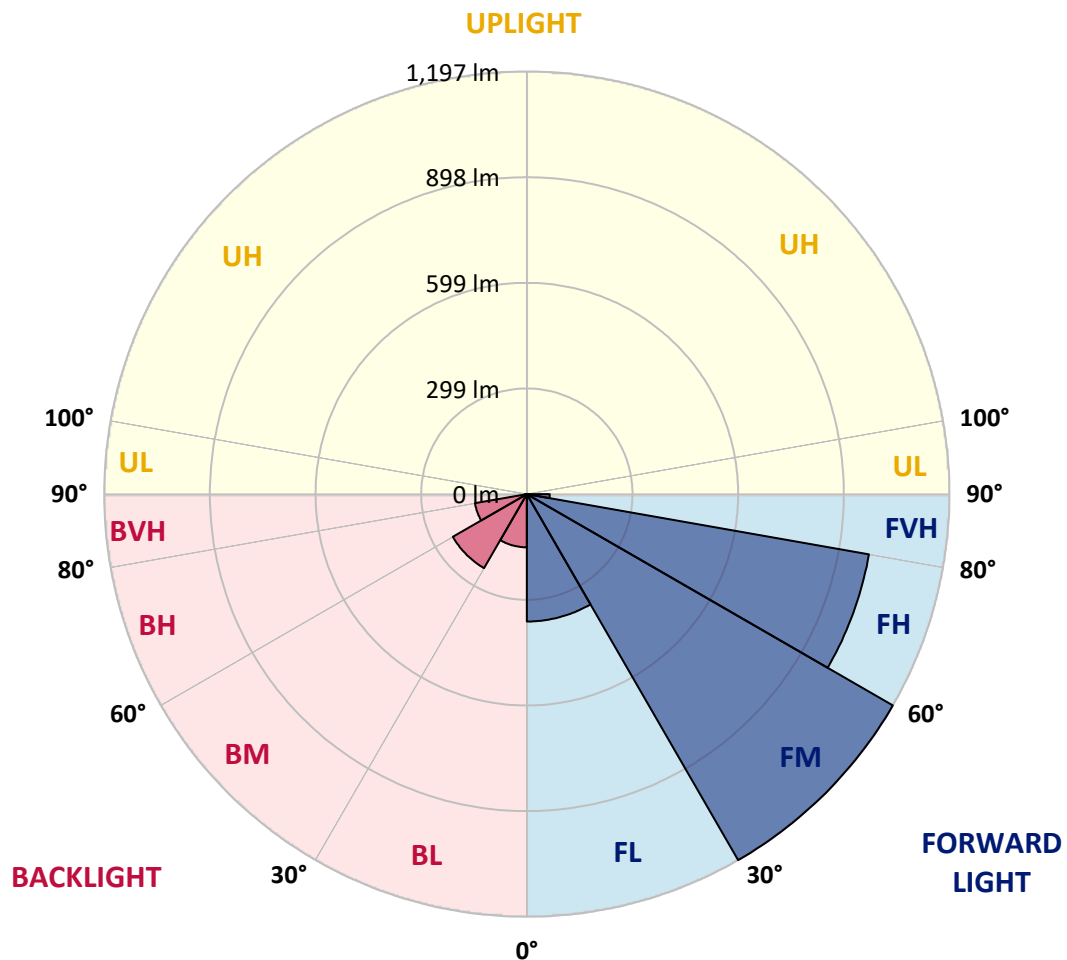
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	360.7	11.4			
FM (30°-60°)	1197.2	38.0			
FH (60°-80°)	984.0	31.2			G1/1800
FVH (80°-90°)	64.8	2.1			G1/100
BL (0°-30°)	150.6	4.8	B1/500		
BM (30°-60°)	242.0	7.7	B1/1000		
BH (60°-80°)	149.2	4.7	B1/500		G1/500
BVH (80°-90°)	6.0	0.2			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1
2.5°	1232.4	1258.5	1259.3	1271.1	1282.9	1282.9	1310.7	1304.0	1279.6	1275.4	1257.7
5°	1241.7	1250.9	1257.7	1317.5	1368.0	1363.0	1378.1	1368.0	1320.8	1260.2	1218.9
7.5°	1161.6	1171.7	1198.7	1300.6	1368.9	1391.6	1420.2	1357.1	1307.4	1197.9	1118.7
10°	1055.5	1074.9	1124.6	1240.8	1325.1	1397.5	1397.5	1347.0	1250.9	1143.9	1047.1
12.5°	996.5	1035.3	1062.2	1180.2	1289.7	1339.4	1337.7	1310.7	1248.4	1113.6	1004.1
15°	1006.6	1017.6	1074.9	1166.7	1239.1	1236.6	1266.9	1258.5	1214.7	1140.6	1020.1
17.5°	1053.0	1069.8	1119.5	1166.7	1201.2	1191.1	1190.3	1230.7	1233.2	1186.1	1079.9
20°	1128.8	1178.5	1202.1	1216.4	1174.3	1131.3	1126.3	1182.7	1226.5	1244.2	1151.5
22.5°	1250.1	1282.9	1330.9	1257.7	1148.2	1094.2	1084.1	1146.5	1234.9	1313.3	1244.2
25°	1368.9	1394.1	1440.5	1346.1	1177.6	1086.7	1069.0	1122.9	1266.9	1409.3	1356.2
27.5°	1494.4	1516.3	1521.3	1411.0	1193.6	1071.5	1050.4	1122.9	1293.9	1459.8	1490.2
30°	1571.0	1597.1	1602.2	1468.3	1219.8	1084.1	1074.0	1127.9	1312.4	1502.8	1586.2
32.5°	1656.9	1663.7	1659.5	1478.4	1248.4	1121.2	1079.1	1161.6	1333.5	1554.2	1673.8
35°	1759.7	1771.5	1728.5	1524.7	1312.4	1144.8	1129.6	1202.9	1369.7	1577.8	1779.9
37.5°	1838.1	1875.1	1778.2	1542.4	1325.1	1194.5	1197.0	1288.8	1395.0	1606.4	1897.0
40°	1985.5	1923.1	1862.5	1603.0	1373.1	1278.7	1265.2	1377.3	1480.0	1624.9	1973.7
42.5°	2066.3	2033.5	1895.3	1608.9	1447.2	1395.0	1398.3	1477.5	1524.7	1677.2	1994.7
45°	2086.6	2052.0	1940.0	1613.1	1520.5	1532.3	1590.4	1605.6	1590.4	1711.7	2034.3
47.5°	2137.9	2063.0	1934.9	1669.6	1639.3	1684.7	1758.9	1791.7	1679.7	1699.1	2052.9
50°	2127.8	2084.9	1924.0	1693.2	1784.1	1904.6	1954.3	1940.8	1779.1	1672.9	2032.6
52.5°	2085.7	2039.4	1957.7	1757.2	1919.8	2065.5	2134.6	2100.9	1867.5	1731.9	2019.2
55°	2147.2	2111.8	2001.5	1844.0	2021.7	2207.0	2255.9	2230.6	1976.2	1786.7	2095.8
57.5°	2213.8	2206.2	2120.2	1945.9	2142.2	2352.7	2352.7	2321.6	2070.5	1865.9	2209.5
60°	2309.8	2326.6	2207.9	2013.3	2183.4	2344.3	2466.5	2430.2	2165.7	2004.8	2338.4
62.5°	2278.6	2332.5	2320.7	2158.2	2230.6	2385.6	2452.1	2479.1	2283.7	2174.2	2510.3
65°	2178.4	2235.7	2319.9	2253.3	2195.2	2285.4	2319.0	2400.8	2342.6	2333.4	2581.0
67.5°	2058.8	2121.1	2173.3	2317.4	2123.6	2183.4	2153.9	2180.1	2278.6	2507.7	2621.5
70°	1797.6	1857.4	1940.0	2175.0	1934.1	1880.2	1872.6	1860.0	2013.3	2445.4	2437.8
72.5°	1478.4	1506.2	1642.6	1768.1	1431.2	1421.1	1432.9	1418.6	1596.3	2213.8	2088.2
75°	1106.9	1134.7	1212.2	1357.9	974.6	916.5	983.9	1050.4	1218.9	1718.4	1500.3
77.5°	832.3	867.6	916.5	1015.9	715.2	624.2	633.5	696.6	881.1	1376.4	840.7
80°	540.0	535.7	630.1	699.2	538.3	555.1	531.5	577.9	638.5	736.2	429.6
82.5°	311.7	315.9	355.5	401.0	374.9	428.8	309.2	516.4	455.7	299.9	160.1
85°	175.2	182.8	219.0	278.0	235.0	157.5	128.9	256.1	286.4	123.0	77.5
87.5°	17.7	15.2	29.5	105.3	64.0	26.1	38.7	61.5	69.1	46.3	22.7
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1
2.5°	1232.4	1232.4	1211.3	1176.0	1161.6	1136.4	1101.8	1112.8	1101.0	1058.0	1047.1
5°	1181.8	1141.4	1097.6	1043.7	1012.5	948.5	928.3	892.1	898.0	861.7	863.4
7.5°	1076.6	1044.5	970.4	899.7	838.2	782.6	704.2	674.7	646.1	631.8	648.6
10°	1015.1	955.2	854.2	761.5	679.8	630.1	577.9	537.4	500.4	472.6	466.7
12.5°	970.4	917.3	795.2	682.3	618.3	577.9	529.9	474.3	438.0	390.0	375.7
15°	956.9	892.1	763.2	651.2	588.8	522.3	467.5	412.8	365.6	315.0	297.4
17.5°	1003.3	928.3	762.3	625.9	538.3	466.7	390.9	329.4	281.4	235.0	224.1
20°	1081.6	967.0	786.8	610.7	490.3	394.2	308.3	246.8	192.9	162.6	155.0
22.5°	1170.9	1032.7	789.3	570.3	442.2	321.8	224.9	162.6	132.3	117.9	113.7
25°	1280.4	1138.0	819.6	537.4	385.8	244.3	160.1	124.7	107.0	98.6	96.9
27.5°	1370.5	1211.3	852.5	502.9	330.2	181.1	125.5	101.9	92.7	84.2	83.4
30°	1464.0	1295.6	861.7	481.8	282.2	149.1	107.8	90.1	80.0	75.8	75.0
32.5°	1545.8	1387.4	891.2	447.3	236.7	131.4	97.7	80.9	74.1	67.4	66.5
35°	1651.0	1440.5	905.5	428.8	219.9	118.8	89.3	74.1	64.0	59.8	58.1
37.5°	1763.9	1491.8	914.8	414.4	205.5	111.2	84.2	69.9	60.7	54.8	53.1
40°	1869.2	1564.3	901.3	396.8	194.6	101.9	80.9	64.9	56.4	50.5	48.0
42.5°	1950.1	1635.0	897.1	379.9	182.8	98.6	76.7	62.3	53.1	46.3	45.5
45°	1995.6	1683.1	867.6	366.4	173.5	100.2	75.0	59.0	50.5	44.6	41.3
47.5°	1984.6	1720.1	875.2	362.2	160.9	93.5	74.1	56.4	46.3	41.3	38.7
50°	2045.3	1795.1	862.6	348.7	151.6	84.2	80.9	56.4	45.5	39.6	37.1
52.5°	2055.4	1863.3	889.5	324.3	137.3	77.5	80.0	55.6	43.8	37.9	34.5
55°	2139.6	1942.5	941.8	310.8	125.5	67.4	73.3	53.9	39.6	34.5	32.9
57.5°	2254.2	2106.8	975.5	298.2	109.5	59.0	61.5	53.1	36.2	32.0	29.5
60°	2364.5	2172.5	978.0	275.5	94.3	53.1	48.0	53.1	33.7	28.6	26.1
62.5°	2447.1	2172.5	961.1	256.1	82.6	47.2	42.1	50.5	30.3	25.3	23.6
65°	2402.4	2114.4	917.3	240.1	75.0	41.3	36.2	38.7	27.0	21.9	20.2
67.5°	2322.4	1933.2	820.5	220.7	74.1	36.2	31.2	28.6	23.6	19.4	17.7
70°	2194.4	1689.0	683.2	198.8	72.4	32.9	27.8	24.4	21.1	16.8	15.2
72.5°	1768.1	1395.0	561.0	186.2	70.8	28.6	23.6	21.1	17.7	14.3	12.6
75°	1224.8	891.2	432.1	159.2	69.1	26.1	21.9	18.5	15.2	11.8	11.0
77.5°	734.5	595.6	278.8	119.6	45.5	21.1	18.5	14.3	12.6	10.1	9.3
80°	343.7	281.4	112.9	46.3	21.9	15.2	12.6	11.0	10.1	8.4	7.6
82.5°	134.8	118.8	54.8	27.0	17.7	11.8	10.1	9.3	8.4	6.7	5.9
85°	72.4	64.0	26.1	18.5	12.6	8.4	8.4	7.6	6.7	5.9	5.1
87.5°	16.0	11.8	11.0	11.0	9.3	6.7	6.7	5.9	5.1	4.2	3.4
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):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1
2.5°	1041.2	1053.8	1033.6	1046.2	1028.5	1042.0	1043.7	1031.1	1034.4	1051.3	1058.9
5°	887.0	878.6	860.1	854.2	855.0	844.1	848.3	854.2	863.4	868.5	883.6
7.5°	639.4	658.7	657.9	672.2	673.1	671.4	659.6	634.3	642.7	636.0	644.4
10°	457.4	465.8	481.8	491.1	507.9	498.7	471.7	461.6	456.6	455.7	464.1
12.5°	365.6	345.4	343.7	347.1	355.5	344.5	331.1	319.3	325.2	336.9	346.2
15°	283.0	266.2	244.3	240.9	242.6	237.5	223.2	208.1	212.3	224.1	230.8
17.5°	217.3	198.0	182.8	172.7	169.3	151.6	130.6	117.9	114.6	113.7	119.6
20°	146.6	143.2	140.7	128.0	128.0	102.8	85.1	75.8	75.8	77.5	78.3
22.5°	109.5	105.3	106.1	103.6	96.9	76.7	67.4	64.9	64.9	66.5	66.5
25°	95.2	89.3	87.6	86.8	80.0	65.7	59.0	56.4	56.4	58.1	58.1
27.5°	80.9	79.2	76.7	73.3	67.4	56.4	52.2	49.7	50.5	51.4	50.5
30°	74.1	69.9	66.5	66.5	59.8	50.5	47.2	45.5	43.8	45.5	46.3
32.5°	65.7	63.2	61.5	59.0	51.4	44.6	41.3	39.6	38.7	38.7	39.6
35°	56.4	56.4	54.8	51.4	44.6	40.4	36.2	34.5	33.7	34.5	34.5
37.5°	50.5	48.0	48.9	45.5	39.6	35.4	31.2	29.5	29.5	28.6	29.5
40°	47.2	43.0	40.4	38.7	35.4	30.3	27.0	25.3	24.4	24.4	24.4
42.5°	42.1	38.7	33.7	32.9	32.0	26.1	21.9	21.1	20.2	19.4	19.4
45°	39.6	34.5	30.3	26.1	26.1	21.9	18.5	16.8	16.0	15.2	16.0
47.5°	36.2	31.2	26.1	21.9	21.1	17.7	14.3	12.6	11.8	11.8	11.8
50°	34.5	27.8	22.7	18.5	16.0	14.3	11.0	9.3	8.4	8.4	8.4
52.5°	32.0	26.1	20.2	16.0	12.6	11.0	8.4	6.7	5.9	5.9	5.9
55°	28.6	23.6	17.7	13.5	11.0	8.4	5.9	4.2	3.4	3.4	3.4
57.5°	27.0	21.1	15.2	11.8	8.4	5.9	3.4	2.5	2.5	1.7	2.5
60°	24.4	18.5	12.6	9.3	6.7	4.2	2.5	0.8	0.8	0.8	0.8
62.5°	21.1	16.0	11.0	7.6	5.1	2.5	0.8	0.0	0.0	0.0	0.0
65°	17.7	12.6	8.4	5.9	3.4	0.8	0.0	0.0	0.0	0.0	0.0
67.5°	15.2	11.0	6.7	4.2	2.5	0.0	0.0	0.0	0.0	0.0	0.0
70°	13.5	9.3	5.1	3.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	11.0	7.6	4.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	9.3	5.9	2.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	7.6	4.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	5.9	3.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.1	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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):**

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1	1186.1
2.5°	1069.8	1064.8	1090.0	1131.3	1152.4	1193.6	1203.7	1229.9	1223.1	1232.4
5°	885.3	895.4	932.5	993.2	1015.1	1074.9	1131.3	1187.7	1224.0	1241.7
7.5°	657.0	690.7	736.2	791.8	848.3	926.6	1022.6	1088.3	1123.7	1161.6
10°	489.4	525.6	577.9	632.6	724.4	812.0	908.1	989.8	1020.1	1055.5
12.5°	385.0	441.4	502.1	561.0	615.8	699.2	817.9	936.7	969.6	996.5
15°	267.9	336.9	423.7	500.4	577.0	649.5	772.5	916.5	961.1	1006.6
17.5°	148.3	203.0	302.4	410.2	523.1	634.3	787.6	953.6	1021.0	1053.0
20°	85.9	107.8	178.6	306.6	455.7	601.5	795.2	1023.5	1112.8	1128.8
22.5°	70.8	78.3	101.1	192.1	373.2	580.4	833.9	1121.2	1212.2	1250.1
25°	60.7	66.5	78.3	115.4	282.2	535.7	858.4	1243.3	1327.6	1368.9
27.5°	53.9	59.8	69.1	85.1	192.1	474.3	898.8	1353.7	1437.9	1494.4
30°	47.2	52.2	61.5	72.4	133.1	405.2	933.3	1434.6	1553.3	1571.0
32.5°	42.1	46.3	53.1	62.3	98.6	307.5	961.1	1518.0	1618.2	1656.9
35°	36.2	41.3	45.5	53.1	75.0	231.7	944.3	1582.8	1713.4	1759.7
37.5°	32.0	35.4	39.6	44.6	63.2	181.1	909.8	1660.3	1795.1	1838.1
40°	27.0	29.5	34.5	39.6	57.3	139.8	870.2	1753.8	1909.7	1985.5
42.5°	22.7	25.3	28.6	37.1	47.2	103.6	790.1	1826.3	2002.3	2066.3
45°	17.7	21.1	26.1	37.1	37.9	76.7	707.6	1880.2	2054.5	2086.6
47.5°	13.5	16.8	25.3	32.0	30.3	53.1	609.9	1941.7	2108.5	2137.9
50°	10.1	13.5	28.6	27.8	25.3	40.4	548.4	1984.6	2111.8	2127.8
52.5°	6.7	10.1	23.6	21.1	21.1	35.4	531.5	1982.9	2120.2	2085.7
55°	5.1	7.6	13.5	15.2	18.5	31.2	516.4	2046.1	2122.8	2147.2
57.5°	3.4	5.9	9.3	11.8	16.0	27.0	485.2	2121.9	2201.1	2213.8
60°	1.7	4.2	6.7	9.3	13.5	23.6	441.4	2177.5	2296.3	2309.8
62.5°	0.8	2.5	5.1	7.6	11.0	18.5	395.9	2089.1	2255.0	2278.6
65°	0.0	1.7	3.4	5.1	6.7	13.5	321.8	1886.1	2091.6	2178.4
67.5°	0.0	0.0	1.7	3.4	4.2	10.1	242.6	1715.9	1940.8	2058.8
70°	0.0	0.0	0.8	0.8	2.5	7.6	155.0	1421.1	1732.8	1797.6
72.5°	0.0	0.0	0.0	0.0	0.8	5.1	90.1	1055.5	1357.9	1478.4
75°	0.0	0.0	0.0	0.0	0.0	4.2	45.5	679.0	945.1	1106.9
77.5°	0.0	0.0	0.0	0.0	0.0	3.4	24.4	438.0	696.6	832.3
80°	0.0	0.0	0.0	0.0	0.0	0.8	14.3	254.4	445.6	540.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	5.9	124.7	266.2	311.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.7	66.5	133.1	175.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	9.3	17.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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