

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: P677329

Luminaire Tested: **CCW-SA-1D-830-U-SLL-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677329  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1D-830-U-SLL-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/  
SLL distribution lens and House Side Shield  
Light Source: (16) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

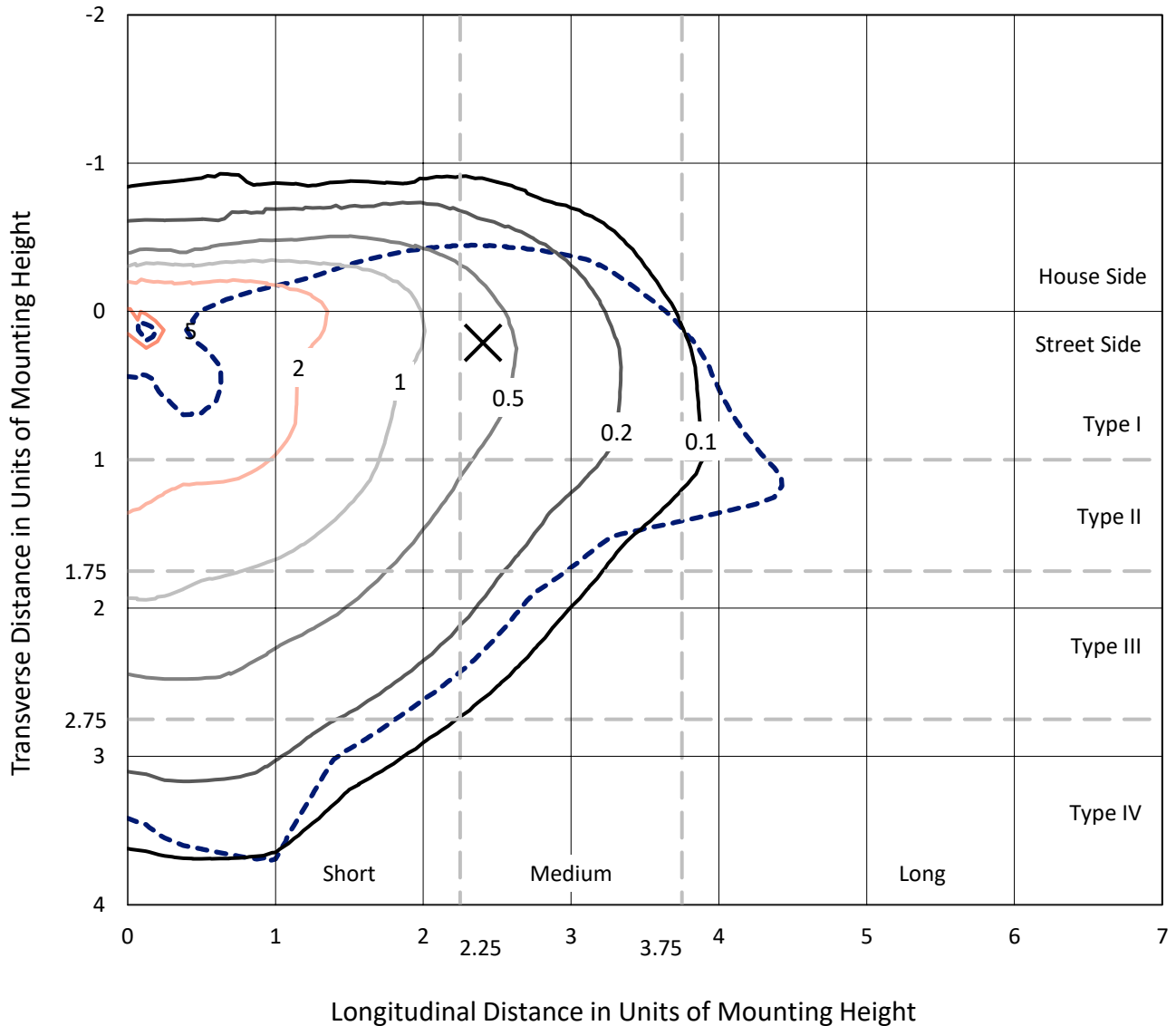
Lumens per Lamp: N/A  
Luminaire Lumens: 3215.2 lumens  
Efficiency: N/A  
Efficacy: 73.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1

Input Watts (W): 44  
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

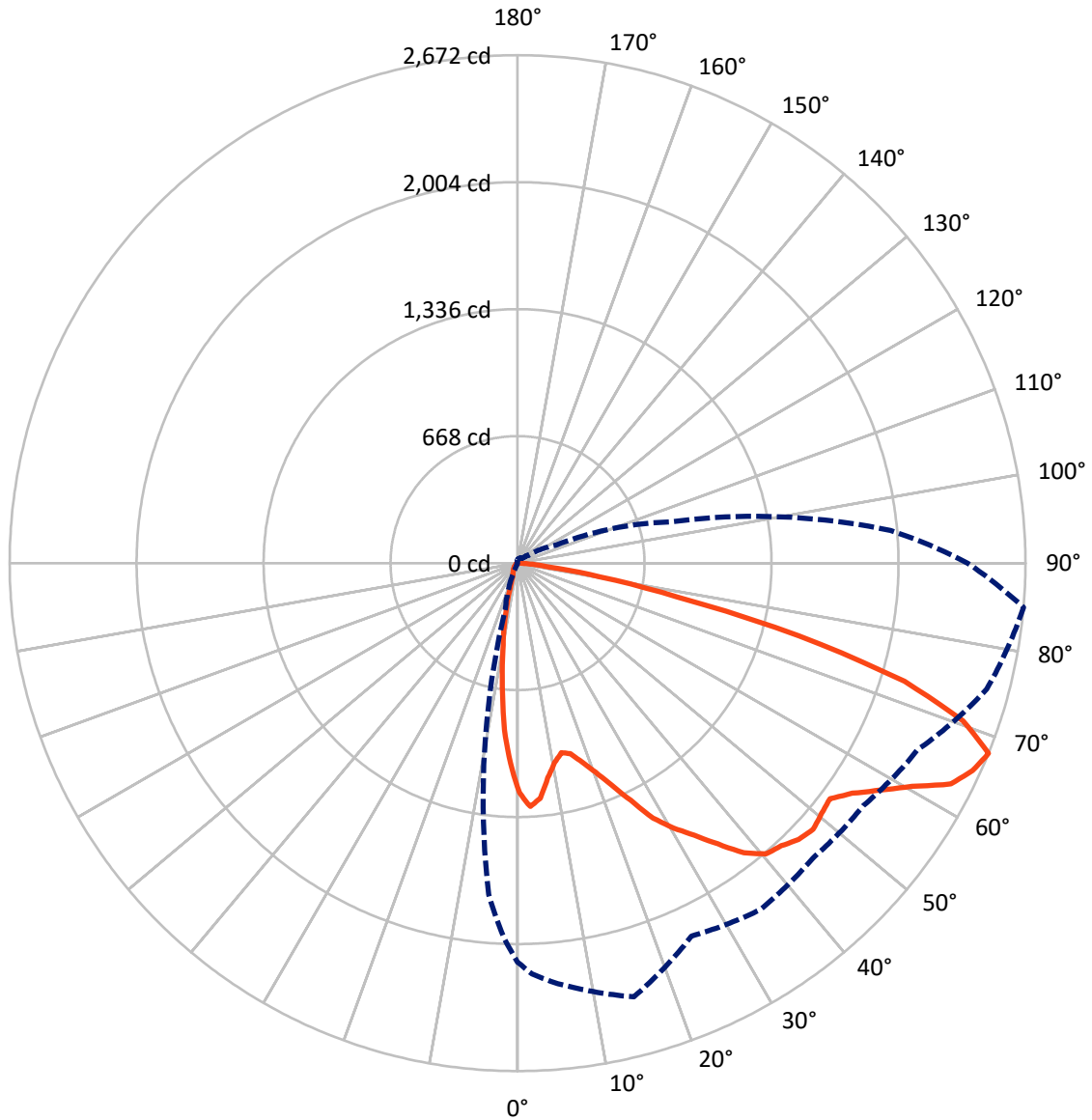
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 6 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	558.3	0.0	558.3
	% Fixture	17.4	0.0	17.4
<b>Street Side</b>	Lumens	2656.9	0.0	2656.9
	% Fixture	82.6	0.0	82.6
<b>Total</b>	Lumens	3215.2	0.0	3215.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.8	2.9
10°-20°	180.1	5.6
20°-30°	249.2	7.8
30°-40°	352.2	11.0
40°-50°	479.5	14.9
50°-60°	635.1	19.8
60°-70°	737.4	22.9
70°-80°	417.6	13.0
80°-90°	72.2	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°	3215.2	100.0
0°-180°	3215.2	100.0



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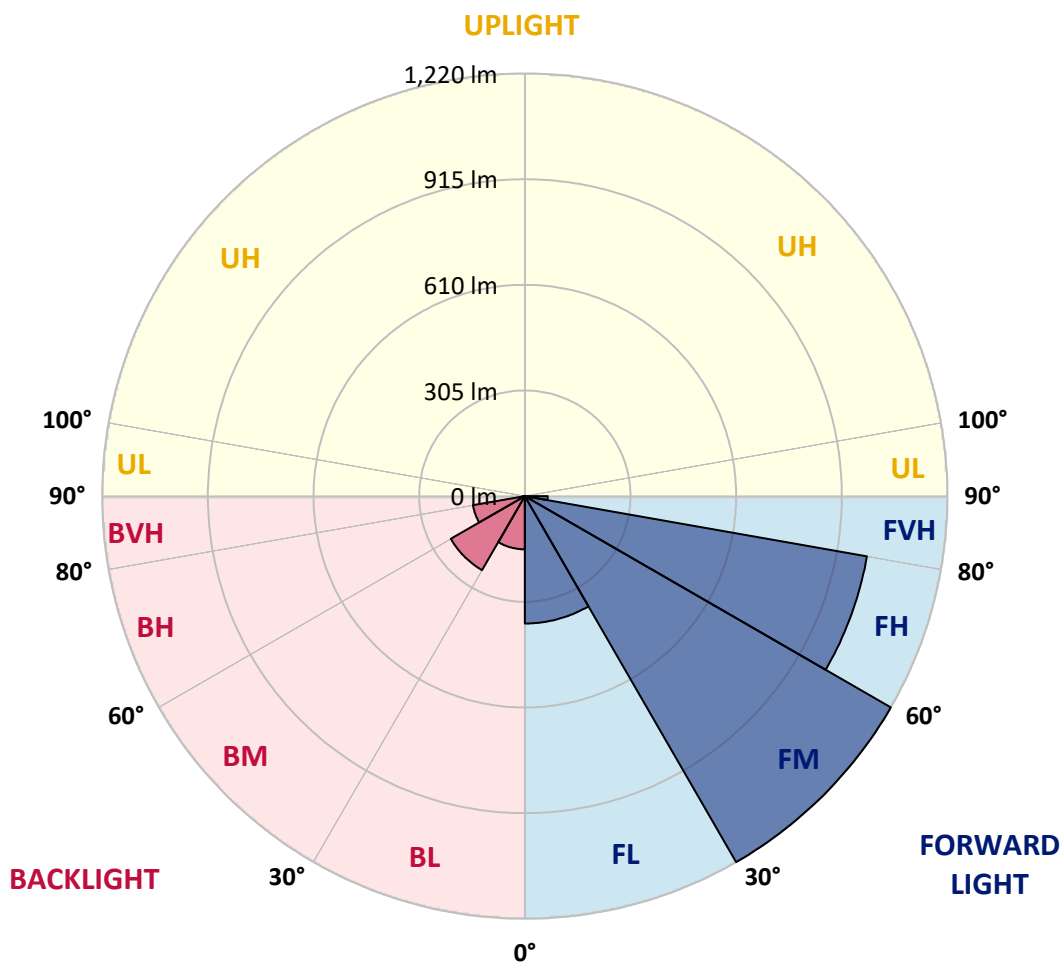
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	367.7	11.4			
FM (30°-60°)	1220.2	38.0			
FH (60°-80°)	1003.0	31.2			G1/1800
FVH (80°-90°)	66.1	2.1			G1/100
BL (0°-30°)	153.5	4.8	B1/500		
BM (30°-60°)	246.7	7.7	B1/1000		
BH (60°-80°)	152.0	4.7	B1/500		G1/500
BVH (80°-90°)	6.1	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°	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9
2.5°	1256.1	1282.7	1283.6	1295.6	1307.6	1307.6	1335.9	1329.1	1304.2	1299.9	1281.9
5°	1265.5	1275.0	1281.9	1342.8	1394.3	1389.2	1404.6	1394.3	1346.2	1284.4	1242.4
7.5°	1184.0	1194.3	1221.8	1325.6	1395.2	1418.4	1447.6	1383.2	1332.5	1220.9	1140.2
10°	1075.8	1095.5	1146.2	1264.7	1350.5	1424.4	1424.4	1372.9	1275.0	1165.9	1067.2
12.5°	1015.7	1055.2	1082.7	1202.9	1314.5	1365.1	1363.4	1335.9	1272.4	1135.0	1023.4
15°	1026.0	1037.2	1095.5	1189.1	1263.0	1260.4	1291.3	1282.7	1238.1	1162.5	1039.7
17.5°	1073.2	1090.4	1141.0	1189.1	1224.3	1214.0	1213.2	1254.4	1257.0	1208.9	1100.7
20°	1150.5	1201.1	1225.2	1239.8	1196.9	1153.1	1147.9	1205.4	1250.1	1268.1	1173.7
22.5°	1274.1	1307.6	1356.6	1281.9	1170.2	1115.3	1105.0	1168.5	1258.7	1338.5	1268.1
25°	1395.2	1420.9	1468.2	1372.0	1200.3	1107.6	1089.5	1144.5	1291.3	1436.4	1382.3
27.5°	1523.1	1545.4	1550.6	1438.1	1216.6	1092.1	1070.6	1144.5	1318.8	1487.9	1518.8
30°	1601.2	1627.9	1633.0	1496.5	1243.2	1105.0	1094.7	1149.6	1337.7	1531.7	1616.7
32.5°	1688.8	1695.7	1691.4	1506.8	1272.4	1142.8	1099.8	1184.0	1359.1	1584.1	1706.0
35°	1793.6	1805.6	1761.8	1554.0	1337.7	1166.8	1151.4	1226.0	1396.0	1608.1	1814.2
37.5°	1873.4	1911.2	1812.5	1572.1	1350.5	1217.5	1220.0	1313.6	1421.8	1637.3	1933.5
40°	2023.7	1960.1	1898.3	1633.9	1399.5	1303.3	1289.6	1403.8	1508.5	1656.2	2011.6
42.5°	2106.1	2072.6	1931.8	1639.9	1475.0	1421.8	1425.2	1505.9	1554.0	1709.4	2033.1
45°	2126.7	2091.5	1977.3	1644.2	1549.7	1561.8	1621.0	1636.4	1621.0	1744.6	2073.5
47.5°	2179.1	2102.7	1972.2	1701.7	1670.8	1717.2	1792.7	1826.2	1712.0	1731.7	2092.4
50°	2168.8	2125.0	1961.0	1725.7	1818.5	1941.2	1991.9	1978.2	1813.3	1705.1	2071.7
52.5°	2125.8	2078.6	1995.3	1791.0	1956.7	2105.2	2175.6	2141.3	1903.5	1765.2	2058.0
55°	2188.5	2152.5	2040.0	1879.4	2060.6	2249.5	2299.3	2273.5	2014.2	1821.0	2136.1
57.5°	2256.3	2248.6	2161.0	1983.3	2183.4	2398.0	2398.0	2366.2	2110.4	1901.7	2252.0
60°	2354.2	2371.4	2250.3	2052.0	2225.4	2389.4	2513.9	2477.0	2207.4	2043.4	2383.4
62.5°	2322.4	2377.4	2365.4	2199.7	2273.5	2431.5	2499.3	2526.8	2327.6	2216.0	2558.6
65°	2220.3	2278.7	2364.5	2296.7	2237.5	2329.3	2363.7	2446.9	2387.7	2378.3	2630.7
67.5°	2098.4	2161.9	2215.1	2361.9	2164.5	2225.4	2195.4	2222.0	2322.4	2556.0	2671.9
70°	1832.2	1893.2	1977.3	2216.8	1971.3	1916.3	1908.6	1895.7	2052.0	2492.4	2484.7
72.5°	1506.8	1535.1	1674.2	1802.2	1458.7	1448.4	1460.4	1445.8	1627.0	2256.3	2128.4
75°	1128.2	1156.5	1235.5	1384.0	993.4	934.1	1002.8	1070.6	1242.4	1751.5	1529.1
77.5°	848.3	884.3	934.1	1035.4	728.9	636.2	645.6	710.0	898.1	1402.9	856.9
80°	550.3	546.1	642.2	712.6	548.6	565.8	541.8	589.0	650.8	750.4	437.9
82.5°	317.7	322.0	362.3	408.7	382.1	437.0	315.1	526.3	464.5	305.7	163.1
85°	178.6	186.3	223.2	283.3	239.5	160.6	131.4	261.0	291.9	125.4	79.0
87.5°	18.0	15.5	30.1	107.3	65.3	26.6	39.5	62.7	70.4	47.2	23.2
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°	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9
2.5°	1256.1	1256.1	1234.6	1198.6	1184.0	1158.2	1123.0	1134.2	1122.2	1078.4	1067.2
5°	1204.6	1163.4	1118.7	1063.8	1032.0	966.8	946.2	909.2	915.2	878.3	880.0
7.5°	1097.3	1064.6	989.1	917.0	854.3	797.6	717.8	687.7	658.5	643.9	661.1
10°	1034.6	973.6	870.6	776.2	692.9	642.2	589.0	547.8	510.0	481.7	475.7
12.5°	989.1	935.0	810.5	695.4	630.2	589.0	540.0	483.4	446.5	397.5	382.9
15°	975.3	909.2	777.9	663.7	600.1	532.3	476.5	420.7	372.6	321.1	303.1
17.5°	1022.6	946.2	777.0	637.9	548.6	475.7	398.4	335.7	286.8	239.5	228.4
20°	1102.4	985.6	801.9	622.5	499.7	401.8	314.2	251.6	196.6	165.7	158.0
22.5°	1193.4	1052.6	804.5	581.3	450.8	328.0	229.2	165.7	134.8	120.2	115.9
25°	1305.0	1159.9	835.4	547.8	393.2	249.0	163.1	127.1	109.0	100.5	98.7
27.5°	1396.9	1234.6	868.9	512.6	336.6	184.6	127.9	103.9	94.4	85.9	85.0
30°	1492.2	1320.5	878.3	491.1	287.6	152.0	109.9	91.9	81.6	77.3	76.4
32.5°	1575.5	1414.1	908.4	455.9	241.3	133.9	99.6	82.4	75.6	68.7	67.8
35°	1682.8	1468.2	923.0	437.0	224.1	121.1	91.0	75.6	65.3	61.0	59.2
37.5°	1797.9	1520.5	932.4	422.4	209.5	113.3	85.9	71.3	61.8	55.8	54.1
40°	1905.2	1594.4	918.7	404.4	198.3	103.9	82.4	66.1	57.5	51.5	48.9
42.5°	1987.6	1666.5	914.4	387.2	186.3	100.5	78.1	63.5	54.1	47.2	46.4
45°	2034.0	1715.4	884.3	373.5	176.9	102.2	76.4	60.1	51.5	45.5	42.1
47.5°	2022.8	1753.2	892.1	369.2	164.0	95.3	75.6	57.5	47.2	42.1	39.5
50°	2084.6	1829.6	879.2	355.5	154.5	85.9	82.4	57.5	46.4	40.4	37.8
52.5°	2094.9	1899.2	906.7	330.6	139.9	79.0	81.6	56.7	44.6	38.6	35.2
55°	2180.8	1979.9	959.9	316.8	127.9	68.7	74.7	54.9	40.4	35.2	33.5
57.5°	2297.6	2147.3	994.2	303.9	111.6	60.1	62.7	54.1	36.9	32.6	30.1
60°	2410.0	2214.3	996.8	280.8	96.2	54.1	48.9	54.1	34.3	29.2	26.6
62.5°	2494.2	2214.3	979.6	261.0	84.1	48.1	42.9	51.5	30.9	25.8	24.0
65°	2448.7	2155.0	935.0	244.7	76.4	42.1	36.9	39.5	27.5	22.3	20.6
67.5°	2367.1	1970.4	836.3	224.9	75.6	36.9	31.8	29.2	24.0	19.7	18.0
70°	2236.6	1721.4	696.3	202.6	73.8	33.5	28.3	24.9	21.5	17.2	15.5
72.5°	1802.2	1421.8	571.8	189.7	72.1	29.2	24.0	21.5	18.0	14.6	12.9
75°	1248.4	908.4	440.4	162.3	70.4	26.6	22.3	18.9	15.5	12.0	11.2
77.5°	748.7	607.0	284.2	121.9	46.4	21.5	18.9	14.6	12.9	10.3	9.4
80°	350.3	286.8	115.0	47.2	22.3	15.5	12.9	11.2	10.3	8.6	7.7
82.5°	137.4	121.1	55.8	27.5	18.0	12.0	10.3	9.4	8.6	6.9	6.0
85°	73.8	65.3	26.6	18.9	12.9	8.6	8.6	7.7	6.9	6.0	5.2
87.5°	16.3	12.0	11.2	11.2	9.4	6.9	6.9	6.0	5.2	4.3	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°	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9
2.5°	1061.2	1074.1	1053.5	1066.4	1048.3	1062.1	1063.8	1050.9	1054.3	1071.5	1079.2
5°	904.1	895.5	876.6	870.6	871.5	860.3	864.6	870.6	880.0	885.2	900.6
7.5°	651.7	671.4	670.5	685.1	686.0	684.3	672.3	646.5	655.1	648.2	656.8
10°	466.2	474.8	491.1	500.6	517.7	508.3	480.8	470.5	465.3	464.5	473.1
12.5°	372.6	352.0	350.3	353.7	362.3	351.2	337.4	325.4	331.4	343.4	352.9
15°	288.5	271.3	249.0	245.6	247.3	242.1	227.5	212.1	216.4	228.4	235.3
17.5°	221.5	201.8	186.3	176.0	172.6	154.5	133.1	120.2	116.8	115.9	121.9
20°	149.4	146.0	143.4	130.5	130.5	104.7	86.7	77.3	77.3	79.0	79.8
22.5°	111.6	107.3	108.2	105.6	98.7	78.1	68.7	66.1	66.1	67.8	67.8
25°	97.0	91.0	89.3	88.4	81.6	67.0	60.1	57.5	57.5	59.2	59.2
27.5°	82.4	80.7	78.1	74.7	68.7	57.5	53.2	50.7	51.5	52.4	51.5
30°	75.6	71.3	67.8	67.8	61.0	51.5	48.1	46.4	44.6	46.4	47.2
32.5°	67.0	64.4	62.7	60.1	52.4	45.5	42.1	40.4	39.5	39.5	40.4
35°	57.5	57.5	55.8	52.4	45.5	41.2	36.9	35.2	34.3	35.2	35.2
37.5°	51.5	48.9	49.8	46.4	40.4	36.1	31.8	30.1	30.1	29.2	30.1
40°	48.1	43.8	41.2	39.5	36.1	30.9	27.5	25.8	24.9	24.9	24.9
42.5°	42.9	39.5	34.3	33.5	32.6	26.6	22.3	21.5	20.6	19.7	19.7
45°	40.4	35.2	30.9	26.6	26.6	22.3	18.9	17.2	16.3	15.5	16.3
47.5°	36.9	31.8	26.6	22.3	21.5	18.0	14.6	12.9	12.0	12.0	12.0
50°	35.2	28.3	23.2	18.9	16.3	14.6	11.2	9.4	8.6	8.6	8.6
52.5°	32.6	26.6	20.6	16.3	12.9	11.2	8.6	6.9	6.0	6.0	6.0
55°	29.2	24.0	18.0	13.7	11.2	8.6	6.0	4.3	3.4	3.4	3.4
57.5°	27.5	21.5	15.5	12.0	8.6	6.0	3.4	2.6	2.6	1.7	2.6
60°	24.9	18.9	12.9	9.4	6.9	4.3	2.6	0.9	0.9	0.9	0.9
62.5°	21.5	16.3	11.2	7.7	5.2	2.6	0.9	0.0	0.0	0.0	0.0
65°	18.0	12.9	8.6	6.0	3.4	0.9	0.0	0.0	0.0	0.0	0.0
67.5°	15.5	11.2	6.9	4.3	2.6	0.0	0.0	0.0	0.0	0.0	0.0
70°	13.7	9.4	5.2	3.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	11.2	7.7	4.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	9.4	6.0	2.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	7.7	4.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	6.0	3.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	0.9	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°	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9	1208.9
2.5°	1090.4	1085.2	1111.0	1153.1	1174.5	1216.6	1226.9	1253.5	1246.7	1256.1
5°	902.4	912.7	950.4	1012.3	1034.6	1095.5	1153.1	1210.6	1247.5	1265.5
7.5°	669.7	704.0	750.4	807.1	864.6	944.4	1042.3	1109.3	1145.3	1184.0
10°	498.8	535.8	589.0	644.8	738.4	827.7	925.5	1008.8	1039.7	1075.8
12.5°	392.4	449.9	511.7	571.8	627.6	712.6	833.7	954.7	988.2	1015.7
15°	273.0	343.4	431.9	510.0	588.1	662.0	787.3	934.1	979.6	1026.0
17.5°	151.1	206.9	308.2	418.1	533.2	646.5	802.8	971.9	1040.6	1073.2
20°	87.6	109.9	182.0	312.5	464.5	613.0	810.5	1043.2	1134.2	1150.5
22.5°	72.1	79.8	103.0	195.8	380.3	591.6	850.0	1142.8	1235.5	1274.1
25°	61.8	67.8	79.8	117.6	287.6	546.1	874.9	1267.3	1353.1	1395.2
27.5°	54.9	61.0	70.4	86.7	195.8	483.4	916.1	1379.7	1465.6	1523.1
30°	48.1	53.2	62.7	73.8	135.7	413.0	951.3	1462.2	1583.2	1601.2
32.5°	42.9	47.2	54.1	63.5	100.5	313.4	979.6	1547.2	1649.3	1688.8
35°	36.9	42.1	46.4	54.1	76.4	236.1	962.5	1613.3	1746.3	1793.6
37.5°	32.6	36.1	40.4	45.5	64.4	184.6	927.3	1692.3	1829.6	1873.4
40°	27.5	30.1	35.2	40.4	58.4	142.5	886.9	1787.6	1946.4	2023.7
42.5°	23.2	25.8	29.2	37.8	48.1	105.6	805.3	1861.4	2040.8	2106.1
45°	18.0	21.5	26.6	37.8	38.6	78.1	721.2	1916.3	2094.1	2126.7
47.5°	13.7	17.2	25.8	32.6	30.9	54.1	621.6	1979.0	2149.0	2179.1
50°	10.3	13.7	29.2	28.3	25.8	41.2	558.9	2022.8	2152.5	2168.8
52.5°	6.9	10.3	24.0	21.5	21.5	36.1	541.8	2021.1	2161.0	2125.8
55°	5.2	7.7	13.7	15.5	18.9	31.8	526.3	2085.5	2163.6	2188.5
57.5°	3.4	6.0	9.4	12.0	16.3	27.5	494.5	2162.8	2243.5	2256.3
60°	1.7	4.3	6.9	9.4	13.7	24.0	449.9	2219.4	2340.5	2354.2
62.5°	0.9	2.6	5.2	7.7	11.2	18.9	403.5	2129.3	2298.4	2322.4
65°	0.0	1.7	3.4	5.2	6.9	13.7	328.0	1922.4	2131.8	2220.3
67.5°	0.0	0.0	1.7	3.4	4.3	10.3	247.3	1748.9	1978.2	2098.4
70°	0.0	0.0	0.9	0.9	2.6	7.7	158.0	1448.4	1766.1	1832.2
72.5°	0.0	0.0	0.0	0.0	0.9	5.2	91.9	1075.8	1384.0	1506.8
75°	0.0	0.0	0.0	0.0	0.0	4.3	46.4	692.0	963.3	1128.2
77.5°	0.0	0.0	0.0	0.0	0.0	3.4	24.9	446.5	710.0	848.3
80°	0.0	0.0	0.0	0.0	0.0	0.9	14.6	259.3	454.2	550.3
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	6.0	127.1	271.3	317.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.7	67.8	135.7	178.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	9.4	18.0
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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