

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: P677485

Luminaire Tested: **CCW-SA-1E-835-U-SLR-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677485  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1E-835-U-SLR-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1050mA w/  
SLR distribution lens and House Side Shield  
Light Source: (16) 3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4048.6 lumens  
Efficiency: N/A  
Efficacy: 72.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

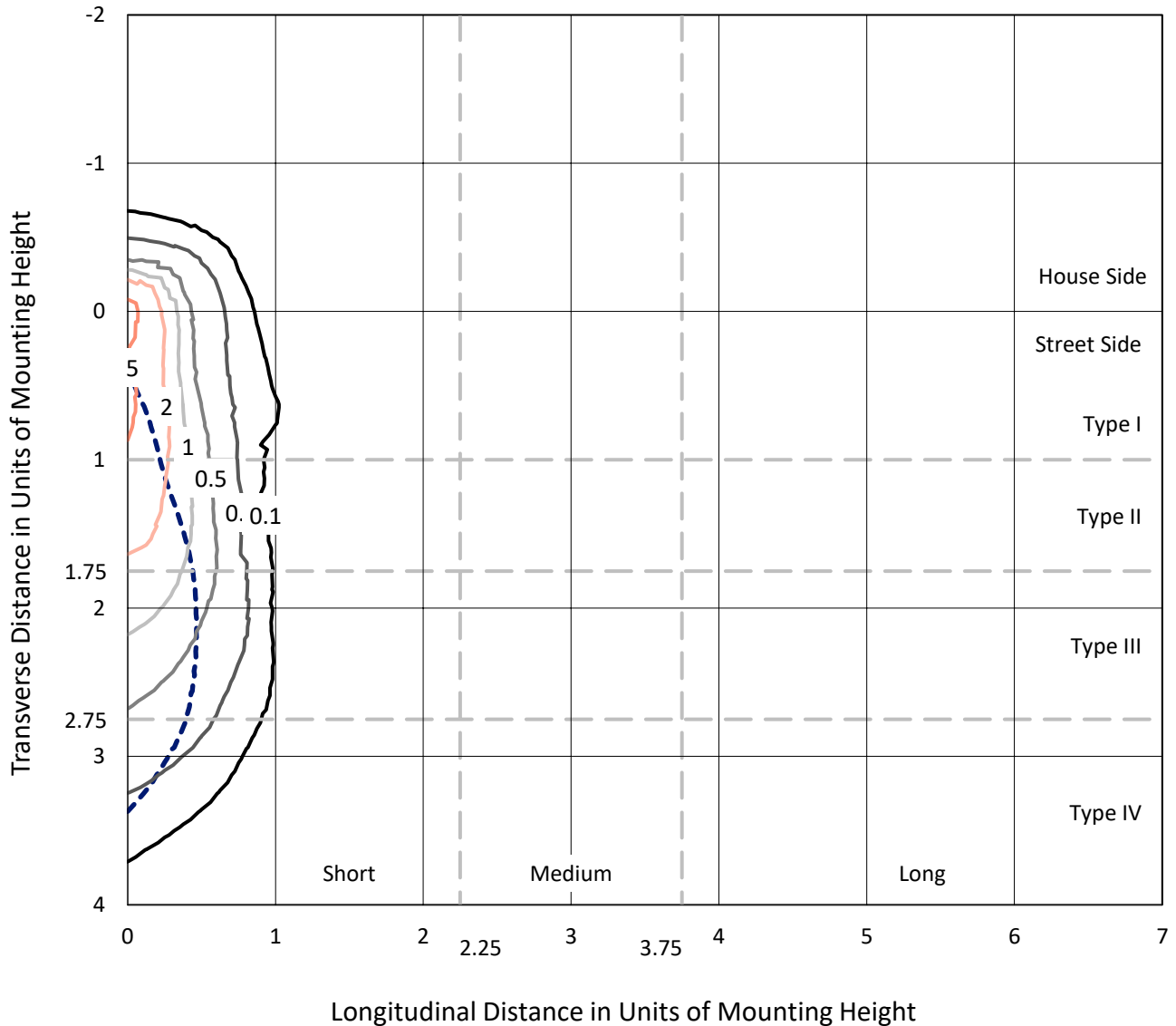
Input Watts (W): 56.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

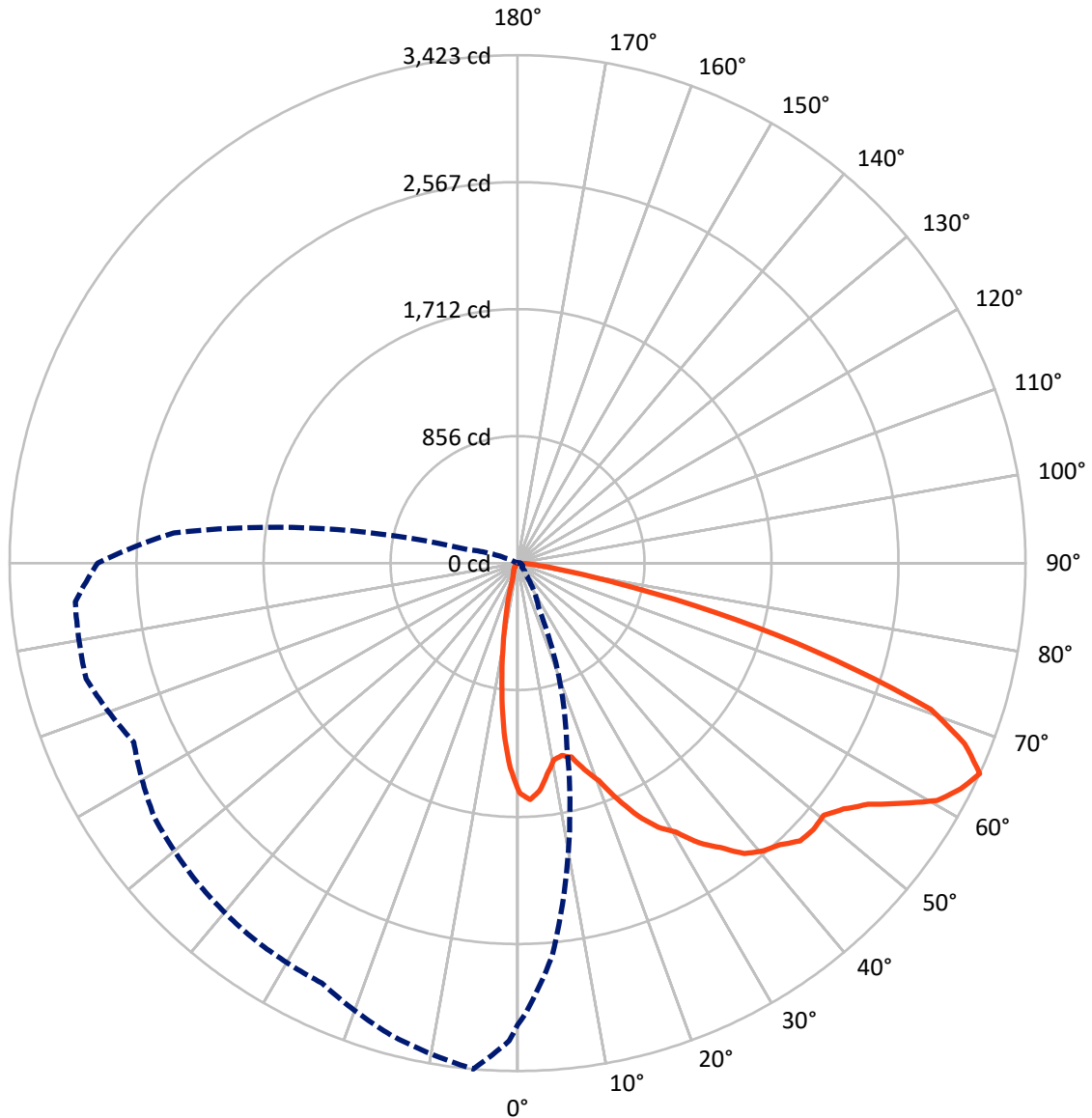
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 6.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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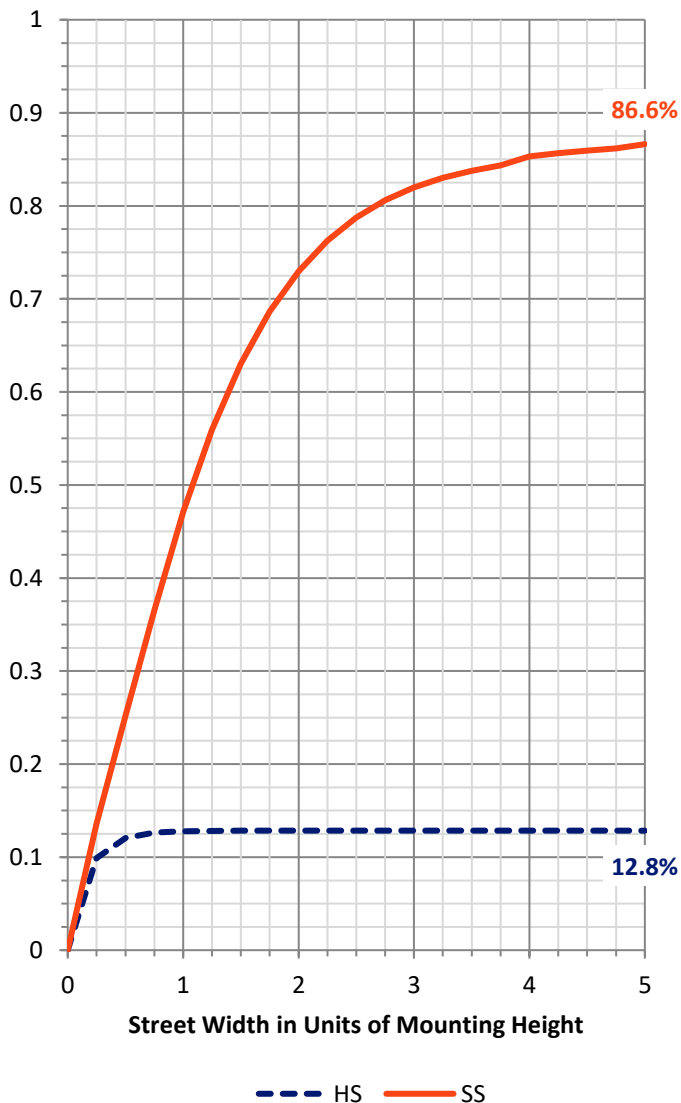
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	525.7	0.0	525.7
	% Fixture	13.0	0.0	13.0
<b>Street Side</b>	Lumens	3522.9	0.0	3522.9
	% Fixture	87.0	0.0	87.0
<b>Total</b>	Lumens	4048.6	0.0	4048.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.2	2.9
10°-20°	227.0	5.6
20°-30°	316.2	7.8
30°-40°	449.3	11.1
40°-50°	623.0	15.4
50°-60°	848.9	21.0
60°-70°	933.3	23.1
70°-80°	458.7	11.3
80°-90°	74.9	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°	4048.6	100.0
0°-180°	4048.6	100.0



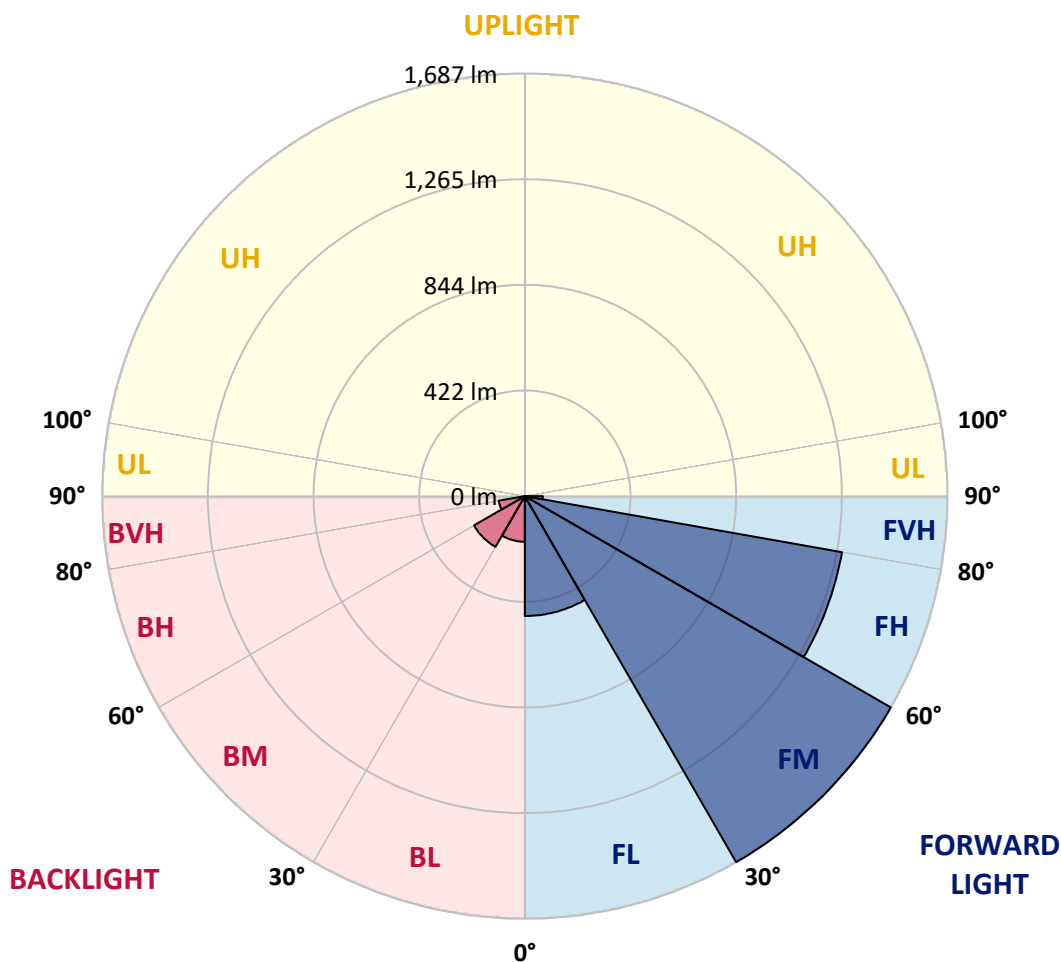
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	478.5	11.8			
FM (30°-60°)	1687.2	41.7			
FH (60°-80°)	1285.8	31.8			G1/1800
FVH (80°-90°)	71.5	1.8			G1/100
BL (0°-30°)	182.0	4.5	B1/500		
BM (30°-60°)	234.0	5.8	B1/1000		
BH (60°-80°)	106.2	2.6	B0/110		G0/110
BVH (80°-90°)	3.4	0.1			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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8
2.5°	1579.4	1598.0	1580.5	1519.4	1508.5	1479.0	1434.2	1431.0	1384.0	1389.5	1364.4
5°	1484.5	1503.0	1465.9	1385.1	1309.8	1249.8	1213.8	1149.4	1135.2	1103.5	1103.5
7.5°	1387.3	1386.2	1322.9	1255.2	1142.8	1032.6	982.4	889.6	835.0	805.5	777.2
10°	1306.5	1289.1	1249.8	1110.1	987.8	873.2	811.0	749.9	693.1	644.0	594.9
12.5°	1249.8	1260.7	1198.5	1046.8	888.5	808.8	742.2	677.8	610.2	554.5	499.9
15°	1279.3	1261.8	1188.7	1032.6	872.1	763.0	674.6	596.0	520.7	447.5	406.0
17.5°	1370.9	1326.2	1240.0	1032.6	838.3	693.1	586.1	493.4	412.6	347.1	295.8
20°	1494.3	1443.0	1350.2	1070.8	813.2	641.8	495.5	378.8	294.7	233.6	194.3
22.5°	1620.9	1580.5	1440.8	1086.1	783.7	573.0	390.8	274.0	196.5	157.2	137.5
25°	1772.6	1715.9	1563.0	1147.2	740.0	506.5	307.8	191.0	146.3	125.5	113.5
27.5°	1893.8	1883.9	1677.7	1184.3	707.3	451.9	243.4	151.7	121.2	105.9	98.2
30°	2046.6	1993.1	1817.4	1258.5	670.2	389.7	203.0	136.4	111.3	95.0	89.5
32.5°	2138.3	2113.2	1890.5	1300.0	628.7	338.4	174.6	120.1	101.5	89.5	84.0
35°	2271.4	2221.2	1995.3	1326.2	606.9	308.9	157.2	109.2	85.1	73.1	66.6
37.5°	2419.9	2401.3	2120.8	1325.1	575.2	291.4	145.2	101.5	80.8	67.7	60.0
40°	2571.6	2496.3	2197.2	1355.7	558.9	278.3	136.4	97.1	76.4	64.4	54.6
42.5°	2685.1	2598.9	2285.6	1344.7	539.2	255.4	133.2	90.6	73.1	58.9	50.2
45°	2715.7	2685.1	2365.3	1341.5	525.0	236.9	127.7	89.5	70.9	55.7	46.9
47.5°	2774.6	2753.9	2463.5	1346.9	514.1	222.7	114.6	91.7	67.7	52.4	44.8
50°	2800.8	2763.7	2543.2	1360.0	489.0	205.2	102.6	96.1	66.6	51.3	42.6
52.5°	2908.9	2876.1	2652.4	1397.1	468.3	182.3	90.6	91.7	68.8	48.0	40.4
55°	3014.8	2977.6	2820.5	1482.3	438.8	163.7	77.5	80.8	65.5	43.7	36.0
57.5°	3159.9	3098.8	2932.9	1517.2	412.6	138.6	68.8	66.6	61.1	39.3	31.7
60°	3181.8	3206.9	2916.5	1495.4	385.3	122.2	60.0	51.3	65.5	34.9	27.3
62.5°	3254.9	3150.1	2840.1	1445.2	365.7	112.4	53.5	42.6	56.8	30.6	22.9
65°	3114.1	3036.6	2661.1	1283.6	340.6	113.5	46.9	34.9	36.0	25.1	18.6
67.5°	2907.8	2846.7	2364.2	1107.9	315.4	111.3	41.5	30.6	27.3	21.8	16.4
70°	2552.0	2419.9	2008.4	899.4	278.3	103.7	34.9	27.3	22.9	17.5	12.0
72.5°	1856.7	1803.2	1440.8	695.3	250.0	93.9	32.7	22.9	19.6	13.1	9.8
75°	1249.8	1161.4	909.2	456.3	200.8	81.9	27.3	20.7	15.3	9.8	7.6
77.5°	660.4	624.3	515.2	217.2	111.3	38.2	15.3	12.0	8.7	7.6	4.4
80°	286.0	254.3	222.7	88.4	39.3	17.5	9.8	6.5	5.5	4.4	2.2
82.5°	146.3	139.7	115.7	38.2	22.9	13.1	5.5	4.4	3.3	2.2	1.1
85°	72.0	74.2	61.1	12.0	13.1	7.6	1.1	1.1	0.0	0.0	0.0
87.5°	5.5	5.5	4.4	2.2	3.3	1.1	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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8
2.5°	1354.6	1369.8	1343.7	1360.0	1352.4	1355.7	1358.9	1350.2	1352.4	1382.9	1384.0
5°	1085.0	1114.4	1103.5	1118.8	1145.0	1131.9	1143.9	1141.7	1143.9	1148.3	1167.9
7.5°	773.9	765.1	785.9	826.3	873.2	901.6	887.4	879.8	875.4	864.5	877.6
10°	584.0	579.6	574.1	586.1	616.7	648.4	665.8	636.4	620.0	599.2	591.6
12.5°	484.6	457.3	442.1	423.5	432.2	460.6	461.7	433.3	407.1	396.2	408.2
15°	382.0	363.5	336.2	310.0	296.9	318.7	300.2	272.9	239.0	234.7	233.6
17.5°	272.9	262.0	242.3	231.4	216.1	210.7	191.0	149.5	125.5	119.0	121.2
20°	185.6	176.8	175.7	165.9	159.4	155.0	123.3	96.1	88.4	89.5	90.6
22.5°	137.5	133.2	127.7	126.6	121.2	115.7	90.6	80.8	75.3	75.3	78.6
25°	112.4	110.2	104.8	102.6	100.4	92.8	76.4	68.8	66.6	64.4	67.7
27.5°	96.1	95.0	91.7	88.4	86.2	78.6	66.6	60.0	57.9	57.9	57.9
30°	86.2	86.2	81.9	75.3	75.3	66.6	56.8	52.4	50.2	50.2	49.1
32.5°	80.8	78.6	73.1	68.8	65.5	56.8	50.2	45.8	42.6	42.6	43.7
35°	65.5	65.5	64.4	61.1	56.8	48.0	42.6	38.2	36.0	34.9	36.0
37.5°	57.9	54.6	50.2	51.3	49.1	41.5	36.0	32.7	29.5	29.5	29.5
40°	52.4	49.1	44.8	41.5	40.4	37.1	31.7	26.2	22.9	21.8	21.8
42.5°	46.9	44.8	38.2	32.7	31.7	31.7	24.0	19.6	16.4	16.4	16.4
45°	43.7	40.4	34.9	28.4	22.9	24.0	19.6	14.2	12.0	10.9	10.9
47.5°	41.5	38.2	30.6	24.0	17.5	17.5	14.2	9.8	7.6	6.5	6.5
50°	38.2	34.9	27.3	19.6	13.1	10.9	8.7	5.5	3.3	2.2	2.2
52.5°	36.0	32.7	24.0	16.4	10.9	7.6	5.5	1.1	0.0	0.0	0.0
55°	32.7	28.4	20.7	13.1	8.7	4.4	1.1	0.0	0.0	0.0	0.0
57.5°	28.4	25.1	16.4	9.8	5.5	1.1	0.0	0.0	0.0	0.0	0.0
60°	24.0	20.7	13.1	7.6	2.2	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	19.6	17.5	9.8	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	16.4	13.1	7.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	14.2	10.9	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	10.9	7.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	7.6	5.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	5.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	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):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8
2.5°	1388.4	1421.1	1451.7	1460.4	1484.5	1551.0	1551.0	1582.7	1639.5	1660.2	1664.6
5°	1171.2	1206.1	1212.7	1280.3	1312.0	1379.7	1424.4	1531.4	1595.8	1636.2	1661.3
7.5°	890.7	902.7	927.8	991.1	1053.3	1135.2	1220.3	1356.7	1470.3	1516.1	1601.2
10°	612.3	648.4	702.9	759.7	856.8	947.4	1057.7	1186.5	1326.2	1382.9	1456.1
12.5°	412.6	462.8	550.1	630.9	720.4	812.1	916.9	1089.3	1247.6	1326.2	1399.3
15°	241.2	302.3	377.7	508.6	627.6	730.2	835.0	1009.6	1201.8	1303.3	1392.8
17.5°	122.2	140.8	203.0	316.5	473.7	641.8	797.9	1020.6	1236.7	1361.1	1435.3
20°	91.7	97.1	114.6	168.1	324.2	530.5	763.0	1036.9	1333.8	1485.5	1525.9
22.5°	79.7	84.0	91.7	109.2	182.3	406.0	713.8	1077.3	1465.9	1608.9	1694.0
25°	67.7	72.0	78.6	89.5	116.8	276.2	653.8	1119.9	1583.8	1763.9	1843.6
27.5°	58.9	62.2	68.8	77.5	95.0	175.7	550.1	1176.6	1763.9	1951.6	1972.4
30°	50.2	53.5	58.9	68.8	80.8	124.4	403.9	1184.3	1863.2	2033.5	2091.3
32.5°	43.7	44.8	51.3	60.0	67.7	98.2	283.8	1191.9	1936.3	2139.4	2151.4
35°	36.0	38.2	44.8	50.2	58.9	77.5	215.0	1153.7	2031.3	2248.5	2245.2
37.5°	29.5	32.7	37.1	41.5	48.0	65.5	171.4	1082.8	2150.3	2417.7	2315.1
40°	22.9	26.2	30.6	36.0	40.4	58.9	128.8	975.8	2274.7	2500.7	2391.5
42.5°	16.4	18.6	22.9	28.4	36.0	49.1	92.8	849.2	2323.8	2597.8	2483.2
45°	12.0	14.2	17.5	24.0	37.1	39.3	64.4	733.5	2376.2	2640.4	2462.5
47.5°	6.5	8.7	13.1	20.7	32.7	29.5	45.8	629.8	2436.3	2678.6	2478.8
50°	2.2	3.3	7.6	21.8	26.2	22.9	36.0	574.1	2495.2	2686.2	2511.6
52.5°	0.0	0.0	4.4	22.9	19.6	17.5	31.7	552.3	2479.9	2710.2	2490.8
55°	0.0	0.0	1.1	9.8	10.9	13.1	26.2	551.2	2588.0	2717.9	2604.3
57.5°	0.0	0.0	0.0	3.3	6.5	10.9	22.9	516.3	2656.7	2907.8	2757.2
60°	0.0	0.0	0.0	1.1	4.4	7.6	17.5	485.7	2726.6	2992.9	2920.9
62.5°	0.0	0.0	0.0	0.0	1.1	3.3	12.0	438.8	2585.8	2986.4	3079.2
65°	0.0	0.0	0.0	0.0	0.0	0.0	7.6	347.1	2326.0	2830.3	2991.8
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	4.4	240.1	2036.8	2633.8	2831.4
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	145.2	1643.8	2309.6	2401.3
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.2	1173.4	1833.7	1970.2
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.1	725.9	1340.4	1508.5
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8	470.4	1015.1	1145.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	251.0	636.4	740.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	109.2	386.4	445.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.9	234.7	267.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.0	48.0
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°	359°	360°
0°	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8
2.5°	1666.7	1698.4	1710.4	1691.8	1694.0	1655.8	1650.4	1596.9	1575.1	1579.4
5°	1743.1	1789.0	1814.1	1793.4	1746.4	1673.3	1606.7	1543.4	1504.1	1484.5
7.5°	1725.7	1777.0	1808.6	1828.3	1774.8	1656.9	1555.4	1436.4	1386.2	1387.3
10°	1629.6	1736.6	1801.0	1775.9	1750.8	1632.9	1475.7	1346.9	1302.2	1306.5
12.5°	1552.1	1671.1	1709.3	1729.0	1677.7	1583.8	1477.9	1330.6	1280.3	1249.8
15°	1504.1	1592.5	1594.7	1625.3	1604.5	1604.5	1500.8	1356.7	1313.1	1279.3
17.5°	1504.1	1523.8	1521.6	1532.5	1567.4	1608.9	1558.7	1462.6	1376.4	1370.9
20°	1537.9	1476.8	1462.6	1467.0	1496.5	1619.8	1686.4	1566.3	1511.7	1494.3
22.5°	1616.5	1482.3	1396.0	1380.8	1471.4	1618.7	1768.2	1730.0	1635.1	1620.9
25°	1724.6	1472.4	1378.6	1358.9	1427.7	1658.0	1880.7	1888.3	1802.1	1772.6
27.5°	1827.2	1516.1	1376.4	1372.0	1462.6	1649.3	1958.2	2014.9	1917.8	1893.8
30°	1862.1	1559.8	1416.8	1358.9	1475.7	1680.9	1956.0	2104.4	2041.1	2046.6
32.5°	1903.6	1603.4	1421.1	1398.2	1531.4	1732.2	2018.2	2248.5	2202.7	2138.3
35°	1964.7	1662.4	1462.6	1441.9	1570.7	1778.1	2031.3	2354.4	2346.8	2271.4
37.5°	2017.1	1720.2	1548.9	1552.1	1690.8	1852.3	2089.2	2484.3	2471.2	2419.9
40°	2054.2	1801.0	1683.1	1691.8	1795.5	1935.3	2191.8	2549.8	2646.9	2571.6
42.5°	2059.7	1873.0	1837.0	1906.9	2004.0	2064.0	2233.2	2594.5	2734.2	2685.1
45°	2080.4	1987.6	2088.1	2139.4	2219.0	2177.6	2231.1	2670.9	2740.8	2715.7
47.5°	2161.2	2196.1	2322.7	2478.8	2507.2	2370.8	2283.4	2682.9	2777.9	2774.6
50°	2245.2	2419.9	2597.8	2701.5	2737.5	2503.9	2332.6	2673.1	2827.0	2800.8
52.5°	2339.1	2614.2	2870.7	2998.4	2978.7	2651.3	2388.2	2752.8	2917.6	2908.9
55°	2398.1	2701.5	3046.4	3224.3	3209.0	2816.1	2565.1	2867.4	3036.6	3014.8
57.5°	2554.1	2843.4	3221.1	3304.0	3344.4	3032.2	2688.4	3055.1	3135.9	3159.9
60°	2682.9	2936.2	3266.9	3387.0	3401.2	3161.0	2904.5	3248.3	3262.5	3181.8
62.5°	2871.8	2972.2	3169.8	3277.8	3350.9	3234.1	3098.8	3352.0	3260.3	3254.9
65°	3010.4	2854.3	2988.6	3048.6	3095.5	3122.8	3294.2	3423.0	3220.0	3114.1
67.5°	2932.9	2631.6	2606.5	2609.8	2624.0	2788.8	3228.7	3249.4	2995.1	2907.8
70°	2581.4	2159.0	2125.2	2151.4	2080.4	2279.1	2963.5	2953.6	2642.6	2552.0
72.5°	2088.1	1574.0	1516.1	1552.1	1568.5	1779.2	2493.0	2239.8	1927.6	1856.7
75°	1659.1	1153.7	973.6	1060.9	1116.6	1295.6	1947.3	1521.6	1345.8	1249.8
77.5°	1303.3	873.2	757.5	722.6	773.9	942.0	1416.8	799.0	705.1	660.4
80°	826.3	641.8	696.4	646.2	668.0	672.4	737.9	363.5	289.3	286.0
82.5°	497.7	438.8	521.7	287.1	522.8	467.2	306.7	164.8	146.3	146.3
85°	352.6	271.8	180.1	116.8	232.5	256.5	119.0	85.1	74.2	72.0
87.5°	176.8	84.0	40.4	26.2	29.5	48.0	14.2	6.5	6.5	5.5
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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