

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: P677496

Luminaire Tested: **CCW-SA-1E-840-U-SLR-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677496  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1E-840-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) 4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4189.1 lumens  
Efficiency: N/A  
Efficacy: 74.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

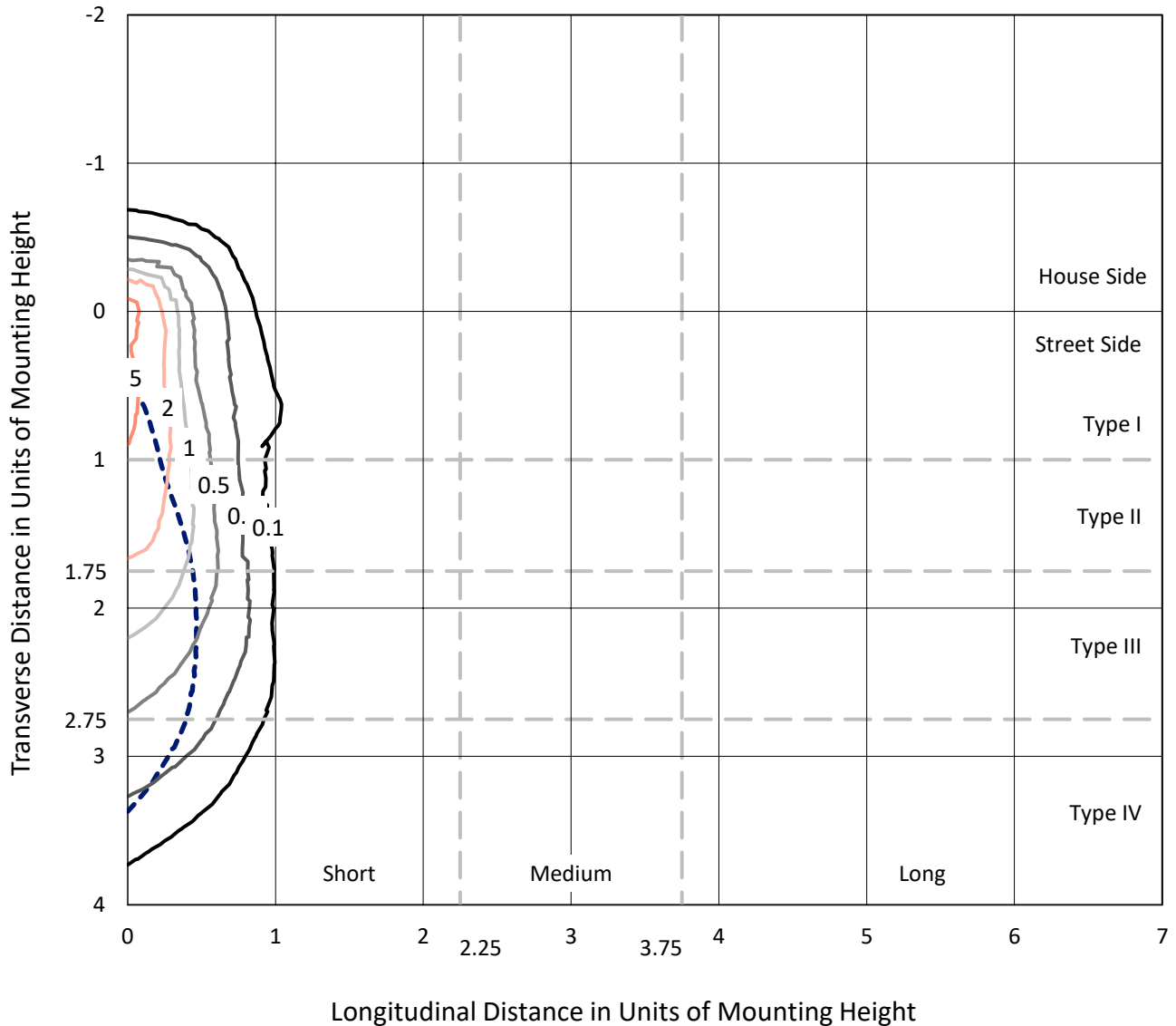
Input Watts (W): 56.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

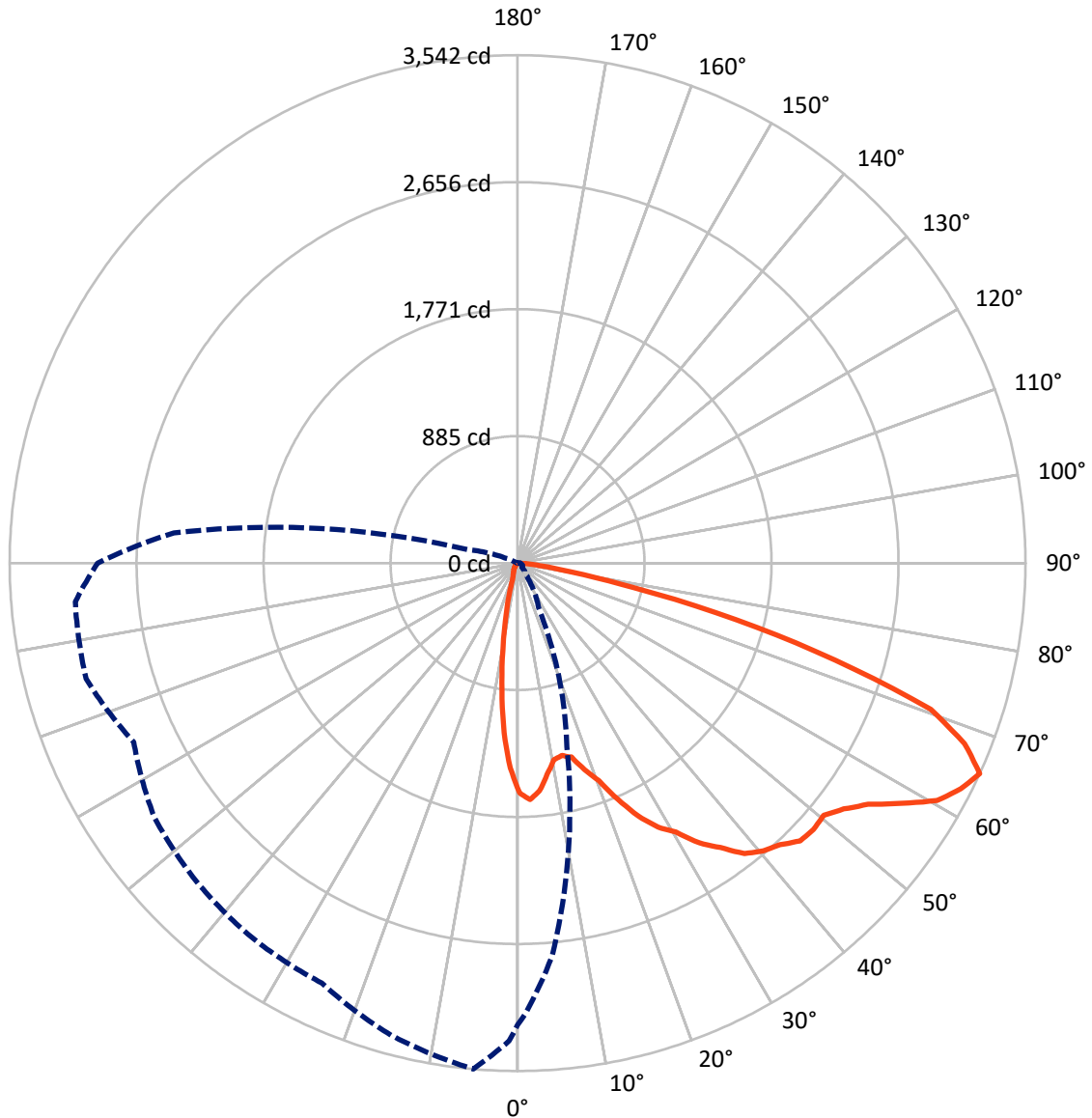
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 7.1 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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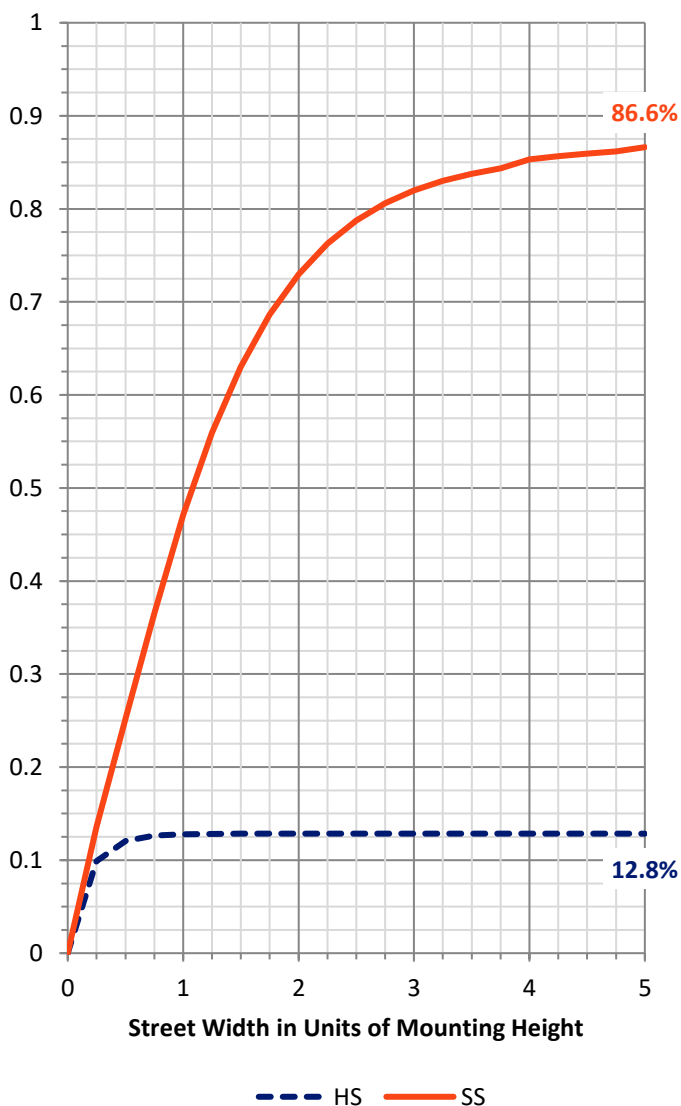
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	543.9	0.0	543.9
	% Fixture	13.0	0.0	13.0
<b>Street Side</b>	Lumens	3645.2	0.0	3645.2
	% Fixture	87.0	0.0	87.0
<b>Total</b>	Lumens	4189.1	0.0	4189.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.3	2.9
10°-20°	234.9	5.6
20°-30°	327.2	7.8
30°-40°	464.9	11.1
40°-50°	644.6	15.4
50°-60°	878.4	21.0
60°-70°	965.7	23.1
70°-80°	474.6	11.3
80°-90°	77.5	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°	4189.1	100.0
0°-180°	4189.1	100.0



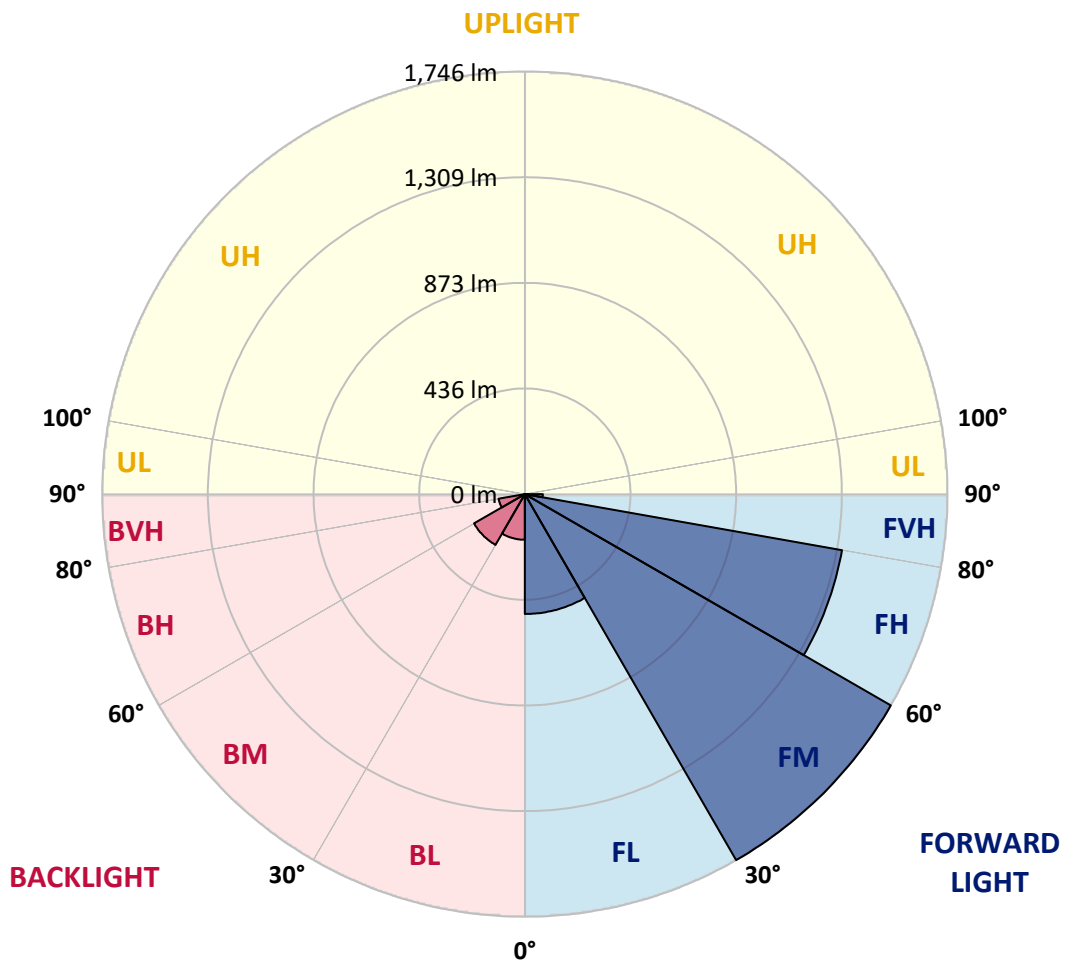
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	495.1	11.8			
FM (30°-60°)	1745.7	41.7			
FH (60°-80°)	1330.4	31.8			G1/1800
FVH (80°-90°)	74.0	1.8			G1/100
BL (0°-30°)	188.3	4.5	B1/500		
BM (30°-60°)	242.2	5.8	B1/1000		
BH (60°-80°)	109.9	2.6	B0/110		G0/110
BVH (80°-90°)	3.5	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°	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5
2.5°	1634.2	1653.4	1635.4	1572.1	1560.8	1530.3	1484.0	1480.6	1432.1	1437.7	1411.7
5°	1536.0	1555.2	1516.8	1433.2	1355.3	1293.2	1255.9	1189.3	1174.6	1141.8	1141.8
7.5°	1435.5	1434.3	1368.8	1298.8	1182.5	1068.4	1016.5	920.5	864.0	833.5	804.1
10°	1351.9	1333.8	1293.2	1148.6	1022.1	903.5	839.1	775.9	717.2	666.3	615.5
12.5°	1293.2	1304.5	1240.1	1083.1	919.3	836.9	768.0	701.4	631.3	573.7	517.3
15°	1323.7	1305.6	1229.9	1068.4	902.4	789.4	698.0	616.7	538.7	463.1	420.1
17.5°	1418.5	1372.2	1283.0	1068.4	867.4	717.2	606.5	510.5	426.9	359.1	306.1
20°	1546.1	1493.1	1397.1	1107.9	841.4	664.1	512.7	391.9	304.9	241.7	201.0
22.5°	1677.2	1635.4	1490.8	1123.7	810.9	592.9	404.3	283.5	203.3	162.6	142.3
25°	1834.1	1775.4	1617.3	1187.0	765.7	524.0	318.5	197.6	151.3	129.9	117.5
27.5°	1959.5	1949.3	1735.9	1225.4	731.8	467.6	251.9	157.0	125.4	109.6	101.6
30°	2117.6	2062.3	1880.4	1302.2	693.4	403.2	210.1	141.2	115.2	98.3	92.6
32.5°	2212.5	2186.5	1956.1	1345.1	650.5	350.1	180.7	124.2	105.0	92.6	87.0
35°	2350.3	2298.3	2064.5	1372.2	627.9	319.6	162.6	112.9	88.1	75.7	68.9
37.5°	2503.9	2484.7	2194.4	1371.1	595.2	301.5	150.2	105.0	83.6	70.0	62.1
40°	2660.9	2582.9	2273.5	1402.7	578.3	288.0	141.2	100.5	79.1	66.6	56.5
42.5°	2778.3	2689.1	2365.0	1391.4	557.9	264.3	137.8	93.7	75.7	61.0	52.0
45°	2809.9	2778.3	2447.4	1388.0	543.2	245.1	132.1	92.6	73.4	57.6	48.6
47.5°	2870.9	2849.5	2549.0	1393.7	531.9	230.4	118.6	94.9	70.0	54.2	46.3
50°	2898.0	2859.6	2631.5	1407.2	506.0	212.3	106.2	99.4	68.9	53.1	44.0
52.5°	3009.8	2976.0	2744.4	1445.6	484.5	188.6	93.7	94.9	71.2	49.7	41.8
55°	3119.4	3081.0	2918.4	1533.7	454.0	169.4	80.2	83.6	67.8	45.2	37.3
57.5°	3269.6	3206.4	3034.7	1569.9	426.9	143.4	71.2	68.9	63.2	40.7	32.8
60°	3292.2	3318.2	3017.7	1547.3	398.7	126.5	62.1	53.1	67.8	36.1	28.2
62.5°	3367.9	3259.4	2938.7	1495.3	378.3	116.3	55.3	44.0	58.7	31.6	23.7
65°	3222.2	3142.0	2753.5	1328.2	352.4	117.5	48.6	36.1	37.3	26.0	19.2
67.5°	3008.7	2945.5	2446.3	1146.3	326.4	115.2	42.9	31.6	28.2	22.6	16.9
70°	2640.5	2503.9	2078.1	930.6	288.0	107.3	36.1	28.2	23.7	18.1	12.4
72.5°	1921.1	1865.8	1490.8	719.4	258.6	97.1	33.9	23.7	20.3	13.6	10.2
75°	1293.2	1201.7	940.8	472.1	207.8	84.7	28.2	21.5	15.8	10.2	7.9
77.5°	683.3	646.0	533.1	224.7	115.2	39.5	15.8	12.4	9.0	7.9	4.5
80°	295.9	263.1	230.4	91.5	40.7	18.1	10.2	6.8	5.6	4.5	2.3
82.5°	151.3	144.6	119.7	39.5	23.7	13.6	5.6	4.5	3.4	2.3	1.1
85°	74.5	76.8	63.2	12.4	13.6	7.9	1.1	1.1	0.0	0.0	0.0
87.5°	5.6	5.6	4.5	2.3	3.4	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°	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5
2.5°	1401.6	1417.4	1390.3	1407.2	1399.3	1402.7	1406.1	1397.1	1399.3	1430.9	1432.1
5°	1122.6	1153.1	1141.8	1157.6	1184.7	1171.2	1183.6	1181.3	1183.6	1188.1	1208.5
7.5°	800.7	791.7	813.2	855.0	903.5	932.9	918.2	910.3	905.8	894.5	908.0
10°	604.2	599.7	594.1	606.5	638.1	670.9	688.9	658.4	641.5	620.0	612.1
12.5°	501.5	473.2	457.4	438.2	447.2	476.6	477.7	448.4	421.3	410.0	422.4
15°	395.3	376.1	347.9	320.7	307.2	329.8	310.6	282.3	247.3	242.8	241.7
17.5°	282.3	271.1	250.7	239.4	223.6	218.0	197.6	154.7	129.9	123.1	125.4
20°	192.0	183.0	181.8	171.7	164.9	160.4	127.6	99.4	91.5	92.6	93.7
22.5°	142.3	137.8	132.1	131.0	125.4	119.7	93.7	83.6	77.9	77.9	81.3
25°	116.3	114.1	108.4	106.2	103.9	96.0	79.1	71.2	68.9	66.6	70.0
27.5°	99.4	98.3	94.9	91.5	89.2	81.3	68.9	62.1	59.9	59.9	59.9
30°	89.2	89.2	84.7	77.9	77.9	68.9	58.7	54.2	52.0	52.0	50.8
32.5°	83.6	81.3	75.7	71.2	67.8	58.7	52.0	47.4	44.0	44.0	45.2
35°	67.8	67.8	66.6	63.2	58.7	49.7	44.0	39.5	37.3	36.1	37.3
37.5°	59.9	56.5	52.0	53.1	50.8	42.9	37.3	33.9	30.5	30.5	30.5
40°	54.2	50.8	46.3	42.9	41.8	38.4	32.8	27.1	23.7	22.6	22.6
42.5°	48.6	46.3	39.5	33.9	32.8	32.8	24.8	20.3	16.9	16.9	16.9
45°	45.2	41.8	36.1	29.4	23.7	24.8	20.3	14.7	12.4	11.3	11.3
47.5°	42.9	39.5	31.6	24.8	18.1	18.1	14.7	10.2	7.9	6.8	6.8
50°	39.5	36.1	28.2	20.3	13.6	11.3	9.0	5.6	3.4	2.3	2.3
52.5°	37.3	33.9	24.8	16.9	11.3	7.9	5.6	1.1	0.0	0.0	0.0
55°	33.9	29.4	21.5	13.6	9.0	4.5	1.1	0.0	0.0	0.0	0.0
57.5°	29.4	26.0	16.9	10.2	5.6	1.1	0.0	0.0	0.0	0.0	0.0
60°	24.8	21.5	13.6	7.9	2.3	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	20.3	18.1	10.2	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	16.9	13.6	7.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	14.7	11.3	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	11.3	7.9	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	7.9	5.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	5.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.4	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°	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5
2.5°	1436.6	1470.5	1502.1	1511.1	1536.0	1604.9	1604.9	1637.6	1696.4	1717.8	1722.3
5°	1211.8	1248.0	1254.8	1324.8	1357.5	1427.6	1473.9	1584.5	1651.2	1693.0	1718.9
7.5°	921.6	934.0	960.0	1025.5	1089.9	1174.6	1262.7	1403.8	1521.3	1568.7	1656.8
10°	633.6	670.9	727.3	786.1	886.6	980.3	1094.4	1227.7	1372.2	1430.9	1506.6
12.5°	426.9	478.9	569.2	652.8	745.4	840.3	948.7	1127.1	1290.9	1372.2	1447.9
15°	249.6	312.8	390.8	526.3	649.4	755.6	864.0	1044.7	1243.5	1348.5	1441.1
17.5°	126.5	145.7	210.1	327.5	490.2	664.1	825.6	1056.0	1279.6	1408.4	1485.2
20°	94.9	100.5	118.6	173.9	335.4	548.9	789.4	1072.9	1380.1	1537.1	1578.9
22.5°	82.4	87.0	94.9	112.9	188.6	420.1	738.6	1114.7	1516.8	1664.7	1752.8
25°	70.0	74.5	81.3	92.6	120.8	285.7	676.5	1158.8	1638.8	1825.1	1907.6
27.5°	61.0	64.4	71.2	80.2	98.3	181.8	569.2	1217.5	1825.1	2019.4	2040.8
30°	52.0	55.3	61.0	71.2	83.6	128.8	417.9	1225.4	1927.9	2104.1	2163.9
32.5°	45.2	46.3	53.1	62.1	70.0	101.6	293.6	1233.3	2003.6	2213.6	2226.0
35°	37.3	39.5	46.3	52.0	61.0	80.2	222.5	1193.8	2101.8	2326.6	2323.2
37.5°	30.5	33.9	38.4	42.9	49.7	67.8	177.3	1120.4	2224.9	2501.6	2395.5
40°	23.7	27.1	31.6	37.3	41.8	61.0	133.3	1009.7	2353.7	2587.4	2474.5
42.5°	16.9	19.2	23.7	29.4	37.3	50.8	96.0	878.7	2404.5	2688.0	2569.4
45°	12.4	14.7	18.1	24.8	38.4	40.7	66.6	759.0	2458.7	2732.0	2547.9
47.5°	6.8	9.0	13.6	21.5	33.9	30.5	47.4	651.7	2520.8	2771.5	2564.9
50°	2.3	3.4	7.9	22.6	27.1	23.7	37.3	594.1	2581.8	2779.4	2598.7
52.5°	0.0	0.0	4.5	23.7	20.3	18.1	32.8	571.5	2566.0	2804.3	2577.3
55°	0.0	0.0	1.1	10.2	11.3	13.6	27.1	570.3	2677.8	2812.2	2694.7
57.5°	0.0	0.0	0.0	3.4	6.8	11.3	23.7	534.2	2749.0	3008.7	2852.9
60°	0.0	0.0	0.0	1.1	4.5	7.9	18.1	502.6	2821.2	3096.8	3022.3
62.5°	0.0	0.0	0.0	0.0	1.1	3.4	12.4	454.0	2675.5	3090.0	3186.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	7.9	359.1	2406.7	2928.5	3095.7
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	4.5	248.5	2107.5	2725.2	2929.7
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150.2	1700.9	2389.8	2484.7
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.4	1214.1	1897.4	2038.6
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0	751.0	1386.9	1560.8
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2	486.8	1050.3	1184.7
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	259.8	658.4	765.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	112.9	399.8	460.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.1	242.8	276.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.3	49.7
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):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5	1601.5
2.5°	1724.6	1757.3	1769.8	1750.6	1752.8	1713.3	1707.6	1652.3	1629.7	1634.2
5°	1803.6	1851.1	1877.1	1855.6	1807.0	1731.4	1662.5	1597.0	1556.3	1536.0
7.5°	1785.6	1838.7	1871.4	1891.7	1836.4	1714.4	1609.4	1486.3	1434.3	1435.5
10°	1686.2	1796.9	1863.5	1837.5	1811.6	1689.6	1526.9	1393.7	1347.4	1351.9
12.5°	1606.0	1729.1	1768.6	1789.0	1735.9	1638.8	1529.2	1376.7	1324.8	1293.2
15°	1556.3	1647.8	1650.0	1681.7	1660.2	1660.2	1552.9	1403.8	1358.7	1323.7
17.5°	1556.3	1576.6	1574.4	1585.7	1621.8	1664.7	1612.8	1513.4	1424.2	1418.5
20°	1591.3	1528.1	1513.4	1517.9	1548.4	1676.0	1744.9	1620.7	1564.2	1546.1
22.5°	1672.6	1533.7	1444.5	1428.7	1522.4	1674.9	1829.6	1790.1	1691.8	1677.2
25°	1784.4	1523.6	1426.4	1406.1	1477.3	1715.6	1946.0	1953.9	1864.6	1834.1
27.5°	1890.6	1568.7	1424.2	1419.7	1513.4	1706.5	2026.1	2084.9	1984.4	1959.5
30°	1926.8	1613.9	1466.0	1406.1	1526.9	1739.3	2023.9	2177.5	2112.0	2117.6
32.5°	1969.7	1659.1	1470.5	1446.8	1584.5	1792.4	2088.3	2326.6	2279.1	2212.5
35°	2032.9	1720.1	1513.4	1491.9	1625.2	1839.8	2101.8	2436.1	2428.2	2350.3
37.5°	2087.1	1779.9	1602.6	1606.0	1749.4	1916.6	2161.7	2570.5	2557.0	2503.9
40°	2125.5	1863.5	1741.5	1750.6	1857.9	2002.4	2267.8	2638.3	2738.8	2660.9
42.5°	2131.2	1938.0	1900.8	1973.1	2073.6	2135.7	2310.7	2684.6	2829.1	2778.3
45°	2152.6	2056.6	2160.5	2213.6	2296.1	2253.1	2308.5	2763.6	2835.9	2809.9
47.5°	2236.2	2272.3	2403.4	2564.9	2594.2	2453.0	2362.7	2776.1	2874.3	2870.9
50°	2323.2	2503.9	2688.0	2795.3	2832.5	2590.8	2413.5	2765.9	2925.1	2898.0
52.5°	2420.3	2704.9	2970.3	3102.5	3082.1	2743.3	2471.1	2848.3	3018.9	3009.8
55°	2481.3	2795.3	3152.1	3336.2	3320.4	2913.8	2654.1	2966.9	3142.0	3119.4
57.5°	2642.8	2942.1	3332.9	3418.7	3460.5	3137.5	2781.7	3161.2	3244.8	3269.6
60°	2776.1	3038.1	3380.3	3504.5	3519.2	3270.7	3005.3	3361.1	3375.8	3292.2
62.5°	2971.4	3075.3	3279.8	3391.6	3467.2	3346.4	3206.4	3468.4	3373.5	3367.9
65°	3114.9	2953.4	3092.3	3154.4	3203.0	3231.2	3408.5	3541.8	3331.7	3222.2
67.5°	3034.7	2723.0	2697.0	2700.4	2715.1	2885.6	3340.8	3362.2	3099.1	3008.7
70°	2671.0	2233.9	2198.9	2226.0	2152.6	2358.2	3066.3	3056.1	2734.3	2640.5
72.5°	2160.5	1628.6	1568.7	1606.0	1622.9	1840.9	2579.5	2317.5	1994.5	1921.1
75°	1716.7	1193.8	1007.4	1097.8	1155.4	1340.6	2014.8	1574.4	1392.5	1293.2
77.5°	1348.5	903.5	783.8	747.7	800.7	974.7	1466.0	826.7	729.6	683.3
80°	855.0	664.1	720.6	668.6	691.2	695.7	763.5	376.1	299.3	295.9
82.5°	515.0	454.0	539.9	297.0	541.0	483.4	317.4	170.5	151.3	151.3
85°	364.8	281.2	186.4	120.8	240.6	265.4	123.1	88.1	76.8	74.5
87.5°	183.0	87.0	41.8	27.1	30.5	49.7	14.7	6.8	6.8	5.6
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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