

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: P676355

Luminaire Tested: **CCW-SA-1E-850-U-T2-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676355  
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-T2-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1050mA w/  
T2 distribution lens and House Side Shield  
Light Source: (16) 5000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

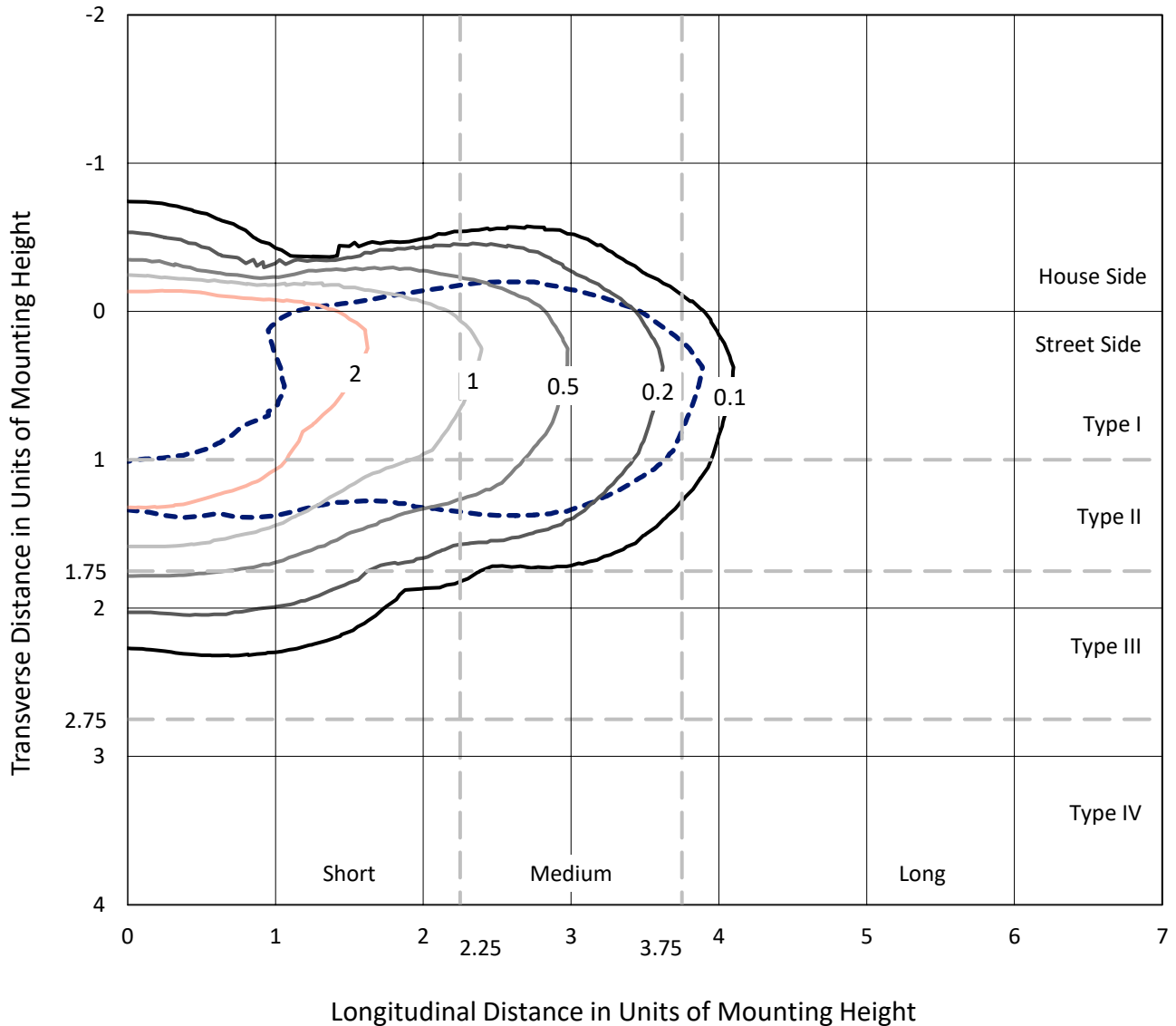
Lumens per Lamp: N/A  
Luminaire Lumens: 4606 lumens  
Efficiency: N/A  
Efficacy: 82.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 56.1  
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

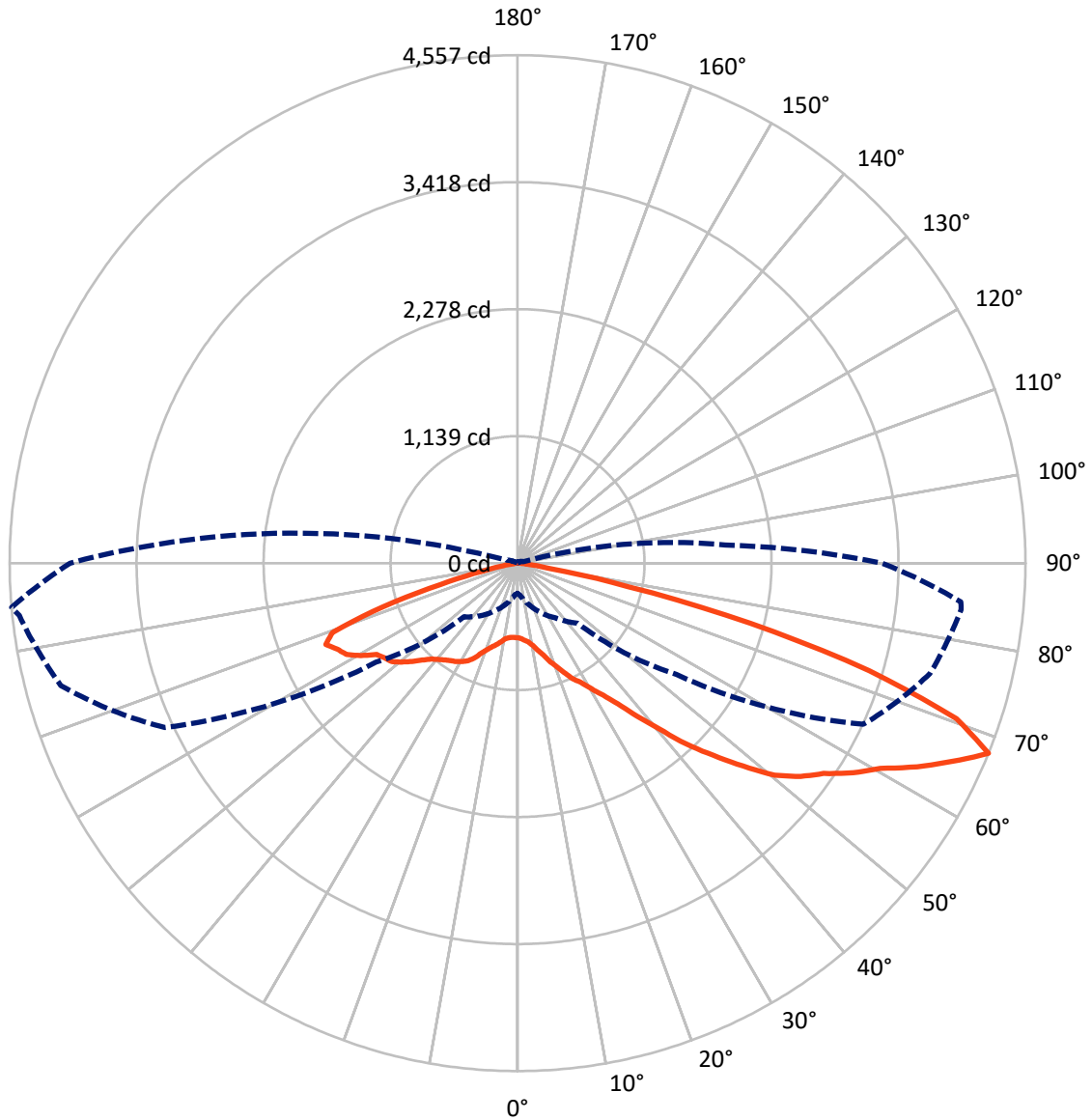
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 275-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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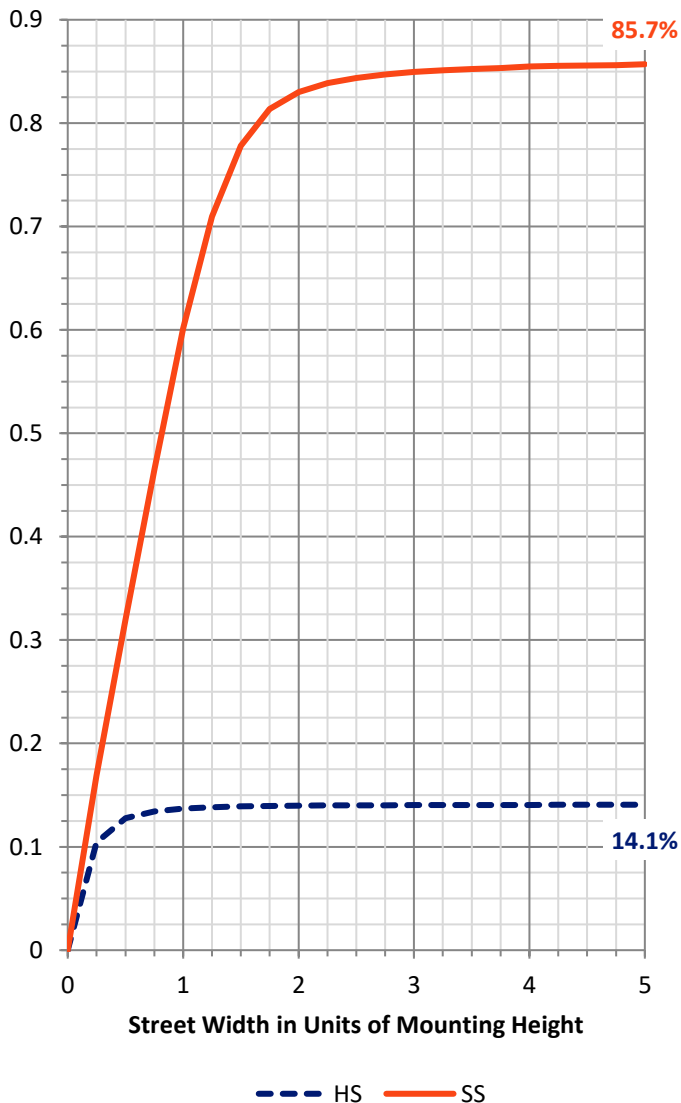
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	654.4	0.0	654.4
	% Fixture	14.2	0.0	14.2
<b>Street Side</b>	Lumens	3951.6	0.0	3951.6
	% Fixture	85.8	0.0	85.8
<b>Total</b>	Lumens	4606.0	0.0	4606.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.1	1.3
10°-20°	164.2	3.6
20°-30°	272.7	5.9
30°-40°	469.2	10.2
40°-50°	843.2	18.3
50°-60°	1200.4	26.1
60°-70°	1094.4	23.8
70°-80°	466.0	10.1
80°-90°	34.7	0.8
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°	4606.0	100.0
0°-180°	4606.0	100.0



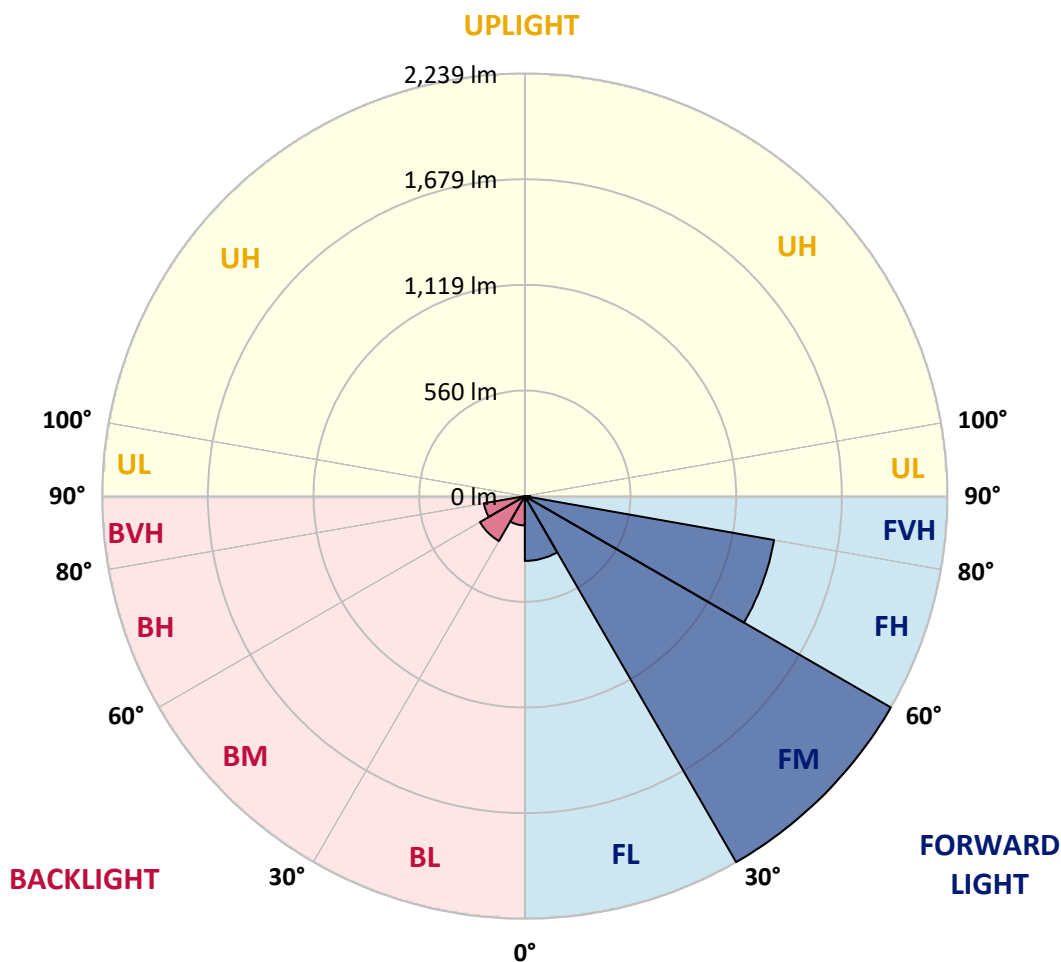
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	343.1	7.4			
FM (30°-60°)	2238.5	48.6			
FH (60°-80°)	1340.5	29.1			G1/1800
FVH (80°-90°)	29.5	0.6			G1/100
BL (0°-30°)	154.9	3.4	B1/500		
BM (30°-60°)	274.3	6.0	B1/1000		
BH (60°-80°)	219.9	4.8	B1/500		G1/500
BVH (80°-90°)	5.2	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8
2.5°	693.9	700.5	700.5	698.3	691.7	687.3	685.1	680.8	676.4	676.4	678.6
5°	700.5	693.9	702.7	691.7	691.7	691.7	700.5	696.1	693.9	683.0	683.0
7.5°	700.5	693.9	693.9	700.5	693.9	698.3	709.3	704.9	713.7	693.9	698.3
10°	680.8	678.6	683.0	691.7	693.9	702.7	713.7	735.7	737.9	724.7	722.5
12.5°	641.2	639.0	654.4	658.8	685.1	707.1	740.0	757.6	777.4	770.8	757.6
15°	612.7	617.1	628.1	645.6	669.8	709.3	746.6	786.2	821.3	812.5	808.1
17.5°	623.7	621.5	623.7	634.6	665.4	704.9	768.6	814.7	865.2	865.2	869.6
20°	656.6	663.2	661.0	654.4	669.8	702.7	768.6	849.8	933.3	926.7	926.7
22.5°	713.7	715.9	702.7	698.3	696.1	715.9	781.8	893.8	990.4	1003.6	999.2
25°	773.0	775.2	770.8	757.6	740.0	744.4	805.9	928.9	1069.4	1091.4	1087.0
27.5°	871.8	869.6	858.6	843.3	816.9	797.1	843.3	955.3	1130.9	1168.3	1157.3
30°	970.6	964.0	948.7	928.9	904.7	867.4	889.4	1005.8	1207.8	1242.9	1218.8
32.5°	1091.4	1078.2	1082.6	1051.9	1001.4	942.1	937.7	1051.9	1269.3	1319.8	1300.0
35°	1245.1	1229.8	1207.8	1179.2	1130.9	1051.9	1027.7	1126.5	1372.5	1409.8	1409.8
37.5°	1447.2	1462.5	1436.2	1317.6	1264.9	1190.2	1139.7	1203.4	1462.5	1552.6	1530.6
40°	1653.6	1666.8	1618.4	1530.6	1416.4	1324.2	1293.4	1328.6	1598.7	1706.3	1664.6
42.5°	1820.5	1838.0	1820.5	1706.3	1616.2	1497.7	1442.8	1475.7	1774.4	1903.9	1849.0
45°	1996.2	2013.7	1994.0	1919.3	1831.5	1763.4	1625.0	1666.8	1958.8	2152.1	2090.6
47.5°	2127.9	2149.9	2114.7	2099.4	2029.1	2018.1	1783.1	1829.3	2152.1	2402.4	2325.6
50°	2158.7	2182.8	2213.6	2231.1	2207.0	2233.3	1996.2	2035.7	2354.1	2633.0	2558.3
52.5°	2086.2	2110.3	2178.4	2259.7	2371.7	2450.7	2211.4	2244.3	2564.9	2824.0	2784.5
55°	1873.2	1895.1	2033.5	2143.3	2411.2	2540.8	2417.8	2556.1	2716.4	3023.9	2927.3
57.5°	1515.2	1541.6	1723.9	1892.9	2279.4	2490.2	2540.8	2815.3	2966.8	3171.0	3059.0
60°	1076.0	1091.4	1249.5	1548.2	1914.9	2237.7	2516.6	3008.5	3164.4	3368.6	3309.4
62.5°	619.3	632.4	797.1	1078.2	1445.0	1868.8	2409.0	3190.8	3377.4	3586.0	3553.1
65°	410.6	415.0	527.0	680.8	939.9	1376.9	2136.7	3353.3	3588.2	3759.5	3722.2
67.5°	270.1	294.3	382.1	487.5	601.7	762.0	1741.4	3421.3	3829.8	4001.1	3992.3
70°	193.2	202.0	274.5	375.5	452.4	428.2	1018.9	2940.4	3818.8	4067.0	3994.5
72.5°	114.2	123.0	182.3	281.1	355.7	272.3	476.5	2079.6	3164.4	3245.7	3225.9
75°	83.4	83.4	112.0	202.0	259.1	195.4	224.0	1315.4	2101.6	2281.6	2279.4
77.5°	59.3	61.5	76.9	120.8	199.8	142.7	123.0	731.3	1148.5	1256.1	1196.8
80°	35.1	37.3	52.7	72.5	144.9	103.2	81.3	333.8	441.4	445.8	423.8
82.5°	26.4	26.4	35.1	50.5	101.0	70.3	50.5	127.4	142.7	129.6	109.8
85°	15.4	13.2	26.4	37.3	59.3	39.5	35.1	59.3	65.9	48.3	43.9
87.5°	4.4	4.4	11.0	13.2	26.4	22.0	15.4	22.0	30.7	17.6	13.2
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°	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8
2.5°	674.2	667.6	656.6	652.2	636.8	630.2	625.9	614.9	617.1	610.5	610.5
5°	667.6	667.6	645.6	621.5	597.3	581.9	564.4	542.4	542.4	533.6	535.8
7.5°	691.7	674.2	645.6	601.7	562.2	527.0	511.7	489.7	476.5	469.9	469.9
10°	707.1	689.5	641.2	588.5	538.0	494.1	461.2	430.4	412.8	412.8	410.6
12.5°	748.8	722.5	658.8	586.3	511.7	445.8	395.3	360.1	336.0	318.4	322.8
15°	784.0	755.4	667.6	568.8	465.5	373.3	311.8	246.0	213.0	195.4	188.9
17.5°	838.9	786.2	687.3	538.0	395.3	292.1	202.0	147.1	134.0	131.8	131.8
20°	885.0	823.5	689.5	478.7	325.0	186.7	129.6	120.8	114.2	112.0	109.8
22.5°	948.7	871.8	680.8	410.6	232.8	125.2	109.8	101.0	96.6	90.0	90.0
25°	1014.5	935.5	663.2	347.0	142.7	107.6	96.6	87.8	79.1	74.7	76.9
27.5°	1084.8	983.8	612.7	270.1	109.8	94.4	79.1	72.5	68.1	65.9	65.9
30°	1141.9	1014.5	538.0	180.1	98.8	83.4	70.3	63.7	59.3	57.1	57.1
32.5°	1183.6	1040.9	454.6	120.8	90.0	74.7	63.7	57.1	52.7	50.5	50.5
35°	1253.9	1060.7	377.7	103.2	81.3	65.9	54.9	50.5	46.1	46.1	46.1
37.5°	1361.5	1087.0	300.9	94.4	74.7	59.3	52.7	46.1	43.9	41.7	41.7
40°	1455.9	1120.0	215.2	85.6	68.1	54.9	46.1	41.7	39.5	37.3	37.3
42.5°	1592.1	1157.3	140.5	76.9	61.5	50.5	41.7	37.3	35.1	32.9	32.9
45°	1765.6	1218.8	109.8	68.1	54.9	46.1	39.5	35.1	30.7	30.7	28.5
47.5°	1950.0	1293.4	98.8	63.7	50.5	41.7	35.1	30.7	28.5	26.4	26.4
50°	2121.3	1365.9	92.2	59.3	46.1	39.5	32.9	28.5	24.2	22.0	22.0
52.5°	2275.0	1434.0	87.8	54.9	43.9	35.1	28.5	24.2	22.0	19.8	19.8
55°	2356.3	1464.7	85.6	52.7	39.5	32.9	26.4	22.0	19.8	17.6	17.6
57.5°	2483.7	1504.3	83.4	50.5	37.3	28.5	24.2	19.8	17.6	15.4	15.4
60°	2690.1	1633.8	81.3	48.3	35.1	28.5	22.0	17.6	13.2	11.0	11.0
62.5°	2861.4	1741.4	72.5	41.7	30.7	24.2	17.6	13.2	8.8	6.6	6.6
65°	3056.8	1791.9	63.7	37.3	26.4	19.8	13.2	8.8	6.6	2.2	2.2
67.5°	3269.8	1868.8	52.7	32.9	24.2	15.4	11.0	6.6	2.2	0.0	0.0
70°	3157.8	1772.2	43.9	28.5	22.0	13.2	8.8	4.4	0.0	0.0	0.0
72.5°	2474.9	1269.3	35.1	26.4	19.8	13.2	8.8	2.2	0.0	0.0	0.0
75°	1653.6	718.1	30.7	22.0	15.4	11.0	6.6	2.2	0.0	0.0	0.0
77.5°	898.2	322.8	26.4	19.8	13.2	8.8	6.6	2.2	0.0	0.0	0.0
80°	292.1	127.4	22.0	17.6	13.2	8.8	6.6	2.2	0.0	0.0	0.0
82.5°	79.1	39.5	22.0	17.6	13.2	8.8	6.6	2.2	0.0	0.0	0.0
85°	32.9	26.4	22.0	17.6	13.2	8.8	6.6	2.2	0.0	0.0	0.0
87.5°	13.2	8.8	8.8	11.0	8.8	6.6	4.4	2.2	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°	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8
2.5°	612.7	617.1	619.3	619.3	630.2	641.2	654.4	665.4	665.4	672.0	678.6
5°	538.0	542.4	549.0	568.8	590.7	614.9	639.0	656.6	680.8	691.7	698.3
7.5°	476.5	480.9	498.5	518.3	549.0	590.7	632.4	672.0	696.1	707.1	715.9
10°	412.8	419.4	439.2	474.3	513.9	564.4	612.7	680.8	720.3	742.2	751.0
12.5°	320.6	338.2	364.5	401.9	452.4	529.2	619.3	689.5	757.6	784.0	801.5
15°	202.0	217.4	259.1	318.4	386.5	476.5	601.7	702.7	797.1	823.5	852.0
17.5°	129.6	131.8	144.9	208.6	296.5	410.6	575.3	722.5	841.1	878.4	922.3
20°	109.8	114.2	116.4	125.2	197.6	338.2	520.4	746.6	893.8	944.3	986.0
22.5°	92.2	94.4	98.8	105.4	118.6	246.0	445.8	746.6	939.9	1014.5	1062.9
25°	74.7	79.1	83.4	90.0	103.2	153.7	368.9	733.5	994.8	1087.0	1148.5
27.5°	65.9	65.9	70.3	76.9	87.8	107.6	292.1	693.9	1036.5	1130.9	1212.2
30°	57.1	59.3	61.5	68.1	79.1	94.4	202.0	630.2	1080.4	1216.6	1308.8
32.5°	50.5	50.5	54.9	59.3	70.3	85.6	129.6	533.6	1137.5	1282.5	1412.0
35°	46.1	46.1	48.3	52.7	63.7	76.9	101.0	452.4	1205.6	1407.6	1550.4
37.5°	41.7	41.7	43.9	48.3	57.1	68.1	92.2	388.7	1275.9	1532.8	1741.4
40°	37.3	37.3	39.5	43.9	50.5	61.5	83.4	314.0	1363.7	1717.3	1950.0
42.5°	32.9	32.9	35.1	39.5	46.1	54.9	72.5	235.0	1480.1	1917.1	2220.1
45°	28.5	28.5	30.7	35.1	39.5	50.5	65.9	180.1	1607.5	2138.9	2457.3
47.5°	24.2	26.4	28.5	32.9	37.3	46.1	59.3	158.1	1732.6	2373.9	2720.8
50°	22.0	22.0	24.2	28.5	35.1	41.7	54.9	155.9	1860.0	2553.9	2990.9
52.5°	19.8	19.8	22.0	26.4	32.9	39.5	52.7	160.3	1965.4	2720.8	3179.8
55°	17.6	17.6	19.8	22.0	28.5	37.3	48.3	164.7	2040.1	2889.9	3331.3
57.5°	15.4	15.4	17.6	22.0	26.4	32.9	43.9	169.1	2160.9	3056.8	3550.9
60°	11.0	11.0	15.4	19.8	24.2	28.5	41.7	173.5	2354.1	3287.4	3737.6
62.5°	6.6	6.6	8.8	15.4	19.8	26.4	37.3	164.7	2534.2	3583.9	4023.0
65°	2.2	4.4	6.6	8.8	15.4	22.0	30.7	149.3	2685.7	3880.3	4286.6
67.5°	0.0	0.0	2.2	6.6	13.2	17.6	26.4	109.8	2709.8	4014.3	4556.7
70°	0.0	0.0	2.2	6.6	11.0	17.6	24.2	61.5	2308.0	3586.0	4176.8
72.5°	0.0	0.0	0.0	4.4	11.0	15.4	22.0	46.1	1701.9	2703.3	3300.6
75°	0.0	0.0	0.0	2.2	8.8	13.2	19.8	35.1	1034.3	1802.9	2154.3
77.5°	0.0	0.0	0.0	2.2	6.6	13.2	19.8	30.7	364.5	858.6	1012.4
80°	0.0	0.0	0.0	4.4	8.8	13.2	17.6	26.4	87.8	215.2	289.9
82.5°	0.0	0.0	0.0	2.2	6.6	11.0	15.4	22.0	35.1	63.7	101.0
85°	0.0	0.0	0.0	2.2	4.4	11.0	15.4	19.8	24.2	30.7	43.9
87.5°	0.0	0.0	0.0	0.0	2.2	4.4	6.6	8.8	8.8	8.8	15.4
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):**

	276°	285°	295°	305°	315°	325°	335°	345°	355°	360°
0°	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8	669.8
2.5°	676.4	685.1	689.5	698.3	702.7	700.5	698.3	704.9	700.5	693.9
5°	700.5	700.5	707.1	709.3	709.3	702.7	707.1	704.9	700.5	700.5
7.5°	726.9	737.9	737.9	724.7	722.5	718.1	718.1	700.5	693.9	700.5
10°	753.2	762.0	764.2	748.8	729.1	720.3	709.3	687.3	676.4	680.8
12.5°	808.1	808.1	784.0	766.4	740.0	709.3	683.0	652.2	636.8	641.2
15°	847.7	856.4	823.5	784.0	737.9	680.8	652.2	628.1	619.3	612.7
17.5°	924.5	906.9	854.2	797.1	731.3	672.0	652.2	630.2	623.7	623.7
20°	990.4	981.6	902.6	799.3	729.1	689.5	676.4	665.4	663.2	656.6
22.5°	1080.4	1040.9	939.9	823.5	753.2	718.1	713.7	724.7	718.1	713.7
25°	1148.5	1115.6	968.4	858.6	790.6	779.6	786.2	797.1	779.6	773.0
27.5°	1240.7	1179.2	1023.3	904.7	841.1	852.0	874.0	876.2	865.2	871.8
30°	1326.4	1260.5	1065.1	957.5	926.7	937.7	970.6	994.8	979.4	970.6
32.5°	1449.4	1348.3	1148.5	1045.3	1034.3	1062.9	1100.2	1115.6	1095.8	1091.4
35°	1578.9	1449.4	1234.1	1144.1	1163.9	1203.4	1236.3	1262.7	1231.9	1245.1
37.5°	1780.9	1611.9	1379.1	1300.0	1308.8	1324.2	1385.7	1458.1	1473.5	1447.2
40°	1991.8	1787.5	1513.0	1451.5	1471.3	1513.0	1585.5	1653.6	1688.7	1653.6
42.5°	2235.5	1956.6	1719.5	1647.0	1666.8	1726.0	1822.7	1877.6	1873.2	1820.5
45°	2536.4	2191.6	1912.7	1822.7	1895.1	1947.8	2044.5	2051.1	2009.3	1996.2
47.5°	2766.9	2389.2	2121.3	2064.2	2163.0	2165.2	2187.2	2189.4	2143.3	2127.9
50°	3021.7	2617.6	2354.1	2270.7	2437.5	2360.7	2301.4	2261.9	2191.6	2158.7
52.5°	3272.0	2780.1	2569.3	2483.7	2657.1	2452.9	2345.3	2224.5	2121.3	2086.2
55°	3406.0	3048.0	2883.3	2683.5	2705.5	2479.3	2209.2	2057.6	1882.0	1873.2
57.5°	3564.1	3228.1	3149.0	2819.6	2624.2	2294.8	1925.9	1726.0	1537.2	1515.2
60°	3750.7	3513.6	3430.1	2797.7	2336.5	1928.1	1526.2	1269.3	1091.4	1076.0
62.5°	3959.4	3851.8	3603.6	2582.5	1855.6	1357.1	1008.0	792.8	628.1	619.3
65°	4288.8	4135.0	3695.8	2174.0	1227.6	869.6	669.8	513.9	415.0	410.6
67.5°	4495.2	4242.6	3489.4	1550.4	680.8	575.3	469.9	373.3	287.7	270.1
70°	4203.1	3893.5	2760.4	887.2	395.3	437.0	362.3	250.3	197.6	193.2
72.5°	3357.7	2889.9	1857.8	417.2	246.0	342.6	263.5	169.1	118.6	114.2
75°	2290.4	1818.3	1166.1	193.2	173.5	250.3	193.2	98.8	83.4	83.4
77.5°	1023.3	926.7	597.3	118.6	129.6	191.1	112.0	68.1	61.5	59.3
80°	311.8	327.2	243.8	81.3	96.6	144.9	68.1	46.1	37.3	35.1
82.5°	105.4	123.0	109.8	48.3	65.9	103.2	46.1	30.7	26.4	26.4
85°	50.5	61.5	54.9	30.7	35.1	50.5	37.3	24.2	15.4	15.4
87.5°	19.8	28.5	19.8	13.2	19.8	26.4	15.4	11.0	4.4	4.4
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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