

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: P677352

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

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677352  
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-SLL-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1050mA w/  
SLL distribution lens and House Side Shield  
Light Source: (16) 4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

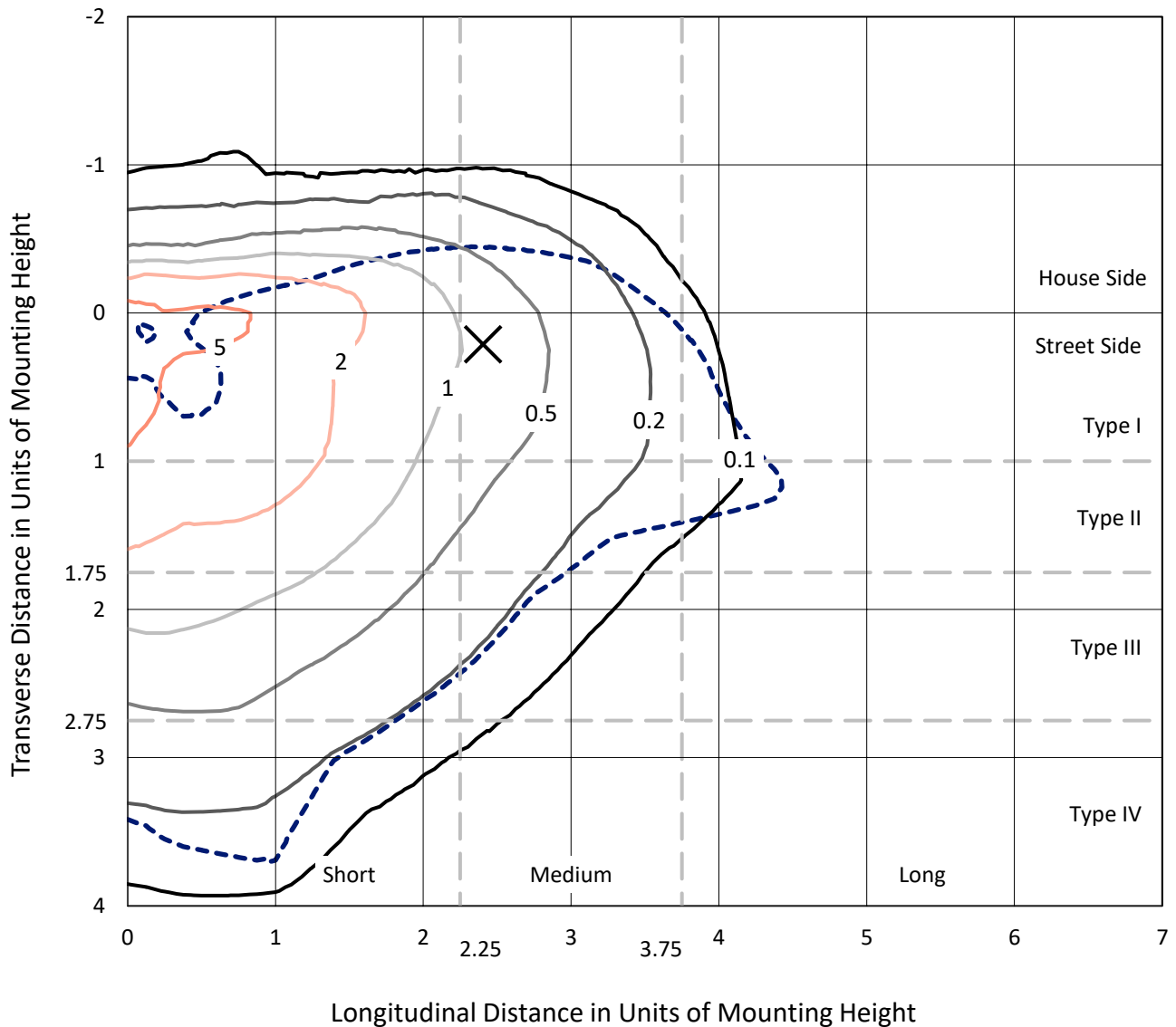
Lumens per Lamp: N/A  
Luminaire Lumens: 4229.4 lumens  
Efficiency: N/A  
Efficacy: 75.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1

Input Watts (W): 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

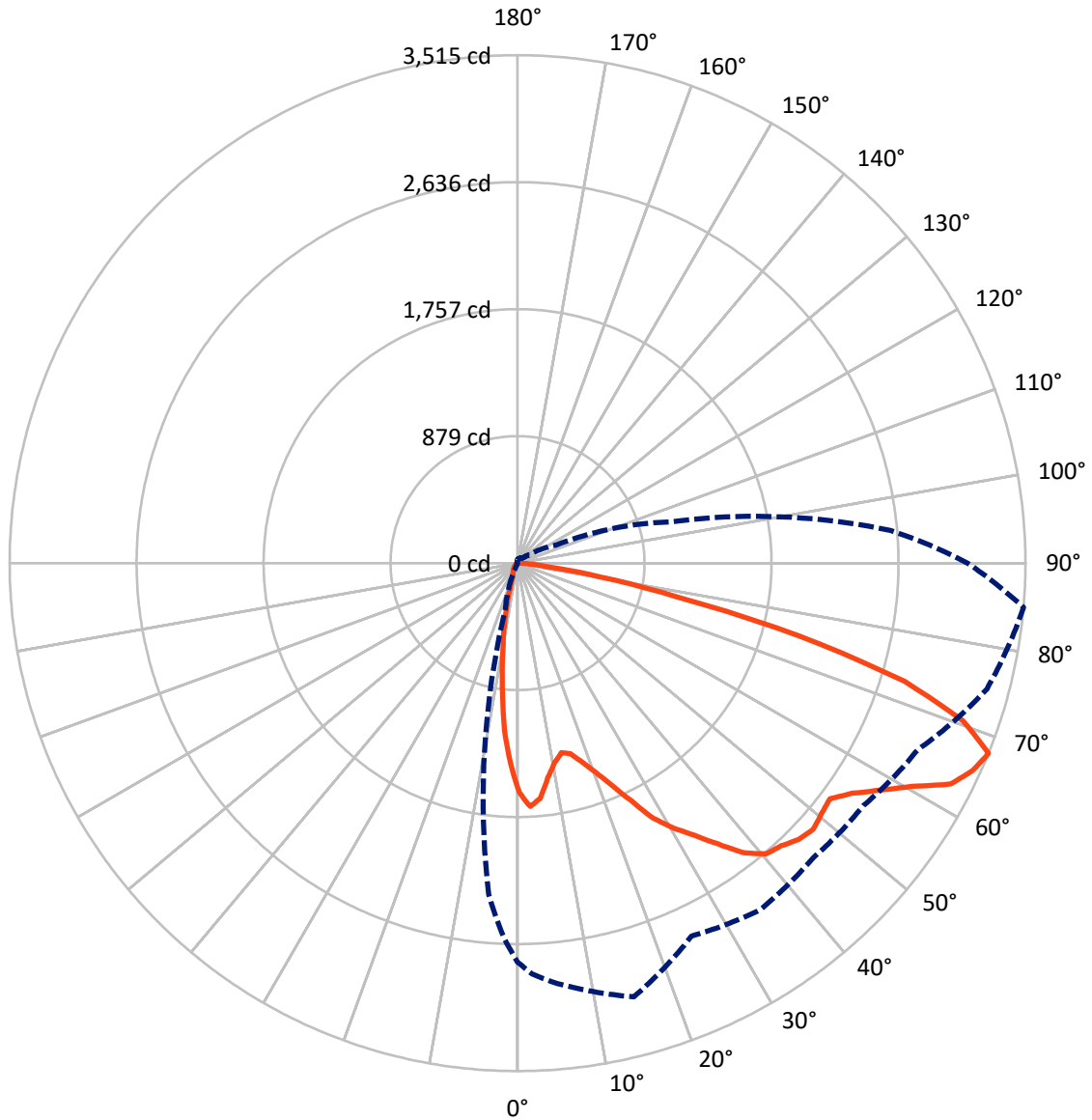
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 7.9 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	734.4	0.0	734.4
	% Fixture	17.4	0.0	17.4
<b>Street Side</b>	Lumens	3495.0	0.0	3495.0
	% Fixture	82.6	0.0	82.6
<b>Total</b>	Lumens	4229.4	0.0	4229.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.8	2.9
10°-20°	236.9	5.6
20°-30°	327.8	7.8
30°-40°	463.3	11.0
40°-50°	630.8	14.9
50°-60°	835.4	19.8
60°-70°	970.0	22.9
70°-80°	549.3	13.0
80°-90°	94.9	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°	4229.4	100.0
0°-180°	4229.4	100.0



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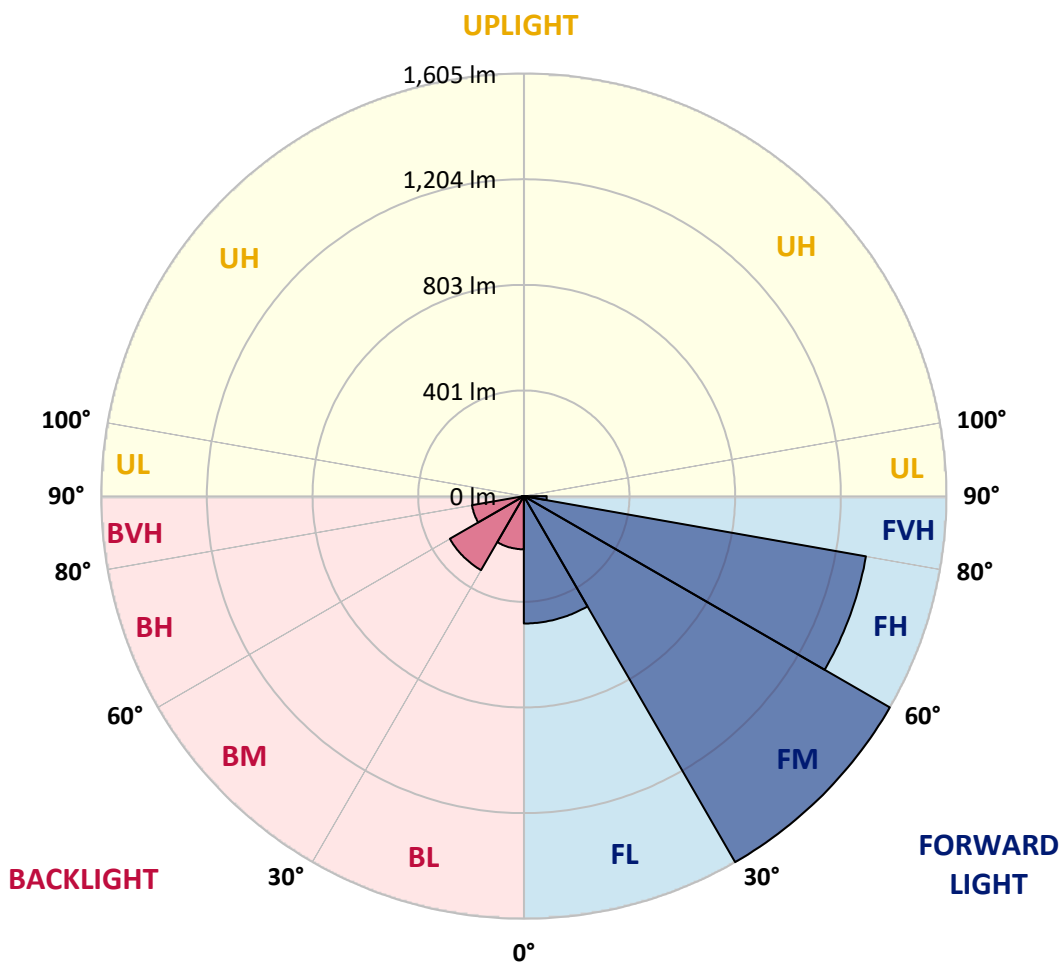
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	483.6	11.4			
FM (30°-60°)	1605.1	38.0			
FH (60°-80°)	1319.4	31.2			G1/1800
FVH (80°-90°)	86.9	2.1			G1/100
BL (0°-30°)	201.9	4.8	B1/500		
BM (30°-60°)	324.5	7.7	B1/1000		
BH (60°-80°)	200.0	4.7	B1/500		G1/500
BVH (80°-90°)	8.0	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°	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2
2.5°	1652.3	1687.3	1688.5	1704.3	1720.1	1720.1	1757.4	1748.3	1715.6	1709.9	1686.2
5°	1664.7	1677.2	1686.2	1766.4	1834.2	1827.4	1847.7	1834.2	1770.9	1689.6	1634.3
7.5°	1557.5	1571.0	1607.1	1743.8	1835.3	1865.8	1904.2	1819.5	1752.8	1606.0	1499.9
10°	1415.1	1441.1	1507.8	1663.6	1776.6	1873.7	1873.7	1805.9	1677.2	1533.7	1403.9
12.5°	1336.1	1388.0	1424.2	1582.3	1729.1	1795.8	1793.5	1757.4	1673.8	1493.1	1346.3
15°	1349.6	1364.3	1441.1	1564.2	1661.4	1658.0	1698.6	1687.3	1628.6	1529.2	1367.7
17.5°	1411.8	1434.3	1501.0	1564.2	1610.5	1597.0	1595.9	1650.1	1653.5	1590.2	1447.9
20°	1513.4	1580.0	1611.7	1630.9	1574.4	1516.8	1510.0	1585.7	1644.4	1668.1	1543.9
22.5°	1676.0	1720.1	1784.5	1686.2	1539.4	1467.1	1453.5	1537.1	1655.7	1760.7	1668.1
25°	1835.3	1869.2	1931.3	1804.8	1578.9	1456.9	1433.2	1505.5	1698.6	1889.5	1818.3
27.5°	2003.6	2032.9	2039.7	1891.8	1600.4	1436.6	1408.4	1505.5	1734.8	1957.3	1997.9
30°	2106.3	2141.4	2148.1	1968.6	1635.4	1453.5	1440.0	1512.3	1759.6	2014.9	2126.7
32.5°	2221.5	2230.6	2224.9	1982.1	1673.8	1503.2	1446.8	1557.5	1787.9	2083.8	2244.1
35°	2359.3	2375.1	2317.5	2044.2	1759.6	1534.9	1514.5	1612.8	1836.4	2115.4	2386.4
37.5°	2464.4	2514.1	2384.2	2067.9	1776.6	1601.5	1604.9	1728.0	1870.3	2153.8	2543.4
40°	2662.0	2578.4	2497.1	2149.3	1840.9	1714.4	1696.4	1846.6	1984.4	2178.6	2646.2
42.5°	2770.4	2726.4	2541.2	2157.2	1940.3	1870.3	1874.8	1981.0	2044.2	2248.7	2674.4
45°	2797.5	2751.2	2601.0	2162.8	2038.6	2054.4	2132.3	2152.7	2132.3	2295.0	2727.5
47.5°	2866.4	2765.9	2594.3	2238.5	2197.8	2258.8	2358.2	2402.3	2252.0	2278.0	2752.4
50°	2852.9	2795.3	2579.6	2270.1	2392.1	2553.6	2620.2	2602.2	2385.3	2243.0	2725.3
52.5°	2796.4	2734.3	2624.7	2355.9	2573.9	2769.3	2861.9	2816.7	2503.9	2322.1	2707.2
55°	2878.9	2831.4	2683.5	2472.3	2710.6	2959.1	3024.6	2990.7	2649.6	2395.5	2810.0
57.5°	2968.1	2957.9	2842.7	2608.9	2872.1	3154.4	3154.4	3112.7	2776.1	2501.6	2962.4
60°	3096.8	3119.4	2960.2	2699.3	2927.4	3143.1	3306.9	3258.3	2903.7	2688.0	3135.2
62.5°	3055.1	3127.3	3111.5	2893.5	2990.7	3198.5	3287.7	3323.9	3061.8	2915.0	3365.6
65°	2920.7	2997.5	3110.4	3021.2	2943.2	3064.1	3109.3	3218.8	3140.9	3128.5	3460.5
67.5°	2760.3	2843.9	2913.9	3107.0	2847.2	2927.4	2887.9	2922.9	3055.1	3362.3	3514.7
70°	2410.2	2490.3	2601.0	2916.1	2593.1	2520.8	2510.7	2493.7	2699.3	3278.7	3268.5
72.5°	1982.1	2019.4	2202.3	2370.6	1918.9	1905.3	1921.1	1901.9	2140.2	2968.1	2799.8
75°	1484.0	1521.3	1625.2	1820.6	1306.7	1228.8	1319.1	1408.4	1634.3	2304.0	2011.5
77.5°	1115.9	1163.3	1228.8	1362.1	958.9	836.9	849.3	934.0	1181.4	1845.5	1127.2
80°	724.0	718.3	844.8	937.4	721.7	744.3	712.7	774.8	856.1	987.1	576.0
82.5°	417.9	423.5	476.6	537.6	502.6	574.9	414.5	692.3	611.0	402.1	214.6
85°	234.9	245.1	293.6	372.7	315.1	211.2	172.8	343.3	384.0	164.9	103.9
87.5°	23.7	20.3	39.5	141.2	85.8	35.0	52.0	82.4	92.6	62.1	30.5
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°	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2
2.5°	1652.3	1652.3	1624.1	1576.7	1557.5	1523.6	1477.3	1491.9	1476.1	1418.5	1403.9
5°	1584.6	1530.3	1471.6	1399.3	1357.5	1271.7	1244.6	1196.0	1203.9	1155.4	1157.6
7.5°	1443.4	1400.5	1301.1	1206.2	1123.8	1049.2	944.2	904.7	866.3	847.1	869.6
10°	1360.9	1280.7	1145.2	1021.0	911.4	844.8	774.8	720.6	670.9	633.6	625.7
12.5°	1301.1	1229.9	1066.2	914.8	829.0	774.8	710.4	635.9	587.3	522.9	503.7
15°	1283.0	1196.0	1023.2	873.0	789.5	700.2	626.8	553.4	490.2	422.4	398.7
17.5°	1345.1	1244.6	1022.1	839.2	721.7	625.7	524.0	441.6	377.2	315.1	300.4
20°	1450.2	1296.6	1054.9	818.8	657.3	528.6	413.4	330.9	258.6	218.0	207.8
22.5°	1569.9	1384.7	1058.3	764.6	592.9	431.4	301.6	218.0	177.3	158.1	152.5
25°	1716.7	1525.8	1098.9	720.6	517.3	327.5	214.6	167.2	143.4	132.1	129.9
27.5°	1837.5	1624.1	1143.0	674.3	442.7	242.8	168.3	136.7	124.2	112.9	111.8
30°	1962.9	1737.0	1155.4	646.0	378.4	199.9	144.6	120.8	107.3	101.6	100.5
32.5°	2072.5	1860.1	1194.9	599.7	317.4	176.2	131.0	108.4	99.4	90.4	89.2
35°	2213.6	1931.3	1214.1	574.9	294.8	159.2	119.7	99.4	85.8	80.2	77.9
37.5°	2365.0	2000.2	1226.5	555.7	275.6	149.1	112.9	93.7	81.3	73.4	71.2
40°	2506.2	2097.3	1208.5	532.0	260.9	136.7	108.4	87.0	75.7	67.8	64.4
42.5°	2614.6	2192.2	1202.8	509.4	245.1	132.1	102.8	83.6	71.2	62.1	61.0
45°	2675.6	2256.6	1163.3	491.3	232.7	134.4	100.5	79.1	67.8	59.9	55.3
47.5°	2660.9	2306.3	1173.5	485.6	215.7	125.4	99.4	75.7	62.1	55.3	52.0
50°	2742.2	2406.8	1156.5	467.6	203.3	112.9	108.4	75.7	61.0	53.1	49.7
52.5°	2755.8	2498.3	1192.7	434.8	184.1	103.9	107.3	74.5	58.7	50.8	46.3
55°	2868.7	2604.4	1262.7	416.8	168.3	90.4	98.3	72.3	53.1	46.3	44.0
57.5°	3022.3	2824.7	1307.9	399.8	146.8	79.1	82.4	71.2	48.6	42.9	39.5
60°	3170.3	2912.7	1311.2	369.3	126.5	71.2	64.4	71.2	45.2	38.4	35.0
62.5°	3280.9	2912.7	1288.7	343.3	110.7	63.2	56.5	67.8	40.7	33.9	31.6
65°	3221.1	2834.8	1229.9	321.9	100.5	55.3	48.6	52.0	36.1	29.4	27.1
67.5°	3113.8	2592.0	1100.0	295.9	99.4	48.6	41.8	38.4	31.6	26.0	23.7
70°	2942.1	2264.5	916.0	266.5	97.1	44.0	37.3	32.8	28.2	22.6	20.3
72.5°	2370.6	1870.3	752.2	249.6	94.9	38.4	31.6	28.2	23.7	19.2	16.9
75°	1642.2	1194.9	579.4	213.5	92.6	35.0	29.4	24.8	20.3	15.8	14.7
77.5°	984.8	798.5	373.8	160.4	61.0	28.2	24.8	19.2	16.9	13.6	12.4
80°	460.8	377.2	151.3	62.1	29.4	20.3	16.9	14.7	13.6	11.3	10.2
82.5°	180.7	159.2	73.4	36.1	23.7	15.8	13.6	12.4	11.3	9.0	7.9
85°	97.1	85.8	35.0	24.8	16.9	11.3	11.3	10.2	9.0	7.9	6.8
87.5°	21.5	15.8	14.7	14.7	12.4	9.0	9.0	7.9	6.8	5.6	4.5
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°	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2
2.5°	1395.9	1412.9	1385.8	1402.7	1379.0	1397.1	1399.3	1382.4	1386.9	1409.5	1419.7
5°	1189.3	1178.0	1153.1	1145.2	1146.3	1131.7	1137.3	1145.2	1157.6	1164.4	1184.7
7.5°	857.2	883.2	882.1	901.3	902.4	900.1	884.3	850.4	861.7	852.7	864.0
10°	613.3	624.6	646.0	658.4	681.0	668.6	632.5	618.9	612.1	611.0	622.3
12.5°	490.2	463.1	460.8	465.3	476.6	461.9	443.9	428.0	436.0	451.8	464.2
15°	379.5	356.9	327.5	323.0	325.3	318.5	299.3	279.0	284.6	300.4	309.5
17.5°	291.4	265.4	245.1	231.5	227.0	203.3	175.1	158.1	153.6	152.5	160.4
20°	196.5	192.0	188.6	171.7	171.7	137.8	114.1	101.6	101.6	103.9	105.0
22.5°	146.8	141.2	142.3	138.9	129.9	102.8	90.4	87.0	87.0	89.2	89.2
25°	127.6	119.7	117.5	116.3	107.3	88.1	79.1	75.7	75.7	77.9	77.9
27.5°	108.4	106.2	102.8	98.3	90.4	75.7	70.0	66.6	67.8	68.9	67.8
30°	99.4	93.7	89.2	89.2	80.2	67.8	63.2	61.0	58.7	61.0	62.1
32.5°	88.1	84.7	82.4	79.1	68.9	59.9	55.3	53.1	52.0	52.0	53.1
35°	75.7	75.7	73.4	68.9	59.9	54.2	48.6	46.3	45.2	46.3	46.3
37.5°	67.8	64.4	65.5	61.0	53.1	47.4	41.8	39.5	39.5	38.4	39.5
40°	63.2	57.6	54.2	52.0	47.4	40.7	36.1	33.9	32.8	32.8	32.8
42.5°	56.5	52.0	45.2	44.0	42.9	35.0	29.4	28.2	27.1	26.0	26.0
45°	53.1	46.3	40.7	35.0	35.0	29.4	24.8	22.6	21.5	20.3	21.5
47.5°	48.6	41.8	35.0	29.4	28.2	23.7	19.2	16.9	15.8	15.8	15.8
50°	46.3	37.3	30.5	24.8	21.5	19.2	14.7	12.4	11.3	11.3	11.3
52.5°	42.9	35.0	27.1	21.5	16.9	14.7	11.3	9.0	7.9	7.9	7.9
55°	38.4	31.6	23.7	18.1	14.7	11.3	7.9	5.6	4.5	4.5	4.5
57.5°	36.1	28.2	20.3	15.8	11.3	7.9	4.5	3.4	3.4	2.3	3.4
60°	32.8	24.8	16.9	12.4	9.0	5.6	3.4	1.1	1.1	1.1	1.1
62.5°	28.2	21.5	14.7	10.2	6.8	3.4	1.1	0.0	0.0	0.0	0.0
65°	23.7	16.9	11.3	7.9	4.5	1.1	0.0	0.0	0.0	0.0	0.0
67.5°	20.3	14.7	9.0	5.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0
70°	18.1	12.4	6.8	4.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	14.7	10.2	5.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	12.4	7.9	3.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	10.2	5.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	7.9	4.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	1.1	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°	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2
2.5°	1434.3	1427.6	1461.5	1516.8	1545.0	1600.4	1613.9	1648.9	1639.9	1652.3
5°	1187.0	1200.6	1250.3	1331.6	1360.9	1441.1	1516.8	1592.5	1641.0	1664.7
7.5°	880.9	926.1	987.1	1061.6	1137.3	1242.3	1371.1	1459.2	1506.6	1557.5
10°	656.2	704.8	774.8	848.2	971.3	1088.8	1217.5	1327.1	1367.7	1415.1
12.5°	516.1	591.8	673.1	752.2	825.6	937.4	1096.7	1255.9	1299.9	1336.1
15°	359.2	451.8	568.1	670.9	773.6	870.8	1035.7	1228.8	1288.7	1349.6
17.5°	198.8	272.2	405.5	550.0	701.4	850.4	1056.0	1278.5	1368.8	1411.8
20°	115.2	144.6	239.4	411.1	611.0	806.4	1066.2	1372.2	1491.9	1513.4
22.5°	94.9	105.0	135.5	257.5	500.3	778.2	1118.1	1503.2	1625.2	1676.0
25°	81.3	89.2	105.0	154.7	378.4	718.3	1150.9	1667.0	1779.9	1835.3
27.5°	72.3	80.2	92.6	114.1	257.5	635.9	1205.1	1815.0	1927.9	2003.6
30°	63.2	70.0	82.4	97.1	178.4	543.2	1251.4	1923.4	2082.6	2106.3
32.5°	56.5	62.1	71.2	83.6	132.1	412.2	1288.7	2035.2	2169.6	2221.5
35°	48.6	55.3	61.0	71.2	100.5	310.6	1266.1	2122.2	2297.2	2359.3
37.5°	42.9	47.4	53.1	59.9	84.7	242.8	1219.8	2226.1	2406.8	2464.4
40°	36.1	39.5	46.3	53.1	76.8	187.5	1166.7	2351.4	2560.4	2662.0
42.5°	30.5	33.9	38.4	49.7	63.2	138.9	1059.4	2448.6	2684.6	2770.4
45°	23.7	28.2	35.0	49.7	50.8	102.8	948.7	2520.8	2754.6	2797.5
47.5°	18.1	22.6	33.9	42.9	40.7	71.2	817.7	2603.3	2826.9	2866.4
50°	13.6	18.1	38.4	37.3	33.9	54.2	735.2	2660.9	2831.4	2852.9
52.5°	9.0	13.6	31.6	28.2	28.2	47.4	712.7	2658.6	2842.7	2796.4
55°	6.8	10.2	18.1	20.3	24.8	41.8	692.3	2743.3	2846.1	2878.9
57.5°	4.5	7.9	12.4	15.8	21.5	36.1	650.5	2845.0	2951.1	2968.1
60°	2.3	5.6	9.0	12.4	18.1	31.6	591.8	2919.5	3078.8	3096.8
62.5°	1.1	3.4	6.8	10.2	14.7	24.8	530.8	2800.9	3023.4	3055.1
65°	0.0	2.3	4.5	6.8	9.0	18.1	431.4	2528.7	2804.3	2920.7
67.5°	0.0	0.0	2.3	4.5	5.6	13.6	325.3	2300.6	2602.2	2760.3
70°	0.0	0.0	1.1	1.1	3.4	10.2	207.8	1905.3	2323.2	2410.2
72.5°	0.0	0.0	0.0	0.0	1.1	6.8	120.8	1415.1	1820.6	1982.1
75°	0.0	0.0	0.0	0.0	0.0	5.6	61.0	910.3	1267.2	1484.0
77.5°	0.0	0.0	0.0	0.0	0.0	4.5	32.8	587.3	934.0	1115.9
80°	0.0	0.0	0.0	0.0	0.0	1.1	19.2	341.1	597.5	724.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	7.9	167.2	356.9	417.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	89.2	178.4	234.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	12.4	23.7
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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