

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: P677474

Luminaire Tested: **CCW-SA-1E-830-U-SLR-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677474  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1E-830-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) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3904.1 lumens  
Efficiency: N/A  
Efficacy: 69.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

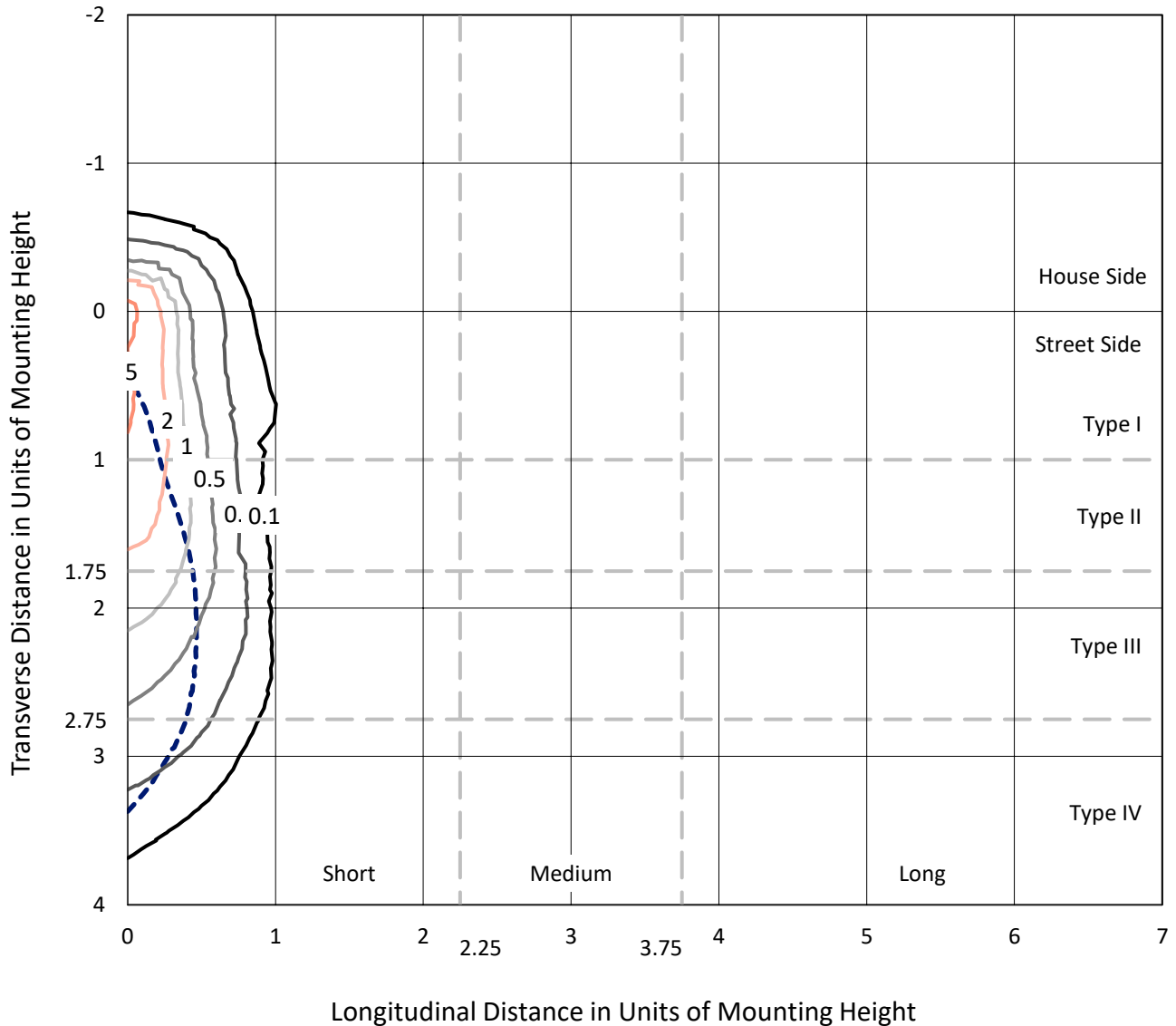
Input Watts (W): 56.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

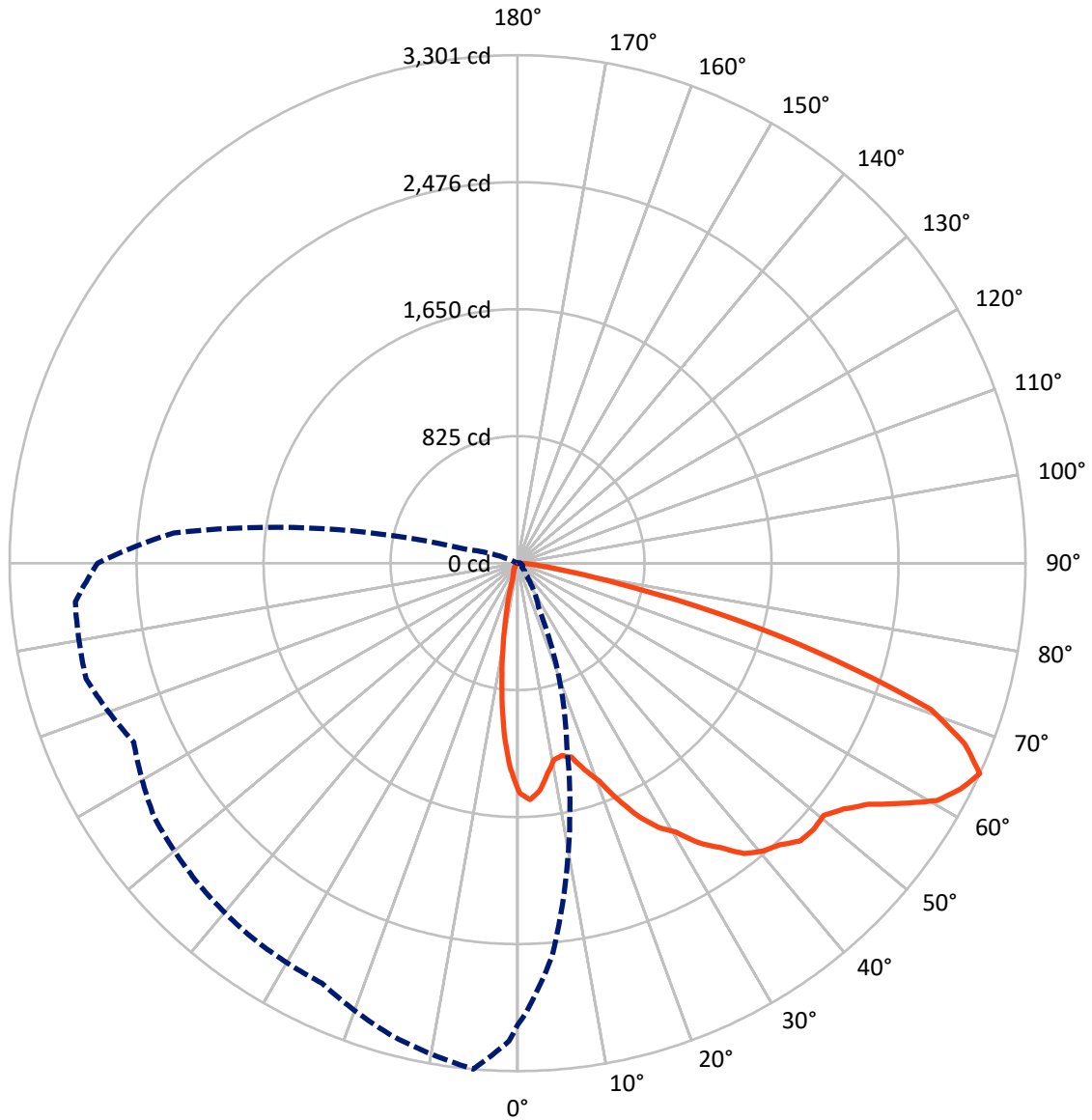
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 6.6 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	506.9	0.0	506.9
	% Fixture	13.0	0.0	13.0
<b>Street Side</b>	Lumens	3397.2	0.0	3397.2
	% Fixture	87.0	0.0	87.0
<b>Total</b>	Lumens	3904.1	0.0	3904.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.1	2.9
10°-20°	218.9	5.6
20°-30°	304.9	7.8
30°-40°	433.2	11.1
40°-50°	600.8	15.4
50°-60°	818.6	21.0
60°-70°	900.0	23.1
70°-80°	442.3	11.3
80°-90°	72.2	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°	3904.1	100.0
0°-180°	3904.1	100.0



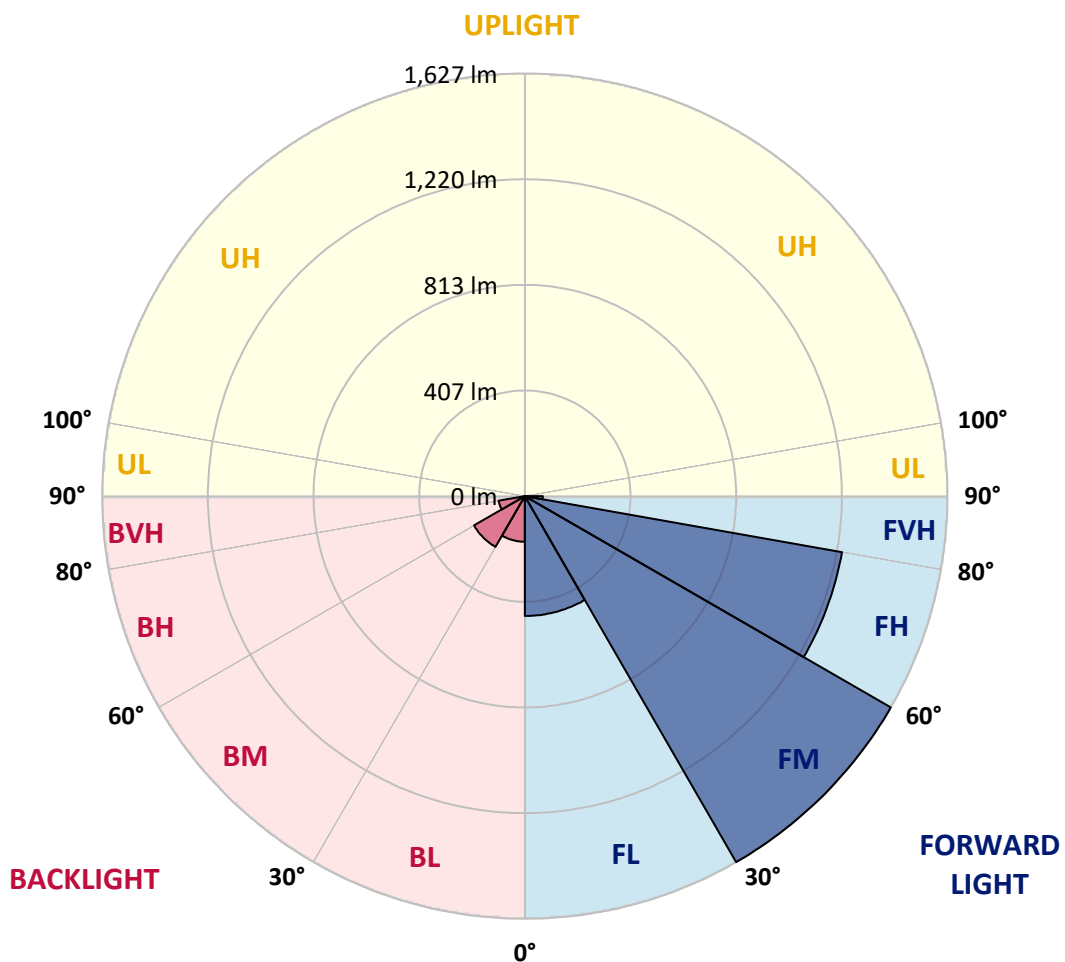
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	461.4	11.8			
FM (30°-60°)	1627.0	41.7			
FH (60°-80°)	1239.9	31.8			G1/1800
FVH (80°-90°)	69.0	1.8			G1/100
BL (0°-30°)	175.5	4.5	B1/500		
BM (30°-60°)	225.7	5.8	B1/1000		
BH (60°-80°)	102.5	2.6	B0/110		G0/110
BVH (80°-90°)	3.3	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°	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5
2.5°	1523.1	1541.0	1524.1	1465.2	1454.6	1426.2	1383.1	1379.9	1334.7	1339.9	1315.7
5°	1431.5	1449.4	1413.6	1335.7	1263.1	1205.2	1170.5	1108.4	1094.7	1064.1	1064.1
7.5°	1337.8	1336.8	1275.7	1210.5	1102.0	995.7	947.3	857.8	805.2	776.8	749.4
10°	1259.9	1243.1	1205.2	1070.5	952.6	842.1	782.1	723.1	668.4	621.0	573.6
12.5°	1205.2	1215.7	1155.7	1009.4	856.8	780.0	715.7	653.6	588.4	534.7	482.1
15°	1233.6	1216.8	1146.2	995.7	841.0	735.7	650.5	574.7	502.1	431.6	391.6
17.5°	1322.0	1278.9	1195.7	995.7	808.4	668.4	565.2	475.8	397.9	334.7	285.2
20°	1441.0	1391.5	1302.0	1032.6	784.2	618.9	477.9	365.2	284.2	225.2	187.4
22.5°	1563.1	1524.1	1389.4	1047.3	755.7	552.6	376.8	264.2	189.5	151.6	132.6
25°	1709.4	1654.6	1507.3	1106.2	713.6	488.4	296.8	184.2	141.0	121.0	109.5
27.5°	1826.2	1816.7	1617.8	1142.0	682.1	435.8	234.7	146.3	116.8	102.1	94.7
30°	1973.6	1922.0	1752.5	1213.6	646.3	375.8	195.8	131.6	107.4	91.6	86.3
32.5°	2062.0	2037.8	1823.0	1253.6	606.3	326.3	168.4	115.8	97.9	86.3	81.0
35°	2190.4	2142.0	1924.1	1278.9	585.2	297.9	151.6	105.3	82.1	70.5	64.2
37.5°	2333.5	2315.6	2045.1	1277.8	554.7	281.0	140.0	97.9	77.9	65.3	57.9
40°	2479.8	2407.2	2118.8	1307.3	538.9	268.4	131.6	93.7	73.7	62.1	52.6
42.5°	2589.3	2506.2	2204.1	1296.8	520.0	246.3	128.4	87.4	70.5	56.8	48.4
45°	2618.8	2589.3	2280.9	1293.6	506.3	228.4	123.2	86.3	68.4	53.7	45.3
47.5°	2675.6	2655.6	2375.6	1298.9	495.8	214.7	110.5	88.4	65.3	50.5	43.2
50°	2700.9	2665.1	2452.5	1311.5	471.6	197.9	98.9	92.6	64.2	49.5	41.1
52.5°	2805.1	2773.5	2557.7	1347.3	451.6	175.8	87.4	88.4	66.3	46.3	38.9
55°	2907.2	2871.4	2719.8	1429.4	423.1	157.9	74.7	77.9	63.2	42.1	34.7
57.5°	3047.2	2988.2	2828.2	1463.1	397.9	133.7	66.3	64.2	58.9	37.9	30.5
60°	3068.2	3092.4	2812.5	1442.0	371.6	117.9	57.9	49.5	63.2	33.7	26.3
62.5°	3138.8	3037.7	2738.8	1393.6	352.6	108.4	51.6	41.1	54.7	29.5	22.1
65°	3003.0	2928.2	2566.2	1237.8	328.4	109.5	45.3	33.7	34.7	24.2	17.9
67.5°	2804.0	2745.1	2279.9	1068.4	304.2	107.4	40.0	29.5	26.3	21.1	15.8
70°	2460.9	2333.5	1936.7	867.3	268.4	100.0	33.7	26.3	22.1	16.8	11.6
72.5°	1790.4	1738.8	1389.4	670.5	241.0	90.5	31.6	22.1	18.9	12.6	9.5
75°	1205.2	1119.9	876.8	440.0	193.7	78.9	26.3	20.0	14.7	9.5	7.4
77.5°	636.8	602.1	496.8	209.5	107.4	36.8	14.7	11.6	8.4	7.4	4.2
80°	275.8	245.2	214.7	85.3	37.9	16.8	9.5	6.3	5.3	4.2	2.1
82.5°	141.0	134.7	111.6	36.8	22.1	12.6	5.3	4.2	3.2	2.1	1.1
85°	69.5	71.6	58.9	11.6	12.6	7.4	1.1	1.1	0.0	0.0	0.0
87.5°	5.3	5.3	4.2	2.1	3.2	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°	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5
2.5°	1306.2	1321.0	1295.7	1311.5	1304.1	1307.3	1310.4	1302.0	1304.1	1333.6	1334.7
5°	1046.3	1074.7	1064.1	1078.9	1104.1	1091.5	1103.1	1101.0	1103.1	1107.3	1126.2
7.5°	746.3	737.8	757.8	796.8	842.1	869.4	855.7	848.4	844.2	833.6	846.3
10°	563.1	558.9	553.7	565.2	594.7	625.2	642.1	613.6	597.9	577.9	570.5
12.5°	467.3	441.0	426.3	408.4	416.8	444.2	445.2	417.9	392.6	382.1	393.7
15°	368.4	350.5	324.2	298.9	286.3	307.3	289.5	263.1	230.5	226.3	225.2
17.5°	263.1	252.6	233.7	223.1	208.4	203.1	184.2	144.2	121.0	114.7	116.8
20°	178.9	170.5	169.5	160.0	153.7	149.5	118.9	92.6	85.3	86.3	87.4
22.5°	132.6	128.4	123.2	122.1	116.8	111.6	87.4	77.9	72.6	72.6	75.8
25°	108.4	106.3	101.0	98.9	96.8	89.5	73.7	66.3	64.2	62.1	65.3
27.5°	92.6	91.6	88.4	85.3	83.2	75.8	64.2	57.9	55.8	55.8	55.8
30°	83.2	83.2	78.9	72.6	72.6	64.2	54.7	50.5	48.4	48.4	47.4
32.5°	77.9	75.8	70.5	66.3	63.2	54.7	48.4	44.2	41.1	41.1	42.1
35°	63.2	63.2	62.1	58.9	54.7	46.3	41.1	36.8	34.7	33.7	34.7
37.5°	55.8	52.6	48.4	49.5	47.4	40.0	34.7	31.6	28.4	28.4	28.4
40°	50.5	47.4	43.2	40.0	38.9	35.8	30.5	25.3	22.1	21.1	21.1
42.5°	45.3	43.2	36.8	31.6	30.5	30.5	23.2	18.9	15.8	15.8	15.8
45°	42.1	38.9	33.7	27.4	22.1	23.2	18.9	13.7	11.6	10.5	10.5
47.5°	40.0	36.8	29.5	23.2	16.8	16.8	13.7	9.5	7.4	6.3	6.3
50°	36.8	33.7	26.3	18.9	12.6	10.5	8.4	5.3	3.2	2.1	2.1
52.5°	34.7	31.6	23.2	15.8	10.5	7.4	5.3	1.1	0.0	0.0	0.0
55°	31.6	27.4	20.0	12.6	8.4	4.2	1.1	0.0	0.0	0.0	0.0
57.5°	27.4	24.2	15.8	9.5	5.3	1.1	0.0	0.0	0.0	0.0	0.0
60°	23.2	20.0	12.6	7.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	18.9	16.8	9.5	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	15.8	12.6	7.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	13.7	10.5	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	10.5	7.4	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	7.4	5.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	5.3	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.2	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°	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5
2.5°	1338.9	1370.4	1399.9	1408.3	1431.5	1495.7	1495.7	1526.2	1581.0	1601.0	1605.2
5°	1129.4	1163.1	1169.4	1234.7	1265.2	1330.4	1373.6	1476.8	1538.9	1577.8	1602.0
7.5°	858.9	870.5	894.7	955.7	1015.7	1094.7	1176.8	1308.3	1417.8	1462.0	1544.1
10°	590.5	625.2	677.9	732.6	826.3	913.6	1019.9	1144.1	1278.9	1333.6	1404.1
12.5°	397.9	446.3	530.5	608.4	694.7	783.1	884.2	1050.5	1203.1	1278.9	1349.4
15°	232.6	291.6	364.2	490.5	605.2	704.2	805.2	973.6	1158.9	1256.8	1343.1
17.5°	117.9	135.8	195.8	305.2	456.8	618.9	769.4	984.2	1192.6	1312.6	1384.1
20°	88.4	93.7	110.5	162.1	312.6	511.5	735.7	999.9	1286.2	1432.5	1471.5
22.5°	76.8	81.0	88.4	105.3	175.8	391.6	688.4	1038.9	1413.6	1551.5	1633.6
25°	65.3	69.5	75.8	86.3	112.6	266.3	630.5	1079.9	1527.3	1700.9	1777.8
27.5°	56.8	60.0	66.3	74.7	91.6	169.5	530.5	1134.7	1700.9	1882.0	1902.0
30°	48.4	51.6	56.8	66.3	77.9	120.0	389.4	1142.0	1796.7	1960.9	2016.7
32.5°	42.1	43.2	49.5	57.9	65.3	94.7	273.7	1149.4	1867.3	2063.0	2074.6
35°	34.7	36.8	43.2	48.4	56.8	74.7	207.4	1112.6	1958.8	2168.3	2165.1
37.5°	28.4	31.6	35.8	40.0	46.3	63.2	165.3	1044.1	2073.6	2331.4	2232.5
40°	22.1	25.3	29.5	34.7	38.9	56.8	124.2	941.0	2193.5	2411.4	2306.2
42.5°	15.8	17.9	22.1	27.4	34.7	47.4	89.5	818.9	2240.9	2505.1	2394.6
45°	11.6	13.7	16.8	23.2	35.8	37.9	62.1	707.3	2291.4	2546.2	2374.6
47.5°	6.3	8.4	12.6	20.0	31.6	28.4	44.2	607.3	2349.3	2583.0	2390.4
50°	2.1	3.2	7.4	21.1	25.3	22.1	34.7	553.7	2406.2	2590.4	2422.0
52.5°	0.0	0.0	4.2	22.1	18.9	16.8	30.5	532.6	2391.4	2613.5	2402.0
55°	0.0	0.0	1.1	9.5	10.5	12.6	25.3	531.5	2495.6	2620.9	2511.4
57.5°	0.0	0.0	0.0	3.2	6.3	10.5	22.1	497.9	2561.9	2804.0	2658.8
60°	0.0	0.0	0.0	1.1	4.2	7.4	16.8	468.4	2629.3	2886.1	2816.7
62.5°	0.0	0.0	0.0	0.0	1.1	3.2	11.6	423.1	2493.5	2879.8	2969.3
65°	0.0	0.0	0.0	0.0	0.0	0.0	7.4	334.7	2243.0	2729.3	2885.1
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	4.2	231.6	1964.1	2539.8	2730.4
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	140.0	1585.2	2227.2	2315.6
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	1131.5	1768.3	1899.9
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.2	700.0	1292.6	1454.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5	453.7	978.9	1104.1
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	242.1	613.6	713.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.3	372.6	429.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.7	226.3	257.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.7	46.3
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°	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5	1492.5
2.5°	1607.3	1637.8	1649.4	1631.5	1633.6	1596.7	1591.5	1539.9	1518.9	1523.1
5°	1680.9	1725.2	1749.4	1729.4	1684.1	1613.6	1549.4	1488.3	1450.4	1431.5
7.5°	1664.1	1713.6	1744.1	1763.0	1711.5	1597.8	1499.9	1385.2	1336.8	1337.8
10°	1571.5	1674.6	1736.7	1712.5	1688.3	1574.6	1423.1	1298.9	1255.7	1259.9
12.5°	1496.8	1611.5	1648.3	1667.3	1617.8	1527.3	1425.2	1283.1	1234.7	1205.2
15°	1450.4	1535.7	1537.8	1567.3	1547.3	1547.3	1447.3	1308.3	1266.2	1233.6
17.5°	1450.4	1469.4	1467.3	1477.8	1511.5	1551.5	1503.1	1410.4	1327.3	1322.0
20°	1483.1	1424.1	1410.4	1414.7	1443.1	1562.0	1626.2	1510.4	1457.8	1441.0
22.5°	1558.9	1429.4	1346.2	1331.5	1418.9	1561.0	1705.2	1668.3	1576.7	1563.1
25°	1663.1	1419.9	1329.4	1310.4	1376.8	1598.8	1813.6	1820.9	1737.8	1709.4
27.5°	1762.0	1462.0	1327.3	1323.1	1410.4	1590.4	1888.3	1943.0	1849.4	1826.2
30°	1795.7	1504.1	1366.2	1310.4	1423.1	1621.0	1886.2	2029.3	1968.3	1973.6
32.5°	1835.7	1546.2	1370.4	1348.3	1476.8	1670.4	1946.2	2168.3	2124.1	2062.0
35°	1894.6	1603.1	1410.4	1390.4	1514.6	1714.6	1958.8	2270.4	2263.0	2190.4
37.5°	1945.1	1658.8	1493.6	1496.8	1630.4	1786.2	2014.6	2395.6	2383.0	2333.5
40°	1980.9	1736.7	1623.1	1631.5	1731.5	1866.2	2113.6	2458.8	2552.5	2479.8
42.5°	1986.2	1806.2	1771.5	1838.8	1932.5	1990.4	2153.6	2502.0	2636.7	2589.3
45°	2006.2	1916.7	2013.6	2063.0	2139.9	2099.9	2151.4	2575.6	2643.0	2618.8
47.5°	2084.1	2117.8	2239.9	2390.4	2417.7	2286.2	2202.0	2587.2	2678.8	2675.6
50°	2165.1	2333.5	2505.1	2605.1	2639.8	2414.6	2249.3	2577.7	2726.1	2700.9
52.5°	2255.7	2520.9	2768.3	2891.4	2872.5	2556.7	2303.0	2654.6	2813.5	2805.1
55°	2312.5	2605.1	2937.7	3109.3	3094.5	2715.6	2473.5	2765.1	2928.2	2907.2
57.5°	2463.0	2741.9	3106.1	3186.1	3225.1	2924.0	2592.5	2946.1	3024.0	3047.2
60°	2587.2	2831.4	3150.3	3266.1	3279.8	3048.2	2800.9	3132.4	3146.1	3068.2
62.5°	2769.3	2866.1	3056.7	3160.9	3231.4	3118.8	2988.2	3232.4	3144.0	3138.8
65°	2903.0	2752.5	2881.9	2939.8	2985.1	3011.4	3176.6	3300.9	3105.1	3003.0
67.5°	2828.2	2537.7	2513.5	2516.7	2530.4	2689.3	3113.5	3133.5	2888.2	2804.0
70°	2489.3	2082.0	2049.3	2074.6	2006.2	2197.8	2857.7	2848.2	2548.3	2460.9
72.5°	2013.6	1517.8	1462.0	1496.8	1512.5	1715.7	2404.1	2159.9	1858.8	1790.4
75°	1599.9	1112.6	938.9	1023.1	1076.8	1249.4	1877.8	1467.3	1297.8	1205.2
77.5°	1256.8	842.1	730.5	696.8	746.3	908.4	1366.2	770.5	680.0	636.8
80°	796.8	618.9	671.5	623.1	644.2	648.4	711.5	350.5	278.9	275.8
82.5°	480.0	423.1	503.1	276.8	504.2	450.5	295.8	158.9	141.0	141.0
85°	340.0	262.1	173.7	112.6	224.2	247.4	114.7	82.1	71.6	69.5
87.5°	170.5	81.0	38.9	25.3	28.4	46.3	13.7	6.3	6.3	5.3
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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