

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: P677366

Luminaire Tested: **CCW-SA-2B-850-U-SLL-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677366  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-2B-850-U-SLL-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @450mA w/  
SLL distribution lens and House Side Shield  
Light Source: (32) 5000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

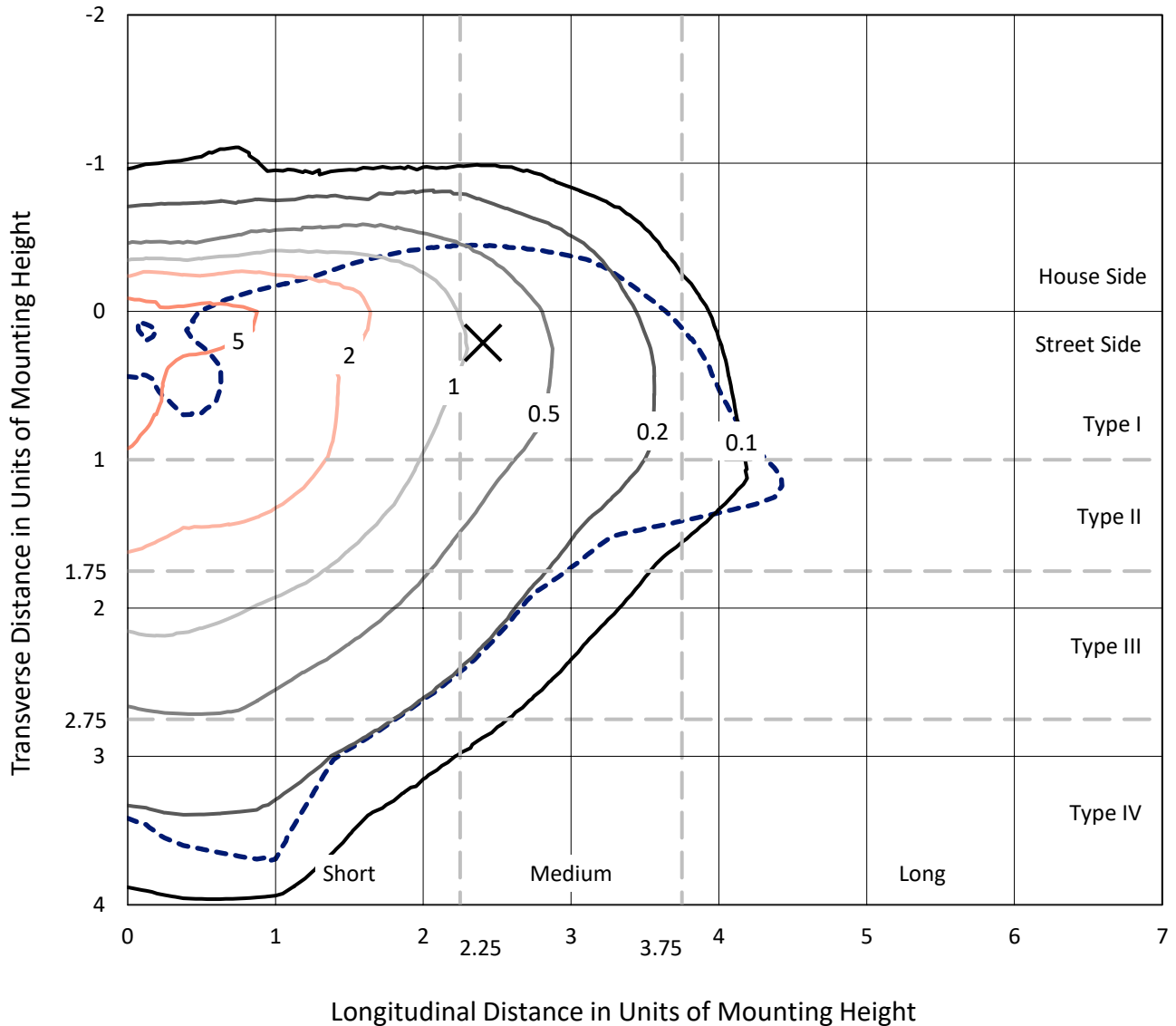
Lumens per Lamp: N/A  
Luminaire Lumens: 4372.4 lumens  
Efficiency: N/A  
Efficacy: 95.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1

Input Watts (W): 46  
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

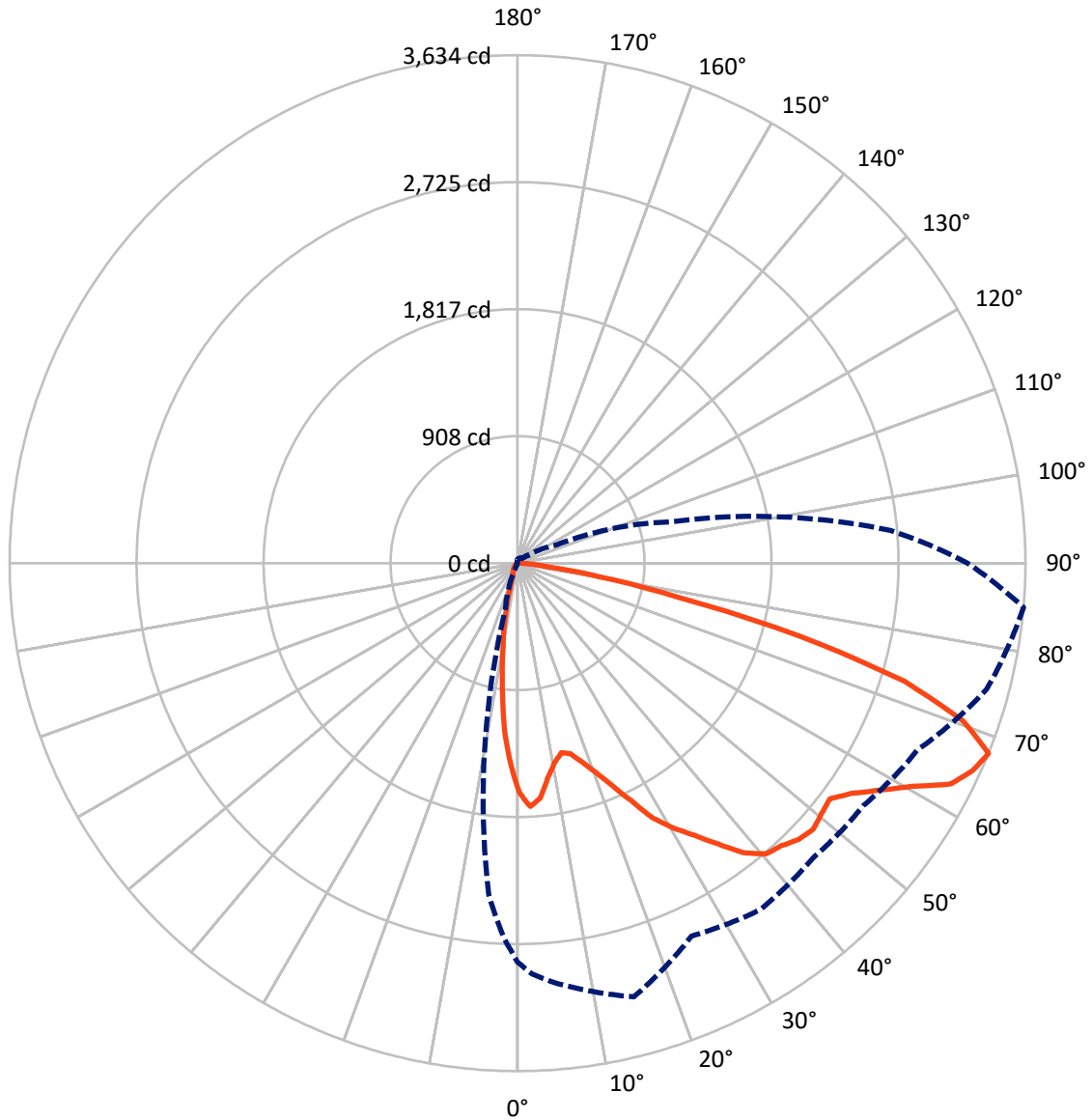
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 8.2 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	759.2	0.0	759.2
	% Fixture	17.4	0.0	17.4
<b>Street Side</b>	Lumens	3613.2	0.0	3613.2
	% Fixture	82.6	0.0	82.6
<b>Total</b>	Lumens	4372.4	0.0	4372.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.9	2.9
10°-20°	244.9	5.6
20°-30°	338.9	7.8
30°-40°	479.0	11.0
40°-50°	652.1	14.9
50°-60°	863.7	19.8
60°-70°	1002.8	22.9
70°-80°	567.9	13.0
80°-90°	98.1	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°	4372.4	100.0
0°-180°	4372.4	100.0



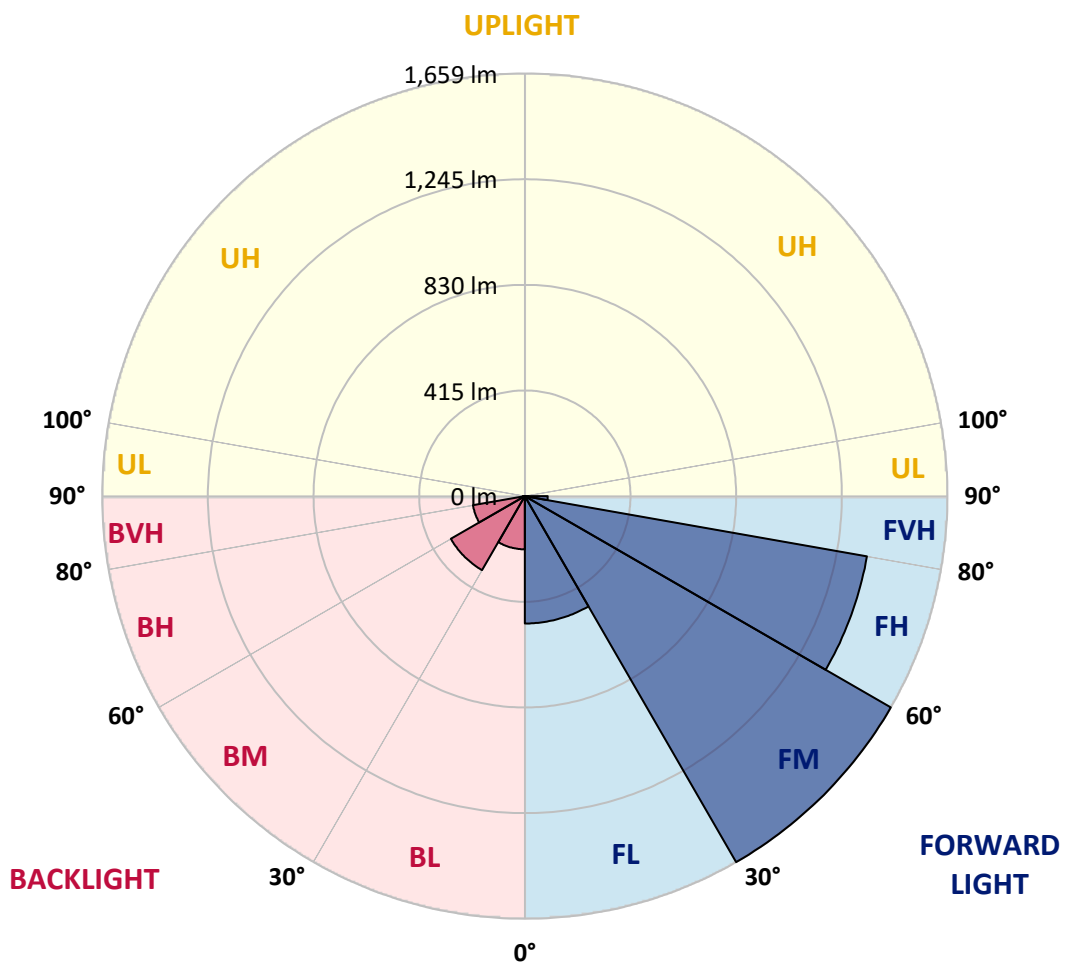
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	500.0	11.4			
FM (30°-60°)	1659.3	38.0			
FH (60°-80°)	1364.0	31.2			G1/1800
FVH (80°-90°)	89.9	2.1			G1/100
BL (0°-30°)	208.7	4.8	B1/500		
BM (30°-60°)	335.4	7.7	B1/1000		
BH (60°-80°)	206.8	4.7	B1/500		G1/500
BVH (80°-90°)	8.3	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°	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0
2.5°	1708.2	1744.4	1745.6	1761.9	1778.2	1778.2	1816.8	1807.4	1773.6	1767.7	1743.2
5°	1721.0	1733.9	1743.2	1826.1	1896.2	1889.2	1910.2	1896.2	1830.8	1746.7	1689.5
7.5°	1610.1	1624.1	1661.5	1802.8	1897.3	1928.9	1968.6	1881.0	1812.1	1660.3	1550.6
10°	1463.0	1489.9	1558.7	1719.9	1836.6	1937.0	1937.0	1867.0	1733.9	1585.6	1451.3
12.5°	1381.3	1435.0	1472.3	1635.8	1787.6	1856.5	1854.1	1816.8	1730.4	1543.6	1391.8
15°	1395.3	1410.5	1489.9	1617.1	1717.5	1714.0	1756.1	1744.4	1683.7	1580.9	1414.0
17.5°	1459.5	1482.8	1551.7	1617.1	1665.0	1651.0	1649.8	1705.9	1709.4	1644.0	1496.9
20°	1564.6	1633.5	1666.2	1686.0	1627.6	1568.1	1561.1	1639.3	1700.0	1724.5	1596.1
22.5°	1732.7	1778.2	1844.8	1743.2	1591.4	1516.7	1502.7	1589.1	1711.7	1820.3	1724.5
25°	1897.3	1932.4	1996.6	1865.8	1632.3	1506.2	1481.7	1556.4	1756.1	1953.4	1879.8
27.5°	2071.3	2101.7	2108.7	1955.7	1654.5	1485.2	1456.0	1556.4	1793.4	2023.4	2065.5
30°	2177.6	2213.8	2220.8	2035.1	1690.7	1502.7	1488.7	1563.4	1819.1	2083.0	2198.6
32.5°	2296.7	2306.0	2300.2	2049.1	1730.4	1554.1	1495.7	1610.1	1848.3	2154.2	2320.0
35°	2439.1	2455.5	2395.9	2113.4	1819.1	1586.8	1565.7	1667.3	1898.5	2186.9	2467.1
37.5°	2547.7	2599.1	2464.8	2137.9	1836.6	1655.7	1659.2	1786.4	1933.5	2226.6	2629.4
40°	2752.0	2665.6	2581.6	2221.9	1903.2	1772.4	1753.7	1909.0	2051.5	2252.3	2735.7
42.5°	2864.1	2818.6	2627.1	2230.1	2005.9	1933.5	1938.2	2048.0	2113.4	2324.7	2764.9
45°	2892.1	2844.3	2689.0	2235.9	2107.5	2123.9	2204.4	2225.4	2204.4	2372.6	2819.7
47.5°	2963.4	2859.4	2682.0	2314.2	2272.1	2335.2	2437.9	2483.5	2328.2	2355.0	2845.4
50°	2949.3	2889.8	2666.8	2346.9	2473.0	2639.9	2708.8	2690.1	2466.0	2318.8	2817.4
52.5°	2891.0	2826.8	2713.5	2435.6	2661.0	2862.9	2958.7	2912.0	2588.6	2400.6	2798.7
55°	2976.2	2927.2	2774.2	2555.9	2802.2	3059.1	3126.8	3091.8	2739.2	2476.5	2905.0
57.5°	3068.4	3057.9	2938.8	2697.1	2969.2	3261.1	3261.1	3217.9	2870.0	2586.2	3062.6
60°	3201.6	3224.9	3060.3	2790.6	3026.4	3249.4	3418.7	3368.5	3001.9	2778.9	3241.2
62.5°	3158.3	3233.1	3216.7	2991.4	3091.8	3306.6	3398.9	3436.2	3165.4	3013.6	3479.4
65°	3019.4	3098.8	3215.6	3123.3	3042.8	3167.7	3214.4	3327.7	3247.1	3234.2	3577.5
67.5°	2853.6	2940.0	3012.4	3212.1	2943.5	3026.4	2985.5	3021.7	3158.3	3475.9	3633.6
70°	2491.7	2574.6	2689.0	3014.7	2680.8	2606.1	2595.6	2578.1	2790.6	3389.5	3379.0
72.5°	2049.1	2087.7	2276.8	2450.8	1983.7	1969.7	1986.1	1966.2	2212.6	3068.4	2894.5
75°	1534.2	1572.8	1680.2	1882.2	1350.9	1270.3	1363.8	1456.0	1689.5	2381.9	2079.5
77.5°	1153.6	1202.6	1270.3	1408.1	991.3	865.2	878.0	965.6	1221.3	1907.9	1165.3
80°	748.4	742.6	873.4	969.1	746.1	769.4	736.8	801.0	885.0	1020.5	595.5
82.5°	432.0	437.8	492.7	555.8	519.6	594.3	428.5	715.7	631.7	415.7	221.8
85°	242.9	253.4	303.6	385.3	325.8	218.3	178.6	354.9	397.0	170.5	107.4
87.5°	24.5	21.0	40.9	145.9	88.7	36.2	53.7	85.2	95.7	64.2	31.5
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°	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0
2.5°	1708.2	1708.2	1679.0	1630.0	1610.1	1575.1	1527.2	1542.4	1526.0	1466.5	1451.3
5°	1638.1	1582.1	1521.4	1446.7	1403.5	1314.7	1286.7	1236.5	1244.7	1194.5	1196.8
7.5°	1492.2	1447.8	1345.1	1247.0	1161.8	1084.7	976.1	935.2	895.5	875.7	899.0
10°	1407.0	1324.1	1183.9	1055.5	942.3	873.4	801.0	744.9	693.6	655.0	646.8
12.5°	1345.1	1271.5	1102.2	945.8	857.0	801.0	734.4	657.4	607.2	540.6	520.7
15°	1326.4	1236.5	1057.8	902.6	816.2	723.9	648.0	572.1	506.7	436.7	412.2
17.5°	1390.6	1286.7	1056.7	867.5	746.1	646.8	541.8	456.5	390.0	325.8	310.6
20°	1499.2	1340.4	1090.5	846.5	679.5	546.4	427.3	342.1	267.4	225.3	214.8
22.5°	1623.0	1431.5	1094.0	790.5	613.0	446.0	311.7	225.3	183.3	163.5	157.6
25°	1774.7	1577.4	1136.1	744.9	534.8	338.6	221.8	172.8	148.3	136.6	134.3
27.5°	1899.7	1679.0	1181.6	697.1	457.7	251.0	174.0	141.3	128.4	116.8	115.6
30°	2029.3	1795.8	1194.5	667.9	391.1	206.7	149.5	124.9	110.9	105.1	103.9
32.5°	2142.5	1923.0	1235.3	620.0	328.1	182.1	135.4	112.1	102.7	93.4	92.2
35°	2288.5	1996.6	1255.2	594.3	304.7	164.6	123.8	102.7	88.7	82.9	80.6
37.5°	2444.9	2067.8	1268.0	574.5	284.9	154.1	116.8	96.9	84.1	75.9	73.6
40°	2590.9	2168.2	1249.3	549.9	269.7	141.3	112.1	89.9	78.2	70.1	66.6
42.5°	2703.0	2266.3	1243.5	526.6	253.4	136.6	106.3	86.4	73.6	64.2	63.1
45°	2766.0	2332.9	1202.6	507.9	240.5	138.9	103.9	81.7	70.1	61.9	57.2
47.5°	2750.9	2384.2	1213.1	502.1	223.0	129.6	102.7	78.2	64.2	57.2	53.7
50°	2834.9	2488.1	1195.6	483.4	210.2	116.8	112.1	78.2	63.1	54.9	51.4
52.5°	2848.9	2582.7	1233.0	449.5	190.3	107.4	110.9	77.1	60.7	52.5	47.9
55°	2965.7	2692.5	1305.4	430.8	174.0	93.4	101.6	74.7	54.9	47.9	45.5
57.5°	3124.5	2920.2	1352.1	413.3	151.8	81.7	85.2	73.6	50.2	44.4	40.9
60°	3277.4	3011.2	1355.6	381.8	130.8	73.6	66.6	73.6	46.7	39.7	36.2
62.5°	3391.9	3011.2	1332.2	354.9	114.4	65.4	58.4	70.1	42.0	35.0	32.7
65°	3330.0	2930.7	1271.5	332.8	103.9	57.2	50.2	53.7	37.4	30.4	28.0
67.5°	3219.1	2679.6	1137.2	305.9	102.7	50.2	43.2	39.7	32.7	26.9	24.5
70°	3041.6	2341.0	946.9	275.6	100.4	45.5	38.5	33.9	29.2	23.4	21.0
72.5°	2450.8	1933.5	777.6	258.0	98.1	39.7	32.7	29.2	24.5	19.8	17.5
75°	1697.7	1235.3	599.0	220.7	95.7	36.2	30.4	25.7	21.0	16.3	15.2
77.5°	1018.1	825.5	386.5	165.8	63.1	29.2	25.7	19.8	17.5	14.0	12.8
80°	476.4	390.0	156.5	64.2	30.4	21.0	17.5	15.2	14.0	11.7	10.5
82.5°	186.8	164.6	75.9	37.4	24.5	16.3	14.0	12.8	11.7	9.3	8.2
85°	100.4	88.7	36.2	25.7	17.5	11.7	11.7	10.5	9.3	8.2	7.0
87.5°	22.2	16.3	15.2	15.2	12.8	9.3	9.3	8.2	7.0	5.8	4.7
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):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0
2.5°	1443.1	1460.7	1432.6	1450.2	1425.6	1444.3	1446.7	1429.1	1433.8	1457.2	1467.7
5°	1229.5	1217.8	1192.1	1183.9	1185.1	1169.9	1175.8	1183.9	1196.8	1203.8	1224.8
7.5°	886.2	913.1	911.9	931.7	932.9	930.6	914.2	879.2	890.9	881.5	893.2
10°	634.0	645.7	667.9	680.7	704.1	691.2	653.9	639.8	632.8	631.7	643.3
12.5°	506.7	478.7	476.4	481.0	492.7	477.5	458.9	442.5	450.7	467.0	479.9
15°	392.3	369.0	338.6	333.9	336.3	329.3	309.4	288.4	294.2	310.6	319.9
17.5°	301.2	274.4	253.4	239.4	234.7	210.2	181.0	163.5	158.8	157.6	165.8
20°	203.2	198.5	195.0	177.5	177.5	142.4	117.9	105.1	105.1	107.4	108.6
22.5°	151.8	145.9	147.1	143.6	134.3	106.3	93.4	89.9	89.9	92.2	92.2
25°	131.9	123.8	121.4	120.3	110.9	91.1	81.7	78.2	78.2	80.6	80.6
27.5°	112.1	109.8	106.3	101.6	93.4	78.2	72.4	68.9	70.1	71.2	70.1
30°	102.7	96.9	92.2	92.2	82.9	70.1	65.4	63.1	60.7	63.1	64.2
32.5°	91.1	87.6	85.2	81.7	71.2	61.9	57.2	54.9	53.7	53.7	54.9
35°	78.2	78.2	75.9	71.2	61.9	56.0	50.2	47.9	46.7	47.9	47.9
37.5°	70.1	66.6	67.7	63.1	54.9	49.0	43.2	40.9	40.9	39.7	40.9
40°	65.4	59.5	56.0	53.7	49.0	42.0	37.4	35.0	33.9	33.9	33.9
42.5°	58.4	53.7	46.7	45.5	44.4	36.2	30.4	29.2	28.0	26.9	26.9
45°	54.9	47.9	42.0	36.2	36.2	30.4	25.7	23.4	22.2	21.0	22.2
47.5°	50.2	43.2	36.2	30.4	29.2	24.5	19.8	17.5	16.3	16.3	16.3
50°	47.9	38.5	31.5	25.7	22.2	19.8	15.2	12.8	11.7	11.7	11.7
52.5°	44.4	36.2	28.0	22.2	17.5	15.2	11.7	9.3	8.2	8.2	8.2
55°	39.7	32.7	24.5	18.7	15.2	11.7	8.2	5.8	4.7	4.7	4.7
57.5°	37.4	29.2	21.0	16.3	11.7	8.2	4.7	3.5	3.5	2.3	3.5
60°	33.9	25.7	17.5	12.8	9.3	5.8	3.5	1.2	1.2	1.2	1.2
62.5°	29.2	22.2	15.2	10.5	7.0	3.5	1.2	0.0	0.0	0.0	0.0
65°	24.5	17.5	11.7	8.2	4.7	1.2	0.0	0.0	0.0	0.0	0.0
67.5°	21.0	15.2	9.3	5.8	3.5	0.0	0.0	0.0	0.0	0.0	0.0
70°	18.7	12.8	7.0	4.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	15.2	10.5	5.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	12.8	8.2	3.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	10.5	5.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	8.2	4.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	7.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.5	1.2	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°	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0	1644.0
2.5°	1482.8	1475.8	1510.9	1568.1	1597.3	1654.5	1668.5	1704.7	1695.4	1708.2
5°	1227.1	1241.2	1292.5	1376.6	1407.0	1489.9	1568.1	1646.3	1696.5	1721.0
7.5°	910.7	957.4	1020.5	1097.5	1175.8	1284.4	1417.5	1508.5	1557.6	1610.1
10°	678.4	728.6	801.0	876.9	1004.1	1125.6	1258.7	1371.9	1414.0	1463.0
12.5°	533.6	611.8	695.9	777.6	853.5	969.1	1133.7	1298.4	1343.9	1381.3
15°	371.3	467.0	587.3	693.6	799.8	900.2	1070.7	1270.3	1332.2	1395.3
17.5°	205.5	281.4	419.2	568.6	725.1	879.2	1091.7	1321.7	1415.1	1459.5
20°	119.1	149.5	247.5	425.0	631.7	833.7	1102.2	1418.6	1542.4	1564.6
22.5°	98.1	108.6	140.1	266.2	517.2	804.5	1155.9	1554.1	1680.2	1732.7
25°	84.1	92.2	108.6	160.0	391.1	742.6	1189.8	1723.4	1840.1	1897.3
27.5°	74.7	82.9	95.7	117.9	266.2	657.4	1245.8	1876.3	1993.1	2071.3
30°	65.4	72.4	85.2	100.4	184.5	561.6	1293.7	1988.4	2153.0	2177.6
32.5°	58.4	64.2	73.6	86.4	136.6	426.2	1332.2	2104.0	2243.0	2296.7
35°	50.2	57.2	63.1	73.6	103.9	321.1	1308.9	2193.9	2374.9	2439.1
37.5°	44.4	49.0	54.9	61.9	87.6	251.0	1261.0	2301.3	2488.1	2547.7
40°	37.4	40.9	47.9	54.9	79.4	193.8	1206.1	2430.9	2646.9	2752.0
42.5°	31.5	35.0	39.7	51.4	65.4	143.6	1095.2	2531.3	2775.4	2864.1
45°	24.5	29.2	36.2	51.4	52.5	106.3	980.8	2606.1	2847.8	2892.1
47.5°	18.7	23.4	35.0	44.4	42.0	73.6	845.3	2691.3	2922.5	2963.4
50°	14.0	18.7	39.7	38.5	35.0	56.0	760.1	2750.9	2927.2	2949.3
52.5°	9.3	14.0	32.7	29.2	29.2	49.0	736.8	2748.5	2938.8	2891.0
55°	7.0	10.5	18.7	21.0	25.7	43.2	715.7	2836.1	2942.3	2976.2
57.5°	4.7	8.2	12.8	16.3	22.2	37.4	672.5	2941.2	3050.9	3068.4
60°	2.3	5.8	9.3	12.8	18.7	32.7	611.8	3018.2	3182.9	3201.6
62.5°	1.2	3.5	7.0	10.5	15.2	25.7	548.8	2895.6	3125.7	3158.3
65°	0.0	2.3	4.7	7.0	9.3	18.7	446.0	2614.2	2899.1	3019.4
67.5°	0.0	0.0	2.3	4.7	5.8	14.0	336.3	2378.4	2690.1	2853.6
70°	0.0	0.0	1.2	1.2	3.5	10.5	214.8	1969.7	2401.7	2491.7
72.5°	0.0	0.0	0.0	0.0	1.2	7.0	124.9	1463.0	1882.2	2049.1
75°	0.0	0.0	0.0	0.0	0.0	5.8	63.1	941.1	1310.0	1534.2
77.5°	0.0	0.0	0.0	0.0	0.0	4.7	33.9	607.2	965.6	1153.6
80°	0.0	0.0	0.0	0.0	0.0	1.2	19.8	352.6	617.7	748.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	8.2	172.8	369.0	432.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	92.2	184.5	242.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	12.8	24.5
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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