

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: P677495

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

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677495  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1D-840-U-SLR-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA 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: 3417 lumens  
Efficiency: N/A  
Efficacy: 77.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

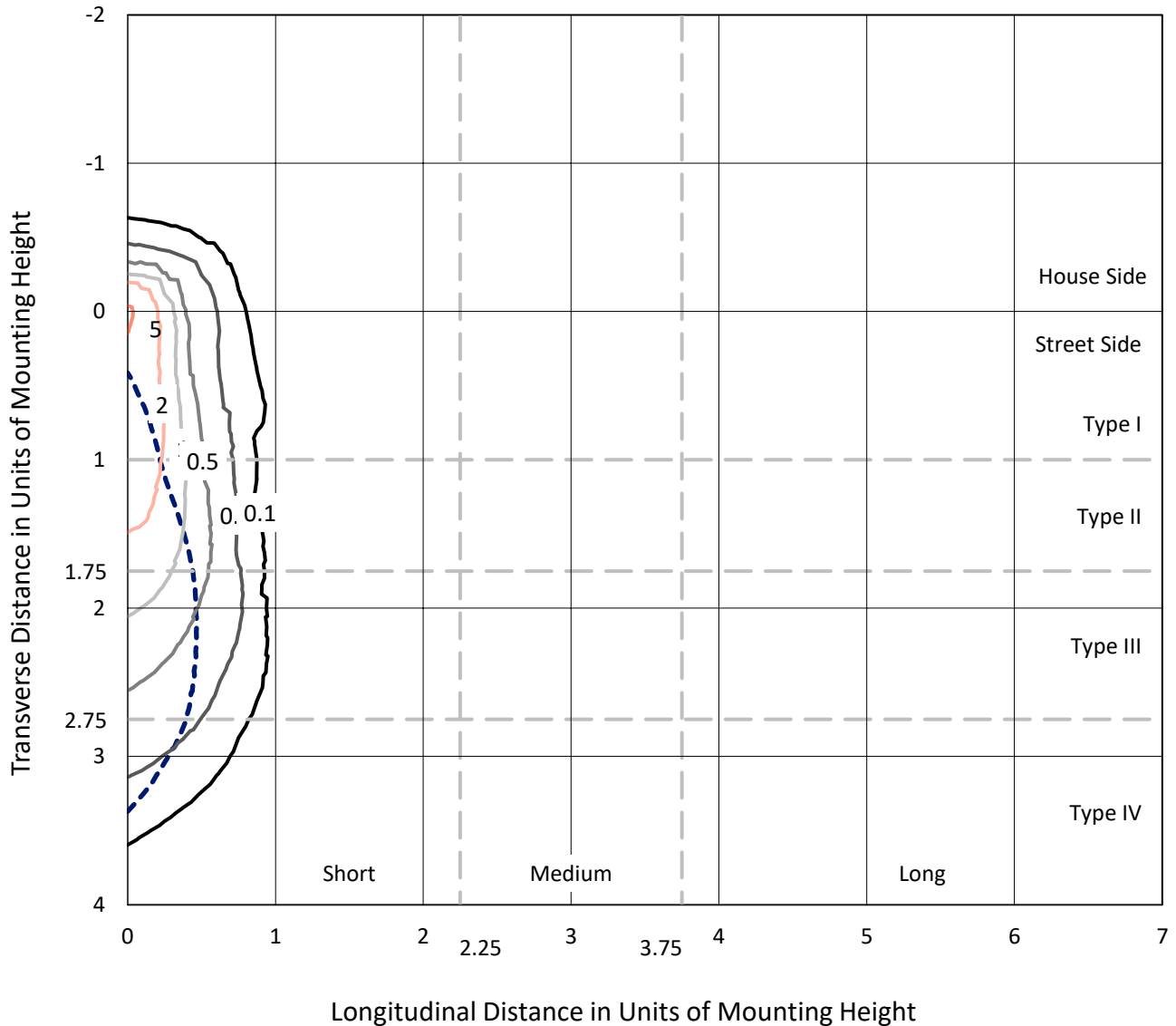
Input Watts (W): 44  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

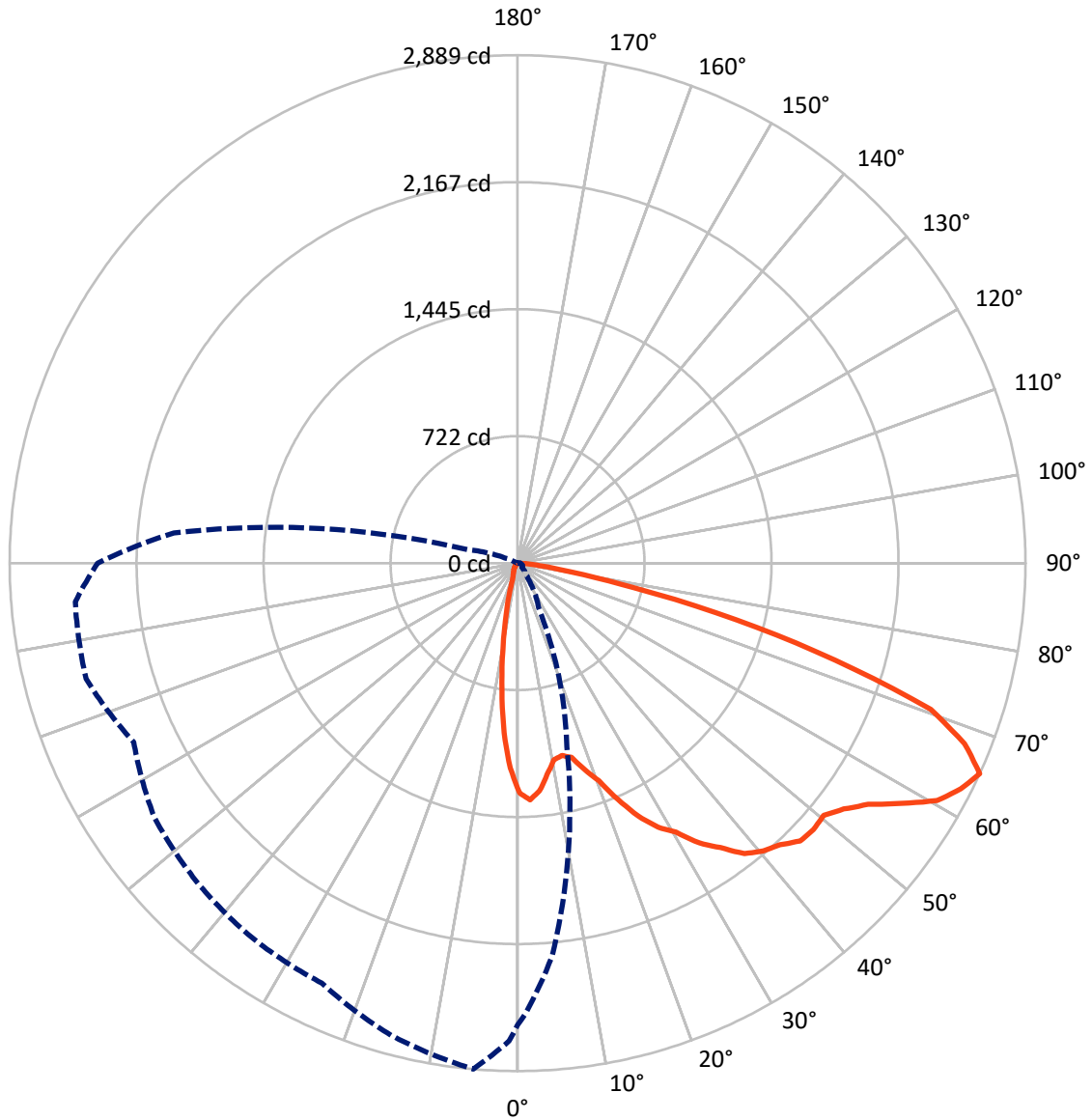
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.8 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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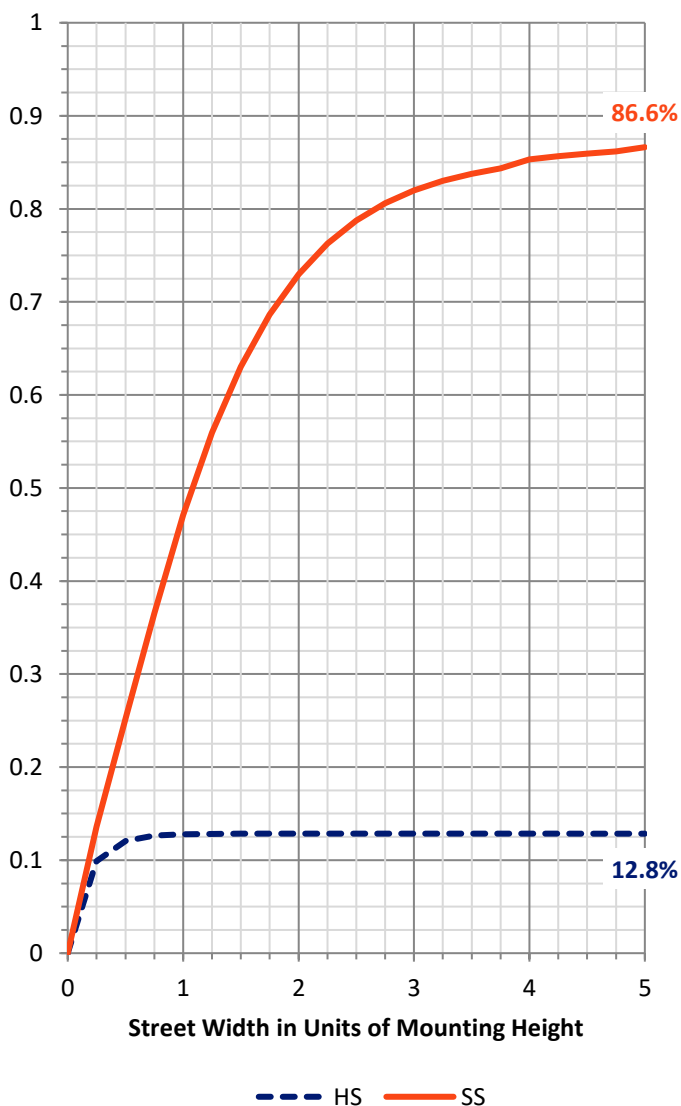
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	443.7	0.0	443.7
	% Fixture	13.0	0.0	13.0
<b>Street Side</b>	Lumens	2973.3	0.0	2973.3
	% Fixture	87.0	0.0	87.0
<b>Total</b>	Lumens	3417.0	0.0	3417.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.0	2.9
10°-20°	191.6	5.6
20°-30°	266.9	7.8
30°-40°	379.2	11.1
40°-50°	525.8	15.4
50°-60°	716.5	21.0
60°-70°	787.7	23.1
70°-80°	387.1	11.3
80°-90°	63.2	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°	3417.0	100.0
0°-180°	3417.0	100.0



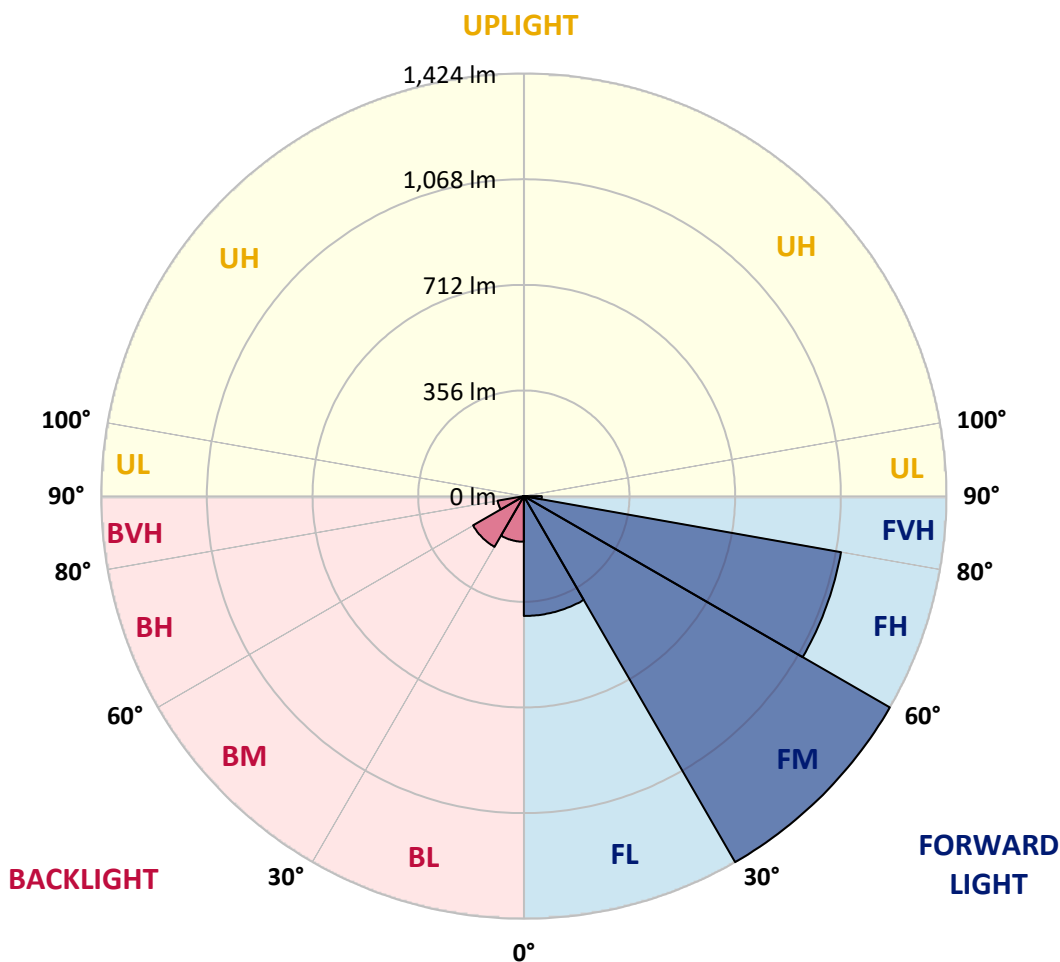
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	403.8	11.8			
FM (30°-60°)	1424.0	41.7			
FH (60°-80°)	1085.2	31.8			G1/1800
FVH (80°-90°)	60.4	1.8			G1/100
BL (0°-30°)	153.6	4.5	B1/500		
BM (30°-60°)	197.5	5.8	B0/220		
BH (60°-80°)	89.7	2.6	B0/110		G0/110
BVH (80°-90°)	2.8	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°	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3
2.5°	1333.0	1348.7	1334.0	1282.4	1273.1	1248.3	1210.5	1207.7	1168.1	1172.7	1151.5
5°	1252.9	1268.5	1237.2	1169.0	1105.5	1054.8	1024.4	970.1	958.1	931.4	931.4
7.5°	1170.9	1170.0	1116.5	1059.4	964.5	871.5	829.1	750.8	704.7	679.9	655.9
10°	1102.7	1088.0	1054.8	936.9	833.7	737.0	684.5	632.9	585.0	543.5	502.1
12.5°	1054.8	1064.0	1011.5	883.5	749.9	682.6	626.4	572.1	515.0	468.0	421.9
15°	1079.7	1064.9	1003.2	871.5	736.1	643.9	569.3	503.0	439.4	377.7	342.7
17.5°	1157.1	1119.3	1046.5	871.5	707.5	585.0	494.7	416.4	348.2	293.0	249.7
20°	1261.2	1217.9	1139.6	903.7	686.3	541.7	418.2	319.7	248.7	197.1	164.0
22.5°	1368.0	1334.0	1216.0	916.6	661.4	483.6	329.8	231.2	165.8	132.7	116.1
25°	1496.1	1448.2	1319.2	968.2	624.6	427.5	259.8	161.2	123.4	105.9	95.8
27.5°	1598.3	1590.1	1415.9	999.5	597.0	381.4	205.4	128.1	102.3	89.4	82.9
30°	1727.3	1682.2	1533.9	1062.2	565.6	328.9	171.4	115.2	94.0	80.1	75.5
32.5°	1804.7	1783.5	1595.6	1097.2	530.6	285.6	147.4	101.3	85.7	75.5	70.9
35°	1917.1	1874.7	1684.0	1119.3	512.2	260.7	132.7	92.1	71.9	61.7	56.2
37.5°	2042.4	2026.7	1790.0	1118.4	485.5	246.0	122.5	85.7	68.2	57.1	50.7
40°	2170.4	2106.9	1854.4	1144.2	471.7	234.9	115.2	82.0	64.5	54.4	46.1
42.5°	2266.2	2193.5	1929.1	1135.0	455.1	215.6	112.4	76.5	61.7	49.7	42.4
45°	2292.0	2266.2	1996.3	1132.2	443.1	199.9	107.8	75.5	59.9	47.0	39.6
47.5°	2341.8	2324.3	2079.2	1136.8	433.9	187.9	96.7	77.4	57.1	44.2	37.8
50°	2363.9	2332.6	2146.5	1147.9	412.7	173.2	86.6	81.1	56.2	43.3	35.9
52.5°	2455.1	2427.5	2238.6	1179.2	395.2	153.8	76.5	77.4	58.0	40.5	34.1
55°	2544.5	2513.1	2380.5	1251.0	370.3	138.2	65.4	68.2	55.3	36.8	30.4
57.5°	2667.0	2615.4	2475.4	1280.5	348.2	117.0	58.0	56.2	51.6	33.2	26.7
60°	2685.4	2706.6	2461.5	1262.1	325.2	103.2	50.7	43.3	55.3	29.5	23.0
62.5°	2747.1	2658.7	2397.1	1219.7	308.6	94.9	45.1	35.9	47.9	25.8	19.3
65°	2628.3	2562.9	2246.0	1083.4	287.4	95.8	39.6	29.5	30.4	21.2	15.7
67.5°	2454.2	2402.6	1995.4	935.1	266.2	94.0	35.0	25.8	23.0	18.4	13.8
70°	2153.9	2042.4	1695.1	759.1	234.9	87.5	29.5	23.0	19.3	14.7	10.1
72.5°	1567.0	1521.9	1216.0	586.8	211.0	79.2	27.6	19.3	16.6	11.1	8.3
75°	1054.8	980.2	767.4	385.1	169.5	69.1	23.0	17.5	12.9	8.3	6.4
77.5°	557.3	526.9	434.8	183.3	94.0	32.2	12.9	10.1	7.4	6.4	3.7
80°	241.4	214.6	187.9	74.6	33.2	14.7	8.3	5.5	4.6	3.7	1.8
82.5°	123.4	117.9	97.7	32.2	19.3	11.1	4.6	3.7	2.8	1.8	0.9
85°	60.8	62.6	51.6	10.1	11.1	6.4	0.9	0.9	0.0	0.0	0.0
87.5°	4.6	4.6	3.7	1.8	2.8	0.9	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°	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3
2.5°	1143.3	1156.2	1134.0	1147.9	1141.4	1144.2	1146.9	1139.6	1141.4	1167.2	1168.1
5°	915.7	940.6	931.4	944.3	966.4	955.3	965.5	963.6	965.5	969.1	985.7
7.5°	653.2	645.8	663.3	697.4	737.0	760.9	749.0	742.5	738.8	729.6	740.7
10°	492.9	489.2	484.6	494.7	520.5	547.2	562.0	537.1	523.3	505.8	499.3
12.5°	409.0	386.0	373.1	357.4	364.8	388.8	389.7	365.7	343.6	334.4	344.5
15°	322.4	306.8	283.7	261.6	250.6	269.0	253.3	230.3	201.8	198.1	197.1
17.5°	230.3	221.1	204.5	195.3	182.4	177.8	161.2	126.2	105.9	100.4	102.3
20°	156.6	149.2	148.3	140.0	134.5	130.8	104.1	81.1	74.6	75.5	76.5
22.5°	116.1	112.4	107.8	106.9	102.3	97.7	76.5	68.2	63.6	63.6	66.3
25°	94.9	93.0	88.4	86.6	84.8	78.3	64.5	58.0	56.2	54.4	57.1
27.5°	81.1	80.1	77.4	74.6	72.8	66.3	56.2	50.7	48.8	48.8	48.8
30°	72.8	72.8	69.1	63.6	63.6	56.2	47.9	44.2	42.4	42.4	41.5
32.5°	68.2	66.3	61.7	58.0	55.3	47.9	42.4	38.7	35.9	35.9	36.8
35°	55.3	55.3	54.4	51.6	47.9	40.5	35.9	32.2	30.4	29.5	30.4
37.5°	48.8	46.1	42.4	43.3	41.5	35.0	30.4	27.6	24.9	24.9	24.9
40°	44.2	41.5	37.8	35.0	34.1	31.3	26.7	22.1	19.3	18.4	18.4
42.5°	39.6	37.8	32.2	27.6	26.7	26.7	20.3	16.6	13.8	13.8	13.8
45°	36.8	34.1	29.5	24.0	19.3	20.3	16.6	12.0	10.1	9.2	9.2
47.5°	35.0	32.2	25.8	20.3	14.7	14.7	12.0	8.3	6.4	5.5	5.5
50°	32.2	29.5	23.0	16.6	11.1	9.2	7.4	4.6	2.8	1.8	1.8
52.5°	30.4	27.6	20.3	13.8	9.2	6.4	4.6	0.9	0.0	0.0	0.0
55°	27.6	24.0	17.5	11.1	7.4	3.7	0.9	0.0	0.0	0.0	0.0
57.5°	24.0	21.2	13.8	8.3	4.6	0.9	0.0	0.0	0.0	0.0	0.0
60°	20.3	17.5	11.1	6.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	16.6	14.7	8.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	13.8	11.1	6.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	12.0	9.2	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	9.2	6.4	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	6.4	4.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	4.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	2.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.9	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°	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3
2.5°	1171.8	1199.5	1225.2	1232.6	1252.9	1309.1	1309.1	1335.8	1383.7	1401.2	1404.9
5°	988.5	1018.0	1023.5	1080.6	1107.3	1164.4	1202.2	1292.5	1346.8	1380.9	1402.1
7.5°	751.7	761.9	783.1	836.5	889.0	958.1	1029.9	1145.1	1240.9	1279.6	1351.5
10°	516.8	547.2	593.3	641.2	723.2	799.6	892.7	1001.4	1119.3	1167.2	1228.9
12.5°	348.2	390.6	464.3	532.5	608.0	685.4	773.8	919.4	1053.0	1119.3	1181.0
15°	203.6	255.2	318.7	429.3	529.7	616.3	704.7	852.1	1014.3	1100.0	1175.5
17.5°	103.2	118.8	171.4	267.2	399.8	541.7	673.4	861.4	1043.8	1148.8	1211.4
20°	77.4	82.0	96.7	141.9	273.6	447.7	643.9	875.2	1125.8	1253.8	1287.9
22.5°	67.3	70.9	77.4	92.1	153.8	342.7	602.5	909.3	1237.2	1357.9	1429.8
25°	57.1	60.8	66.3	75.5	98.6	233.1	551.8	945.2	1336.7	1488.7	1556.0
27.5°	49.7	52.5	58.0	65.4	80.1	148.3	464.3	993.1	1488.7	1647.2	1664.7
30°	42.4	45.1	49.7	58.0	68.2	105.0	340.9	999.5	1572.6	1716.3	1765.1
32.5°	36.8	37.8	43.3	50.7	57.1	82.9	239.5	1006.0	1634.3	1805.6	1815.8
35°	30.4	32.2	37.8	42.4	49.7	65.4	181.5	973.7	1714.4	1897.7	1895.0
37.5°	24.9	27.6	31.3	35.0	40.5	55.3	144.6	913.9	1814.8	2040.5	1953.9
40°	19.3	22.1	25.8	30.4	34.1	49.7	108.7	823.6	1919.9	2110.6	2018.4
42.5°	13.8	15.7	19.3	24.0	30.4	41.5	78.3	716.7	1961.3	2192.5	2095.8
45°	10.1	12.0	14.7	20.3	31.3	33.2	54.4	619.1	2005.5	2228.5	2078.3
47.5°	5.5	7.4	11.1	17.5	27.6	24.9	38.7	531.6	2056.2	2260.7	2092.1
50°	1.8	2.8	6.4	18.4	22.1	19.3	30.4	484.6	2105.9	2267.2	2119.8
52.5°	0.0	0.0	3.7	19.3	16.6	14.7	26.7	466.1	2093.0	2287.4	2102.3
55°	0.0	0.0	0.9	8.3	9.2	11.1	22.1	465.2	2184.3	2293.9	2198.1
57.5°	0.0	0.0	0.0	2.8	5.5	9.2	19.3	435.7	2242.3	2454.2	2327.0
60°	0.0	0.0	0.0	0.9	3.7	6.4	14.7	410.0	2301.2	2526.0	2465.2
62.5°	0.0	0.0	0.0	0.0	0.9	2.8	10.1	370.3	2182.4	2520.5	2598.8
65°	0.0	0.0	0.0	0.0	0.0	0.0	6.4	293.0	1963.2	2388.8	2525.1
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.7	202.7	1719.0	2222.9	2389.7
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	122.5	1387.4	1949.3	2026.7
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5	990.3	1547.7	1662.8
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.2	612.6	1131.3	1273.1
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	397.1	856.8	966.4
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	211.9	537.1	624.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.1	326.1	375.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.5	198.1	225.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4	40.5
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):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3	1306.3
2.5°	1406.7	1433.4	1443.6	1427.9	1429.8	1397.5	1392.9	1347.8	1329.3	1333.0
5°	1471.2	1509.9	1531.1	1513.6	1474.0	1412.3	1356.1	1302.6	1269.5	1252.9
7.5°	1456.5	1499.8	1526.5	1543.1	1497.9	1398.4	1312.8	1212.3	1170.0	1170.9
10°	1375.4	1465.7	1520.0	1498.9	1477.7	1378.2	1245.5	1136.8	1099.0	1102.7
12.5°	1310.0	1410.4	1442.7	1459.2	1415.9	1336.7	1247.4	1123.0	1080.6	1054.8
15°	1269.5	1344.1	1345.9	1371.7	1354.2	1354.2	1266.7	1145.1	1108.2	1079.7
17.5°	1269.5	1286.0	1284.2	1293.4	1322.9	1357.9	1315.5	1234.5	1161.7	1157.1
20°	1298.0	1246.4	1234.5	1238.1	1263.0	1367.1	1423.3	1322.0	1275.9	1261.2
22.5°	1364.4	1251.0	1178.3	1165.4	1241.8	1366.2	1492.4	1460.2	1380.0	1368.0
25°	1455.6	1242.7	1163.5	1146.9	1205.0	1399.4	1587.3	1593.7	1521.0	1496.1
27.5°	1542.2	1279.6	1161.7	1158.0	1234.5	1392.0	1652.7	1700.6	1618.6	1598.3
30°	1571.6	1316.4	1195.8	1146.9	1245.5	1418.7	1650.9	1776.1	1722.7	1727.3
32.5°	1606.6	1353.3	1199.5	1180.1	1292.5	1462.0	1703.4	1897.7	1859.1	1804.7
35°	1658.2	1403.0	1234.5	1217.0	1325.7	1500.7	1714.4	1987.1	1980.7	1917.1
37.5°	1702.4	1451.9	1307.2	1310.0	1427.0	1563.3	1763.2	2096.7	2085.7	2042.4
40°	1733.8	1520.0	1420.5	1427.9	1515.4	1633.4	1849.8	2152.0	2234.0	2170.4
42.5°	1738.4	1580.8	1550.4	1609.4	1691.4	1742.1	1884.9	2189.8	2307.7	2266.2
45°	1755.9	1677.6	1762.3	1805.6	1872.9	1837.9	1883.0	2254.3	2313.2	2292.0
47.5°	1824.0	1853.5	1960.4	2092.1	2116.1	2000.9	1927.2	2264.4	2344.5	2341.8
50°	1895.0	2042.4	2192.5	2280.1	2310.5	2113.3	1968.7	2256.1	2386.0	2363.9
52.5°	1974.2	2206.4	2422.9	2530.6	2514.1	2237.7	2015.7	2323.4	2462.5	2455.1
55°	2024.0	2280.1	2571.2	2721.3	2708.4	2376.8	2164.9	2420.1	2562.9	2544.5
57.5°	2155.7	2399.8	2718.6	2788.6	2822.7	2559.2	2269.0	2578.5	2646.7	2667.0
60°	2264.4	2478.1	2757.3	2858.6	2870.6	2667.9	2451.4	2741.6	2753.6	2685.4
62.5°	2423.8	2508.5	2675.3	2766.5	2828.2	2729.6	2615.4	2829.1	2751.7	2747.1
65°	2540.8	2409.0	2522.3	2573.0	2612.6	2635.7	2780.3	2889.0	2717.6	2628.3
67.5°	2475.4	2221.1	2199.9	2202.7	2214.7	2353.8	2725.0	2742.5	2527.9	2454.2
70°	2178.7	1822.2	1793.6	1815.8	1755.9	1923.5	2501.2	2492.9	2230.3	2153.9
72.5°	1762.3	1328.4	1279.6	1310.0	1323.8	1501.6	2104.1	1890.4	1626.9	1567.0
75°	1400.3	973.7	821.7	895.4	942.4	1093.5	1643.5	1284.2	1135.9	1054.8
77.5°	1100.0	737.0	639.3	609.9	653.2	795.0	1195.8	674.3	595.1	557.3
80°	697.4	541.7	587.7	545.4	563.8	567.5	622.8	306.8	244.1	241.4
82.5°	420.1	370.3	440.4	242.3	441.3	394.3	258.9	139.1	123.4	123.4
85°	297.6	229.4	152.0	98.6	196.2	216.5	100.4	71.9	62.6	60.8
87.5°	149.2	70.9	34.1	22.1	24.9	40.5	12.0	5.5	5.5	4.6
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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