

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: P676324

Luminaire Tested: **CCW-SA-2A-830-U-T2-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676324  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-2A-830-U-T2-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @350mA w/  
T2 distribution lens and House Side Shield  
Light Source: (32) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3356.6 lumens  
Efficiency: N/A  
Efficacy: 92.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

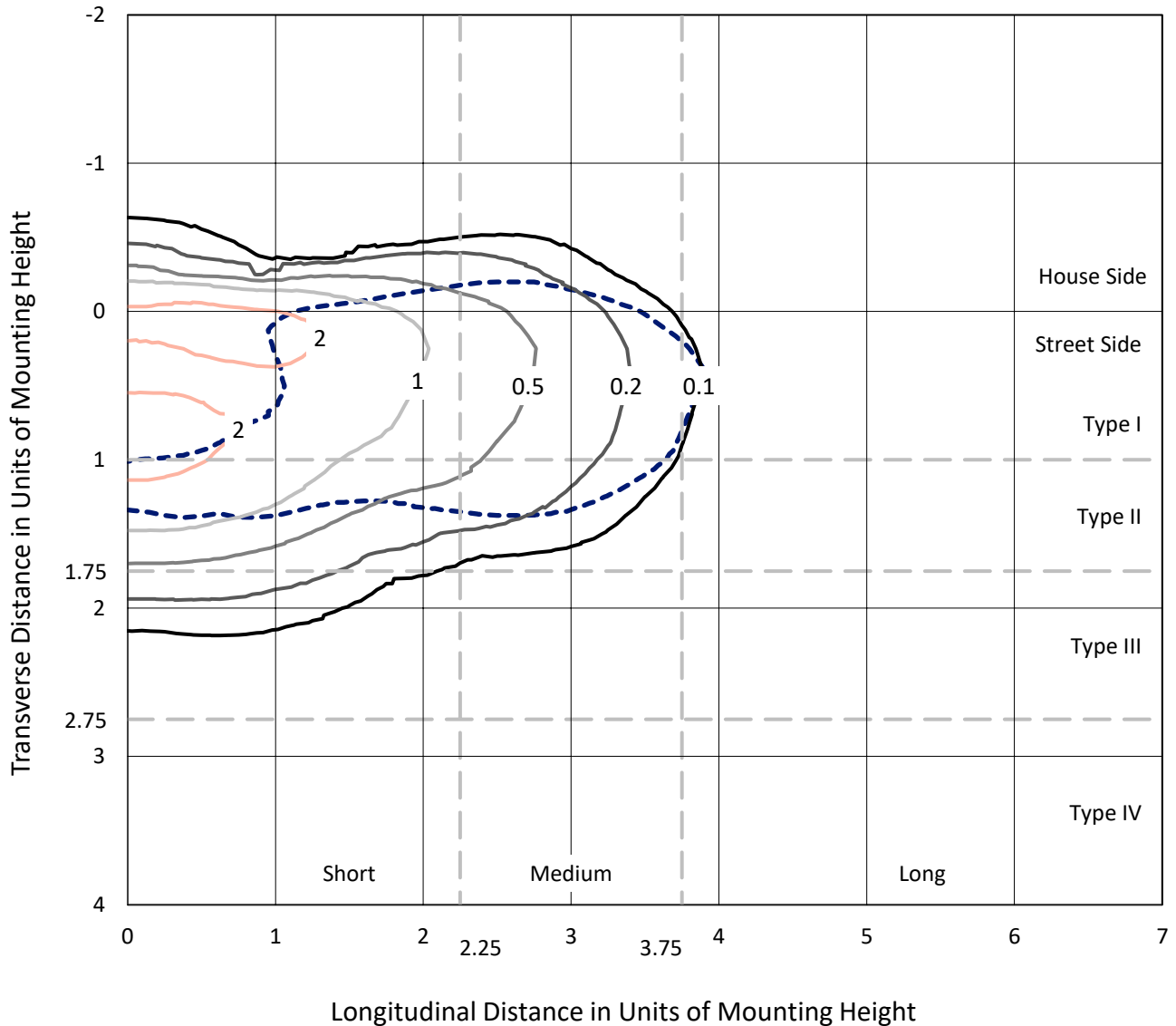
Input Watts (W): 36.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

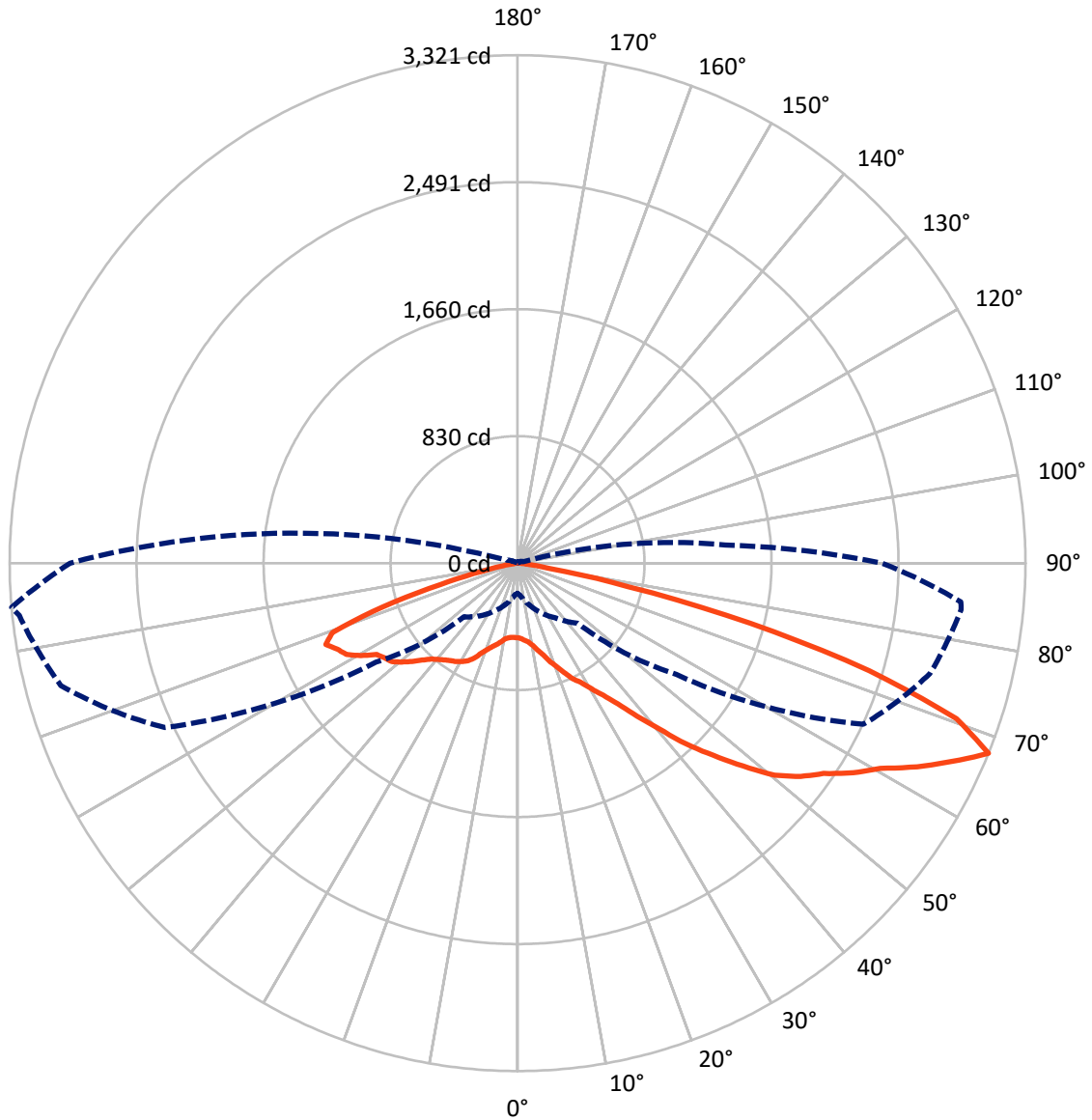
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.6 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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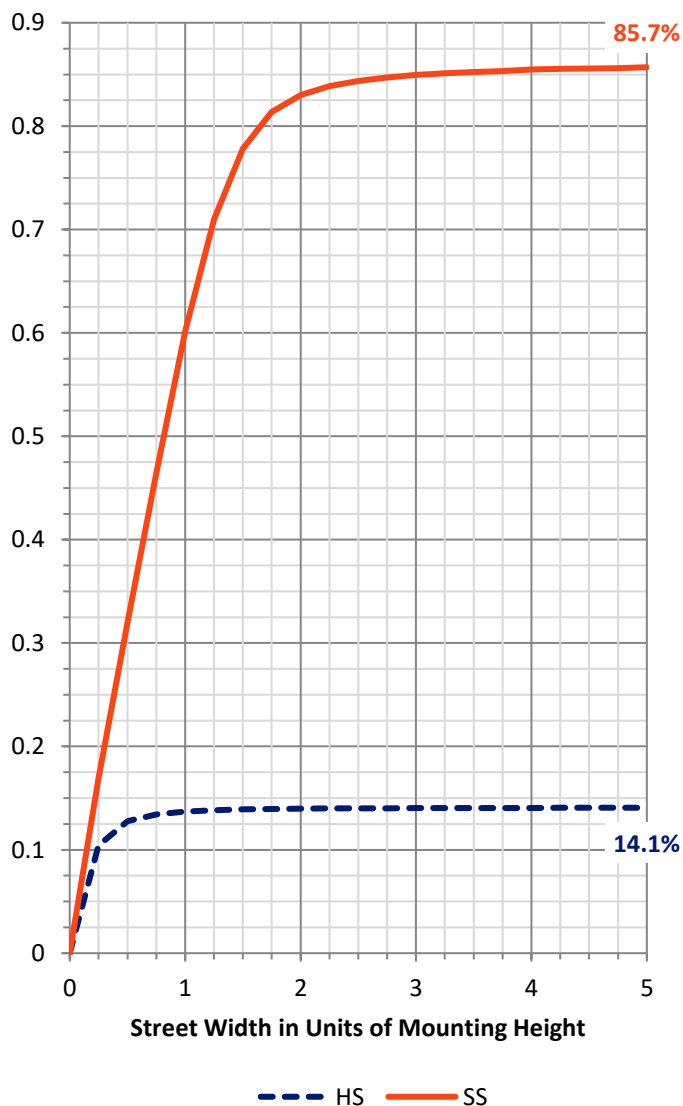
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	476.9	0.0	476.9
	% Fixture	14.2	0.0	14.2
<b>Street Side</b>	Lumens	2879.8	0.0	2879.8
	% Fixture	85.8	0.0	85.8
<b>Total</b>	Lumens	3356.6	0.0	3356.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.5	1.3
10°-20°	119.7	3.6
20°-30°	198.8	5.9
30°-40°	342.0	10.2
40°-50°	614.5	18.3
50°-60°	874.8	26.1
60°-70°	797.5	23.8
70°-80°	339.6	10.1
80°-90°	25.3	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°	3356.6	100.0
0°-180°	3356.6	100.0



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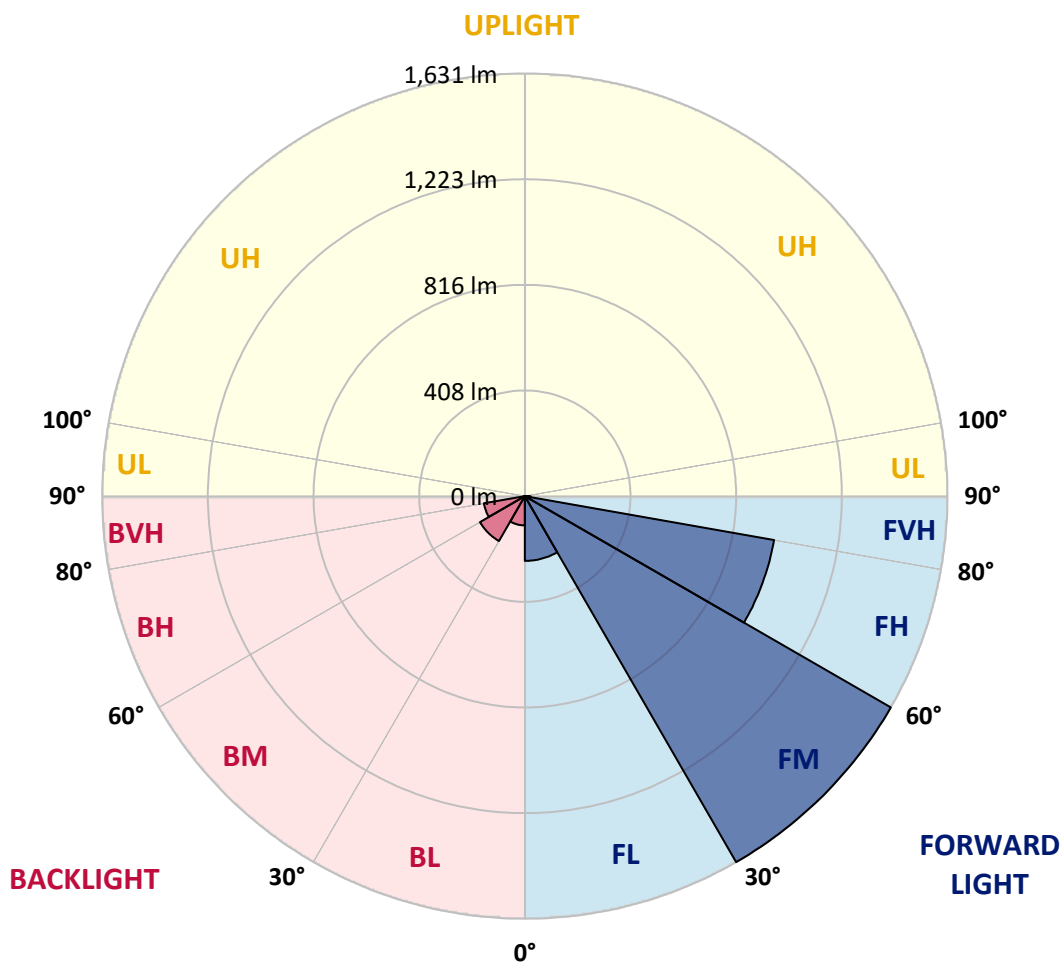
CATALOG NUMBER: CCW-SA-2A-830-U-T2-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	250.1	7.4			
FM (30°-60°)	1631.3	48.6			
FH (60°-80°)	976.9	29.1			G1/1800
FVH (80°-90°)	21.5	0.6			G1/100
BL (0°-30°)	112.9	3.4	B1/500		
BM (30°-60°)	199.9	6.0	B0/220		
BH (60°-80°)	160.2	4.8	B1/500		G1/500
BVH (80°-90°)	3.8	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1
2.5°	505.7	510.5	510.5	508.9	504.1	500.9	499.3	496.1	492.9	492.9	494.5
5°	510.5	505.7	512.1	504.1	504.1	504.1	510.5	507.3	505.7	497.7	497.7
7.5°	510.5	505.7	505.7	510.5	505.7	508.9	516.9	513.7	520.1	505.7	508.9
10°	496.1	494.5	497.7	504.1	505.7	512.1	520.1	536.1	537.7	528.1	526.5
12.5°	467.3	465.7	476.9	480.1	499.3	515.3	539.3	552.1	566.5	561.7	552.1
15°	446.5	449.7	457.7	470.5	488.1	516.9	544.1	572.9	598.5	592.1	588.9
17.5°	454.5	452.9	454.5	462.5	484.9	513.7	560.1	593.7	630.5	630.5	633.7
20°	478.5	483.3	481.7	476.9	488.1	512.1	560.1	619.3	680.1	675.3	675.3
22.5°	520.1	521.7	512.1	508.9	507.3	521.7	569.7	651.3	721.8	731.4	728.2
25°	563.3	564.9	561.7	552.1	539.3	542.5	587.3	676.9	779.4	795.4	792.2
27.5°	635.3	633.7	625.7	614.5	595.3	580.9	614.5	696.1	824.2	851.4	843.4
30°	707.4	702.5	691.3	676.9	659.3	632.1	648.1	733.0	880.2	905.8	888.2
32.5°	795.4	785.8	789.0	766.6	729.8	686.5	683.3	766.6	925.0	961.8	947.4
35°	907.4	896.2	880.2	859.4	824.2	766.6	749.0	821.0	1000.2	1027.4	1027.4
37.5°	1054.6	1065.8	1046.6	960.2	921.8	867.4	830.6	877.0	1065.8	1131.4	1115.4
40°	1205.1	1214.7	1179.5	1115.4	1032.2	965.0	942.6	968.2	1165.0	1243.5	1213.1
42.5°	1326.7	1339.5	1326.7	1243.5	1177.9	1091.4	1051.4	1075.4	1293.1	1387.5	1347.5
45°	1454.7	1467.5	1453.1	1398.7	1334.7	1285.1	1184.3	1214.7	1427.5	1568.3	1523.5
47.5°	1550.7	1566.7	1541.1	1529.9	1478.7	1470.7	1299.5	1333.1	1568.3	1750.8	1694.8
50°	1573.1	1590.7	1613.1	1625.9	1608.3	1627.5	1454.7	1483.5	1715.6	1918.8	1864.4
52.5°	1520.3	1537.9	1587.5	1646.8	1728.4	1786.0	1611.5	1635.5	1869.2	2058.0	2029.2
55°	1365.1	1381.1	1481.9	1561.9	1757.2	1851.6	1762.0	1862.8	1979.6	2203.7	2133.3
57.5°	1104.2	1123.4	1256.3	1379.5	1661.2	1814.8	1851.6	2051.6	2162.1	2310.9	2229.3
60°	784.2	795.4	910.6	1128.2	1395.5	1630.7	1834.0	2192.5	2306.1	2454.9	2411.7
62.5°	451.3	460.9	580.9	785.8	1053.0	1361.9	1755.6	2325.3	2461.3	2613.4	2589.4
65°	299.3	302.5	384.1	496.1	684.9	1003.4	1557.1	2443.7	2615.0	2739.8	2712.6
67.5°	196.8	214.4	278.5	355.3	438.5	555.3	1269.1	2493.3	2791.0	2915.8	2909.4
70°	140.8	147.2	200.0	273.7	329.7	312.1	742.6	2142.9	2783.0	2963.8	2911.0
72.5°	83.2	89.6	132.8	204.8	259.3	198.4	347.3	1515.5	2306.1	2365.3	2350.9
75°	60.8	60.8	81.6	147.2	188.8	142.4	163.2	958.6	1531.5	1662.8	1661.2
77.5°	43.2	44.8	56.0	88.0	145.6	104.0	89.6	532.9	837.0	915.4	872.2
80°	25.6	27.2	38.4	52.8	105.6	75.2	59.2	243.3	321.7	324.9	308.9
82.5°	19.2	19.2	25.6	36.8	73.6	51.2	36.8	92.8	104.0	94.4	80.0
85°	11.2	9.6	19.2	27.2	43.2	28.8	25.6	43.2	48.0	35.2	32.0
87.5°	3.2	3.2	8.0	9.6	19.2	16.0	11.2	16.0	22.4	12.8	9.6
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°	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1
2.5°	491.3	486.5	478.5	475.3	464.1	459.3	456.1	448.1	449.7	444.9	444.9
5°	486.5	486.5	470.5	452.9	435.3	424.1	411.3	395.3	395.3	388.9	390.5
7.5°	504.1	491.3	470.5	438.5	409.7	384.1	372.9	356.9	347.3	342.5	342.5
10°	515.3	502.5	467.3	428.9	392.1	360.1	336.1	313.7	300.9	300.9	299.3
12.5°	545.7	526.5	480.1	427.3	372.9	324.9	288.1	262.5	244.9	232.0	235.3
15°	571.3	550.5	486.5	414.5	339.3	272.1	227.2	179.2	155.2	142.4	137.6
17.5°	611.3	572.9	500.9	392.1	288.1	212.8	147.2	107.2	97.6	96.0	96.0
20°	644.9	600.1	502.5	348.9	236.9	136.0	94.4	88.0	83.2	81.6	80.0
22.5°	691.3	635.3	496.1	299.3	169.6	91.2	80.0	73.6	70.4	65.6	65.6
25°	739.4	681.7	483.3	252.9	104.0	78.4	70.4	64.0	57.6	54.4	56.0
27.5°	790.6	717.0	446.5	196.8	80.0	68.8	57.6	52.8	49.6	48.0	48.0
30°	832.2	739.4	392.1	131.2	72.0	60.8	51.2	46.4	43.2	41.6	41.6
32.5°	862.6	758.6	331.3	88.0	65.6	54.4	46.4	41.6	38.4	36.8	36.8
35°	913.8	773.0	275.3	75.2	59.2	48.0	40.0	36.8	33.6	33.6	33.6
37.5°	992.2	792.2	219.2	68.8	54.4	43.2	38.4	33.6	32.0	30.4	30.4
40°	1061.0	816.2	156.8	62.4	49.6	40.0	33.6	30.4	28.8	27.2	27.2
42.5°	1160.2	843.4	102.4	56.0	44.8	36.8	30.4	27.2	25.6	24.0	24.0
45°	1286.7	888.2	80.0	49.6	40.0	33.6	28.8	25.6	22.4	22.4	20.8
47.5°	1421.1	942.6	72.0	46.4	36.8	30.4	25.6	22.4	20.8	19.2	19.2
50°	1545.9	995.4	67.2	43.2	33.6	28.8	24.0	20.8	17.6	16.0	16.0
52.5°	1658.0	1045.0	64.0	40.0	32.0	25.6	20.8	17.6	16.0	14.4	14.4
55°	1717.2	1067.4	62.4	38.4	28.8	24.0	19.2	16.0	14.4	12.8	12.8
57.5°	1810.0	1096.2	60.8	36.8	27.2	20.8	17.6	14.4	12.8	11.2	11.2
60°	1960.4	1190.7	59.2	35.2	25.6	20.8	16.0	12.8	9.6	8.0	8.0
62.5°	2085.2	1269.1	52.8	30.4	22.4	17.6	12.8	9.6	6.4	4.8	4.8
65°	2227.7	1305.9	46.4	27.2	19.2	14.4	9.6	6.4	4.8	1.6	1.6
67.5°	2382.9	1361.9	38.4	24.0	17.6	11.2	8.0	4.8	1.6	0.0	0.0
70°	2301.3	1291.5	32.0	20.8	16.0	9.6	6.4	3.2	0.0	0.0	0.0
72.5°	1803.6	925.0	25.6	19.2	14.4	9.6	6.4	1.6	0.0	0.0	0.0
75°	1205.1	523.3	22.4	16.0	11.2	8.0	4.8	1.6	0.0	0.0	0.0
77.5°	654.5	235.3	19.2	14.4	9.6	6.4	4.8	1.6	0.0	0.0	0.0
80°	212.8	92.8	16.0	12.8	9.6	6.4	4.8	1.6	0.0	0.0	0.0
82.5°	57.6	28.8	16.0	12.8	9.6	6.4	4.8	1.6	0.0	0.0	0.0
85°	24.0	19.2	16.0	12.8	9.6	6.4	4.8	1.6	0.0	0.0	0.0
87.5°	9.6	6.4	6.4	8.0	6.4	4.8	3.2	1.6	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°	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1
2.5°	446.5	449.7	451.3	451.3	459.3	467.3	476.9	484.9	484.9	489.7	494.5
5°	392.1	395.3	400.1	414.5	430.5	448.1	465.7	478.5	496.1	504.1	508.9
7.5°	347.3	350.5	363.3	377.7	400.1	430.5	460.9	489.7	507.3	515.3	521.7
10°	300.9	305.7	320.1	345.7	374.5	411.3	446.5	496.1	524.9	540.9	547.3
12.5°	233.6	246.5	265.7	292.9	329.7	385.7	451.3	502.5	552.1	571.3	584.1
15°	147.2	158.4	188.8	232.0	281.7	347.3	438.5	512.1	580.9	600.1	620.9
17.5°	94.4	96.0	105.6	152.0	216.0	299.3	419.3	526.5	612.9	640.1	672.1
20°	80.0	83.2	84.8	91.2	144.0	246.5	379.3	544.1	651.3	688.1	718.6
22.5°	67.2	68.8	72.0	76.8	86.4	179.2	324.9	544.1	684.9	739.4	774.6
25°	54.4	57.6	60.8	65.6	75.2	112.0	268.9	534.5	725.0	792.2	837.0
27.5°	48.0	48.0	51.2	56.0	64.0	78.4	212.8	505.7	755.4	824.2	883.4
30°	41.6	43.2	44.8	49.6	57.6	68.8	147.2	459.3	787.4	886.6	953.8
32.5°	36.8	36.8	40.0	43.2	51.2	62.4	94.4	388.9	829.0	934.6	1029.0
35°	33.6	33.6	35.2	38.4	46.4	56.0	73.6	329.7	878.6	1025.8	1129.8
37.5°	30.4	30.4	32.0	35.2	41.6	49.6	67.2	283.3	929.8	1117.0	1269.1
40°	27.2	27.2	28.8	32.0	36.8	44.8	60.8	228.8	993.8	1251.5	1421.1
42.5°	24.0	24.0	25.6	28.8	33.6	40.0	52.8	171.2	1078.6	1397.1	1617.9
45°	20.8	20.8	22.4	25.6	28.8	36.8	48.0	131.2	1171.4	1558.7	1790.8
47.5°	17.6	19.2	20.8	24.0	27.2	33.6	43.2	115.2	1262.7	1730.0	1982.8
50°	16.0	16.0	17.6	20.8	25.6	30.4	40.0	113.6	1355.5	1861.2	2179.7
52.5°	14.4	14.4	16.0	19.2	24.0	28.8	38.4	116.8	1432.3	1982.8	2317.3
55°	12.8	12.8	14.4	16.0	20.8	27.2	35.2	120.0	1486.7	2106.0	2427.7
57.5°	11.2	11.2	12.8	16.0	19.2	24.0	32.0	123.2	1574.7	2227.7	2587.8
60°	8.0	8.0	11.2	14.4	17.6	20.8	30.4	126.4	1715.6	2395.7	2723.8
62.5°	4.8	4.8	6.4	11.2	14.4	19.2	27.2	120.0	1846.8	2611.8	2931.8
65°	1.6	3.2	4.8	6.4	11.2	16.0	22.4	108.8	1957.2	2827.8	3123.9
67.5°	0.0	0.0	1.6	4.8	9.6	12.8	19.2	80.0	1974.8	2925.4	3320.7
70°	0.0	0.0	1.6	4.8	8.0	12.8	17.6	44.8	1682.0	2613.4	3043.8
72.5°	0.0	0.0	0.0	3.2	8.0	11.2	16.0	33.6	1240.3	1970.0	2405.3
75°	0.0	0.0	0.0	1.6	6.4	9.6	14.4	25.6	753.8	1313.9	1569.9
77.5°	0.0	0.0	0.0	1.6	4.8	9.6	14.4	22.4	265.7	625.7	737.8
80°	0.0	0.0	0.0	3.2	6.4	9.6	12.8	19.2	64.0	156.8	211.2
82.5°	0.0	0.0	0.0	1.6	4.8	8.0	11.2	16.0	25.6	46.4	73.6
85°	0.0	0.0	0.0	1.6	3.2	8.0	11.2	14.4	17.6	22.4	32.0
87.5°	0.0	0.0	0.0	0.0	1.6	3.2	4.8	6.4	6.4	6.4	11.2
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):**

	276°	285°	295°	305°	315°	325°	335°	345°	355°	360°
0°	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1	488.1
2.5°	492.9	499.3	502.5	508.9	512.1	510.5	508.9	513.7	510.5	505.7
5°	510.5	510.5	515.3	516.9	516.9	512.1	515.3	513.7	510.5	510.5
7.5°	529.7	537.7	537.7	528.1	526.5	523.3	523.3	510.5	505.7	510.5
10°	548.9	555.3	556.9	545.7	531.3	524.9	516.9	500.9	492.9	496.1
12.5°	588.9	588.9	571.3	558.5	539.3	516.9	497.7	475.3	464.1	467.3
15°	617.7	624.1	600.1	571.3	537.7	496.1	475.3	457.7	451.3	446.5
17.5°	673.7	660.9	622.5	580.9	532.9	489.7	475.3	459.3	454.5	454.5
20°	721.8	715.4	657.7	582.5	531.3	502.5	492.9	484.9	483.3	478.5
22.5°	787.4	758.6	684.9	600.1	548.9	523.3	520.1	528.1	523.3	520.1
25°	837.0	813.0	705.8	625.7	576.1	568.1	572.9	580.9	568.1	563.3
27.5°	904.2	859.4	745.8	659.3	612.9	620.9	636.9	638.5	630.5	635.3
30°	966.6	918.6	776.2	697.7	675.3	683.3	707.4	725.0	713.8	707.4
32.5°	1056.2	982.6	837.0	761.8	753.8	774.6	801.8	813.0	798.6	795.4
35°	1150.6	1056.2	899.4	833.8	848.2	877.0	901.0	920.2	897.8	907.4
37.5°	1297.9	1174.6	1005.0	947.4	953.8	965.0	1009.8	1062.6	1073.8	1054.6
40°	1451.5	1302.7	1102.6	1057.8	1072.2	1102.6	1155.4	1205.1	1230.7	1205.1
42.5°	1629.1	1425.9	1253.1	1200.3	1214.7	1257.9	1328.3	1368.3	1365.1	1326.7
45°	1848.4	1597.1	1393.9	1328.3	1381.1	1419.5	1489.9	1494.7	1464.3	1454.7
47.5°	2016.4	1741.2	1545.9	1504.3	1576.3	1577.9	1593.9	1595.5	1561.9	1550.7
50°	2202.1	1907.6	1715.6	1654.8	1776.4	1720.4	1677.2	1648.4	1597.1	1573.1
52.5°	2384.5	2026.0	1872.4	1810.0	1936.4	1787.6	1709.2	1621.1	1545.9	1520.3
55°	2482.1	2221.3	2101.2	1955.6	1971.6	1806.8	1609.9	1499.5	1371.5	1365.1
57.5°	2597.4	2352.5	2294.9	2054.8	1912.4	1672.4	1403.5	1257.9	1120.2	1104.2
60°	2733.4	2560.5	2499.7	2038.8	1702.8	1405.1	1112.2	925.0	795.4	784.2
62.5°	2885.4	2807.0	2626.2	1882.0	1352.3	989.0	734.6	577.7	457.7	451.3
65°	3125.5	3013.4	2693.4	1584.3	894.6	633.7	488.1	374.5	302.5	299.3
67.5°	3275.9	3091.9	2542.9	1129.8	496.1	419.3	342.5	272.1	209.6	196.8
70°	3063.1	2837.4	2011.6	646.5	288.1	318.5	264.1	182.4	144.0	140.8
72.5°	2446.9	2106.0	1353.9	304.1	179.2	249.7	192.0	123.2	86.4	83.2
75°	1669.2	1325.1	849.8	140.8	126.4	182.4	140.8	72.0	60.8	60.8
77.5°	745.8	675.3	435.3	86.4	94.4	139.2	81.6	49.6	44.8	43.2
80°	227.2	238.5	177.6	59.2	70.4	105.6	49.6	33.6	27.2	25.6
82.5°	76.8	89.6	80.0	35.2	48.0	75.2	33.6	22.4	19.2	19.2
85°	36.8	44.8	40.0	22.4	25.6	36.8	27.2	17.6	11.2	11.2
87.5°	14.4	20.8	14.4	9.6	14.4	19.2	11.2	8.0	3.2	3.2
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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