

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: P677470

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

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677470  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1A-830-U-SLR-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @350mA w/  
SLR distribution lens and House Side Shield  
Light Source: (16) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

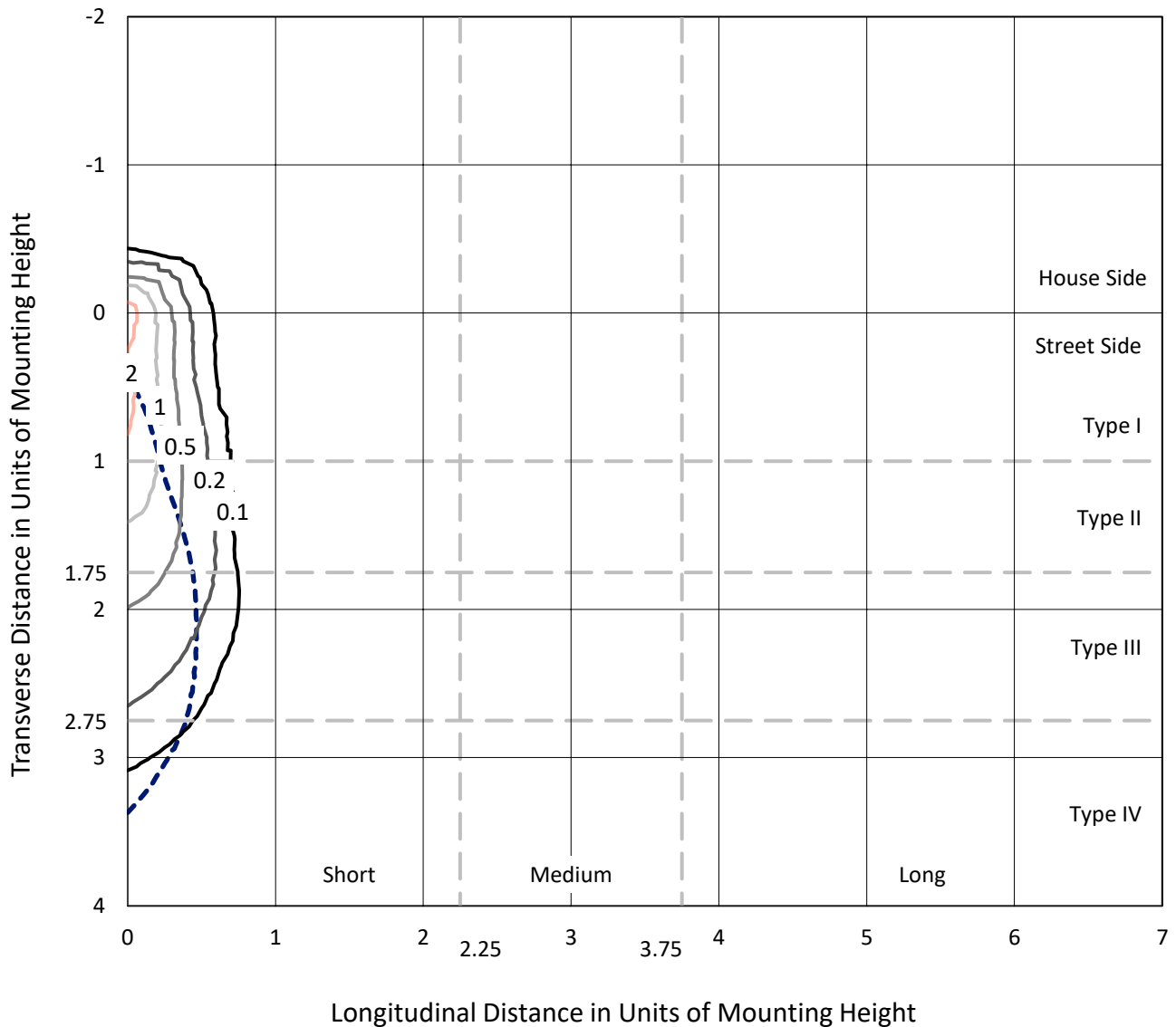
Lumens per Lamp: N/A  
Luminaire Lumens: 1562.2 lumens  
Efficiency: N/A  
Efficacy: 86.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B0 - U0 - G1

Input Watts (W): 18  
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

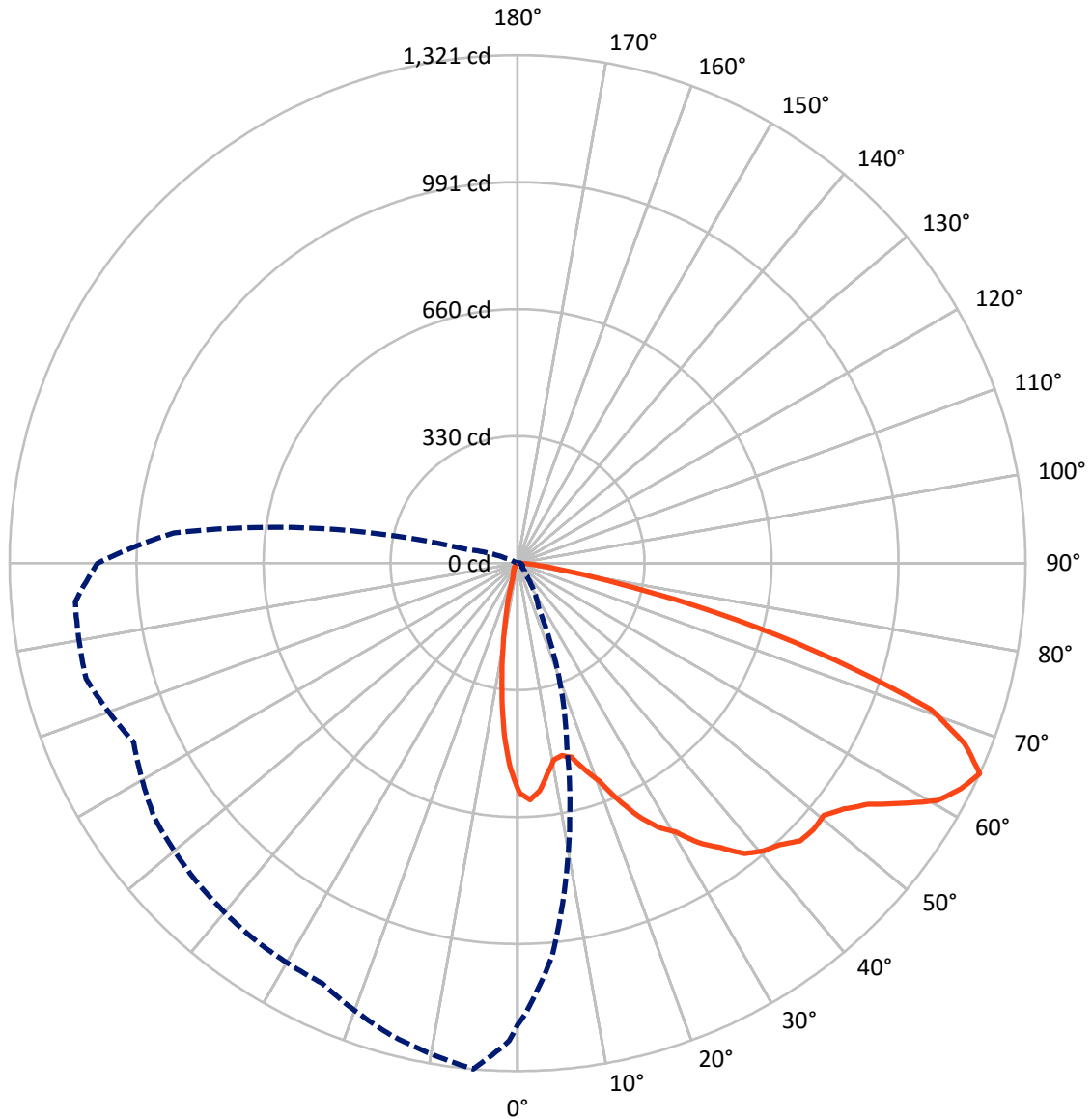
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.7 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	202.8	0.0	202.8
	% Fixture	13.0	0.0	13.0
<b>Street Side</b>	Lumens	1359.4	0.0	1359.4
	% Fixture	87.0	0.0	87.0
<b>Total</b>	Lumens	1562.2	0.0	1562.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.2	2.9
10°-20°	87.6	5.6
20°-30°	122.0	7.8
30°-40°	173.4	11.1
40°-50°	240.4	15.4
50°-60°	327.6	21.0
60°-70°	360.1	23.1
70°-80°	177.0	11.3
80°-90°	28.9	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°	1562.2	100.0
0°-180°	1562.2	100.0



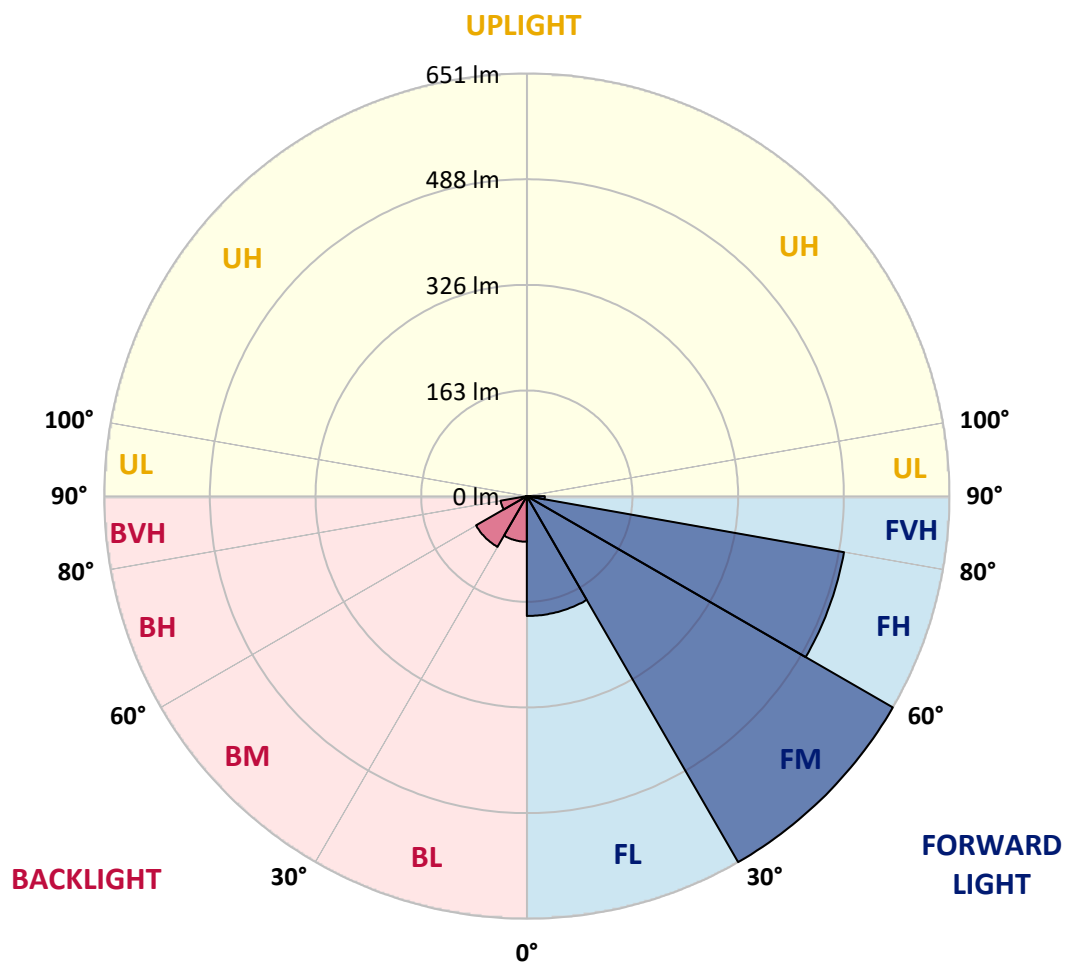
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	184.6	11.8			
FM (30°-60°)	651.0	41.7			
FH (60°-80°)	496.1	31.8			G0/660
FVH (80°-90°)	27.6	1.8			G1/100
BL (0°-30°)	70.2	4.5	B0/110		
BM (30°-60°)	90.3	5.8	B0/220		
BH (60°-80°)	41.0	2.6	B0/110		G0/110
BVH (80°-90°)	1.3	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2
2.5°	609.4	616.6	609.9	586.3	582.1	570.7	553.4	552.2	534.1	536.2	526.5
5°	572.8	580.0	565.6	534.5	505.4	482.3	468.4	443.5	438.0	425.8	425.8
7.5°	535.3	534.9	510.5	484.4	441.0	398.4	379.1	343.3	322.2	310.8	299.9
10°	504.2	497.4	482.3	428.3	381.2	336.9	312.9	289.4	267.5	248.5	229.5
12.5°	482.3	486.5	462.5	403.9	342.8	312.1	286.4	261.6	235.4	214.0	192.9
15°	493.6	486.9	458.7	398.4	336.5	294.4	260.3	230.0	200.9	172.7	156.7
17.5°	529.0	511.7	478.5	398.4	323.5	267.5	226.2	190.4	159.2	133.9	114.1
20°	576.6	556.8	521.0	413.2	313.8	247.7	191.2	146.1	113.7	90.1	75.0
22.5°	625.5	609.9	556.0	419.1	302.4	221.1	150.8	105.7	75.8	60.7	53.1
25°	684.0	662.1	603.1	442.7	285.6	195.4	118.8	73.7	56.4	48.4	43.8
27.5°	730.7	727.0	647.4	457.0	272.9	174.4	93.9	58.5	46.8	40.9	37.9
30°	789.7	769.1	701.3	485.6	258.6	150.4	78.3	52.6	43.0	36.6	34.5
32.5°	825.1	815.4	729.5	501.6	242.6	130.6	67.4	46.3	39.2	34.5	32.4
35°	876.5	857.1	769.9	511.7	234.2	119.2	60.7	42.1	32.9	28.2	25.7
37.5°	933.8	926.6	818.4	511.3	222.0	112.5	56.0	39.2	31.2	26.1	23.2
40°	992.3	963.2	847.8	523.1	215.6	107.4	52.6	37.5	29.5	24.8	21.1
42.5°	1036.1	1002.8	882.0	518.9	208.1	98.6	51.4	35.0	28.2	22.7	19.4
45°	1047.9	1036.1	912.7	517.6	202.6	91.4	49.3	34.5	27.4	21.5	18.1
47.5°	1070.6	1062.6	950.6	519.7	198.4	85.9	44.2	35.4	26.1	20.2	17.3
50°	1080.8	1066.4	981.4	524.8	188.7	79.2	39.6	37.1	25.7	19.8	16.4
52.5°	1122.4	1109.8	1023.5	539.1	180.7	70.3	35.0	35.4	26.5	18.5	15.6
55°	1163.3	1149.0	1088.3	572.0	169.3	63.2	29.9	31.2	25.3	16.8	13.9
57.5°	1219.3	1195.7	1131.7	585.4	159.2	53.5	26.5	25.7	23.6	15.2	12.2
60°	1227.7	1237.4	1125.4	577.0	148.7	47.2	23.2	19.8	25.3	13.5	10.5
62.5°	1256.0	1215.5	1095.9	557.6	141.1	43.4	20.6	16.4	21.9	11.8	8.8
65°	1201.6	1171.7	1026.8	495.3	131.4	43.8	18.1	13.5	13.9	9.7	7.2
67.5°	1122.0	1098.4	912.3	427.5	121.7	43.0	16.0	11.8	10.5	8.4	6.3
70°	984.7	933.8	775.0	347.1	107.4	40.0	13.5	10.5	8.8	6.7	4.6
72.5°	716.4	695.8	556.0	268.3	96.5	36.2	12.6	8.8	7.6	5.1	3.8
75°	482.3	448.1	350.8	176.1	77.5	31.6	10.5	8.0	5.9	3.8	2.9
77.5°	254.8	240.9	198.8	83.8	43.0	14.7	5.9	4.6	3.4	2.9	1.7
80°	110.3	98.1	85.9	34.1	15.2	6.7	3.8	2.5	2.1	1.7	0.8
82.5°	56.4	53.9	44.6	14.7	8.8	5.1	2.1	1.7	1.3	0.8	0.4
85°	27.8	28.6	23.6	4.6	5.1	2.9	0.4	0.4	0.0	0.0	0.0
87.5°	2.1	2.1	1.7	0.8	1.3	0.4	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°	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2
2.5°	522.7	528.6	518.5	524.8	521.8	523.1	524.4	521.0	521.8	533.6	534.1
5°	418.7	430.0	425.8	431.7	441.8	436.8	441.4	440.6	441.4	443.1	450.7
7.5°	298.6	295.2	303.3	318.8	336.9	347.9	342.4	339.5	337.8	333.6	338.6
10°	225.3	223.6	221.5	226.2	238.0	250.2	256.9	245.5	239.2	231.2	228.3
12.5°	187.0	176.5	170.6	163.4	166.8	177.7	178.2	167.2	157.1	152.9	157.5
15°	147.4	140.3	129.7	119.6	114.6	123.0	115.8	105.3	92.2	90.6	90.1
17.5°	105.3	101.1	93.5	89.3	83.4	81.3	73.7	57.7	48.4	45.9	46.8
20°	71.6	68.2	67.8	64.0	61.5	59.8	47.6	37.1	34.1	34.5	35.0
22.5°	53.1	51.4	49.3	48.9	46.8	44.6	35.0	31.2	29.1	29.1	30.3
25°	43.4	42.5	40.4	39.6	38.7	35.8	29.5	26.5	25.7	24.8	26.1
27.5°	37.1	36.6	35.4	34.1	33.3	30.3	25.7	23.2	22.3	22.3	22.3
30°	33.3	33.3	31.6	29.1	29.1	25.7	21.9	20.2	19.4	19.4	19.0
32.5°	31.2	30.3	28.2	26.5	25.3	21.9	19.4	17.7	16.4	16.4	16.8
35°	25.3	25.3	24.8	23.6	21.9	18.5	16.4	14.7	13.9	13.5	13.9
37.5°	22.3	21.1	19.4	19.8	19.0	16.0	13.9	12.6	11.4	11.4	11.4
40°	20.2	19.0	17.3	16.0	15.6	14.3	12.2	10.1	8.8	8.4	8.4
42.5°	18.1	17.3	14.7	12.6	12.2	12.2	9.3	7.6	6.3	6.3	6.3
45°	16.8	15.6	13.5	11.0	8.8	9.3	7.6	5.5	4.6	4.2	4.2
47.5°	16.0	14.7	11.8	9.3	6.7	6.7	5.5	3.8	2.9	2.5	2.5
50°	14.7	13.5	10.5	7.6	5.1	4.2	3.4	2.1	1.3	0.8	0.8
52.5°	13.9	12.6	9.3	6.3	4.2	2.9	2.1	0.4	0.0	0.0	0.0
55°	12.6	11.0	8.0	5.1	3.4	1.7	0.4	0.0	0.0	0.0	0.0
57.5°	11.0	9.7	6.3	3.8	2.1	0.4	0.0	0.0	0.0	0.0	0.0
60°	9.3	8.0	5.1	2.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	7.6	6.7	3.8	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	6.3	5.1	2.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	5.5	4.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	4.2	2.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	2.9	2.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	2.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.4	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°	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2
2.5°	535.7	548.4	560.2	563.5	572.8	598.5	598.5	610.7	632.6	640.6	642.3
5°	451.9	465.4	467.9	494.0	506.3	532.4	549.6	590.9	615.8	631.4	641.0
7.5°	343.7	348.3	358.0	382.4	406.4	438.0	470.9	523.5	567.3	585.0	617.9
10°	236.3	250.2	271.2	293.1	330.6	365.6	408.1	457.8	511.7	533.6	561.9
12.5°	159.2	178.6	212.3	243.4	278.0	313.4	353.8	420.3	481.4	511.7	540.0
15°	93.1	116.7	145.7	196.3	242.2	281.8	322.2	389.6	463.7	502.9	537.4
17.5°	47.2	54.3	78.3	122.1	182.8	247.7	307.9	393.8	477.2	525.2	553.9
20°	35.4	37.5	44.2	64.9	125.1	204.7	294.4	400.1	514.7	573.2	588.8
22.5°	30.7	32.4	35.4	42.1	70.3	156.7	275.5	415.7	565.6	620.8	653.7
25°	26.1	27.8	30.3	34.5	45.1	106.6	252.3	432.1	611.1	680.6	711.4
27.5°	22.7	24.0	26.5	29.9	36.6	67.8	212.3	454.0	680.6	753.1	761.1
30°	19.4	20.6	22.7	26.5	31.2	48.0	155.8	457.0	719.0	784.7	807.0
32.5°	16.8	17.3	19.8	23.2	26.1	37.9	109.5	459.9	747.2	825.5	830.1
35°	13.9	14.7	17.3	19.4	22.7	29.9	83.0	445.2	783.8	867.6	866.4
37.5°	11.4	12.6	14.3	16.0	18.5	25.3	66.1	417.8	829.7	932.9	893.3
40°	8.8	10.1	11.8	13.9	15.6	22.7	49.7	376.5	877.7	964.9	922.8
42.5°	6.3	7.2	8.8	11.0	13.9	19.0	35.8	327.7	896.7	1002.4	958.2
45°	4.6	5.5	6.7	9.3	14.3	15.2	24.8	283.0	916.9	1018.8	950.2
47.5°	2.5	3.4	5.1	8.0	12.6	11.4	17.7	243.0	940.1	1033.6	956.5
50°	0.8	1.3	2.9	8.4	10.1	8.8	13.9	221.5	962.8	1036.5	969.1
52.5°	0.0	0.0	1.7	8.8	7.6	6.7	12.2	213.1	956.9	1045.8	961.1
55°	0.0	0.0	0.4	3.8	4.2	5.1	10.1	212.7	998.6	1048.7	1004.9
57.5°	0.0	0.0	0.0	1.3	2.5	4.2	8.8	199.2	1025.2	1122.0	1063.9
60°	0.0	0.0	0.0	0.4	1.7	2.9	6.7	187.4	1052.1	1154.9	1127.1
62.5°	0.0	0.0	0.0	0.0	0.4	1.3	4.6	169.3	997.8	1152.4	1188.2
65°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	133.9	897.5	1092.1	1154.5
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.7	92.7	785.9	1016.3	1092.5
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0	634.3	891.2	926.6
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	452.8	707.6	760.2
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7	280.1	517.2	582.1
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	181.5	391.7	441.8
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	96.9	245.5	285.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.1	149.1	171.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5	90.6	103.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.9	18.5
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°	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2
2.5°	643.1	655.4	660.0	652.8	653.7	638.9	636.8	616.2	607.8	609.4
5°	672.6	690.3	700.0	692.0	673.9	645.7	620.0	595.6	580.4	572.8
7.5°	665.9	685.7	697.9	705.5	684.8	639.4	600.2	554.3	534.9	535.3
10°	628.8	670.1	694.9	685.3	675.6	630.1	569.4	519.7	502.5	504.2
12.5°	598.9	644.8	659.6	667.2	647.4	611.1	570.3	513.4	494.0	482.3
15°	580.4	614.5	615.3	627.1	619.1	619.1	579.1	523.5	506.7	493.6
17.5°	580.4	588.0	587.1	591.3	604.8	620.8	601.4	564.4	531.1	529.0
20°	593.4	569.9	564.4	566.1	577.4	625.0	650.7	604.4	583.3	576.6
22.5°	623.8	572.0	538.7	532.8	567.8	624.6	682.3	667.6	630.9	625.5
25°	665.5	568.2	532.0	524.4	550.9	639.8	725.7	728.6	695.4	684.0
27.5°	705.1	585.0	531.1	529.4	564.4	636.4	755.6	777.5	740.0	730.7
30°	718.5	601.9	546.7	524.4	569.4	648.6	754.8	812.0	787.6	789.7
32.5°	734.5	618.7	548.4	539.5	590.9	668.4	778.8	867.6	849.9	825.1
35°	758.1	641.5	564.4	556.4	606.1	686.1	783.8	908.5	905.5	876.5
37.5°	778.3	663.8	597.7	598.9	652.4	714.7	806.1	958.6	953.6	933.8
40°	792.7	694.9	649.5	652.8	692.8	746.8	845.7	983.9	1021.4	992.3
42.5°	794.8	722.7	708.8	735.8	773.3	796.5	861.7	1001.1	1055.1	1036.1
45°	802.8	767.0	805.7	825.5	856.3	840.3	860.9	1030.6	1057.6	1047.9
47.5°	833.9	847.4	896.3	956.5	967.5	914.8	881.1	1035.3	1071.9	1070.6
50°	866.4	933.8	1002.4	1042.4	1056.3	966.2	900.1	1031.5	1090.9	1080.8
52.5°	902.6	1008.7	1107.7	1157.0	1149.4	1023.0	921.5	1062.2	1125.8	1122.4
55°	925.3	1042.4	1175.5	1244.2	1238.3	1086.6	989.8	1106.4	1171.7	1163.3
57.5°	985.6	1097.2	1242.9	1274.9	1290.5	1170.0	1037.4	1178.9	1210.1	1219.3
60°	1035.3	1133.0	1260.6	1306.9	1312.4	1219.7	1120.8	1253.4	1258.9	1227.7
62.5°	1108.1	1146.9	1223.1	1264.8	1293.0	1248.0	1195.7	1293.4	1258.1	1256.0
65°	1161.6	1101.4	1153.2	1176.4	1194.5	1205.0	1271.1	1320.8	1242.5	1201.6
67.5°	1131.7	1015.5	1005.8	1007.0	1012.5	1076.1	1245.9	1253.9	1155.7	1122.0
70°	996.1	833.1	820.0	830.1	802.8	879.4	1143.5	1139.7	1019.7	984.7
72.5°	805.7	607.3	585.0	598.9	605.2	686.5	962.0	864.3	743.8	716.4
75°	640.2	445.2	375.7	409.4	430.9	499.9	751.4	587.1	519.3	482.3
77.5°	502.9	336.9	292.3	278.8	298.6	363.5	546.7	308.3	272.1	254.8
80°	318.8	247.7	268.7	249.3	257.8	259.4	284.7	140.3	111.6	110.3
82.5°	192.1	169.3	201.3	110.8	201.7	180.3	118.4	63.6	56.4	56.4
85°	136.0	104.9	69.5	45.1	89.7	99.0	45.9	32.9	28.6	27.8
87.5°	68.2	32.4	15.6	10.1	11.4	18.5	5.5	2.5	2.5	2.1
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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