

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: P677512

Luminaire Tested: **CCW-SA-2D-850-U-SLR-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677512  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-2D-850-U-SLR-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/  
SLR distribution lens and House Side Shield  
Light Source: (32) 5000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

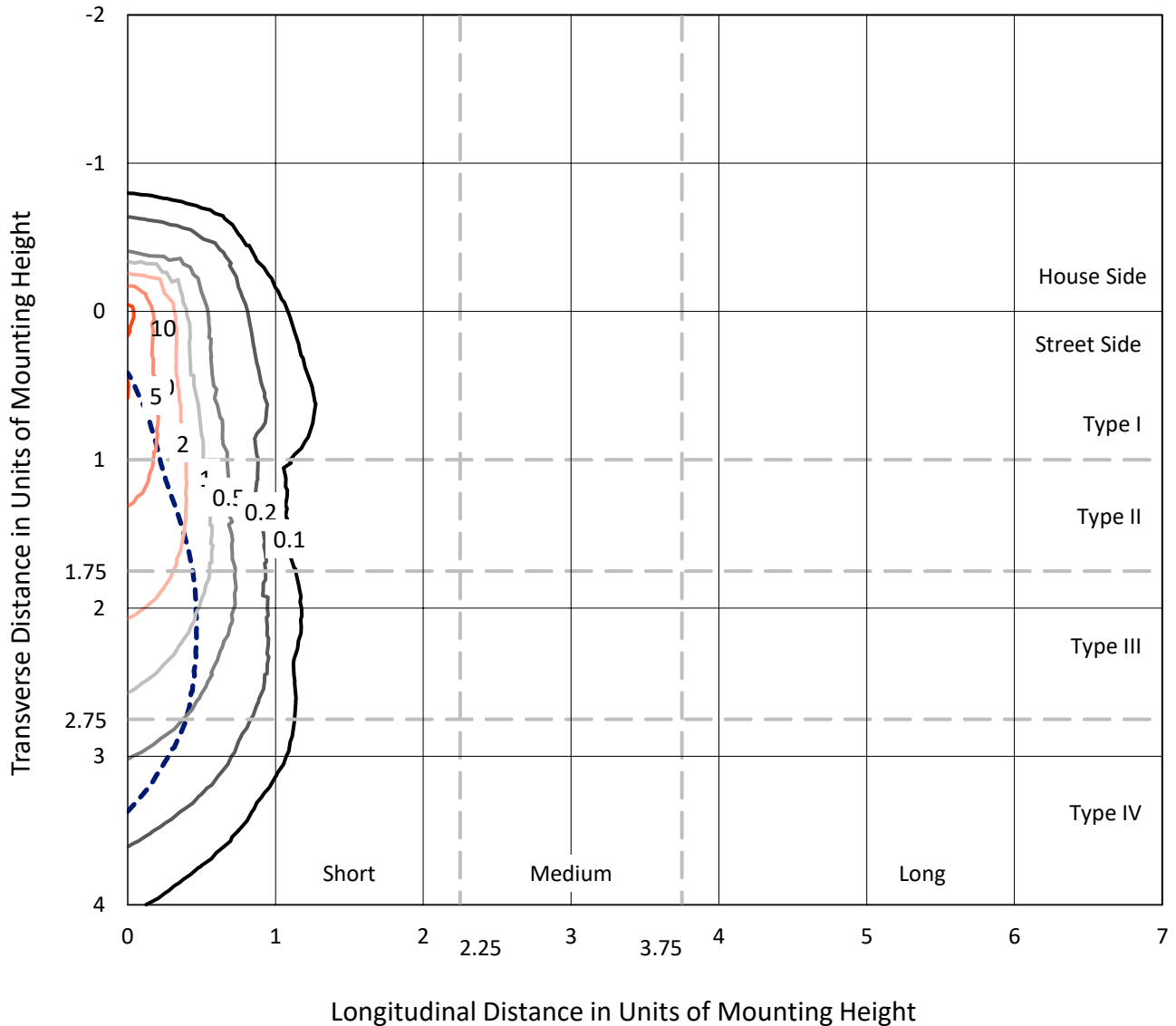
Lumens per Lamp: N/A  
Luminaire Lumens: 6993.7 lumens  
Efficiency: N/A  
Efficacy: 86.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 80.8  
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

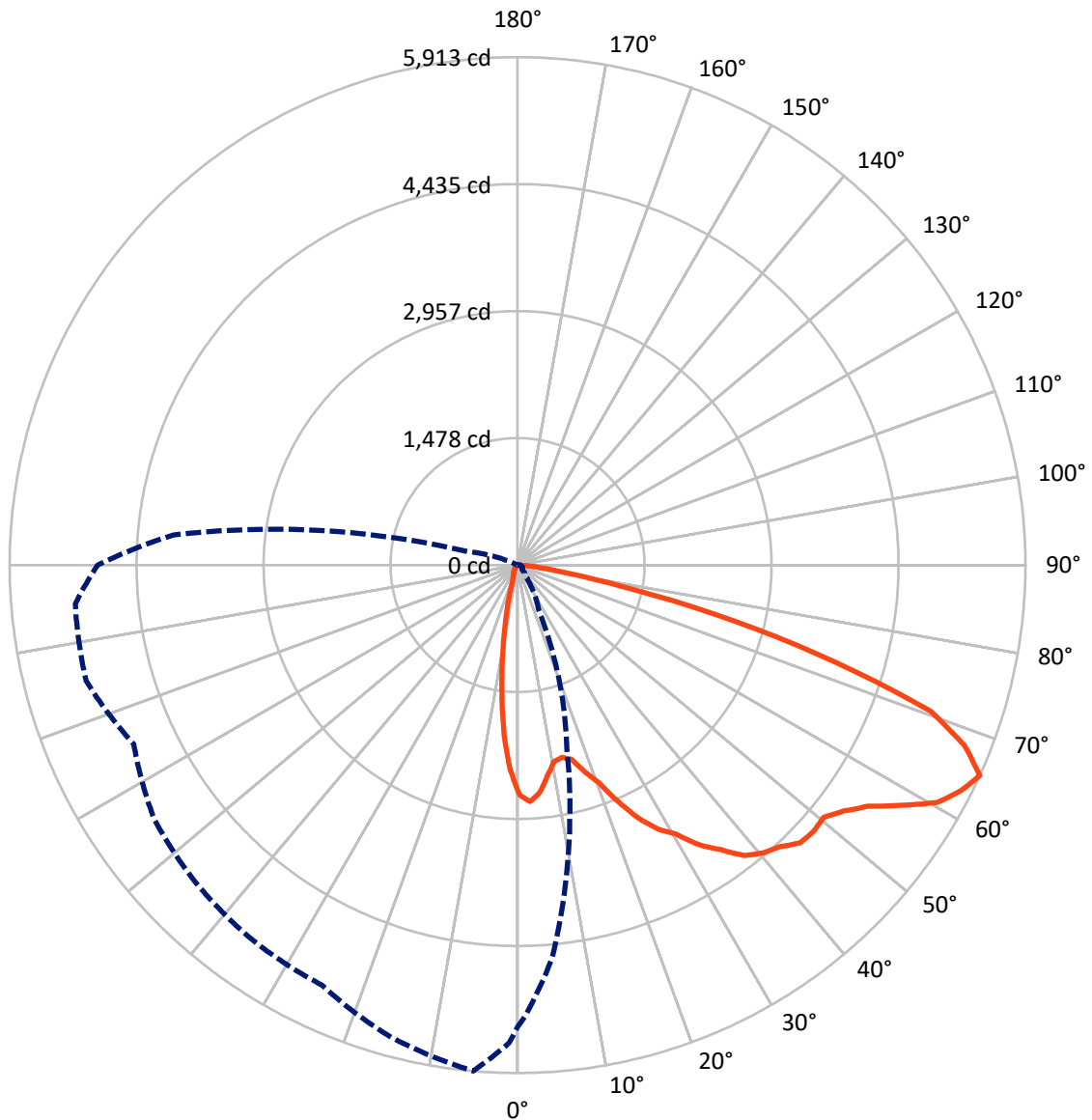
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 11.9 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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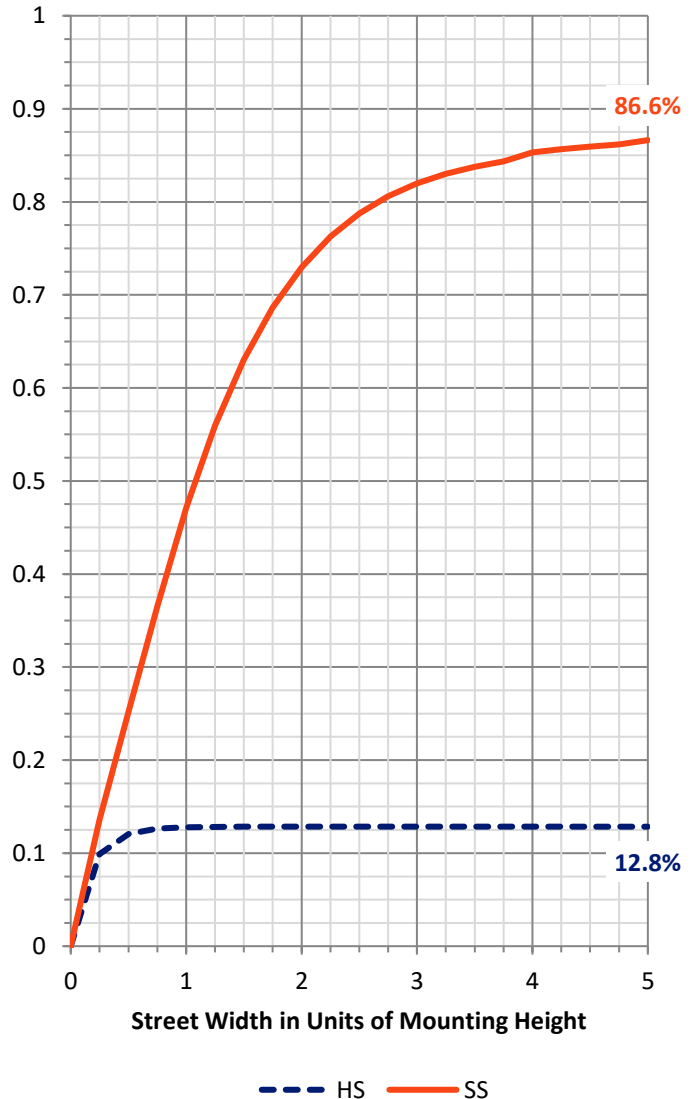
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	908.0	0.0	908.0
	% Fixture	13.0	0.0	13.0
<b>Street Side</b>	Lumens	6085.6	0.0	6085.6
	% Fixture	87.0	0.0	87.0
<b>Total</b>	Lumens	6993.7	0.0	6993.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.5	2.9
10°-20°	392.2	5.6
20°-30°	546.2	7.8
30°-40°	776.1	11.1
40°-50°	1076.2	15.4
50°-60°	1466.4	21.0
60°-70°	1612.2	23.1
70°-80°	792.4	11.3
80°-90°	129.4	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°	6993.7	100.0
0°-180°	6993.7	100.0



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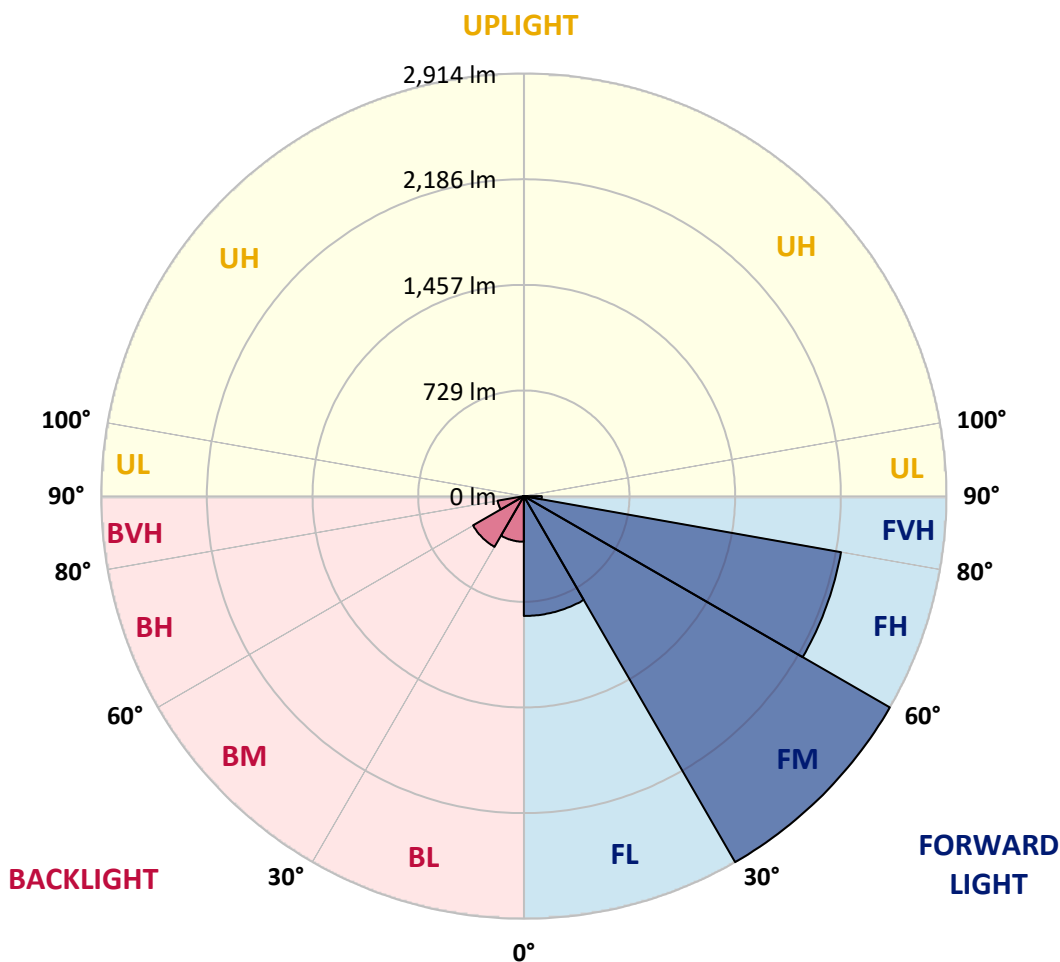
CATALOG NUMBER: CCW-SA-2D-850-U-SLR-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	826.5	11.8			
FM (30°-60°)	2914.5	41.7			
FH (60°-80°)	2221.1	31.8			G2/5000
FVH (80°-90°)	123.6	1.8			G2/225
BL (0°-30°)	314.4	4.5	B1/500		
BM (30°-60°)	404.3	5.8	B1/1000		
BH (60°-80°)	183.5	2.6	B1/500		G1/500
BVH (80°-90°)	5.8	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-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7
2.5°	2728.4	2760.4	2730.2	2624.6	2605.8	2554.9	2477.6	2471.9	2390.8	2400.3	2356.9
5°	2564.3	2596.4	2532.3	2392.7	2262.6	2158.9	2096.7	1985.5	1960.9	1906.3	1906.3
7.5°	2396.5	2394.6	2285.3	2168.4	1974.1	1783.7	1697.0	1536.7	1442.4	1391.5	1342.5
10°	2257.0	2226.8	2158.9	1917.6	1706.4	1508.4	1400.9	1295.4	1197.3	1112.5	1027.6
12.5°	2158.9	2177.8	2070.3	1808.2	1534.8	1397.2	1282.2	1170.9	1054.0	957.8	863.6
15°	2209.8	2179.7	2053.3	1783.7	1506.5	1318.0	1165.3	1029.5	899.4	773.1	701.4
17.5°	2368.2	2290.9	2142.0	1783.7	1448.1	1197.3	1012.5	852.3	712.7	599.6	511.0
20°	2581.3	2492.7	2332.4	1849.7	1404.7	1108.7	856.0	654.3	509.1	403.5	335.6
22.5°	2800.0	2730.2	2488.9	1876.1	1353.8	989.9	675.0	473.3	339.4	271.5	237.6
25°	3062.1	2964.0	2700.1	1981.7	1278.4	874.9	531.7	330.0	252.7	216.8	196.1
27.5°	3271.4	3254.4	2898.1	2045.8	1221.8	780.6	420.5	262.1	209.3	182.9	169.7
30°	3535.4	3443.0	3139.4	2174.0	1157.7	673.1	350.7	235.7	192.3	164.0	154.6
32.5°	3693.7	3650.4	3265.7	2245.7	1086.1	584.5	301.7	207.4	175.4	154.6	145.2
35°	3923.8	3837.0	3446.7	2290.9	1048.4	533.6	271.5	188.6	147.1	126.3	115.0
37.5°	4180.2	4148.2	3663.6	2289.0	993.7	503.4	250.8	175.4	139.5	116.9	103.7
40°	4442.3	4312.2	3795.6	2341.8	965.4	480.8	235.7	167.8	132.0	111.2	94.3
42.5°	4638.4	4489.4	3948.3	2323.0	931.4	441.2	230.0	156.5	126.3	101.8	86.7
45°	4691.2	4638.4	4085.9	2317.3	906.9	409.2	220.6	154.6	122.6	96.2	81.1
47.5°	4793.0	4757.2	4255.6	2326.7	888.1	384.6	198.0	158.4	116.9	90.5	77.3
50°	4838.3	4774.1	4393.3	2349.4	844.7	354.5	177.2	165.9	115.0	88.6	73.5
52.5°	5024.9	4968.4	4581.8	2413.5	808.9	314.9	156.5	158.4	118.8	83.0	69.8
55°	5207.8	5143.7	4872.2	2560.5	758.0	282.8	133.9	139.5	113.1	75.4	62.2
57.5°	5458.6	5353.0	5066.4	2620.9	712.7	239.5	118.8	115.0	105.6	67.9	54.7
60°	5496.3	5539.7	5038.1	2583.2	665.6	211.2	103.7	88.6	113.1	60.3	47.1
62.5°	5622.6	5441.6	4906.1	2496.4	631.7	194.2	92.4	73.5	98.0	52.8	39.6
65°	5379.4	5245.5	4596.9	2217.4	588.3	196.1	81.1	60.3	62.2	43.4	32.1
67.5°	5023.0	4917.4	4084.0	1913.8	544.9	192.3	71.6	52.8	47.1	37.7	28.3
70°	4408.4	4180.2	3469.4	1553.7	480.8	179.1	60.3	47.1	39.6	30.2	20.7
72.5°	3207.3	3114.9	2488.9	1201.1	431.8	162.2	56.6	39.6	33.9	22.6	17.0
75°	2158.9	2006.2	1570.6	788.1	346.9	141.4	47.1	35.8	26.4	17.0	13.2
77.5°	1140.7	1078.5	890.0	375.2	192.3	66.0	26.4	20.7	15.1	13.2	7.5
80°	494.0	439.3	384.6	152.7	67.9	30.2	17.0	11.3	9.4	7.5	3.8
82.5°	252.7	241.3	199.9	66.0	39.6	22.6	9.4	7.5	5.7	3.8	1.9
85°	124.4	128.2	105.6	20.7	22.6	13.2	1.9	1.9	0.0	0.0	0.0
87.5°	9.4	9.4	7.5	3.8	5.7	1.9	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°	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7
2.5°	2339.9	2366.3	2321.1	2349.4	2336.2	2341.8	2347.5	2332.4	2336.2	2389.0	2390.8
5°	1874.2	1925.1	1906.3	1932.7	1977.9	1955.3	1976.0	1972.3	1976.0	1983.6	2017.5
7.5°	1336.8	1321.8	1357.6	1427.3	1508.4	1557.4	1532.9	1519.7	1512.2	1493.3	1516.0
10°	1008.8	1001.2	991.8	1012.5	1065.3	1120.0	1150.2	1099.3	1071.0	1035.2	1022.0
12.5°	837.2	790.0	763.6	731.6	746.7	795.7	797.6	748.6	703.3	684.4	705.2
15°	659.9	627.9	580.7	535.5	512.9	550.6	518.5	471.4	412.9	405.4	403.5
17.5°	471.4	452.5	418.6	399.7	373.3	363.9	330.0	258.3	216.8	205.5	209.3
20°	320.5	305.5	303.6	286.6	275.3	267.7	213.1	165.9	152.7	154.6	156.5
22.5°	237.6	230.0	220.6	218.7	209.3	199.9	156.5	139.5	130.1	130.1	135.8
25°	194.2	190.4	181.0	177.2	173.5	160.3	132.0	118.8	115.0	111.2	116.9
27.5°	165.9	164.0	158.4	152.7	149.0	135.8	115.0	103.7	99.9	99.9	99.9
30°	149.0	149.0	141.4	130.1	130.1	115.0	98.0	90.5	86.7	86.7	84.8
32.5°	139.5	135.8	126.3	118.8	113.1	98.0	86.7	79.2	73.5	73.5	75.4
35°	113.1	113.1	111.2	105.6	98.0	83.0	73.5	66.0	62.2	60.3	62.2
37.5°	99.9	94.3	86.7	88.6	84.8	71.6	62.2	56.6	50.9	50.9	50.9
40°	90.5	84.8	77.3	71.6	69.8	64.1	54.7	45.3	39.6	37.7	37.7
42.5°	81.1	77.3	66.0	56.6	54.7	54.7	41.5	33.9	28.3	28.3	28.3
45°	75.4	69.8	60.3	49.0	39.6	41.5	33.9	24.5	20.7	18.9	18.9
47.5°	71.6	66.0	52.8	41.5	30.2	30.2	24.5	17.0	13.2	11.3	11.3
50°	66.0	60.3	47.1	33.9	22.6	18.9	15.1	9.4	5.7	3.8	3.8
52.5°	62.2	56.6	41.5	28.3	18.9	13.2	9.4	1.9	0.0	0.0	0.0
55°	56.6	49.0	35.8	22.6	15.1	7.5	1.9	0.0	0.0	0.0	0.0
57.5°	49.0	43.4	28.3	17.0	9.4	1.9	0.0	0.0	0.0	0.0	0.0
60°	41.5	35.8	22.6	13.2	3.8	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	33.9	30.2	17.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	28.3	22.6	13.2	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	24.5	18.9	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	18.9	13.2	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	13.2	9.4	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	9.4	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	5.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.9	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°	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7
2.5°	2398.4	2455.0	2507.7	2522.8	2564.3	2679.3	2679.3	2734.0	2832.1	2867.9	2875.4
5°	2023.2	2083.5	2094.8	2211.7	2266.4	2383.3	2460.6	2645.4	2756.6	2826.4	2869.8
7.5°	1538.6	1559.3	1602.7	1712.1	1819.5	1960.9	2108.0	2343.7	2539.8	2619.0	2766.1
10°	1057.8	1120.0	1214.3	1312.3	1480.1	1636.6	1827.1	2049.6	2290.9	2389.0	2515.3
12.5°	712.7	799.5	950.3	1089.8	1244.4	1402.8	1583.8	1881.8	2155.2	2290.9	2417.2
15°	416.7	522.3	652.4	878.7	1084.2	1261.4	1442.4	1744.1	2076.0	2251.3	2405.9
17.5°	211.2	243.2	350.7	546.8	818.3	1108.7	1378.3	1763.0	2136.3	2351.2	2479.5
20°	158.4	167.8	198.0	290.4	560.0	916.4	1318.0	1791.2	2304.1	2566.2	2636.0
22.5°	137.6	145.2	158.4	188.6	314.9	701.4	1233.1	1861.0	2532.3	2779.3	2926.3
25°	116.9	124.4	135.8	154.6	201.8	477.0	1129.4	1934.5	2735.9	3047.0	3184.7
27.5°	101.8	107.5	118.8	133.9	164.0	303.6	950.3	2032.6	3047.0	3371.3	3407.1
30°	86.7	92.4	101.8	118.8	139.5	214.9	697.6	2045.8	3218.6	3512.7	3612.7
32.5°	75.4	77.3	88.6	103.7	116.9	169.7	490.2	2059.0	3344.9	3695.6	3716.4
35°	62.2	66.0	77.3	86.7	101.8	133.9	371.4	1993.0	3509.0	3884.2	3878.5
37.5°	50.9	56.6	64.1	71.6	83.0	113.1	296.0	1870.4	3714.5	4176.4	3999.2
40°	39.6	45.3	52.8	62.2	69.8	101.8	222.5	1685.7	3929.4	4319.7	4131.2
42.5°	28.3	32.1	39.6	49.0	62.2	84.8	160.3	1466.9	4014.3	4487.5	4289.6
45°	20.7	24.5	30.2	41.5	64.1	67.9	111.2	1267.1	4104.8	4561.1	4253.7
47.5°	11.3	15.1	22.6	35.8	56.6	50.9	79.2	1087.9	4208.5	4627.1	4282.0
50°	3.8	5.7	13.2	37.7	45.3	39.6	62.2	991.8	4310.3	4640.3	4338.6
52.5°	0.0	0.0	7.5	39.6	33.9	30.2	54.7	954.1	4283.9	4681.8	4302.8
55°	0.0	0.0	1.9	17.0	18.9	22.6	45.3	952.2	4470.6	4695.0	4498.9
57.5°	0.0	0.0	0.0	5.7	11.3	18.9	39.6	891.9	4589.4	5023.0	4762.8
60°	0.0	0.0	0.0	1.9	7.5	13.2	30.2	839.1	4710.0	5170.1	5045.7
62.5°	0.0	0.0	0.0	0.0	1.9	5.7	20.7	758.0	4466.8	5158.8	5319.1
65°	0.0	0.0	0.0	0.0	0.0	0.0	13.2	599.6	4018.1	4889.2	5168.2
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	7.5	414.8	3518.4	4549.8	4891.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	250.8	2839.6	3989.8	4148.2
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.5	2026.9	3167.7	3403.4
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.4	1253.9	2315.4	2605.8
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	812.7	1753.5	1977.9
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	433.7	1099.3	1278.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	188.6	667.5	769.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.3	405.4	462.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.2	83.0
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°	359°	360°
0°	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7	2673.7
2.5°	2879.2	2933.9	2954.6	2922.6	2926.3	2860.3	2850.9	2758.5	2720.8	2728.4
5°	3011.2	3090.4	3133.7	3097.9	3016.8	2890.5	2775.5	2666.1	2598.3	2564.3
7.5°	2981.0	3069.6	3124.3	3158.3	3065.9	2862.2	2686.9	2481.3	2394.6	2396.5
10°	2815.1	2999.9	3111.1	3067.7	3024.4	2820.7	2549.2	2326.7	2249.4	2257.0
12.5°	2681.2	2886.7	2952.7	2986.7	2898.1	2735.9	2553.0	2298.5	2211.7	2158.9
15°	2598.3	2751.0	2754.8	2807.5	2771.7	2771.7	2592.6	2343.7	2268.3	2209.8
17.5°	2598.3	2632.2	2628.4	2647.3	2707.6	2779.3	2692.5	2526.6	2377.6	2368.2
20°	2656.7	2551.1	2526.6	2534.1	2585.1	2798.1	2913.1	2705.7	2611.5	2581.3
22.5°	2792.5	2560.5	2411.6	2385.2	2541.7	2796.2	3054.5	2988.6	2824.5	2800.0
25°	2979.1	2543.6	2381.4	2347.5	2466.3	2864.1	3248.8	3262.0	3113.0	3062.1
27.5°	3156.4	2619.0	2377.6	2370.1	2526.6	2849.0	3382.6	3480.7	3312.9	3271.4
30°	3216.7	2694.4	2447.4	2347.5	2549.2	2903.7	3378.9	3635.3	3525.9	3535.4
32.5°	3288.4	2769.8	2455.0	2415.4	2645.4	2992.3	3486.3	3884.2	3805.0	3693.7
35°	3393.9	2871.7	2526.6	2490.8	2713.3	3071.5	3509.0	4067.1	4053.9	3923.8
37.5°	3484.4	2971.6	2675.6	2681.2	2920.7	3199.7	3608.9	4291.5	4268.8	4180.2
40°	3548.6	3111.1	2907.5	2922.6	3101.7	3343.0	3786.1	4404.6	4572.4	4442.3
42.5°	3558.0	3235.6	3173.3	3294.0	3461.8	3565.5	3857.8	4481.9	4723.2	4638.4
45°	3593.8	3433.5	3607.0	3695.6	3833.3	3761.6	3854.0	4613.9	4734.6	4691.2
47.5°	3733.3	3793.7	4012.4	4282.0	4331.0	4095.4	3944.5	4634.6	4798.7	4793.0
50°	3878.5	4180.2	4487.5	4666.7	4728.9	4325.4	4029.4	4617.6	4883.5	4838.3
52.5°	4040.7	4515.8	4958.9	5179.5	5145.6	4579.9	4125.5	4755.3	5040.0	5024.9
55°	4142.5	4666.7	5262.5	5569.8	5543.4	4864.7	4431.0	4953.3	5245.5	5207.8
57.5°	4412.1	4911.8	5564.2	5707.5	5777.2	5238.0	4644.0	5277.6	5417.1	5458.6
60°	4634.6	5072.1	5643.4	5850.8	5875.3	5460.5	5017.4	5611.3	5635.8	5496.3
62.5°	4960.8	5134.3	5475.6	5662.2	5788.6	5586.8	5353.0	5790.4	5632.1	5622.6
65°	5200.3	4930.6	5162.6	5266.3	5347.3	5394.5	5690.5	5913.0	5562.3	5379.4
67.5°	5066.4	4546.0	4502.6	4508.3	4532.8	4817.5	5577.4	5613.2	5173.9	5023.0
70°	4459.3	3729.6	3671.1	3716.4	3593.8	3937.0	5119.2	5102.2	4564.9	4408.4
72.5°	3607.0	2718.9	2619.0	2681.2	2709.5	3073.4	4306.5	3869.1	3329.8	3207.3
75°	2866.0	1993.0	1681.9	1832.7	1928.9	2238.1	3363.8	2628.4	2324.9	2158.9
77.5°	2251.3	1508.4	1308.6	1248.2	1336.8	1627.2	2447.4	1380.2	1218.0	1140.7
80°	1427.3	1108.7	1203.0	1116.2	1153.9	1161.5	1274.6	627.9	499.7	494.0
82.5°	859.8	758.0	901.3	495.9	903.2	807.0	529.8	284.7	252.7	252.7
85°	609.0	469.5	311.1	201.8	401.6	443.1	205.5	147.1	128.2	124.4
87.5°	305.5	145.2	69.8	45.3	50.9	83.0	24.5	11.3	11.3	9.4
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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