

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: P677368

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

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677368
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-SLL-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/
SLL distribution lens and House Side Shield
Light Source: (32) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

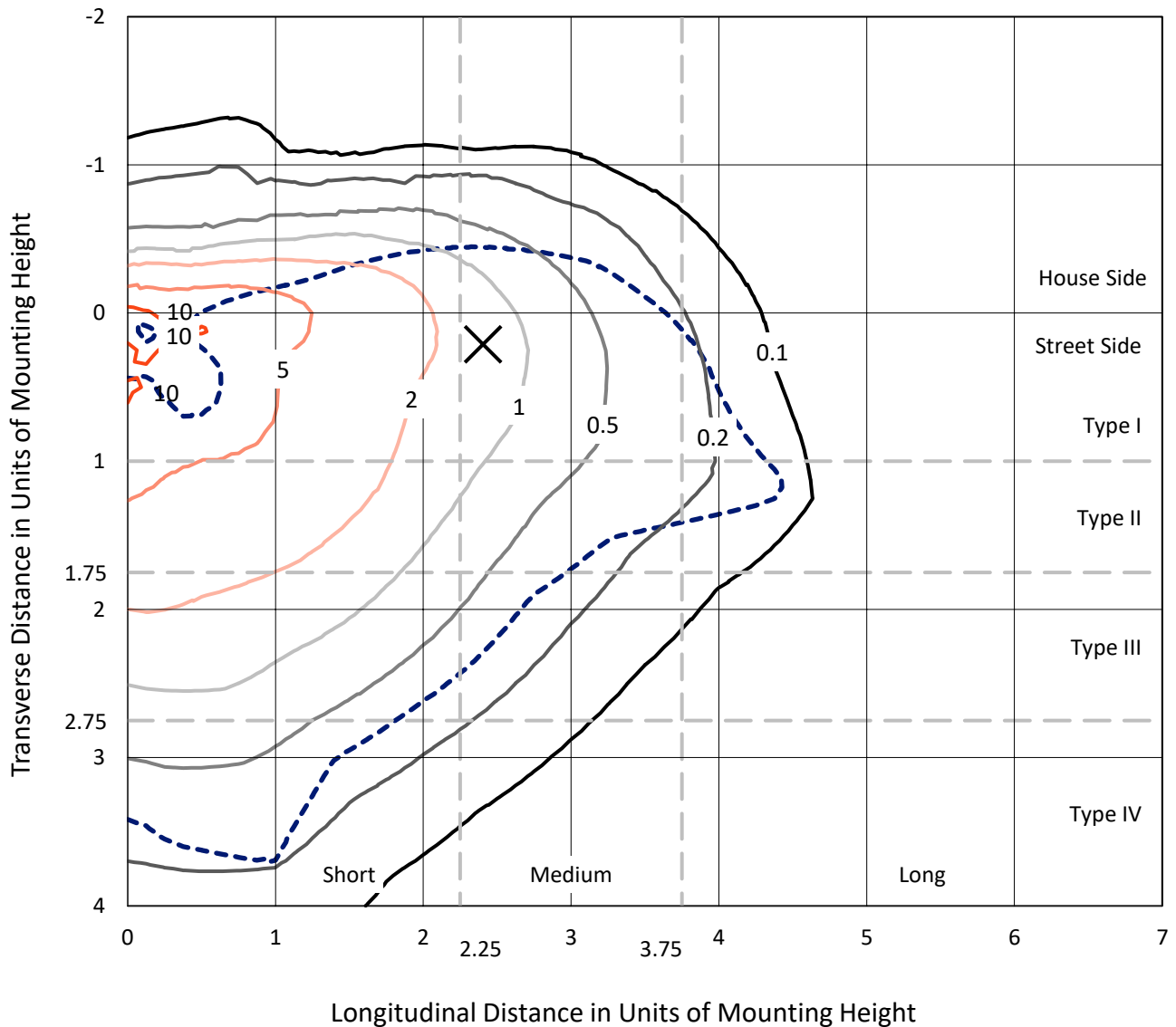
Lumens per Lamp: N/A
Luminaire Lumens: 7060.9 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

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

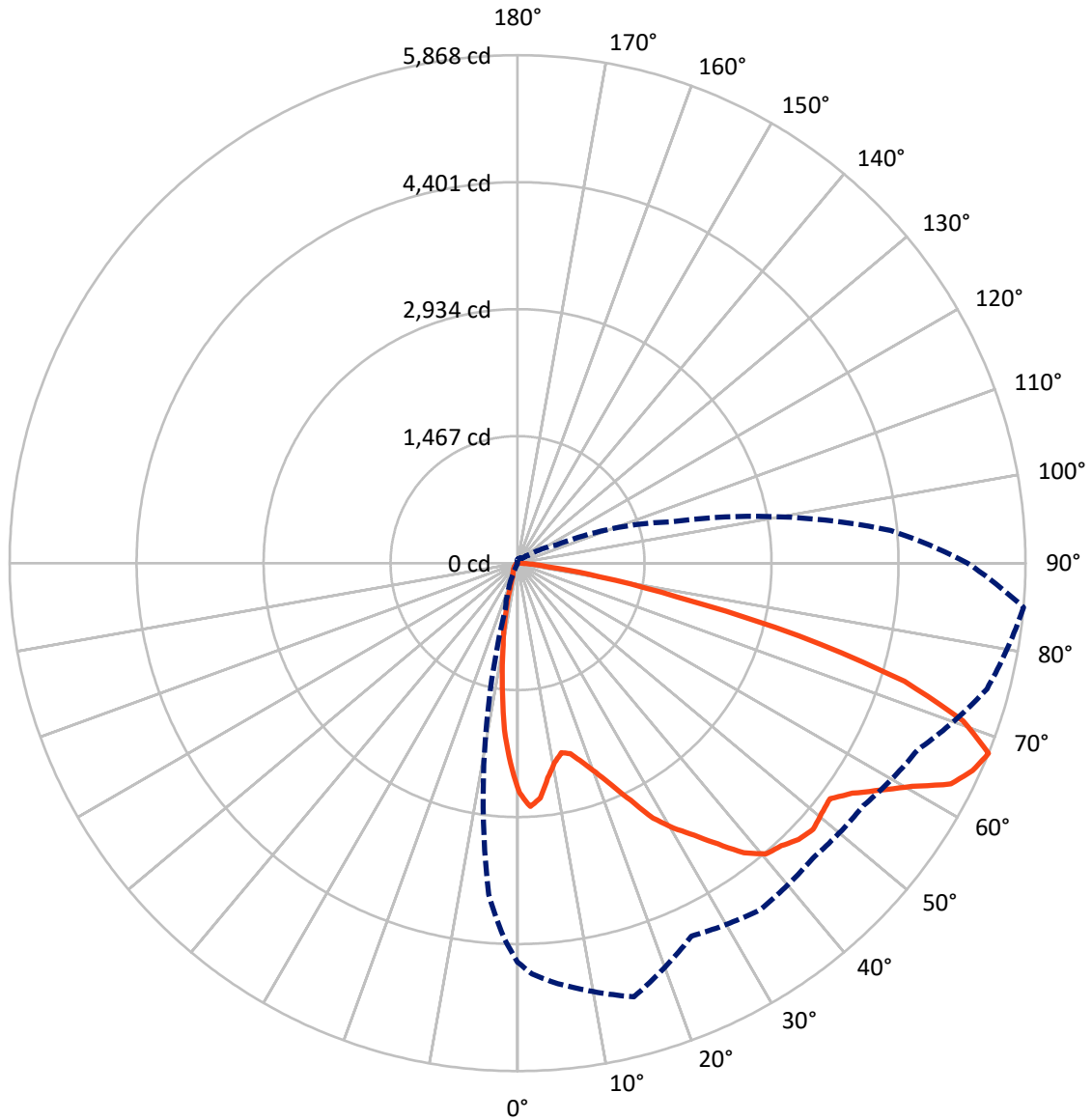
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 13.3 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
House Side	Lumens	1226.0	0.0	1226.0
	% Fixture	17.4	0.0	17.4
Street Side	Lumens	5834.9	0.0	5834.9
	% Fixture	82.6	0.0	82.6
Total	Lumens	7060.9	0.0	7060.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.7	2.9
10°-20°	395.5	5.6
20°-30°	547.3	7.8
30°-40°	773.5	11.0
40°-50°	1053.1	14.9
50°-60°	1394.8	19.8
60°-70°	1619.4	22.9
70°-80°	917.1	13.0
80°-90°	158.5	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°	7060.9	100.0
0°-180°	7060.9	100.0

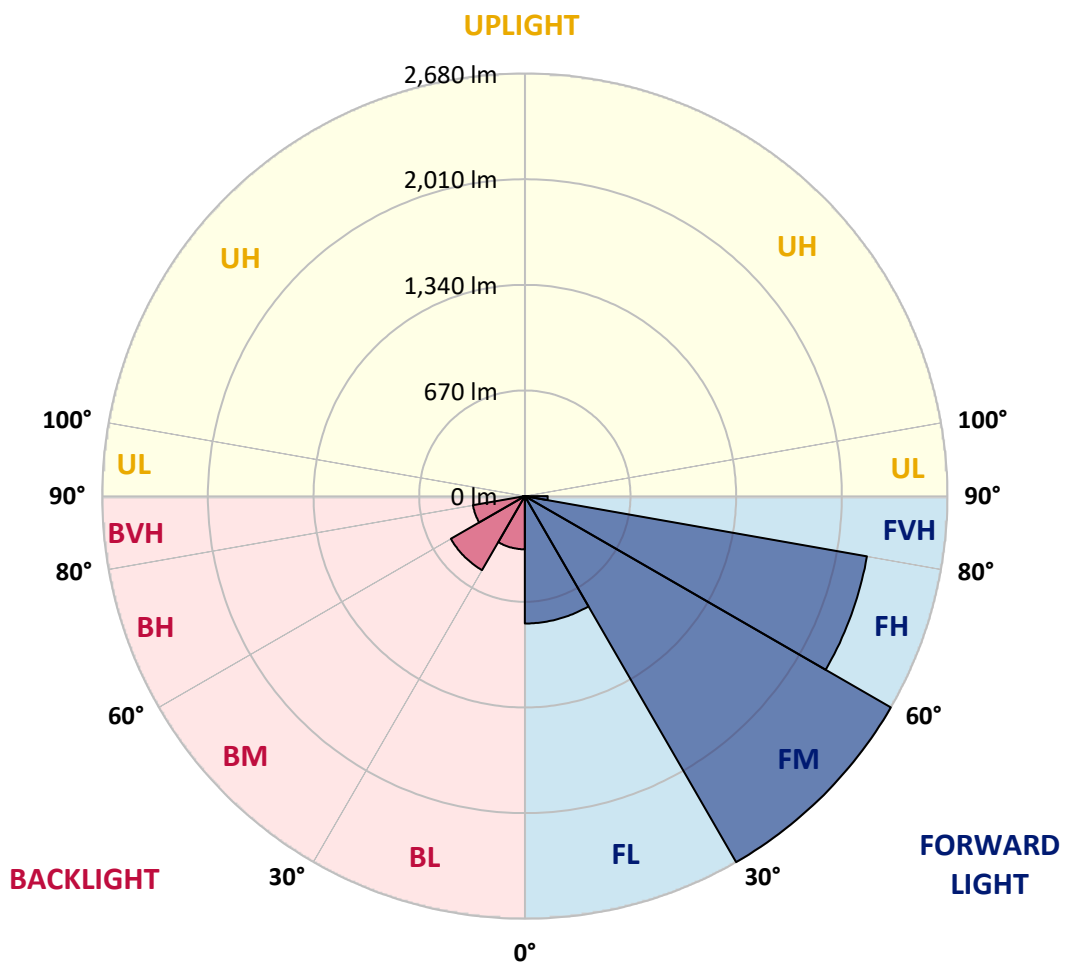


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	807.4	11.4			
FM (30°-60°)	2679.7	38.0			
FH (60°-80°)	2202.7	31.2			G2/5000
FVH (80°-90°)	145.1	2.1			G2/225
BL (0°-30°)	337.0	4.8	B1/500		
BM (30°-60°)	541.7	7.7	B1/1000		
BH (60°-80°)	333.9	4.7	B1/500		G1/500
BVH (80°-90°)	13.4	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8
2.5°	2758.6	2817.0	2818.9	2845.3	2871.7	2871.7	2933.9	2918.8	2864.1	2854.7	2815.1
5°	2779.3	2800.0	2815.1	2949.0	3062.1	3050.8	3084.8	3062.1	2956.5	2820.8	2728.4
7.5°	2600.2	2622.8	2683.1	2911.3	3064.0	3114.9	3179.0	3037.6	2926.4	2681.2	2504.0
10°	2362.6	2406.0	2517.2	2777.4	2966.0	3128.1	3128.1	3015.0	2800.0	2560.6	2343.7
12.5°	2230.6	2317.3	2377.7	2641.6	2886.8	2998.0	2994.2	2933.9	2794.4	2492.7	2247.6
15°	2253.2	2277.7	2406.0	2611.5	2773.6	2768.0	2835.9	2817.0	2719.0	2553.0	2283.4
17.5°	2356.9	2394.6	2505.9	2611.5	2688.8	2666.2	2664.3	2754.8	2760.4	2654.8	2417.3
20°	2526.6	2637.9	2690.7	2722.7	2628.4	2532.3	2521.0	2647.3	2745.4	2784.9	2577.5
22.5°	2798.1	2871.7	2979.2	2815.1	2570.0	2449.3	2426.7	2566.2	2764.2	2939.6	2784.9
25°	3064.0	3120.6	3224.3	3013.1	2636.0	2432.4	2392.8	2513.4	2835.9	3154.5	3035.7
27.5°	3345.0	3394.0	3405.3	3158.3	2671.8	2398.4	2351.3	2513.4	2896.2	3267.6	3335.5
30°	3516.5	3575.0	3586.3	3286.5	2730.3	2426.7	2404.1	2524.7	2937.7	3363.8	3550.5
32.5°	3708.9	3723.9	3714.5	3309.1	2794.4	2509.7	2415.4	2600.2	2984.8	3478.8	3746.6
35°	3938.9	3965.3	3869.1	3412.8	2937.7	2562.5	2528.5	2692.6	3065.9	3531.6	3984.2
37.5°	4114.3	4197.2	3980.4	3452.4	2966.0	2673.7	2679.4	2884.9	3122.5	3595.7	4246.2
40°	4444.2	4304.7	4168.9	3588.2	3073.4	2862.3	2832.1	3082.9	3312.9	3637.2	4417.8
42.5°	4625.2	4551.7	4242.5	3601.4	3239.4	3122.5	3130.0	3307.2	3412.8	3754.1	4465.0
45°	4670.5	4593.2	4342.4	3610.8	3403.4	3429.8	3559.9	3593.8	3559.9	3831.4	4553.6
47.5°	4785.5	4617.7	4331.1	3737.1	3669.3	3771.1	3937.0	4010.6	3759.8	3803.1	4595.1
50°	4762.9	4666.7	4306.6	3789.9	3993.6	4263.2	4374.5	4344.3	3982.3	3744.7	4549.8
52.5°	4668.6	4564.9	4382.0	3933.2	4297.2	4623.4	4778.0	4702.5	4180.3	3876.7	4519.6
55°	4806.3	4727.1	4480.1	4127.5	4525.3	4940.1	5049.5	4992.9	4423.5	3999.2	4691.2
57.5°	4955.2	4938.2	4745.9	4355.6	4794.9	5266.3	5266.3	5196.6	4634.7	4176.5	4945.8
60°	5170.2	5207.9	4942.0	4506.5	4887.3	5247.5	5520.9	5439.8	4847.7	4487.6	5234.3
62.5°	5100.4	5221.1	5194.7	4830.8	4992.9	5339.9	5488.8	5549.2	5111.7	4866.6	5618.9
65°	4876.0	5004.2	5192.8	5043.8	4913.7	5115.5	5190.9	5373.8	5243.7	5223.0	5777.3
67.5°	4608.3	4747.8	4864.7	5187.1	4753.5	4887.3	4821.3	4879.8	5100.4	5613.3	5867.8
70°	4023.8	4157.6	4342.4	4868.5	4329.2	4208.5	4191.6	4163.3	4506.5	5473.7	5456.8
72.5°	3309.1	3371.4	3676.8	3957.8	3203.5	3180.9	3207.3	3175.3	3573.1	4955.2	4674.3
75°	2477.6	2539.8	2713.3	3039.5	2181.6	2051.5	2202.3	2351.3	2728.4	3846.5	3358.2
77.5°	1862.9	1942.1	2051.5	2274.0	1600.8	1397.2	1417.9	1559.3	1972.3	3081.0	1881.8
80°	1208.6	1199.2	1410.4	1565.0	1204.9	1242.6	1189.8	1293.5	1429.2	1648.0	961.6
82.5°	697.7	707.1	795.7	897.5	839.1	959.7	692.0	1155.8	1020.1	671.3	358.3
85°	392.2	409.2	490.2	622.2	526.1	352.6	288.5	573.2	641.1	275.3	173.5
87.5°	39.6	33.9	66.0	235.7	143.3	58.5	86.7	137.6	154.6	103.7	50.9
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°	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8
2.5°	2758.6	2758.6	2711.4	2632.2	2600.2	2543.6	2466.3	2490.8	2464.4	2368.2	2343.7
5°	2645.4	2554.9	2456.9	2336.2	2266.4	2123.1	2077.9	1996.8	2010.0	1928.9	1932.7
7.5°	2409.7	2338.1	2172.1	2013.8	1876.1	1751.7	1576.3	1510.3	1446.2	1414.2	1451.9
10°	2272.1	2138.2	1911.9	1704.5	1521.6	1410.4	1293.5	1203.0	1120.0	1057.8	1044.6
12.5°	2172.1	2053.4	1780.0	1527.3	1384.0	1293.5	1186.0	1061.6	980.5	873.0	841.0
15°	2142.0	1996.8	1708.3	1457.5	1318.0	1169.0	1046.5	923.9	818.3	705.2	665.6
17.5°	2245.7	2077.9	1706.4	1401.0	1204.9	1044.6	874.9	737.2	629.8	526.1	501.6
20°	2421.0	2164.6	1761.1	1367.0	1097.4	882.4	690.1	552.5	431.8	363.9	346.9
22.5°	2620.9	2311.7	1766.8	1276.5	989.9	720.3	503.4	363.9	296.0	264.0	254.5
25°	2866.0	2547.4	1834.6	1203.0	863.6	546.8	358.3	279.1	239.5	220.6	216.8
27.5°	3067.8	2711.4	1908.2	1125.7	739.1	405.4	280.9	228.2	207.4	188.6	186.7
30°	3277.1	2900.0	1928.9	1078.5	631.7	333.7	241.3	201.8	179.1	169.7	167.8
32.5°	3460.0	3105.5	1994.9	1001.2	529.8	294.1	218.7	181.0	165.9	150.8	149.0
35°	3695.7	3224.3	2027.0	959.7	492.1	265.9	199.9	165.9	143.3	133.9	130.1
37.5°	3948.3	3339.3	2047.7	927.7	460.1	248.9	188.6	156.5	135.8	122.6	118.8
40°	4184.0	3501.5	2017.5	888.1	435.6	228.2	181.0	145.2	126.3	113.1	107.5
42.5°	4365.0	3659.8	2008.1	850.4	409.2	220.6	171.6	139.5	118.8	103.7	101.8
45°	4466.9	3767.3	1942.1	820.2	388.4	224.4	167.8	132.0	113.1	99.9	92.4
47.5°	4442.3	3850.3	1959.1	810.8	360.1	209.3	165.9	126.3	103.7	92.4	86.7
50°	4578.1	4018.1	1930.8	780.6	339.4	188.6	181.0	126.3	101.8	88.6	83.0
52.5°	4600.7	4170.8	1991.1	725.9	307.3	173.5	179.1	124.4	98.0	84.8	77.3
55°	4789.3	4348.1	2108.0	695.8	280.9	150.8	164.0	120.7	88.6	77.3	73.5
57.5°	5045.7	4715.7	2183.5	667.5	245.1	132.0	137.6	118.8	81.1	71.7	66.0
60°	5292.7	4862.8	2189.1	616.6	211.2	118.8	107.5	118.8	75.4	64.1	58.5
62.5°	5477.5	4862.8	2151.4	573.2	184.8	105.6	94.3	113.1	67.9	56.6	52.8
65°	5377.6	4732.7	2053.4	537.4	167.8	92.4	81.1	86.7	60.3	49.0	45.3
67.5°	5198.4	4327.3	1836.5	494.0	165.9	81.1	69.8	64.1	52.8	43.4	39.6
70°	4911.8	3780.5	1529.2	445.0	162.2	73.5	62.2	54.7	47.1	37.7	33.9
72.5°	3957.8	3122.5	1255.8	416.7	158.4	64.1	52.8	47.1	39.6	32.1	28.3
75°	2741.6	1994.9	967.3	356.4	154.6	58.5	49.0	41.5	33.9	26.4	24.5
77.5°	1644.2	1333.1	624.1	267.7	101.8	47.1	41.5	32.1	28.3	22.6	20.7
80°	769.3	629.8	252.7	103.7	49.0	33.9	28.3	24.5	22.6	18.9	17.0
82.5°	301.7	265.9	122.6	60.3	39.6	26.4	22.6	20.7	18.9	15.1	13.2
85°	162.2	143.3	58.5	41.5	28.3	18.9	18.9	17.0	15.1	13.2	11.3
87.5°	35.8	26.4	24.5	24.5	20.7	15.1	15.1	13.2	11.3	9.4	7.5
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8
2.5°	2330.5	2358.8	2313.6	2341.8	2302.2	2332.4	2336.2	2307.9	2315.4	2353.2	2370.1
5°	1985.5	1966.6	1925.1	1911.9	1913.8	1889.3	1898.7	1911.9	1932.7	1944.0	1977.9
7.5°	1431.1	1474.5	1472.6	1504.7	1506.5	1502.8	1476.4	1419.8	1438.7	1423.6	1442.4
10°	1023.9	1042.7	1078.5	1099.3	1137.0	1116.2	1055.9	1033.3	1022.0	1020.1	1038.9
12.5°	818.3	773.1	769.3	776.8	795.7	771.2	741.0	714.6	727.8	754.2	775.0
15°	633.5	595.8	546.8	539.3	543.0	531.7	499.7	465.7	475.2	501.6	516.6
17.5°	486.5	443.1	409.2	386.5	379.0	339.4	292.3	264.0	256.4	254.5	267.7
20°	328.1	320.5	314.9	286.6	286.6	230.0	190.4	169.7	169.7	173.5	175.4
22.5°	245.1	235.7	237.6	231.9	216.8	171.6	150.8	145.2	145.2	149.0	149.0
25°	213.1	199.9	196.1	194.2	179.1	147.1	132.0	126.3	126.3	130.1	130.1
27.5°	181.0	177.2	171.6	164.0	150.8	126.3	116.9	111.2	113.1	115.0	113.1
30°	165.9	156.5	149.0	149.0	133.9	113.1	105.6	101.8	98.0	101.8	103.7
32.5°	147.1	141.4	137.6	132.0	115.0	99.9	92.4	88.6	86.7	86.7	88.6
35°	126.3	126.3	122.6	115.0	99.9	90.5	81.1	77.3	75.4	77.3	77.3
37.5°	113.1	107.5	109.4	101.8	88.6	79.2	69.8	66.0	66.0	64.1	66.0
40°	105.6	96.2	90.5	86.7	79.2	67.9	60.3	56.6	54.7	54.7	54.7
42.5°	94.3	86.7	75.4	73.5	71.7	58.5	49.0	47.1	45.3	43.4	43.4
45°	88.6	77.3	67.9	58.5	58.5	49.0	41.5	37.7	35.8	33.9	35.8
47.5°	81.1	69.8	58.5	49.0	47.1	39.6	32.1	28.3	26.4	26.4	26.4
50°	77.3	62.2	50.9	41.5	35.8	32.1	24.5	20.7	18.9	18.9	18.9
52.5°	71.7	58.5	45.3	35.8	28.3	24.5	18.9	15.1	13.2	13.2	13.2
55°	64.1	52.8	39.6	30.2	24.5	18.9	13.2	9.4	7.5	7.5	7.5
57.5°	60.3	47.1	33.9	26.4	18.9	13.2	7.5	5.7	5.7	3.8	5.7
60°	54.7	41.5	28.3	20.7	15.1	9.4	5.7	1.9	1.9	1.9	1.9
62.5°	47.1	35.8	24.5	17.0	11.3	5.7	1.9	0.0	0.0	0.0	0.0
65°	39.6	28.3	18.9	13.2	7.5	1.9	0.0	0.0	0.0	0.0	0.0
67.5°	33.9	24.5	15.1	9.4	5.7	0.0	0.0	0.0	0.0	0.0	0.0
70°	30.2	20.7	11.3	7.5	1.9	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	24.5	17.0	9.4	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	20.7	13.2	5.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	17.0	9.4	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	13.2	7.5	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	11.3	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.5	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.7	1.9	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°	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8	2654.8
2.5°	2394.6	2383.3	2439.9	2532.3	2579.4	2671.8	2694.4	2752.9	2737.8	2758.6
5°	1981.7	2004.3	2087.3	2223.1	2272.1	2406.0	2532.3	2658.6	2739.7	2779.3
7.5°	1470.7	1546.1	1648.0	1772.4	1898.7	2074.1	2289.1	2436.1	2515.3	2600.2
10°	1095.5	1176.6	1293.5	1416.0	1621.6	1817.7	2032.6	2215.5	2283.4	2362.6
12.5°	861.7	988.0	1123.8	1255.8	1378.3	1565.0	1830.9	2096.7	2170.3	2230.6
15°	599.6	754.2	948.4	1120.0	1291.6	1453.8	1729.0	2051.5	2151.4	2253.2
17.5°	331.9	454.4	676.9	918.3	1170.9	1419.8	1763.0	2134.4	2285.3	2356.9
20°	192.3	241.3	399.7	686.3	1020.1	1346.3	1780.0	2290.9	2490.8	2526.6
22.5°	158.4	175.4	226.3	429.9	835.3	1299.1	1866.7	2509.7	2713.3	2798.1
25°	135.8	149.0	175.4	258.3	631.7	1199.2	1921.4	2783.1	2971.6	3064.0
27.5°	120.7	133.9	154.6	190.4	429.9	1061.6	2011.9	3030.1	3218.6	3345.0
30°	105.6	116.9	137.6	162.2	297.9	906.9	2089.2	3211.1	3476.9	3516.5
32.5°	94.3	103.7	118.8	139.5	220.6	688.2	2151.4	3397.8	3622.1	3708.9
35°	81.1	92.4	101.8	118.8	167.8	518.5	2113.7	3542.9	3835.2	3938.9
37.5°	71.7	79.2	88.6	99.9	141.4	405.4	2036.4	3716.4	4018.1	4114.3
40°	60.3	66.0	77.3	88.6	128.2	313.0	1947.8	3925.7	4274.5	4444.2
42.5°	50.9	56.6	64.1	83.0	105.6	231.9	1768.6	4087.9	4481.9	4625.2
45°	39.6	47.1	58.5	83.0	84.8	171.6	1583.9	4208.5	4598.8	4670.5
47.5°	30.2	37.7	56.6	71.7	67.9	118.8	1365.1	4346.2	4719.5	4785.5
50°	22.6	30.2	64.1	62.2	56.6	90.5	1227.5	4442.3	4727.1	4762.9
52.5°	15.1	22.6	52.8	47.1	47.1	79.2	1189.8	4438.6	4745.9	4668.6
55°	11.3	17.0	30.2	33.9	41.5	69.8	1155.8	4580.0	4751.6	4806.3
57.5°	7.5	13.2	20.7	26.4	35.8	60.3	1086.1	4749.7	4926.9	4955.2
60°	3.8	9.4	15.1	20.7	30.2	52.8	988.0	4874.1	5140.0	5170.2
62.5°	1.9	5.7	11.3	17.0	24.5	41.5	886.2	4676.1	5047.6	5100.4
65°	0.0	3.8	7.5	11.3	15.1	30.2	720.3	4221.7	4681.8	4876.0
67.5°	0.0	0.0	3.8	7.5	9.4	22.6	543.0	3840.9	4344.3	4608.3
70°	0.0	0.0	1.9	1.9	5.7	17.0	346.9	3180.9	3878.6	4023.8
72.5°	0.0	0.0	0.0	0.0	1.9	11.3	201.8	2362.6	3039.5	3309.1
75°	0.0	0.0	0.0	0.0	0.0	9.4	101.8	1519.7	2115.6	2477.6
77.5°	0.0	0.0	0.0	0.0	0.0	7.5	54.7	980.5	1559.3	1862.9
80°	0.0	0.0	0.0	0.0	0.0	1.9	32.1	569.4	997.5	1208.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	13.2	279.1	595.8	697.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	3.8	149.0	297.9	392.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	20.7	39.6
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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