

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: P677336

Luminaire Tested: **CCW-SA-2E-830-U-SLL-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677336
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2E-830-U-SLL-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1050mA w/
SLL distribution lens and House Side Shield
Light Source: (32) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

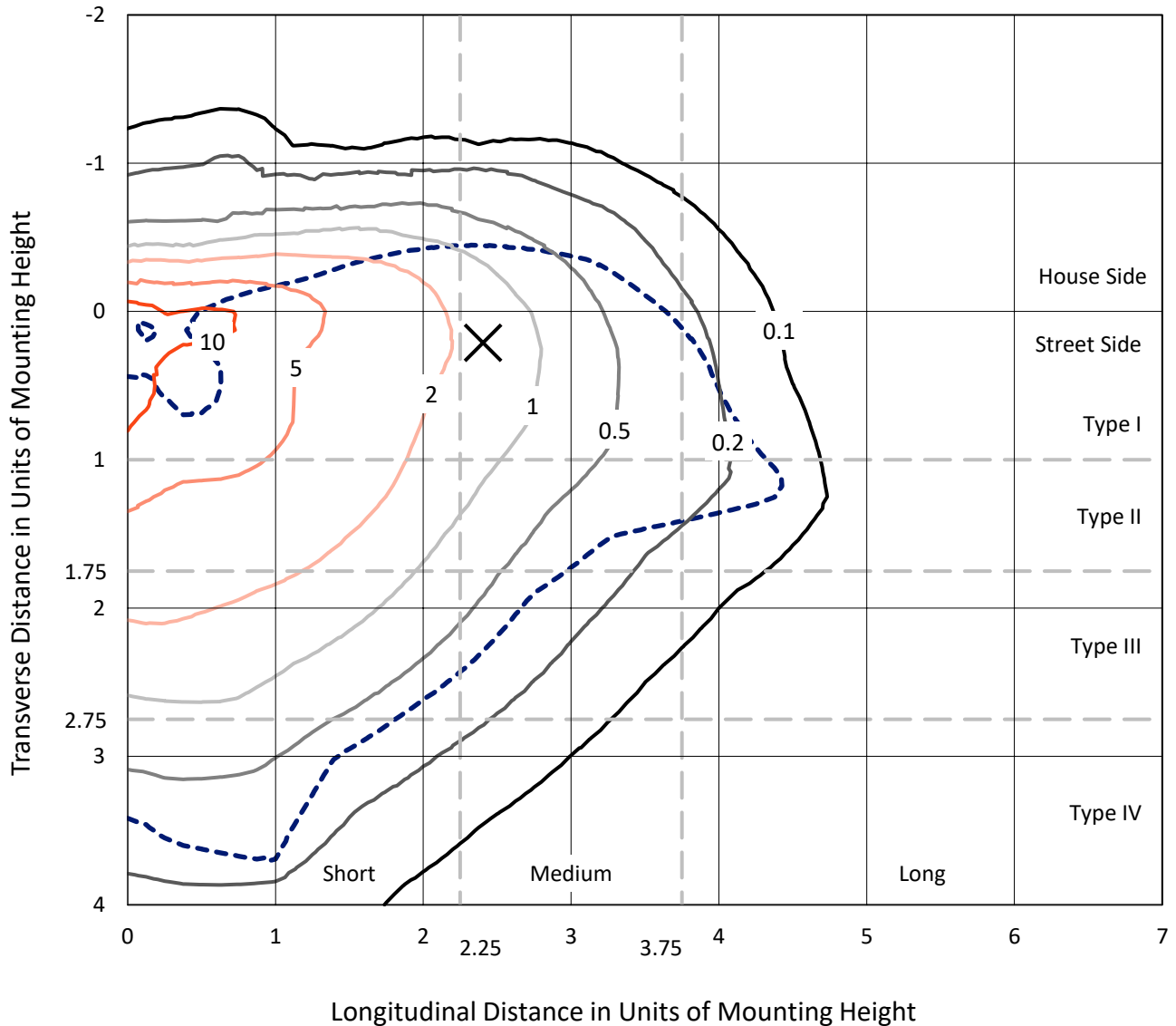
Lumens per Lamp: N/A
Luminaire Lumens: 7882.7 lumens
Efficiency: N/A
Efficacy: 73.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 106.6
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

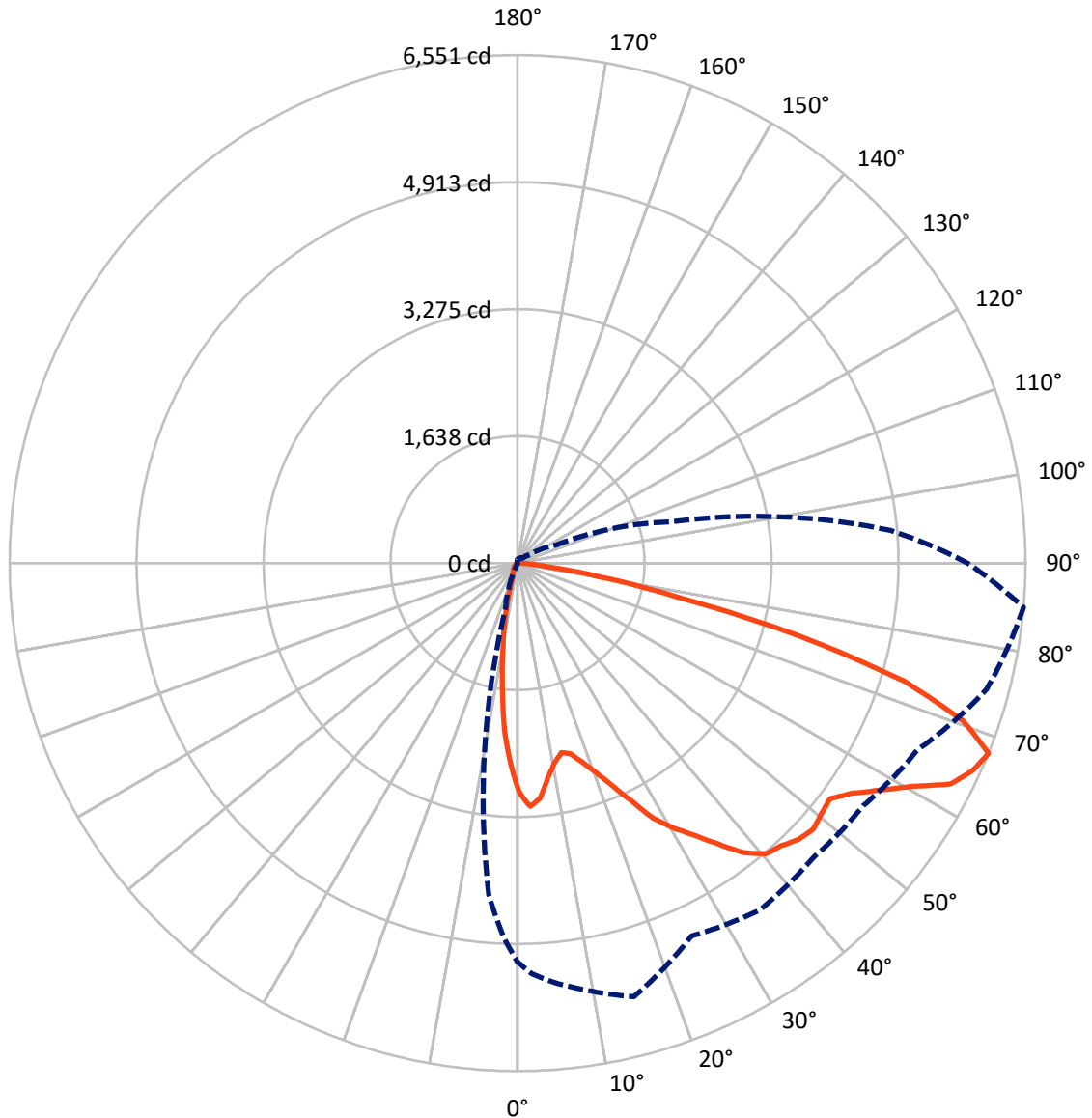
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 14.8 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	1368.7	0.0	1368.7
	% Fixture	17.4	0.0	17.4
Street Side	Lumens	6514.0	0.0	6514.0
	% Fixture	82.6	0.0	82.6
Total	Lumens	7882.7	0.0	7882.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.2	2.9
10°-20°	441.5	5.6
20°-30°	611.0	7.8
30°-40°	863.5	11.0
40°-50°	1175.7	14.9
50°-60°	1557.1	19.8
60°-70°	1807.9	22.9
70°-80°	1023.8	13.0
80°-90°	176.9	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°	7882.7	100.0
0°-180°	7882.7	100.0



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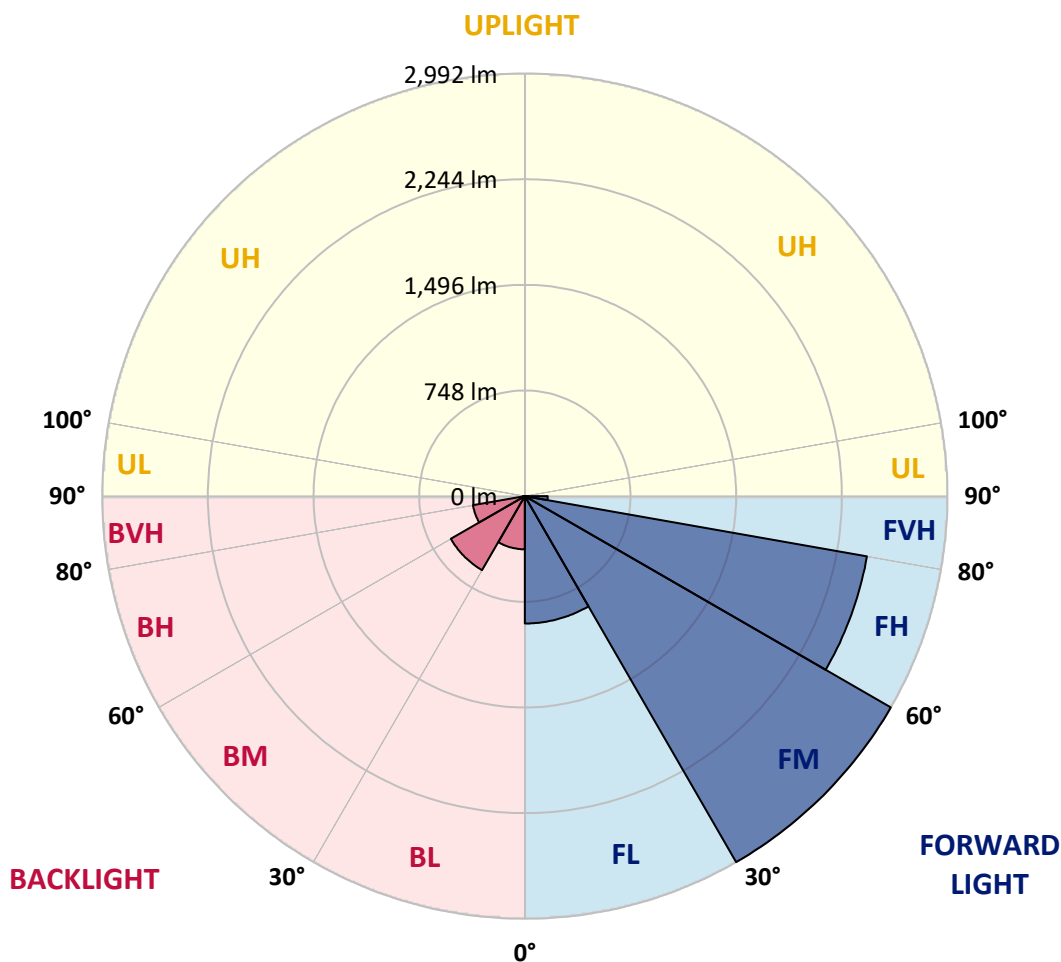
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	901.4	11.4			
FM (30°-60°)	2991.6	38.0			
FH (60°-80°)	2459.0	31.2			G2/5000
FVH (80°-90°)	162.0	2.1			G2/225
BL (0°-30°)	376.3	4.8	B1/500		
BM (30°-60°)	604.8	7.7	B1/1000		
BH (60°-80°)	372.8	4.7	B1/500		G1/500
BVH (80°-90°)	14.9	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°	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8
2.5°	3079.6	3144.9	3147.0	3176.4	3205.9	3205.9	3275.4	3258.5	3197.5	3187.0	3142.8
5°	3102.8	3125.9	3142.8	3292.2	3418.5	3405.9	3443.8	3418.5	3300.6	3149.1	3045.9
7.5°	2902.8	2928.1	2995.4	3250.1	3420.6	3477.5	3549.0	3391.2	3267.0	2993.3	2795.4
10°	2637.6	2686.0	2810.2	3100.7	3311.2	3492.2	3492.2	3365.9	3125.9	2858.6	2616.5
12.5°	2490.2	2587.0	2654.4	2949.1	3222.8	3347.0	3342.7	3275.4	3119.6	2782.8	2509.2
15°	2515.5	2542.8	2686.0	2915.4	3096.5	3090.1	3165.9	3144.9	3035.4	2850.2	2549.2
17.5°	2631.3	2673.4	2797.5	2915.4	3001.7	2976.5	2974.4	3075.4	3081.7	2963.8	2698.6
20°	2820.7	2944.9	3003.8	3039.6	2934.4	2827.0	2814.4	2955.4	3064.9	3109.1	2877.5
22.5°	3123.8	3205.9	3325.9	3142.8	2869.1	2734.4	2709.1	2864.9	3085.9	3281.7	3109.1
25°	3420.6	3483.8	3599.6	3363.8	2942.8	2715.5	2671.2	2806.0	3165.9	3521.7	3389.1
27.5°	3734.3	3789.0	3801.6	3525.9	2982.8	2677.6	2624.9	2806.0	3233.3	3648.0	3723.7
30°	3925.8	3991.1	4003.7	3669.0	3048.0	2709.1	2683.9	2818.6	3279.6	3755.3	3963.7
32.5°	4140.5	4157.4	4146.9	3694.3	3119.6	2801.8	2696.5	2902.8	3332.2	3883.7	4182.6
35°	4397.3	4426.8	4319.5	3810.1	3279.6	2860.7	2822.8	3005.9	3422.7	3942.7	4447.9
37.5°	4593.1	4685.7	4443.7	3854.3	3311.2	2984.9	2991.2	3220.7	3485.9	4014.2	4740.5
40°	4961.5	4805.7	4654.2	4005.8	3431.2	3195.4	3161.7	3441.7	3698.5	4060.5	4932.0
42.5°	5163.6	5081.5	4736.3	4020.6	3616.4	3485.9	3494.3	3692.2	3810.1	4191.1	4984.6
45°	5214.1	5127.8	4847.8	4031.1	3799.5	3829.0	3974.2	4012.1	3974.2	4277.4	5083.6
47.5°	5342.5	5155.2	4835.2	4172.1	4096.3	4210.0	4395.2	4477.3	4197.4	4245.8	5129.9
50°	5317.2	5209.9	4807.8	4231.1	4458.4	4759.4	4883.6	4849.9	4445.8	4180.5	5079.4
52.5°	5212.0	5096.2	4892.0	4391.0	4797.3	5161.5	5334.1	5249.9	4666.8	4327.9	5045.7
55°	5365.7	5277.2	5001.5	4607.8	5052.0	5515.1	5637.2	5574.0	4938.3	4464.7	5237.2
57.5°	5531.9	5513.0	5298.3	4862.6	5353.0	5879.3	5879.3	5801.4	5174.1	4662.6	5521.4
60°	5771.9	5814.0	5517.2	5031.0	5456.2	5858.2	6163.4	6072.9	5412.0	5009.9	5843.5
62.5°	5694.0	5828.8	5799.3	5393.0	5574.0	5961.4	6127.7	6195.0	5706.7	5433.0	6272.9
65°	5443.5	5586.7	5797.2	5630.9	5485.6	5710.9	5795.1	5999.3	5854.0	5830.9	6449.7
67.5°	5144.6	5300.4	5430.9	5790.9	5306.7	5456.2	5382.5	5447.7	5694.0	6266.6	6550.8
70°	4492.1	4641.5	4847.8	5435.1	4833.1	4698.4	4679.4	4647.8	5031.0	6110.8	6091.9
72.5°	3694.3	3763.7	4104.8	4418.4	3576.4	3551.1	3580.6	3544.8	3989.0	5531.9	5218.3
75°	2766.0	2835.4	3029.1	3393.3	2435.5	2290.2	2458.6	2624.9	3045.9	4294.2	3749.0
77.5°	2079.7	2168.2	2290.2	2538.6	1787.1	1559.8	1583.0	1740.8	2201.8	3439.6	2100.8
80°	1349.3	1338.8	1574.5	1747.2	1345.1	1387.2	1328.3	1444.0	1595.6	1839.8	1073.6
82.5°	778.9	789.4	888.3	1002.0	936.7	1071.4	772.5	1290.4	1138.8	749.4	400.0
85°	437.8	456.8	547.3	694.7	587.3	393.6	322.1	639.9	715.7	307.3	193.7
87.5°	44.2	37.9	73.7	263.1	160.0	65.3	96.8	153.7	172.6	115.8	56.8
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°	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8
2.5°	3079.6	3079.6	3027.0	2938.6	2902.8	2839.6	2753.3	2780.7	2751.2	2643.9	2616.5
5°	2953.3	2852.3	2742.8	2608.1	2530.2	2370.2	2319.7	2229.2	2243.9	2153.4	2157.6
7.5°	2690.2	2610.2	2425.0	2248.1	2094.5	1955.5	1759.8	1686.1	1614.5	1578.8	1620.9
10°	2536.5	2387.1	2134.5	1902.9	1698.7	1574.5	1444.0	1343.0	1250.4	1180.9	1166.2
12.5°	2425.0	2292.3	1987.1	1705.1	1545.1	1444.0	1324.0	1185.1	1094.6	974.6	938.8
15°	2391.3	2229.2	1907.1	1627.2	1471.4	1305.1	1168.3	1031.5	913.6	787.3	743.1
17.5°	2507.1	2319.7	1905.0	1564.0	1345.1	1166.2	976.7	823.1	703.1	587.3	559.9
20°	2702.8	2416.5	1966.1	1526.1	1225.1	985.1	770.4	616.8	482.0	406.3	387.3
22.5°	2926.0	2580.7	1972.4	1425.1	1105.1	804.1	562.0	406.3	330.5	294.7	284.2
25°	3199.6	2843.9	2048.2	1343.0	964.1	610.5	400.0	311.5	267.3	246.3	242.1
27.5°	3424.8	3027.0	2130.3	1256.7	825.2	452.6	313.6	254.7	231.6	210.5	208.4
30°	3658.5	3237.5	2153.4	1204.1	705.2	372.6	269.4	225.2	200.0	189.5	187.3
32.5°	3862.7	3466.9	2227.1	1117.8	591.5	328.4	244.2	202.1	185.2	168.4	166.3
35°	4125.8	3599.6	2262.9	1071.4	549.4	296.8	223.1	185.2	160.0	149.5	145.2
37.5°	4407.9	3728.0	2286.0	1035.7	513.6	277.9	210.5	174.7	151.6	136.8	132.6
40°	4671.0	3909.0	2252.4	991.5	486.3	254.7	202.1	162.1	141.0	126.3	120.0
42.5°	4873.1	4085.8	2241.8	949.4	456.8	246.3	191.6	155.8	132.6	115.8	113.7
45°	4986.8	4205.8	2168.2	915.7	433.6	250.5	187.3	147.4	126.3	111.6	103.1
47.5°	4959.4	4298.4	2187.1	905.2	402.1	233.7	185.2	141.0	115.8	103.1	96.8
50°	5110.9	4485.8	2155.5	871.5	378.9	210.5	202.1	141.0	113.7	98.9	92.6
52.5°	5136.2	4656.3	2222.9	810.4	343.1	193.7	200.0	138.9	109.5	94.7	86.3
55°	5346.7	4854.1	2353.4	776.7	313.6	168.4	183.1	134.7	98.9	86.3	82.1
57.5°	5633.0	5264.6	2437.6	745.2	273.7	147.4	153.7	132.6	90.5	80.0	73.7
60°	5908.7	5428.8	2443.9	688.3	235.8	132.6	120.0	132.6	84.2	71.6	65.3
62.5°	6115.0	5428.8	2401.8	639.9	206.3	117.9	105.3	126.3	75.8	63.2	58.9
65°	6003.5	5283.6	2292.3	599.9	187.3	103.1	90.5	96.8	67.4	54.7	50.5
67.5°	5803.5	4831.0	2050.3	551.5	185.2	90.5	77.9	71.6	58.9	48.4	44.2
70°	5483.5	4220.5	1707.2	496.8	181.0	82.1	69.5	61.0	52.6	42.1	37.9
72.5°	4418.4	3485.9	1401.9	465.2	176.8	71.6	58.9	52.6	44.2	35.8	31.6
75°	3060.7	2227.1	1079.9	397.8	172.6	65.3	54.7	46.3	37.9	29.5	27.4
77.5°	1835.6	1488.2	696.8	298.9	113.7	52.6	46.3	35.8	31.6	25.3	23.2
80°	858.8	703.1	282.1	115.8	54.7	37.9	31.6	27.4	25.3	21.1	18.9
82.5°	336.8	296.8	136.8	67.4	44.2	29.5	25.3	23.2	21.1	16.8	14.7
85°	181.0	160.0	65.3	46.3	31.6	21.1	21.1	18.9	16.8	14.7	12.6
87.5°	40.0	29.5	27.4	27.4	23.2	16.8	16.8	14.7	12.6	10.5	8.4
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°	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8
2.5°	2601.8	2633.4	2582.8	2614.4	2570.2	2603.9	2608.1	2576.5	2584.9	2627.0	2646.0
5°	2216.6	2195.5	2149.2	2134.5	2136.6	2109.2	2119.7	2134.5	2157.6	2170.3	2208.1
7.5°	1597.7	1646.1	1644.0	1679.8	1681.9	1677.7	1648.2	1585.1	1606.1	1589.3	1610.3
10°	1143.0	1164.1	1204.1	1227.2	1269.3	1246.2	1178.8	1153.5	1140.9	1138.8	1159.9
12.5°	913.6	863.1	858.8	867.3	888.3	860.9	827.3	797.8	812.5	842.0	865.2
15°	707.3	665.2	610.5	602.0	606.2	593.6	557.8	519.9	530.5	559.9	576.8
17.5°	543.1	494.7	456.8	431.5	423.1	378.9	326.3	294.7	286.3	284.2	298.9
20°	366.3	357.9	351.5	320.0	320.0	256.8	212.6	189.5	189.5	193.7	195.8
22.5°	273.7	263.1	265.2	258.9	242.1	191.6	168.4	162.1	162.1	166.3	166.3
25°	237.9	223.1	218.9	216.8	200.0	164.2	147.4	141.0	141.0	145.2	145.2
27.5°	202.1	197.9	191.6	183.1	168.4	141.0	130.5	124.2	126.3	128.4	126.3
30°	185.2	174.7	166.3	166.3	149.5	126.3	117.9	113.7	109.5	113.7	115.8
32.5°	164.2	157.9	153.7	147.4	128.4	111.6	103.1	98.9	96.8	96.8	98.9
35°	141.0	141.0	136.8	128.4	111.6	101.0	90.5	86.3	84.2	86.3	86.3
37.5°	126.3	120.0	122.1	113.7	98.9	88.4	77.9	73.7	73.7	71.6	73.7
40°	117.9	107.4	101.0	96.8	88.4	75.8	67.4	63.2	61.0	61.0	61.0
42.5°	105.3	96.8	84.2	82.1	80.0	65.3	54.7	52.6	50.5	48.4	48.4
45°	98.9	86.3	75.8	65.3	65.3	54.7	46.3	42.1	40.0	37.9	40.0
47.5°	90.5	77.9	65.3	54.7	52.6	44.2	35.8	31.6	29.5	29.5	29.5
50°	86.3	69.5	56.8	46.3	40.0	35.8	27.4	23.2	21.1	21.1	21.1
52.5°	80.0	65.3	50.5	40.0	31.6	27.4	21.1	16.8	14.7	14.7	14.7
55°	71.6	58.9	44.2	33.7	27.4	21.1	14.7	10.5	8.4	8.4	8.4
57.5°	67.4	52.6	37.9	29.5	21.1	14.7	8.4	6.3	6.3	4.2	6.3
60°	61.0	46.3	31.6	23.2	16.8	10.5	6.3	2.1	2.1	2.1	2.1
62.5°	52.6	40.0	27.4	18.9	12.6	6.3	2.1	0.0	0.0	0.0	0.0
65°	44.2	31.6	21.1	14.7	8.4	2.1	0.0	0.0	0.0	0.0	0.0
67.5°	37.9	27.4	16.8	10.5	6.3	0.0	0.0	0.0	0.0	0.0	0.0
70°	33.7	23.2	12.6	8.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	27.4	18.9	10.5	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	23.2	14.7	6.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	18.9	10.5	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	14.7	8.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	12.6	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.3	2.1	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°	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8	2963.8
2.5°	2673.4	2660.7	2723.9	2827.0	2879.6	2982.8	3008.0	3073.3	3056.5	3079.6
5°	2212.4	2237.6	2330.2	2481.8	2536.5	2686.0	2827.0	2968.1	3058.6	3102.8
7.5°	1641.9	1726.1	1839.8	1978.7	2119.7	2315.5	2555.5	2719.7	2808.1	2902.8
10°	1223.0	1313.5	1444.0	1580.9	1810.3	2029.2	2269.2	2473.4	2549.2	2637.6
12.5°	962.0	1103.0	1254.6	1401.9	1538.8	1747.2	2044.0	2340.8	2422.9	2490.2
15°	669.4	842.0	1058.8	1250.4	1441.9	1623.0	1930.3	2290.2	2401.8	2515.5
17.5°	370.5	507.3	755.7	1025.1	1307.2	1585.1	1968.2	2382.9	2551.3	2631.3
20°	214.7	269.4	446.3	766.2	1138.8	1503.0	1987.1	2557.6	2780.7	2820.7
22.5°	176.8	195.8	252.6	479.9	932.5	1450.3	2084.0	2801.8	3029.1	3123.8
25°	151.6	166.3	195.8	288.4	705.2	1338.8	2145.0	3107.0	3317.5	3420.6
27.5°	134.7	149.5	172.6	212.6	479.9	1185.1	2246.0	3382.7	3593.2	3734.3
30°	117.9	130.5	153.7	181.0	332.6	1012.5	2332.3	3584.8	3881.6	3925.8
32.5°	105.3	115.8	132.6	155.8	246.3	768.3	2401.8	3793.2	4043.7	4140.5
35°	90.5	103.1	113.7	132.6	187.3	578.9	2359.7	3955.3	4281.6	4397.3
37.5°	80.0	88.4	98.9	111.6	157.9	452.6	2273.4	4149.0	4485.8	4593.1
40°	67.4	73.7	86.3	98.9	143.1	349.4	2174.5	4382.6	4772.0	4961.5
42.5°	56.8	63.2	71.6	92.6	117.9	258.9	1974.5	4563.6	5003.6	5163.6
45°	44.2	52.6	65.3	92.6	94.7	191.6	1768.2	4698.4	5134.1	5214.1
47.5°	33.7	42.1	63.2	80.0	75.8	132.6	1524.0	4852.0	5268.8	5342.5
50°	25.3	33.7	71.6	69.5	63.2	101.0	1370.4	4959.4	5277.2	5317.2
52.5°	16.8	25.3	58.9	52.6	52.6	88.4	1328.3	4955.2	5298.3	5212.0
55°	12.6	18.9	33.7	37.9	46.3	77.9	1290.4	5113.1	5304.6	5365.7
57.5°	8.4	14.7	23.2	29.5	40.0	67.4	1212.5	5302.5	5500.4	5531.9
60°	4.2	10.5	16.8	23.2	33.7	58.9	1103.0	5441.4	5738.2	5771.9
62.5°	2.1	6.3	12.6	18.9	27.4	46.3	989.4	5220.4	5635.1	5694.0
65°	0.0	4.2	8.4	12.6	16.8	33.7	804.1	4713.1	5226.7	5443.5
67.5°	0.0	0.0	4.2	8.4	10.5	25.3	606.2	4287.9	4849.9	5144.6
70°	0.0	0.0	2.1	2.1	6.3	18.9	387.3	3551.1	4330.0	4492.1
72.5°	0.0	0.0	0.0	0.0	2.1	12.6	225.2	2637.6	3393.3	3694.3
75°	0.0	0.0	0.0	0.0	0.0	10.5	113.7	1696.6	2361.8	2766.0
77.5°	0.0	0.0	0.0	0.0	0.0	8.4	61.0	1094.6	1740.8	2079.7
80°	0.0	0.0	0.0	0.0	0.0	2.1	35.8	635.7	1113.5	1349.3
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	14.7	311.5	665.2	778.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	4.2	166.3	332.6	437.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	23.2	44.2
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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