

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: P677479

Luminaire Tested: **CCW-SA-2D-830-U-SLR-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677479
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2D-830-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) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6368.5 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

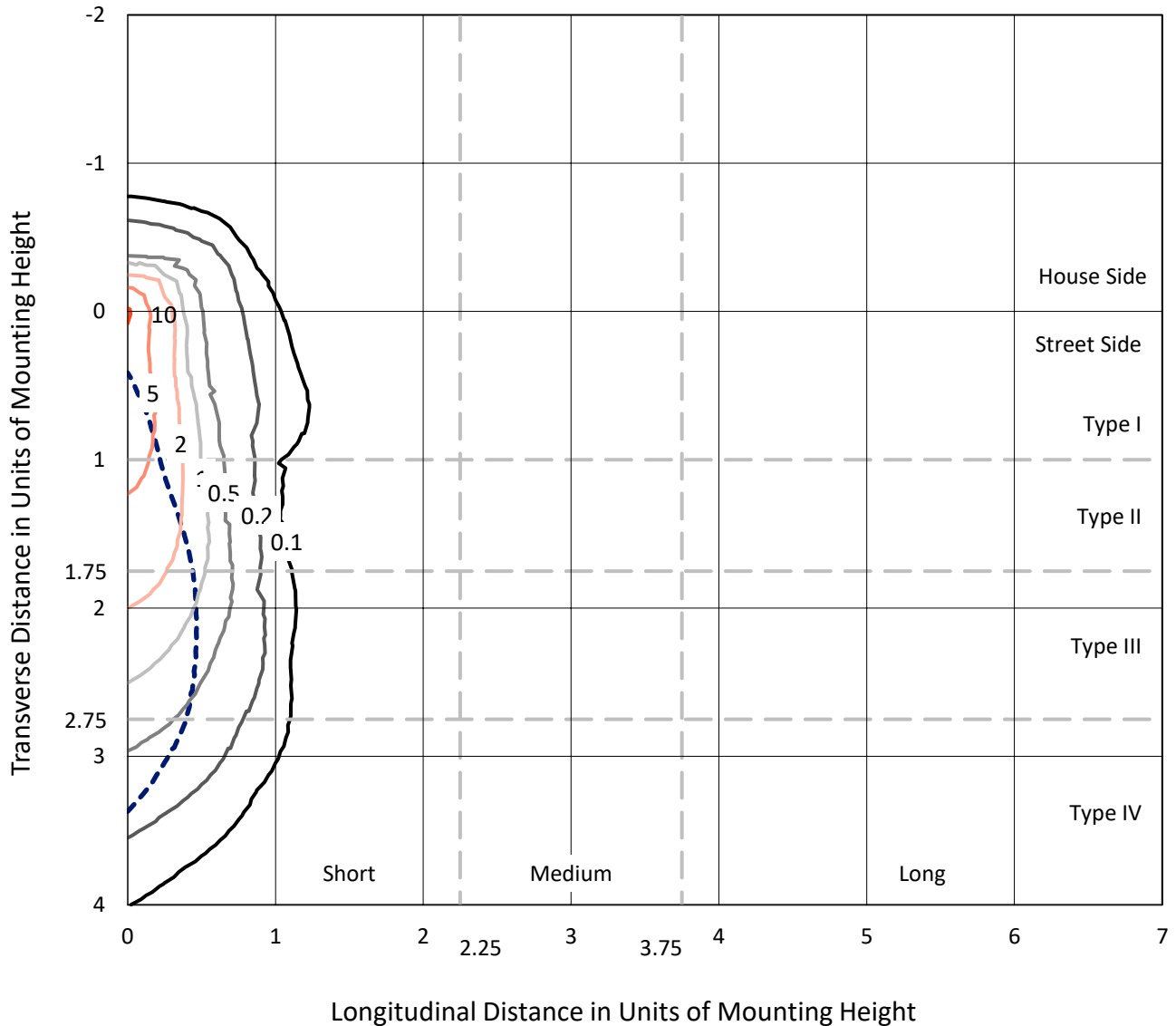
Input Watts (W): 80.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

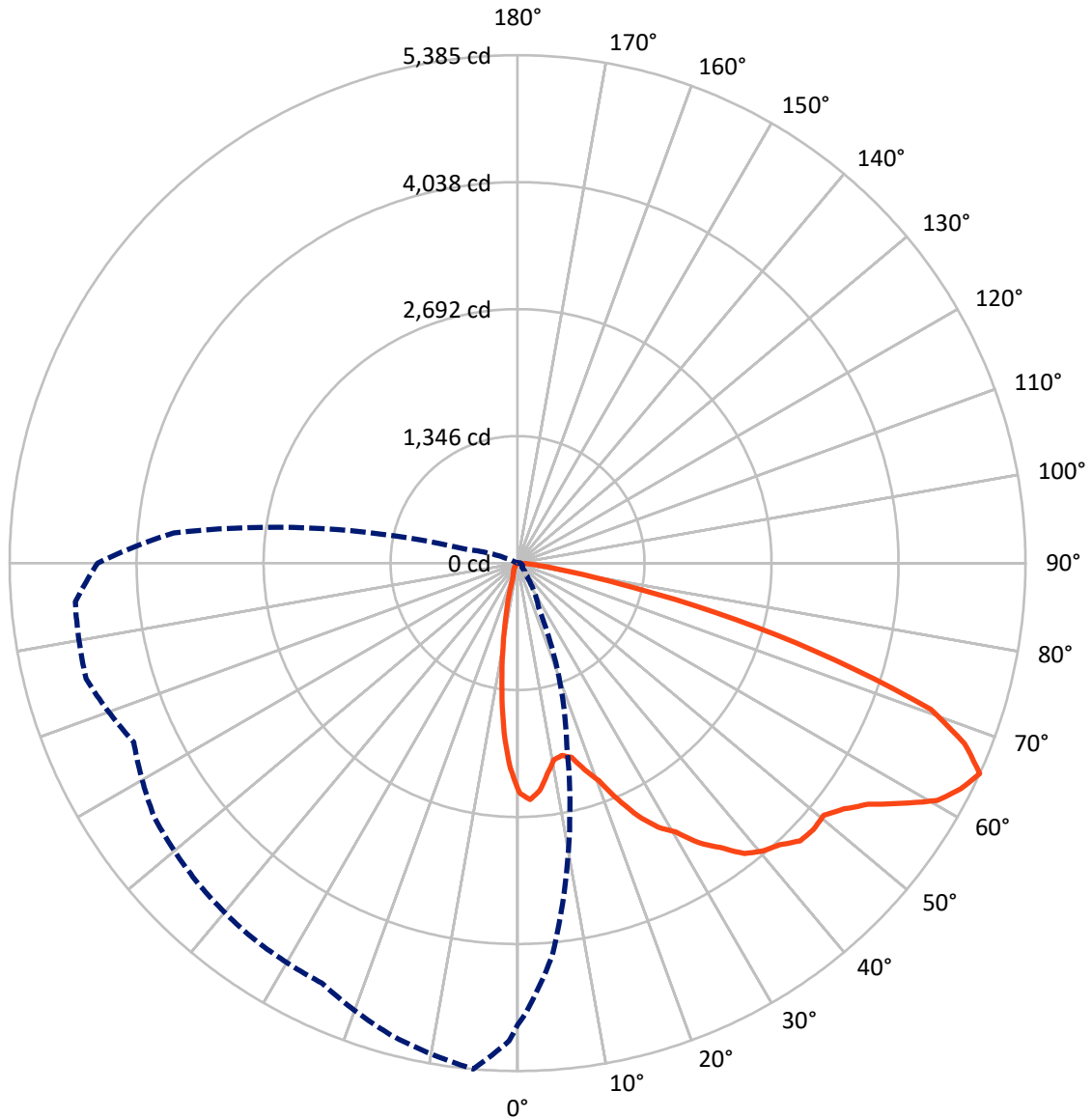
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 10.8 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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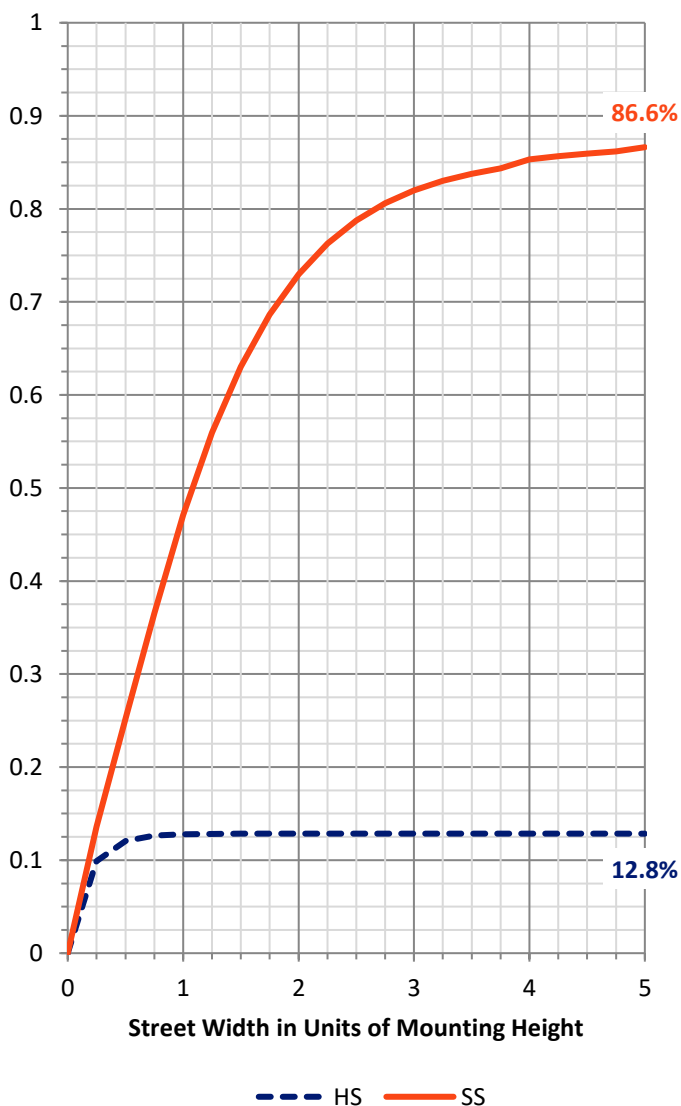
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	826.9	0.0	826.9
	% Fixture	13.0	0.0	13.0
Street Side	Lumens	5541.6	0.0	5541.6
	% Fixture	87.0	0.0	87.0
Total	Lumens	6368.5	0.0	6368.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.4	2.9
10°-20°	357.1	5.6
20°-30°	497.4	7.8
30°-40°	706.7	11.1
40°-50°	980.0	15.4
50°-60°	1335.3	21.0
60°-70°	1468.1	23.1
70°-80°	721.6	11.3
80°-90°	117.8	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°	6368.5	100.0
0°-180°	6368.5	100.0



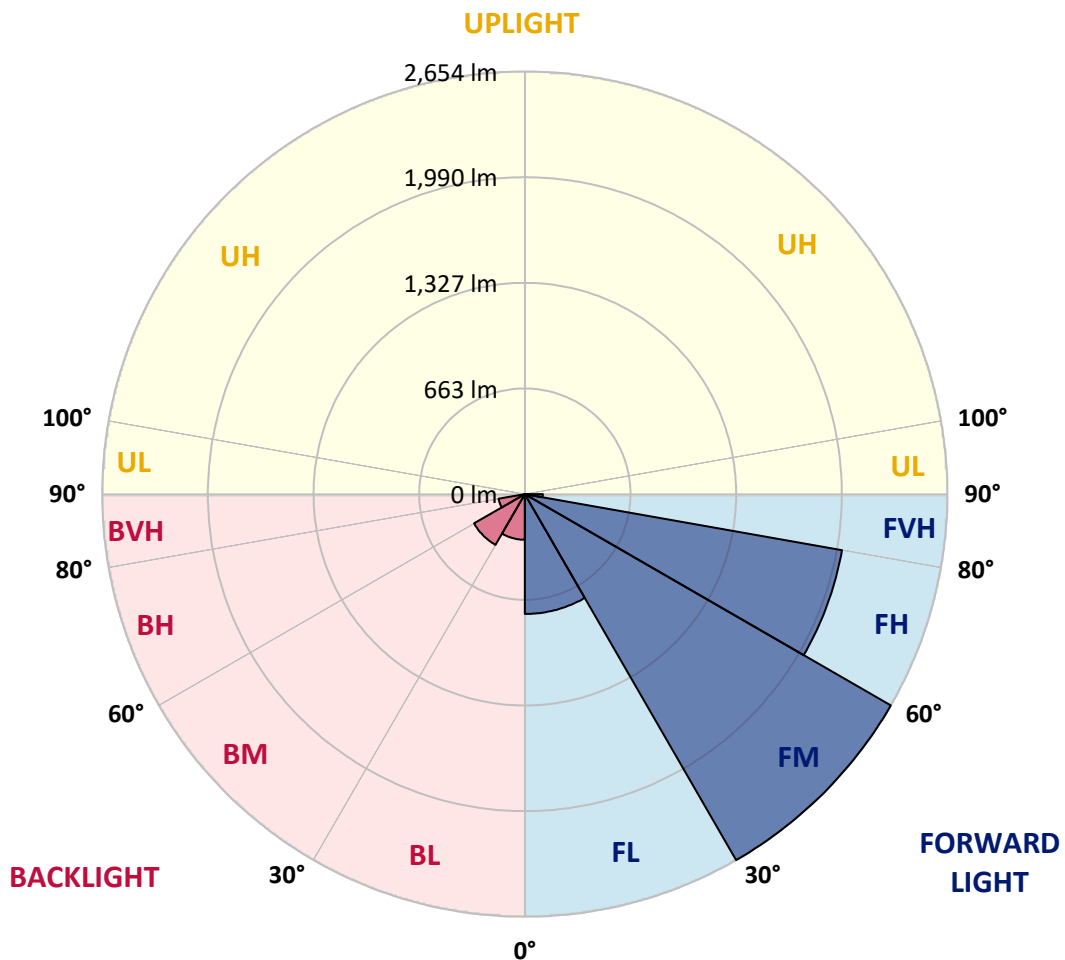
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	752.6	11.8			
FM (30°-60°)	2653.9	41.7			
FH (60°-80°)	2022.6	31.8			G2/5000
FVH (80°-90°)	112.5	1.8			G2/225
BL (0°-30°)	286.3	4.5	B1/500		
BM (30°-60°)	368.2	5.8	B1/1000		
BH (60°-80°)	167.1	2.6	B1/500		G1/500
BVH (80°-90°)	5.3	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7
2.5°	2484.5	2513.7	2486.2	2390.0	2372.9	2326.5	2256.1	2251.0	2177.1	2185.7	2146.2
5°	2335.1	2364.3	2305.9	2178.8	2060.4	1965.9	1909.3	1808.0	1785.7	1735.9	1735.9
7.5°	2182.3	2180.6	2081.0	1974.5	1797.7	1624.3	1545.3	1399.3	1313.5	1267.1	1222.5
10°	2055.2	2027.8	1965.9	1746.2	1553.9	1373.6	1275.7	1179.6	1090.3	1013.0	935.8
12.5°	1965.9	1983.1	1885.2	1646.6	1397.6	1272.3	1167.5	1066.2	959.8	872.2	786.4
15°	2012.3	1984.8	1869.8	1624.3	1371.9	1200.2	1061.1	937.5	819.0	704.0	638.7
17.5°	2156.5	2086.1	1950.5	1624.3	1318.6	1090.3	922.0	776.1	649.0	546.0	465.3
20°	2350.5	2269.8	2123.9	1684.4	1279.2	1009.6	779.5	595.8	463.6	367.4	305.6
22.5°	2549.7	2486.2	2266.4	1708.4	1232.8	901.4	614.7	431.0	309.1	247.2	216.3
25°	2788.4	2699.1	2458.7	1804.5	1164.1	796.7	484.2	300.5	230.1	197.5	178.6
27.5°	2979.0	2963.5	2639.0	1862.9	1112.6	710.8	382.9	238.7	190.6	166.5	154.5
30°	3219.3	3135.2	2858.8	1979.7	1054.2	613.0	319.4	214.6	175.1	149.4	140.8
32.5°	3363.6	3324.1	2973.8	2044.9	989.0	532.3	274.7	188.9	159.7	140.8	132.2
35°	3573.0	3494.1	3138.6	2086.1	954.6	485.9	247.2	171.7	133.9	115.0	104.7
37.5°	3806.5	3777.4	3336.1	2084.4	904.8	458.4	228.4	159.7	127.1	106.5	94.4
40°	4045.2	3926.7	3456.3	2132.5	879.1	437.8	214.6	152.8	120.2	101.3	85.8
42.5°	4223.8	4088.1	3595.4	2115.3	848.2	401.8	209.5	142.5	115.0	92.7	79.0
45°	4271.8	4223.8	3720.7	2110.2	825.9	372.6	200.9	140.8	111.6	87.6	73.8
47.5°	4364.6	4331.9	3875.2	2118.8	808.7	350.3	180.3	144.2	106.5	82.4	70.4
50°	4405.8	4347.4	4000.6	2139.4	769.2	322.8	161.4	151.1	104.7	80.7	67.0
52.5°	4575.8	4524.2	4172.3	2197.7	736.6	286.7	142.5	144.2	108.2	75.5	63.5
55°	4742.3	4683.9	4436.7	2331.7	690.2	257.5	121.9	127.1	103.0	68.7	56.7
57.5°	4970.7	4874.5	4613.5	2386.6	649.0	218.1	108.2	104.7	96.2	61.8	49.8
60°	5005.0	5044.5	4587.8	2352.3	606.1	192.3	94.4	80.7	103.0	54.9	42.9
62.5°	5120.0	4955.2	4467.6	2273.3	575.2	176.8	84.1	67.0	89.3	48.1	36.1
65°	4898.5	4776.6	4186.0	2019.2	535.7	178.6	73.8	54.9	56.7	39.5	29.2
67.5°	4574.0	4477.9	3719.0	1742.7	496.2	175.1	65.2	48.1	42.9	34.3	25.8
70°	4014.3	3806.5	3159.2	1414.8	437.8	163.1	54.9	42.9	36.1	27.5	18.9
72.5°	2920.6	2836.5	2266.4	1093.7	393.2	147.7	51.5	36.1	30.9	20.6	15.5
75°	1965.9	1826.9	1430.2	717.7	315.9	128.8	42.9	32.6	24.0	15.5	12.0
77.5°	1038.8	982.1	810.4	341.7	175.1	60.1	24.0	18.9	13.7	12.0	6.9
80°	449.8	400.1	350.3	139.1	61.8	27.5	15.5	10.3	8.6	6.9	3.4
82.5°	230.1	219.8	182.0	60.1	36.1	20.6	8.6	6.9	5.2	3.4	1.7
85°	113.3	116.8	96.2	18.9	20.6	12.0	1.7	1.7	0.0	0.0	0.0
87.5°	8.6	8.6	6.9	3.4	5.2	1.7	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°	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7
2.5°	2130.8	2154.8	2113.6	2139.4	2127.3	2132.5	2137.6	2123.9	2127.3	2175.4	2177.1
5°	1706.7	1753.0	1735.9	1759.9	1801.1	1780.5	1799.4	1796.0	1799.4	1806.3	1837.2
7.5°	1217.3	1203.6	1236.2	1299.8	1373.6	1418.2	1395.9	1383.9	1377.0	1359.8	1380.5
10°	918.6	911.7	903.1	922.0	970.1	1019.9	1047.4	1001.0	975.2	942.6	930.6
12.5°	762.3	719.4	695.4	666.2	679.9	724.6	726.3	681.6	640.4	623.3	642.2
15°	600.9	571.8	528.8	487.6	467.0	501.4	472.2	429.2	376.0	369.2	367.4
17.5°	429.2	412.1	381.2	364.0	340.0	331.4	300.5	235.2	197.5	187.2	190.6
20°	291.9	278.2	276.4	261.0	250.7	243.8	194.0	151.1	139.1	140.8	142.5
22.5°	216.3	209.5	200.9	199.2	190.6	182.0	142.5	127.1	118.5	118.5	123.6
25°	176.8	173.4	164.8	161.4	158.0	145.9	120.2	108.2	104.7	101.3	106.5
27.5°	151.1	149.4	144.2	139.1	135.6	123.6	104.7	94.4	91.0	91.0	91.0
30°	135.6	135.6	128.8	118.5	118.5	104.7	89.3	82.4	79.0	79.0	77.3
32.5°	127.1	123.6	115.0	108.2	103.0	89.3	79.0	72.1	67.0	67.0	68.7
35°	103.0	103.0	101.3	96.2	89.3	75.5	67.0	60.1	56.7	54.9	56.7
37.5°	91.0	85.8	79.0	80.7	77.3	65.2	56.7	51.5	46.4	46.4	46.4
40°	82.4	77.3	70.4	65.2	63.5	58.4	49.8	41.2	36.1	34.3	34.3
42.5°	73.8	70.4	60.1	51.5	49.8	49.8	37.8	30.9	25.8	25.8	25.8
45°	68.7	63.5	54.9	44.6	36.1	37.8	30.9	22.3	18.9	17.2	17.2
47.5°	65.2	60.1	48.1	37.8	27.5	27.5	22.3	15.5	12.0	10.3	10.3
50°	60.1	54.9	42.9	30.9	20.6	17.2	13.7	8.6	5.2	3.4	3.4
52.5°	56.7	51.5	37.8	25.8	17.2	12.0	8.6	1.7	0.0	0.0	0.0
55°	51.5	44.6	32.6	20.6	13.7	6.9	1.7	0.0	0.0	0.0	0.0
57.5°	44.6	39.5	25.8	15.5	8.6	1.7	0.0	0.0	0.0	0.0	0.0
60°	37.8	32.6	20.6	12.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	30.9	27.5	15.5	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	25.8	20.6	12.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	22.3	17.2	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	17.2	12.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	12.0	8.6	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	8.6	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	5.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.7	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°	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7
2.5°	2184.0	2235.5	2283.6	2297.3	2335.1	2439.8	2439.8	2489.6	2578.9	2611.5	2618.4
5°	1842.3	1897.3	1907.6	2014.0	2063.8	2170.3	2240.7	2408.9	2510.2	2573.8	2613.2
7.5°	1401.1	1419.9	1459.4	1559.0	1656.9	1785.7	1919.6	2134.2	2312.8	2384.9	2518.8
10°	963.2	1019.9	1105.7	1195.0	1347.8	1490.3	1663.8	1866.4	2086.1	2175.4	2290.5
12.5°	649.0	728.0	865.4	992.4	1133.2	1277.4	1442.3	1713.5	1962.5	2086.1	2201.2
15°	379.5	475.6	594.1	800.1	987.3	1148.7	1313.5	1588.2	1890.4	2050.1	2190.9
17.5°	192.3	221.5	319.4	497.9	745.2	1009.6	1255.1	1605.4	1945.3	2141.1	2257.8
20°	144.2	152.8	180.3	264.4	509.9	834.5	1200.2	1631.1	2098.2	2336.8	2400.3
22.5°	125.3	132.2	144.2	171.7	286.7	638.7	1122.9	1694.7	2305.9	2530.8	2664.8
25°	106.5	113.3	123.6	140.8	183.7	434.4	1028.5	1761.6	2491.3	2774.6	2900.0
27.5°	92.7	97.9	108.2	121.9	149.4	276.4	865.4	1850.9	2774.6	3070.0	3102.6
30°	79.0	84.1	92.7	108.2	127.1	195.7	635.3	1862.9	2930.9	3198.7	3289.7
32.5°	68.7	70.4	80.7	94.4	106.5	154.5	446.4	1874.9	3045.9	3365.3	3384.2
35°	56.7	60.1	70.4	79.0	92.7	121.9	338.2	1814.8	3195.3	3537.0	3531.8
37.5°	46.4	51.5	58.4	65.2	75.5	103.0	269.6	1703.2	3382.5	3803.1	3641.7
40°	36.1	41.2	48.1	56.7	63.5	92.7	202.6	1535.0	3578.2	3933.6	3761.9
42.5°	25.8	29.2	36.1	44.6	56.7	77.3	145.9	1335.8	3655.5	4086.4	3906.1
45°	18.9	22.3	27.5	37.8	58.4	61.8	101.3	1153.8	3737.9	4153.4	3873.5
47.5°	10.3	13.7	20.6	32.6	51.5	46.4	72.1	990.7	3832.3	4213.5	3899.3
50°	3.4	5.2	12.0	34.3	41.2	36.1	56.7	903.1	3925.0	4225.5	3950.8
52.5°	0.0	0.0	6.9	36.1	30.9	27.5	49.8	868.8	3901.0	4263.3	3918.2
55°	0.0	0.0	1.7	15.5	17.2	20.6	41.2	867.1	4071.0	4275.3	4096.7
57.5°	0.0	0.0	0.0	5.2	10.3	17.2	36.1	812.1	4179.1	4574.0	4337.1
60°	0.0	0.0	0.0	1.7	6.9	12.0	27.5	764.1	4289.0	4708.0	4594.6
62.5°	0.0	0.0	0.0	0.0	1.7	5.2	18.9	690.2	4067.5	4697.7	4843.6
65°	0.0	0.0	0.0	0.0	0.0	0.0	12.0	546.0	3658.9	4452.1	4706.2
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	6.9	377.7	3203.9	4143.1	4453.8
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	228.4	2585.8	3633.1	3777.4
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.9	1845.8	2884.5	3099.2
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.5	1141.8	2108.5	2372.9
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.5	740.0	1596.8	1801.1
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	394.9	1001.0	1164.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	171.7	607.8	700.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.9	369.2	420.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.7	75.5
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°	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7	2434.7
2.5°	2621.8	2671.6	2690.5	2661.3	2664.8	2604.7	2596.1	2511.9	2477.6	2484.5
5°	2742.0	2814.1	2853.6	2821.0	2747.2	2632.1	2527.4	2427.8	2366.0	2335.1
7.5°	2714.5	2795.2	2845.0	2875.9	2791.8	2606.4	2446.7	2259.5	2180.6	2182.3
10°	2563.5	2731.7	2833.0	2793.5	2754.0	2568.6	2321.4	2118.8	2048.4	2055.2
12.5°	2441.5	2628.7	2688.8	2719.7	2639.0	2491.3	2324.8	2093.0	2014.0	1965.9
15°	2366.0	2505.1	2508.5	2556.6	2524.0	2524.0	2360.8	2134.2	2065.5	2012.3
17.5°	2366.0	2396.9	2393.5	2410.6	2465.6	2530.8	2451.8	2300.8	2165.1	2156.5
20°	2419.2	2323.1	2300.8	2307.6	2354.0	2548.0	2652.7	2463.9	2378.0	2350.5
22.5°	2542.8	2331.7	2196.0	2172.0	2314.5	2546.3	2781.5	2721.4	2572.0	2549.7
25°	2712.8	2316.2	2168.5	2137.6	2245.8	2608.1	2958.4	2970.4	2834.7	2788.4
27.5°	2874.2	2384.9	2165.1	2158.2	2300.8	2594.4	3080.3	3169.5	3016.7	2979.0
30°	2929.2	2453.6	2228.6	2137.6	2321.4	2644.2	3076.8	3310.3	3210.8	3219.3
32.5°	2994.4	2522.2	2235.5	2199.5	2408.9	2724.8	3174.7	3537.0	3464.9	3363.6
35°	3090.6	2615.0	2300.8	2268.1	2470.7	2797.0	3195.3	3703.5	3691.5	3573.0
37.5°	3173.0	2706.0	2436.4	2441.5	2659.6	2913.7	3286.3	3907.8	3887.2	3806.5
40°	3231.4	2833.0	2647.6	2661.3	2824.4	3044.2	3447.7	4010.9	4163.7	4045.2
42.5°	3239.9	2946.3	2889.7	2999.6	3152.4	3246.8	3512.9	4081.3	4301.0	4223.8
45°	3272.6	3126.6	3284.6	3365.3	3490.6	3425.4	3509.5	4201.5	4311.3	4271.8
47.5°	3399.6	3454.6	3653.7	3899.3	3943.9	3729.3	3591.9	4220.3	4369.7	4364.6
50°	3531.8	3806.5	4086.4	4249.5	4306.2	3938.8	3669.2	4204.9	4447.0	4405.8
52.5°	3679.5	4112.2	4515.7	4716.5	4685.6	4170.5	3756.8	4330.2	4589.5	4575.8
55°	3772.2	4249.5	4792.1	5072.0	5047.9	4429.8	4034.9	4510.5	4776.6	4742.3
57.5°	4017.7	4472.7	5066.8	5197.3	5260.8	4769.8	4228.9	4805.8	4932.9	4970.7
60°	4220.3	4618.7	5138.9	5327.8	5350.1	4972.4	4568.9	5109.7	5132.1	5005.0
62.5°	4517.4	4675.3	4986.1	5156.1	5271.1	5087.4	4874.5	5272.8	5128.6	5120.0
65°	4735.4	4489.9	4701.1	4795.5	4869.4	4912.3	5181.8	5384.5	5065.1	4898.5
67.5°	4613.5	4139.6	4100.2	4105.3	4127.6	4386.9	5078.8	5111.5	4711.4	4574.0
70°	4060.7	3396.2	3343.0	3384.2	3272.6	3585.1	4661.6	4646.2	4156.8	4014.3
72.5°	3284.6	2475.9	2384.9	2441.5	2467.3	2798.7	3921.6	3523.2	3032.2	2920.6
75°	2609.8	1814.8	1531.5	1668.9	1756.5	2038.1	3063.1	2393.5	2117.0	1965.9
77.5°	2050.1	1373.6	1191.6	1136.6	1217.3	1481.8	2228.6	1256.8	1109.2	1038.8
80°	1299.8	1009.6	1095.4	1016.5	1050.8	1057.7	1160.7	571.8	455.0	449.8
82.5°	782.9	690.2	820.7	451.6	822.4	734.9	482.5	259.3	230.1	230.1
85°	554.6	427.5	283.3	183.7	365.7	403.5	187.2	133.9	116.8	113.3
87.5°	278.2	132.2	63.5	41.2	46.4	75.5	22.3	10.3	10.3	8.6
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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