

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: P677502

Luminaire Tested: **CCW-SA-2E-840-U-SLR-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677502
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2E-840-U-SLR-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1050mA w/
SLR distribution lens and House Side Shield
Light Source: (32) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

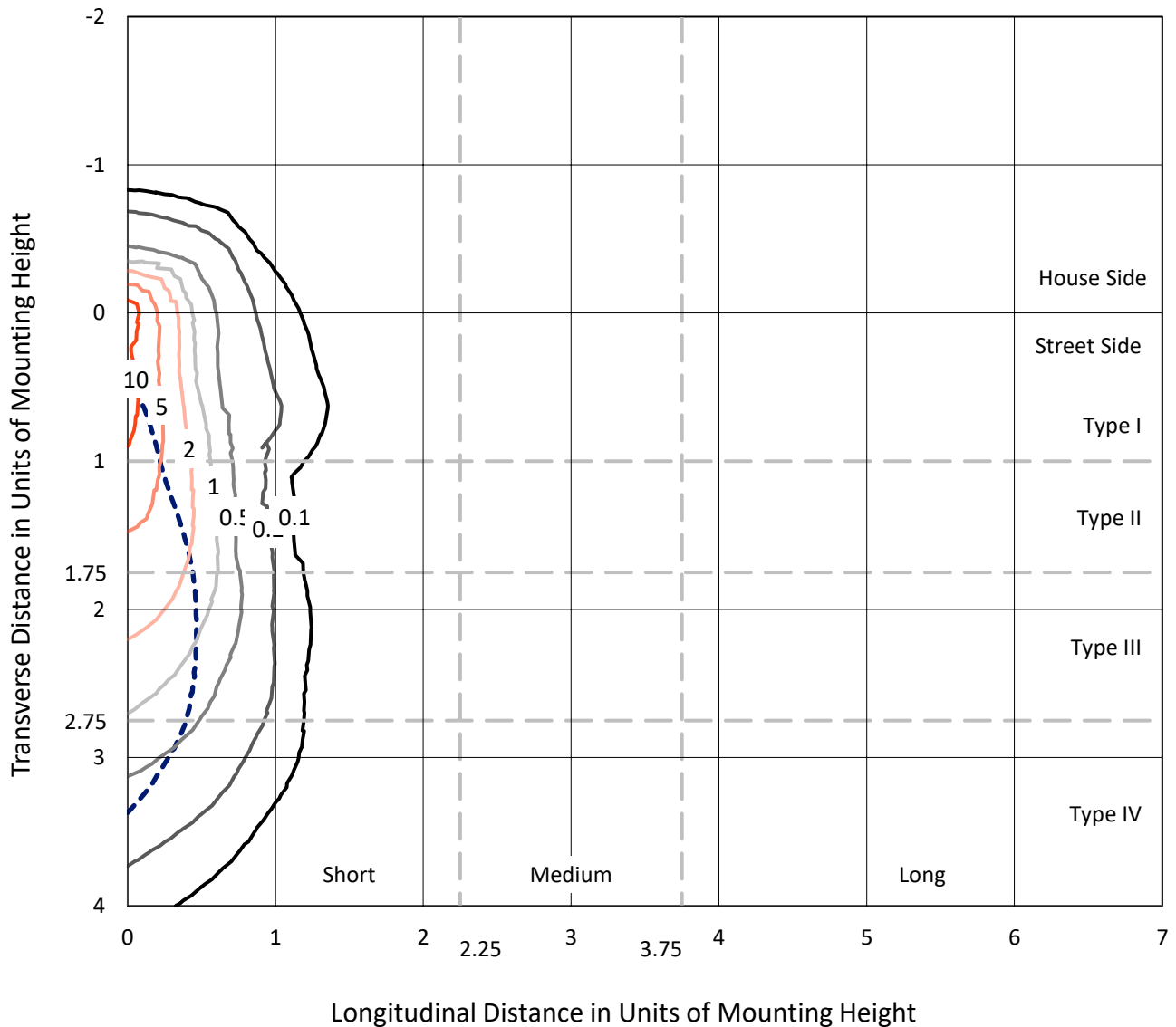
Lumens per Lamp: N/A
Luminaire Lumens: 8377.6 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 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

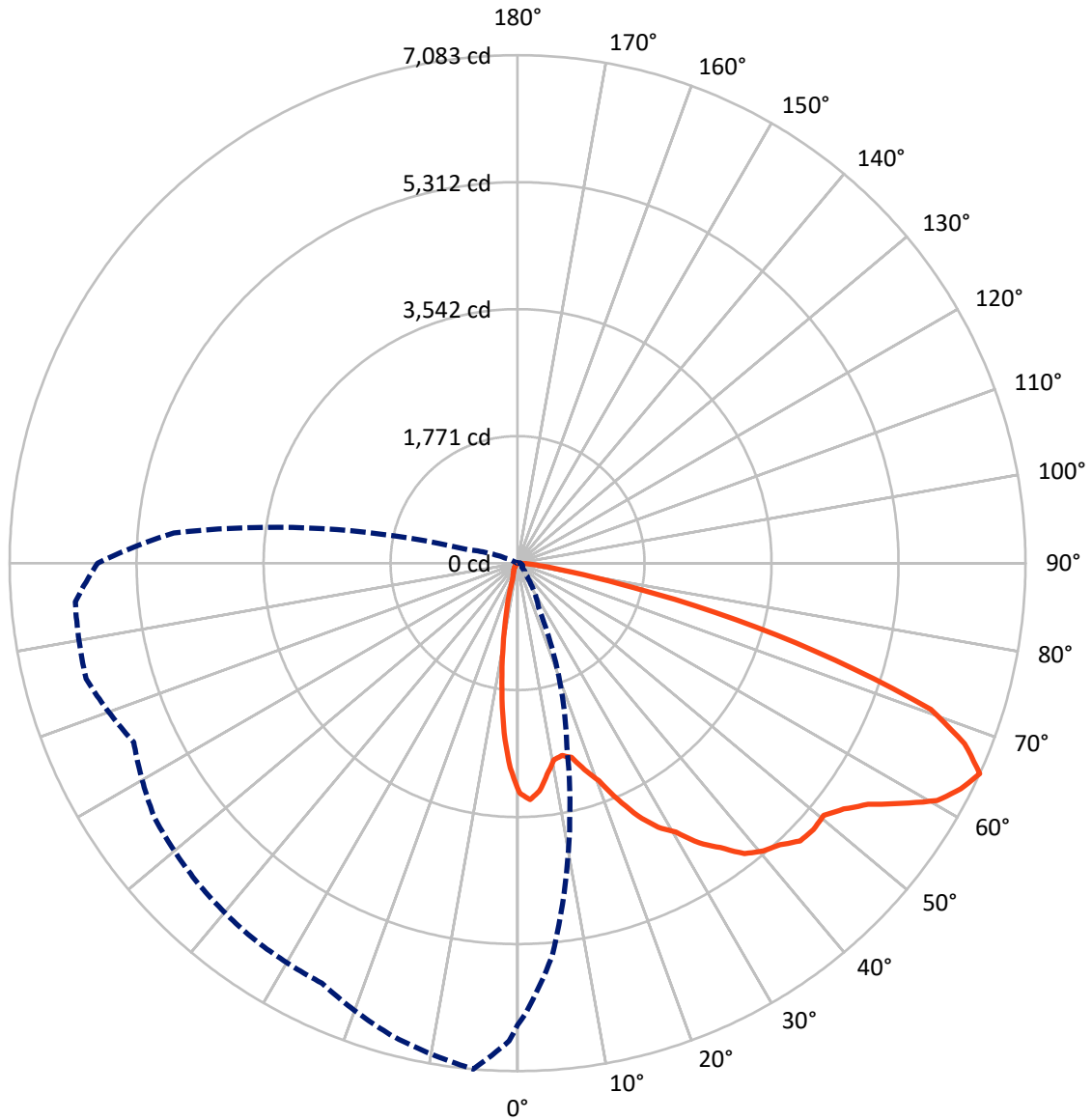
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 14.2 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	1087.7	0.0	1087.7
	% Fixture	13.0	0.0	13.0
Street Side	Lumens	7289.8	0.0	7289.8
	% Fixture	87.0	0.0	87.0
Total	Lumens	8377.6	0.0	8377.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.6	2.9
10°-20°	469.8	5.6
20°-30°	654.3	7.8
30°-40°	929.7	11.1
40°-50°	1289.2	15.4
50°-60°	1756.6	21.0
60°-70°	1931.2	23.1
70°-80°	949.2	11.3
80°-90°	155.0	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°	8377.6	100.0
0°-180°	8377.6	100.0



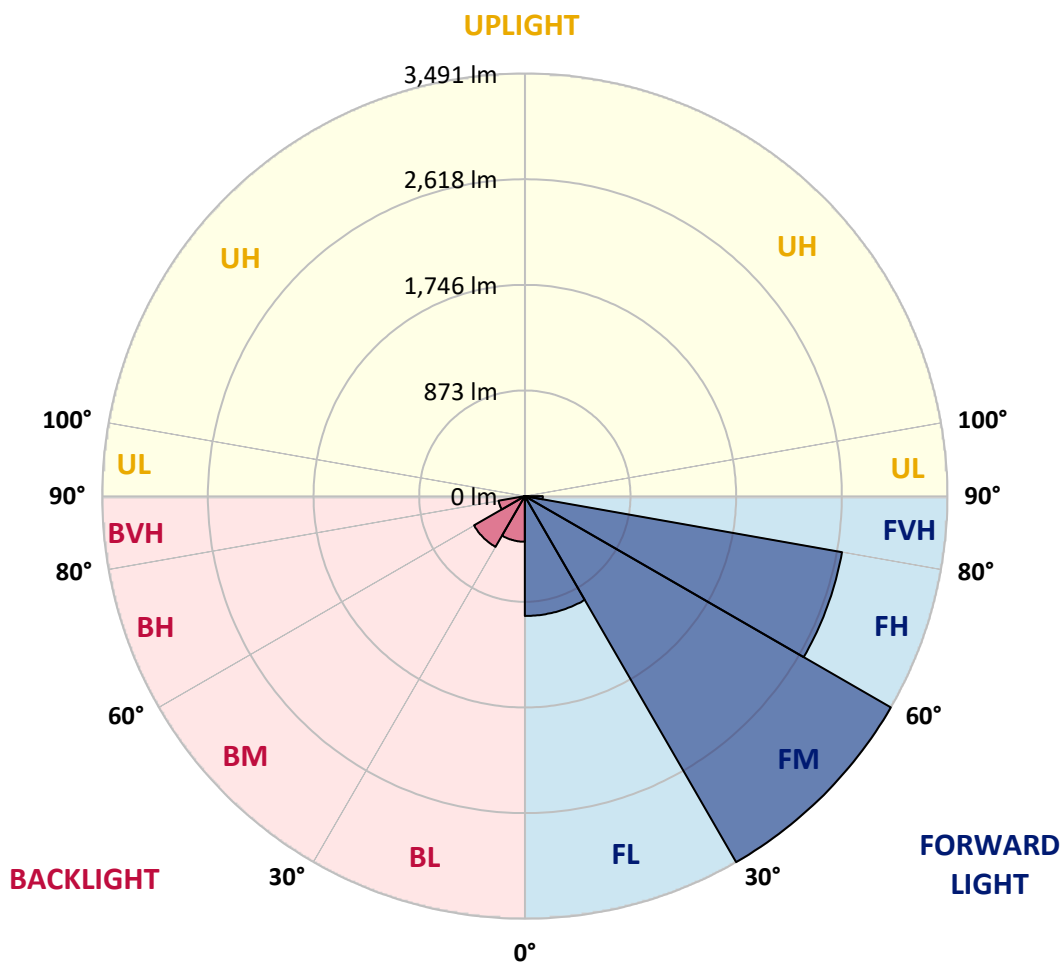
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	990.1	11.8			
FM (30°-60°)	3491.2	41.7			
FH (60°-80°)	2660.6	31.8			G2/5000
FVH (80°-90°)	148.0	1.8			G2/225
BL (0°-30°)	376.6	4.5	B1/500		
BM (30°-60°)	484.3	5.8	B1/1000		
BH (60°-80°)	219.8	2.6	B1/500		G1/500
BVH (80°-90°)	7.0	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°	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7
2.5°	3268.2	3306.6	3270.5	3144.0	3121.4	3060.4	2967.8	2961.1	2863.9	2875.2	2823.3
5°	3071.7	3110.1	3033.3	2866.2	2710.4	2586.1	2511.6	2378.3	2349.0	2283.5	2283.5
7.5°	2870.7	2868.5	2737.5	2597.4	2364.8	2136.7	2032.8	1840.8	1727.9	1666.9	1608.1
10°	2703.6	2667.4	2586.1	2297.0	2044.1	1806.9	1678.2	1551.7	1434.2	1332.6	1231.0
12.5°	2586.1	2608.7	2480.0	2166.0	1838.5	1673.6	1535.9	1402.6	1262.6	1147.4	1034.5
15°	2647.1	2611.0	2459.6	2136.7	1804.6	1578.8	1395.8	1233.2	1077.4	926.0	840.2
17.5°	2836.8	2744.2	2565.8	2136.7	1734.6	1434.2	1212.9	1020.9	853.8	718.2	612.1
20°	3092.1	2985.9	2793.9	2215.7	1682.7	1328.1	1025.4	783.7	609.8	483.3	402.0
22.5°	3354.1	3270.5	2981.4	2247.3	1621.7	1185.8	808.6	566.9	406.6	325.2	284.6
25°	3668.0	3550.6	3234.4	2373.8	1531.3	1048.0	636.9	395.3	302.7	259.7	234.9
27.5°	3918.7	3898.4	3471.5	2450.6	1463.6	935.1	503.7	313.9	250.7	219.1	203.3
30°	4234.9	4124.3	3760.6	2604.2	1386.8	806.3	420.1	282.3	230.4	196.5	185.2
32.5°	4424.7	4372.7	3911.9	2690.0	1301.0	700.2	361.4	248.4	210.1	185.2	173.9
35°	4700.2	4596.3	4128.8	2744.2	1255.8	639.2	325.2	225.9	176.2	151.3	137.8
37.5°	5007.4	4969.0	4388.5	2742.0	1190.3	603.1	300.4	210.1	167.1	140.0	124.2
40°	5321.3	5165.5	4546.6	2805.2	1156.4	576.0	282.3	201.0	158.1	133.3	112.9
42.5°	5556.2	5377.8	4729.6	2782.6	1115.8	528.5	275.6	187.5	151.3	122.0	103.9
45°	5619.5	5556.2	4894.4	2775.9	1086.4	490.1	264.3	185.2	146.8	115.2	97.1
47.5°	5741.4	5698.5	5097.7	2787.1	1063.8	460.8	237.2	189.7	140.0	108.4	92.6
50°	5795.6	5718.8	5262.6	2814.3	1011.9	424.6	212.3	198.8	137.8	106.2	88.1
52.5°	6019.2	5951.5	5488.5	2891.0	969.0	377.2	187.5	189.7	142.3	99.4	83.6
55°	6238.3	6161.5	5836.3	3067.2	908.0	338.8	160.4	167.1	135.5	90.3	74.5
57.5°	6538.7	6412.2	6068.9	3139.5	853.8	286.8	142.3	137.8	126.5	81.3	65.5
60°	6583.9	6635.8	6035.1	3094.3	797.3	253.0	124.2	106.2	135.5	72.3	56.5
62.5°	6735.2	6518.4	5877.0	2990.4	756.6	232.6	110.7	88.1	117.4	63.2	47.4
65°	6443.9	6283.5	5506.5	2656.1	704.7	234.9	97.1	72.3	74.5	51.9	38.4
67.5°	6017.0	5890.5	4892.2	2292.5	652.7	230.4	85.8	63.2	56.5	45.2	33.9
70°	5280.7	5007.4	4155.9	1861.1	576.0	214.6	72.3	56.5	47.4	36.1	24.8
72.5°	3841.9	3731.3	2981.4	1438.7	517.2	194.2	67.8	47.4	40.7	27.1	20.3
75°	2586.1	2403.2	1881.4	944.1	415.6	169.4	56.5	42.9	31.6	20.3	15.8
77.5°	1366.5	1291.9	1066.1	449.5	230.4	79.1	31.6	24.8	18.1	15.8	9.0
80°	591.8	526.3	460.8	182.9	81.3	36.1	20.3	13.6	11.3	9.0	4.5
82.5°	302.7	289.1	239.4	79.1	47.4	27.1	11.3	9.0	6.8	4.5	2.3
85°	149.1	153.6	126.5	24.8	27.1	15.8	2.3	2.3	0.0	0.0	0.0
87.5°	11.3	11.3	9.0	4.5	6.8	2.3	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°	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7
2.5°	2803.0	2834.6	2780.4	2814.3	2798.4	2805.2	2812.0	2793.9	2798.4	2861.7	2863.9
5°	2245.1	2306.1	2283.5	2315.1	2369.3	2342.2	2367.0	2362.5	2367.0	2376.1	2416.7
7.5°	1601.4	1583.3	1626.2	1709.8	1806.9	1865.6	1836.3	1820.5	1811.4	1788.8	1815.9
10°	1208.4	1199.3	1188.0	1212.9	1276.1	1341.6	1377.8	1316.8	1282.9	1240.0	1224.2
12.5°	1002.8	946.4	914.7	876.3	894.4	953.1	955.4	896.7	842.5	819.9	844.7
15°	790.5	752.1	695.7	641.5	614.3	659.5	621.1	564.7	494.6	485.6	483.3
17.5°	564.7	542.1	501.4	478.8	447.2	435.9	395.3	309.4	259.7	246.2	250.7
20°	384.0	365.9	363.6	343.3	329.8	320.7	255.2	198.8	182.9	185.2	187.5
22.5°	284.6	275.6	264.3	262.0	250.7	239.4	187.5	167.1	155.8	155.8	162.6
25°	232.6	228.1	216.8	212.3	207.8	192.0	158.1	142.3	137.8	133.3	140.0
27.5°	198.8	196.5	189.7	182.9	178.4	162.6	137.8	124.2	119.7	119.7	119.7
30°	178.4	178.4	169.4	155.8	155.8	137.8	117.4	108.4	103.9	103.9	101.6
32.5°	167.1	162.6	151.3	142.3	135.5	117.4	103.9	94.9	88.1	88.1	90.3
35°	135.5	135.5	133.3	126.5	117.4	99.4	88.1	79.1	74.5	72.3	74.5
37.5°	119.7	112.9	103.9	106.2	101.6	85.8	74.5	67.8	61.0	61.0	61.0
40°	108.4	101.6	92.6	85.8	83.6	76.8	65.5	54.2	47.4	45.2	45.2
42.5°	97.1	92.6	79.1	67.8	65.5	65.5	49.7	40.7	33.9	33.9	33.9
45°	90.3	83.6	72.3	58.7	47.4	49.7	40.7	29.4	24.8	22.6	22.6
47.5°	85.8	79.1	63.2	49.7	36.1	36.1	29.4	20.3	15.8	13.6	13.6
50°	79.1	72.3	56.5	40.7	27.1	22.6	18.1	11.3	6.8	4.5	4.5
52.5°	74.5	67.8	49.7	33.9	22.6	15.8	11.3	2.3	0.0	0.0	0.0
55°	67.8	58.7	42.9	27.1	18.1	9.0	2.3	0.0	0.0	0.0	0.0
57.5°	58.7	51.9	33.9	20.3	11.3	2.3	0.0	0.0	0.0	0.0	0.0
60°	49.7	42.9	27.1	15.8	4.5	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	40.7	36.1	20.3	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	33.9	27.1	15.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	29.4	22.6	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	22.6	15.8	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	15.8	11.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	11.3	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	6.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	2.3	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°	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7
2.5°	2873.0	2940.7	3004.0	3022.0	3071.7	3209.5	3209.5	3275.0	3392.5	3435.4	3444.4
5°	2423.5	2495.8	2509.3	2649.4	2714.9	2854.9	2947.5	3168.9	3302.1	3385.7	3437.6
7.5°	1843.0	1867.9	1919.8	2050.8	2179.6	2349.0	2525.1	2807.5	3042.4	3137.2	3313.4
10°	1267.1	1341.6	1454.6	1572.0	1773.0	1960.5	2188.6	2455.1	2744.2	2861.7	3013.0
12.5°	853.8	957.7	1138.3	1305.5	1490.7	1680.4	1897.2	2254.1	2581.6	2744.2	2895.6
15°	499.2	625.6	781.5	1052.5	1298.7	1511.0	1727.9	2089.2	2486.7	2696.8	2882.0
17.5°	253.0	291.4	420.1	655.0	980.2	1328.1	1651.1	2111.8	2559.0	2816.5	2970.1
20°	189.7	201.0	237.2	347.8	670.8	1097.7	1578.8	2145.7	2760.0	3074.0	3157.6
22.5°	164.9	173.9	189.7	225.9	377.2	840.2	1477.1	2229.3	3033.3	3329.2	3505.4
25°	140.0	149.1	162.6	185.2	241.7	571.4	1352.9	2317.4	3277.3	3649.9	3814.8
27.5°	122.0	128.7	142.3	160.4	196.5	363.6	1138.3	2434.8	3649.9	4038.4	4081.3
30°	103.9	110.7	122.0	142.3	167.1	257.5	835.7	2450.6	3855.5	4207.8	4327.5
32.5°	90.3	92.6	106.2	124.2	140.0	203.3	587.2	2466.4	4006.8	4426.9	4451.8
35°	74.5	79.1	92.6	103.9	122.0	160.4	444.9	2387.4	4203.3	4652.8	4646.0
37.5°	61.0	67.8	76.8	85.8	99.4	135.5	354.6	2240.6	4449.5	5002.9	4790.6
40°	47.4	54.2	63.2	74.5	83.6	122.0	266.5	2019.2	4707.0	5174.5	4948.7
42.5°	33.9	38.4	47.4	58.7	74.5	101.6	192.0	1757.2	4808.6	5375.5	5138.4
45°	24.8	29.4	36.1	49.7	76.8	81.3	133.3	1517.8	4917.0	5463.6	5095.5
47.5°	13.6	18.1	27.1	42.9	67.8	61.0	94.9	1303.2	5041.3	5542.7	5129.3
50°	4.5	6.8	15.8	45.2	54.2	47.4	74.5	1188.0	5163.2	5558.5	5197.1
52.5°	0.0	0.0	9.0	47.4	40.7	36.1	65.5	1142.9	5131.6	5608.2	5154.2
55°	0.0	0.0	2.3	20.3	22.6	27.1	54.2	1140.6	5355.2	5624.0	5389.1
57.5°	0.0	0.0	0.0	6.8	13.6	22.6	47.4	1068.3	5497.5	6017.0	5705.3
60°	0.0	0.0	0.0	2.3	9.0	15.8	36.1	1005.1	5642.1	6193.2	6044.1
62.5°	0.0	0.0	0.0	0.0	2.3	6.8	24.8	908.0	5350.7	6179.6	6371.6
65°	0.0	0.0	0.0	0.0	0.0	0.0	15.8	718.2	4813.1	5856.6	6190.9
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	9.0	496.9	4214.6	5450.1	5858.9
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	300.4	3401.5	4779.3	4969.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	128.7	2428.0	3794.5	4076.8
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.9	1502.0	2773.6	3121.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3	973.5	2100.5	2369.3
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	519.5	1316.8	1531.3
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	225.9	799.6	921.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.3	485.6	553.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.5	99.4
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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7	3202.7
2.5°	3448.9	3514.4	3539.3	3500.9	3505.4	3426.3	3415.0	3304.4	3259.2	3268.2
5°	3607.0	3701.9	3753.8	3710.9	3613.8	3462.5	3324.7	3193.7	3112.4	3071.7
7.5°	3570.9	3677.0	3742.5	3783.2	3672.5	3428.6	3218.5	2972.4	2868.5	2870.7
10°	3372.1	3593.5	3726.7	3674.8	3622.8	3378.9	3053.7	2787.1	2694.5	2703.6
12.5°	3211.8	3458.0	3537.0	3577.7	3471.5	3277.3	3058.2	2753.3	2649.4	2586.1
15°	3112.4	3295.3	3299.9	3363.1	3320.2	3320.2	3105.6	2807.5	2717.1	2647.1
17.5°	3112.4	3153.0	3148.5	3171.1	3243.4	3329.2	3225.3	3026.6	2848.1	2836.8
20°	3182.4	3055.9	3026.6	3035.6	3096.6	3351.8	3489.6	3241.1	3128.2	3092.1
22.5°	3345.0	3067.2	2888.8	2857.2	3044.6	3349.5	3659.0	3579.9	3383.4	3354.1
25°	3568.6	3046.9	2852.6	2812.0	2954.3	3430.9	3891.6	3907.4	3729.0	3668.0
27.5°	3780.9	3137.2	2848.1	2839.1	3026.6	3412.8	4052.0	4169.4	3968.4	3918.7
30°	3853.2	3227.6	2931.7	2812.0	3053.7	3478.3	4047.5	4354.6	4223.6	4234.9
32.5°	3939.0	3317.9	2940.7	2893.3	3168.9	3584.4	4176.2	4652.8	4557.9	4424.7
35°	4065.5	3439.9	3026.6	2983.6	3250.2	3679.3	4203.3	4871.9	4856.1	4700.2
37.5°	4173.9	3559.6	3205.0	3211.8	3498.6	3832.9	4323.0	5140.6	5113.5	5007.4
40°	4250.7	3726.7	3482.8	3500.9	3715.4	4004.5	4535.3	5276.2	5477.2	5321.3
42.5°	4262.0	3875.8	3801.3	3945.8	4146.8	4271.1	4621.2	5368.8	5657.9	5556.2
45°	4304.9	4113.0	4320.8	4426.9	4591.8	4506.0	4616.6	5526.9	5671.4	5619.5
47.5°	4472.1	4544.4	4806.4	5129.3	5188.1	4905.7	4725.1	5551.7	5748.2	5741.4
50°	4646.0	5007.4	5375.5	5590.1	5664.6	5181.3	4826.7	5531.4	5849.8	5795.6
52.5°	4840.2	5409.4	5940.2	6204.5	6163.8	5486.2	4941.9	5696.3	6037.3	6019.2
55°	4962.2	5590.1	6303.8	6672.0	6640.4	5827.3	5307.8	5933.4	6283.5	6238.3
57.5°	5285.2	5883.7	6665.2	6836.9	6920.4	6274.5	5563.0	6321.9	6489.0	6538.7
60°	5551.7	6075.7	6760.1	7008.5	7037.9	6541.0	6010.2	6721.7	6751.0	6583.9
62.5°	5942.5	6150.2	6559.1	6782.7	6934.0	6692.3	6412.2	6936.2	6746.5	6735.2
65°	6229.3	5906.3	6184.1	6308.3	6405.5	6461.9	6816.5	7083.1	6663.0	6443.9
67.5°	6068.9	5445.6	5393.6	5400.4	5429.7	5770.8	6681.0	6723.9	6197.7	6017.0
70°	5341.7	4467.6	4397.5	4451.8	4304.9	4716.0	6132.2	6111.8	5468.1	5280.7
72.5°	4320.8	3256.9	3137.2	3211.8	3245.6	3681.6	5158.7	4634.7	3988.7	3841.9
75°	3433.1	2387.4	2014.7	2195.4	2310.6	2681.0	4029.4	3148.5	2784.9	2586.1
77.5°	2696.8	1806.9	1567.5	1495.2	1601.4	1949.2	2931.7	1653.3	1459.1	1366.5
80°	1709.8	1328.1	1441.0	1337.1	1382.3	1391.3	1526.8	752.1	598.5	591.8
82.5°	1029.9	908.0	1079.6	594.0	1081.9	966.7	634.7	341.1	302.7	302.7
85°	729.5	562.4	372.7	241.7	481.1	530.8	246.2	176.2	153.6	149.1
87.5°	365.9	173.9	83.6	54.2	61.0	99.4	29.4	13.6	13.6	11.3
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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