

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: P677348

Luminaire Tested: **CCW-SA-1A-840-U-SLL-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677348
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1A-840-U-SLL-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @350mA w/
SLL distribution lens and House Side Shield
Light Source: (16) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

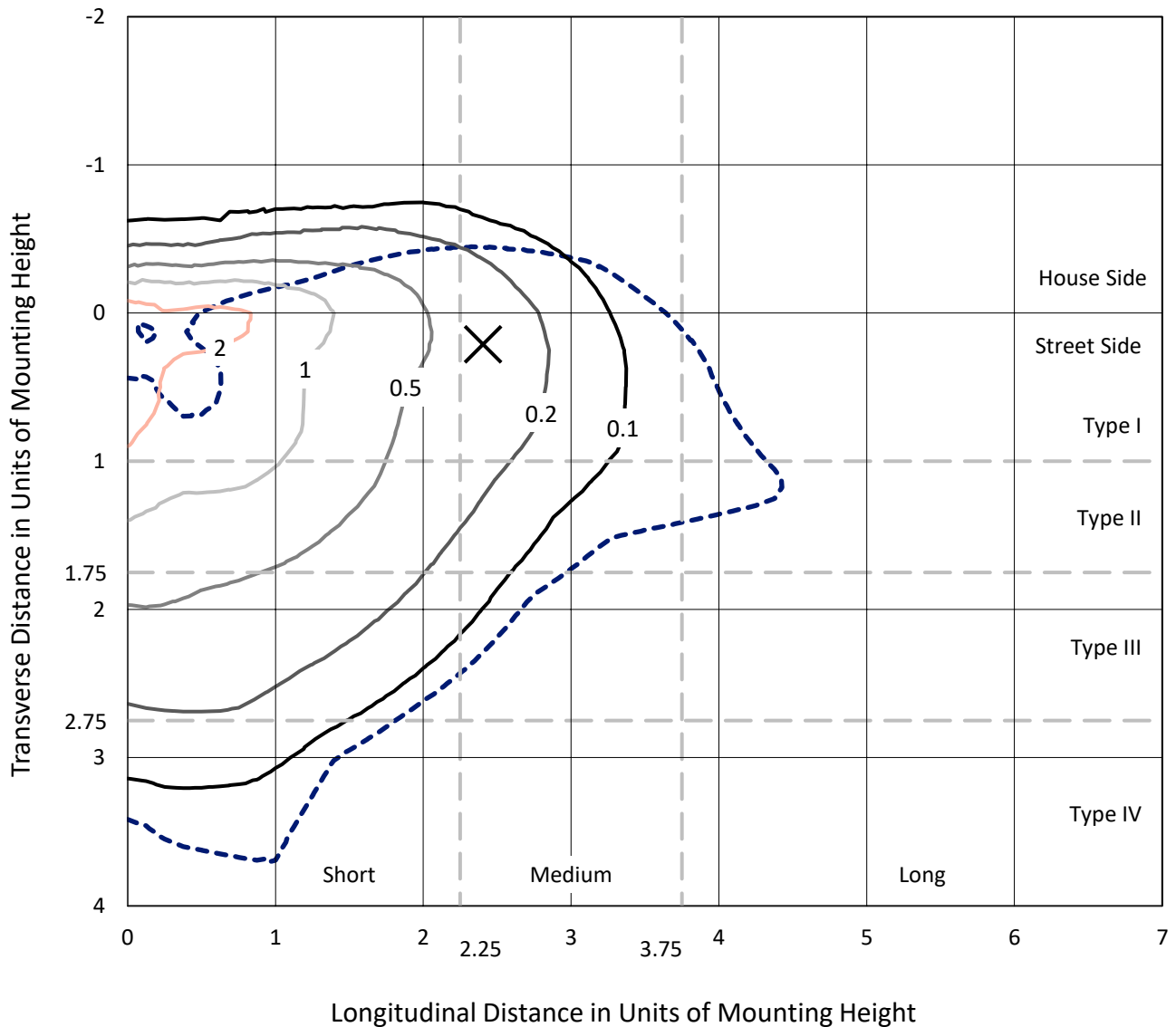
Lumens per Lamp: N/A
Luminaire Lumens: 1692.4 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B0 - U0 - G1

Input Watts (W): 18
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

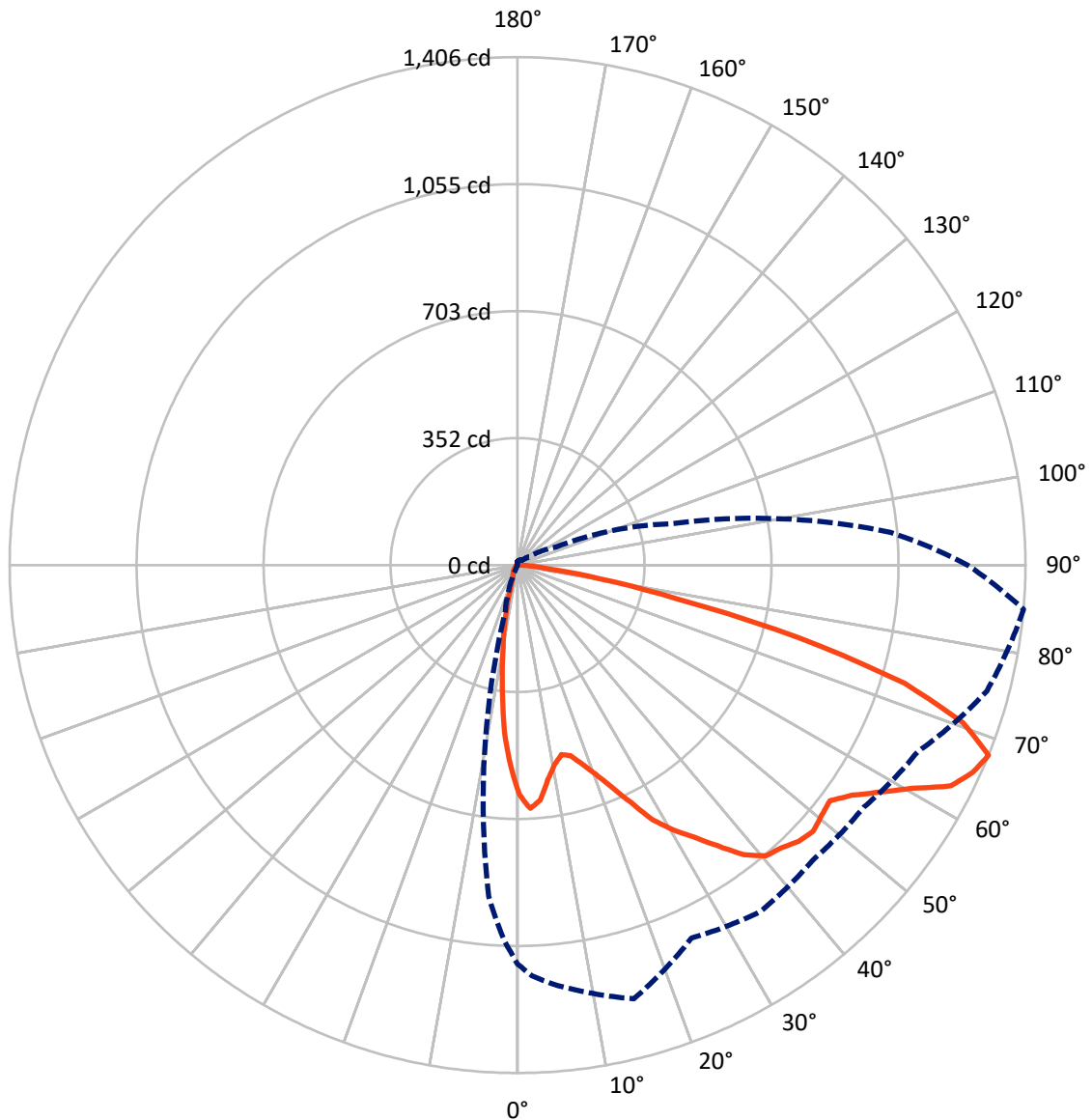
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.2 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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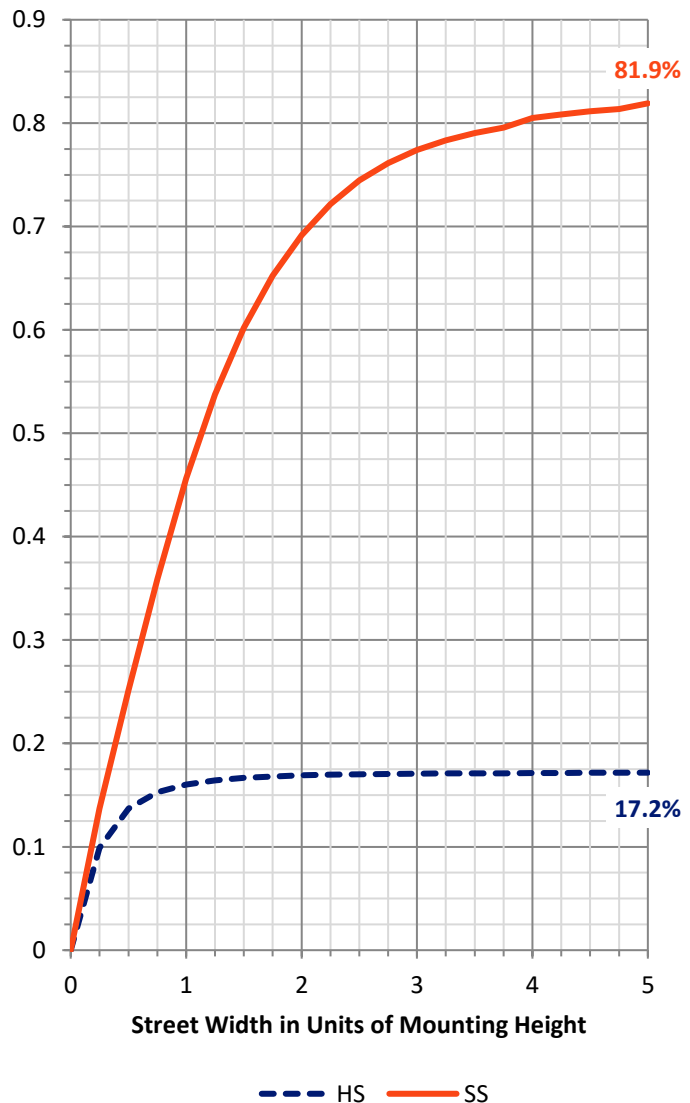
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	293.9	0.0	293.9
	% Fixture	17.4	0.0	17.4
Street Side	Lumens	1398.5	0.0	1398.5
	% Fixture	82.6	0.0	82.6
Total	Lumens	1692.4	0.0	1692.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.3	2.9
10°-20°	94.8	5.6
20°-30°	131.2	7.8
30°-40°	185.4	11.0
40°-50°	252.4	14.9
50°-60°	334.3	19.8
60°-70°	388.2	22.9
70°-80°	219.8	13.0
80°-90°	38.0	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°	1692.4	100.0
0°-180°	1692.4	100.0



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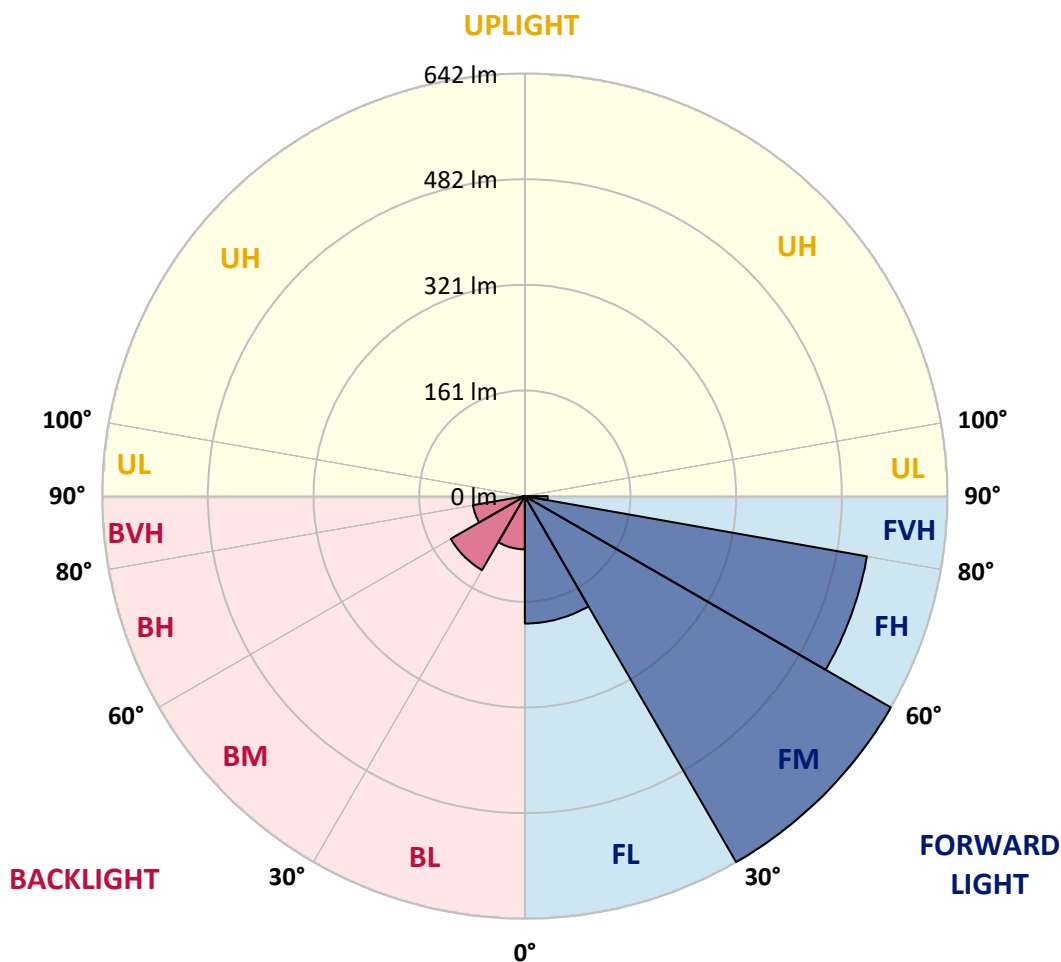
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	193.5	11.4			
FM (30°-60°)	642.3	38.0			
FH (60°-80°)	527.9	31.2			G0/660
FVH (80°-90°)	34.8	2.1			G1/100
BL (0°-30°)	80.8	4.8	B0/110		
BM (30°-60°)	129.8	7.7	B0/220		
BH (60°-80°)	80.0	4.7	B0/110		G0/110
BVH (80°-90°)	3.2	0.2			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3
2.5°	661.2	675.2	675.6	682.0	688.3	688.3	703.2	699.6	686.5	684.2	674.7
5°	666.1	671.1	674.7	706.8	733.9	731.2	739.4	733.9	708.6	676.1	653.9
7.5°	623.2	628.6	643.1	697.8	734.4	746.6	762.0	728.1	701.4	642.6	600.2
10°	566.3	576.7	603.3	665.7	710.9	749.8	749.8	722.6	671.1	613.7	561.7
12.5°	534.6	555.4	569.9	633.2	691.9	718.6	717.7	703.2	669.8	597.5	538.7
15°	540.1	545.9	576.7	625.9	664.8	663.4	679.7	675.2	651.7	611.9	547.3
17.5°	564.9	573.9	600.6	625.9	644.5	639.0	638.6	660.3	661.6	636.3	579.4
20°	605.6	632.2	644.9	652.6	630.0	606.9	604.2	634.5	658.0	667.5	617.8
22.5°	670.7	688.3	714.0	674.7	616.0	587.1	581.6	615.1	662.5	704.6	667.5
25°	734.4	747.9	772.8	722.2	631.8	583.0	573.5	602.4	679.7	756.1	727.6
27.5°	801.7	813.5	816.2	757.0	640.4	574.9	563.6	602.4	694.2	783.2	799.5
30°	842.8	856.9	859.6	787.7	654.4	581.6	576.2	605.1	704.1	806.2	851.0
32.5°	888.9	892.6	890.3	793.1	669.8	601.5	578.9	623.2	715.4	833.8	898.0
35°	944.1	950.4	927.4	818.0	704.1	614.2	606.0	645.4	734.8	846.5	954.9
37.5°	986.1	1006.0	954.0	827.5	710.9	640.8	642.2	691.5	748.4	861.8	1017.7
40°	1065.2	1031.8	999.2	860.0	736.6	686.0	678.8	738.9	794.0	871.8	1058.9
42.5°	1108.6	1091.0	1016.8	863.2	776.4	748.4	750.2	792.7	818.0	899.8	1070.2
45°	1119.4	1100.9	1040.8	865.4	815.7	822.1	853.2	861.4	853.2	918.3	1091.4
47.5°	1147.0	1106.8	1038.1	895.7	879.5	903.9	943.6	961.3	901.1	911.5	1101.4
50°	1141.6	1118.5	1032.2	908.4	957.2	1021.8	1048.5	1041.2	954.5	897.5	1090.5
52.5°	1119.0	1094.1	1050.3	942.7	1029.9	1108.1	1145.2	1127.1	1001.9	929.2	1083.3
55°	1152.0	1133.0	1073.8	989.3	1084.6	1184.1	1210.3	1196.7	1060.2	958.5	1124.4
57.5°	1187.7	1183.6	1137.5	1044.0	1149.3	1262.2	1262.2	1245.5	1110.8	1001.0	1185.4
60°	1239.2	1248.2	1184.5	1080.1	1171.4	1257.7	1323.2	1303.8	1161.9	1075.6	1254.6
62.5°	1222.5	1251.4	1245.1	1157.8	1196.7	1279.9	1315.6	1330.0	1225.2	1166.4	1346.7
65°	1168.7	1199.4	1244.6	1208.9	1177.7	1226.1	1244.2	1288.0	1256.8	1251.8	1384.7
67.5°	1104.5	1138.0	1166.0	1243.3	1139.3	1171.4	1155.6	1169.6	1222.5	1345.4	1406.4
70°	964.4	996.5	1040.8	1166.9	1037.6	1008.7	1004.6	997.9	1080.1	1312.0	1307.9
72.5°	793.1	808.0	881.3	948.6	767.8	762.4	768.7	761.0	856.4	1187.7	1120.3
75°	593.8	608.7	650.3	728.5	522.9	491.7	527.9	563.6	653.9	921.9	804.9
77.5°	446.5	465.5	491.7	545.0	383.7	334.9	339.9	373.7	472.7	738.5	451.0
80°	289.7	287.4	338.0	375.1	288.8	297.8	285.2	310.0	342.6	395.0	230.5
82.5°	167.2	169.5	190.7	215.1	201.1	230.0	165.9	277.0	244.5	160.9	85.9
85°	94.0	98.1	117.5	149.1	126.1	84.5	69.1	137.4	153.7	66.0	41.6
87.5°	9.5	8.1	15.8	56.5	34.3	14.0	20.8	33.0	37.1	24.9	12.2
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°	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3
2.5°	661.2	661.2	649.9	630.9	623.2	609.7	591.1	597.0	590.7	567.6	561.7
5°	634.1	612.4	588.9	559.9	543.2	508.9	498.0	478.6	481.8	462.3	463.2
7.5°	577.6	560.4	520.6	482.7	449.7	419.8	377.8	362.0	346.6	338.9	348.0
10°	544.6	512.5	458.3	408.5	364.7	338.0	310.0	288.3	268.4	253.5	250.4
12.5°	520.6	492.2	426.6	366.1	331.7	310.0	284.3	254.4	235.0	209.2	201.6
15°	513.4	478.6	409.4	349.3	315.9	280.2	250.8	221.4	196.1	169.0	159.5
17.5°	538.2	498.0	409.0	335.8	288.8	250.4	209.7	176.7	150.9	126.1	120.2
20°	580.3	518.8	422.1	327.6	263.0	211.5	165.4	132.4	103.5	87.2	83.2
22.5°	628.2	554.1	423.5	306.0	237.3	172.6	120.7	87.2	71.0	63.3	61.0
25°	686.9	610.6	439.7	288.3	207.0	131.1	85.9	66.9	57.4	52.9	52.0
27.5°	735.3	649.9	457.4	269.8	177.2	97.2	67.3	54.7	49.7	45.2	44.7
30°	785.5	695.1	462.3	258.5	151.4	80.0	57.8	48.4	42.9	40.7	40.2
32.5°	829.3	744.3	478.1	240.0	127.0	70.5	52.4	43.4	39.8	36.2	35.7
35°	885.8	772.8	485.8	230.0	118.0	63.7	47.9	39.8	34.3	32.1	31.2
37.5°	946.3	800.4	490.8	222.3	110.3	59.7	45.2	37.5	32.5	29.4	28.5
40°	1002.8	839.2	483.6	212.9	104.4	54.7	43.4	34.8	30.3	27.1	25.8
42.5°	1046.2	877.2	481.3	203.8	98.1	52.9	41.1	33.4	28.5	24.9	24.4
45°	1070.6	903.0	465.5	196.6	93.1	53.8	40.2	31.6	27.1	24.0	22.1
47.5°	1064.7	922.8	469.6	194.3	86.3	50.2	39.8	30.3	24.9	22.1	20.8
50°	1097.3	963.1	462.8	187.1	81.3	45.2	43.4	30.3	24.4	21.2	19.9
52.5°	1102.7	999.7	477.2	174.0	73.7	41.6	42.9	29.8	23.5	20.3	18.5
55°	1147.9	1042.1	505.3	166.8	67.3	36.2	39.3	28.9	21.2	18.5	17.6
57.5°	1209.4	1130.3	523.3	160.0	58.8	31.6	33.0	28.5	19.4	17.2	15.8
60°	1268.6	1165.5	524.7	147.8	50.6	28.5	25.8	28.5	18.1	15.4	14.0
62.5°	1312.9	1165.5	515.7	137.4	44.3	25.3	22.6	27.1	16.3	13.6	12.7
65°	1288.9	1134.3	492.2	128.8	40.2	22.1	19.4	20.8	14.5	11.8	10.8
67.5°	1246.0	1037.2	440.2	118.4	39.8	19.4	16.7	15.4	12.7	10.4	9.5
70°	1177.3	906.1	366.5	106.7	38.9	17.6	14.9	13.1	11.3	9.0	8.1
72.5°	948.6	748.4	301.0	99.9	38.0	15.4	12.7	11.3	9.5	7.7	6.8
75°	657.1	478.1	231.8	85.4	37.1	14.0	11.8	9.9	8.1	6.3	5.9
77.5°	394.1	319.5	149.6	64.2	24.4	11.3	9.9	7.7	6.8	5.4	5.0
80°	184.4	150.9	60.6	24.9	11.8	8.1	6.8	5.9	5.4	4.5	4.1
82.5°	72.3	63.7	29.4	14.5	9.5	6.3	5.4	5.0	4.5	3.6	3.2
85°	38.9	34.3	14.0	9.9	6.8	4.5	4.5	4.1	3.6	3.2	2.7
87.5°	8.6	6.3	5.9	5.9	5.0	3.6	3.6	3.2	2.7	2.3	1.8
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3
2.5°	558.6	565.4	554.5	561.3	551.8	559.0	559.9	553.2	555.0	564.0	568.1
5°	475.9	471.4	461.4	458.3	458.7	452.8	455.1	458.3	463.2	465.9	474.1
7.5°	343.0	353.4	353.0	360.6	361.1	360.2	353.9	340.3	344.8	341.2	345.7
10°	245.4	249.9	258.5	263.5	272.5	267.5	253.1	247.7	244.9	244.5	249.0
12.5°	196.1	185.3	184.4	186.2	190.7	184.8	177.6	171.3	174.4	180.8	185.7
15°	151.8	142.8	131.1	129.3	130.2	127.4	119.8	111.6	113.9	120.2	123.8
17.5°	116.6	106.2	98.1	92.6	90.8	81.3	70.0	63.3	61.5	61.0	64.2
20°	78.6	76.8	75.5	68.7	68.7	55.1	45.6	40.7	40.7	41.6	42.0
22.5°	58.8	56.5	56.9	55.6	52.0	41.1	36.2	34.8	34.8	35.7	35.7
25°	51.1	47.9	47.0	46.5	42.9	35.3	31.6	30.3	30.3	31.2	31.2
27.5°	43.4	42.5	41.1	39.3	36.2	30.3	28.0	26.7	27.1	27.6	27.1
30°	39.8	37.5	35.7	35.7	32.1	27.1	25.3	24.4	23.5	24.4	24.9
32.5°	35.3	33.9	33.0	31.6	27.6	24.0	22.1	21.2	20.8	20.8	21.2
35°	30.3	30.3	29.4	27.6	24.0	21.7	19.4	18.5	18.1	18.5	18.5
37.5°	27.1	25.8	26.2	24.4	21.2	19.0	16.7	15.8	15.8	15.4	15.8
40°	25.3	23.0	21.7	20.8	19.0	16.3	14.5	13.6	13.1	13.1	13.1
42.5°	22.6	20.8	18.1	17.6	17.2	14.0	11.8	11.3	10.8	10.4	10.4
45°	21.2	18.5	16.3	14.0	14.0	11.8	9.9	9.0	8.6	8.1	8.6
47.5°	19.4	16.7	14.0	11.8	11.3	9.5	7.7	6.8	6.3	6.3	6.3
50°	18.5	14.9	12.2	9.9	8.6	7.7	5.9	5.0	4.5	4.5	4.5
52.5°	17.2	14.0	10.8	8.6	6.8	5.9	4.5	3.6	3.2	3.2	3.2
55°	15.4	12.7	9.5	7.2	5.9	4.5	3.2	2.3	1.8	1.8	1.8
57.5°	14.5	11.3	8.1	6.3	4.5	3.2	1.8	1.4	1.4	0.9	1.4
60°	13.1	9.9	6.8	5.0	3.6	2.3	1.4	0.5	0.5	0.5	0.5
62.5°	11.3	8.6	5.9	4.1	2.7	1.4	0.5	0.0	0.0	0.0	0.0
65°	9.5	6.8	4.5	3.2	1.8	0.5	0.0	0.0	0.0	0.0	0.0
67.5°	8.1	5.9	3.6	2.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0
70°	7.2	5.0	2.7	1.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	5.9	4.1	2.3	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	5.0	3.2	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	4.1	2.3	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	3.2	1.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.4	0.5	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°	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3	636.3
2.5°	573.9	571.2	584.8	606.9	618.2	640.4	645.8	659.8	656.2	661.2
5°	475.0	480.4	500.3	532.8	544.6	576.7	606.9	637.2	656.7	666.1
7.5°	352.5	370.6	395.0	424.8	455.1	497.1	548.6	583.9	602.9	623.2
10°	262.6	282.0	310.0	339.4	388.7	435.7	487.2	531.0	547.3	566.3
12.5°	206.5	236.8	269.3	301.0	330.4	375.1	438.8	502.5	520.2	534.6
15°	143.7	180.8	227.3	268.4	309.6	348.4	414.4	491.7	515.7	540.1
17.5°	79.5	108.9	162.2	220.1	280.6	340.3	422.6	511.6	547.7	564.9
20°	46.1	57.8	95.8	164.5	244.5	322.7	426.6	549.1	597.0	605.6
22.5°	38.0	42.0	54.2	103.0	200.2	311.4	447.4	601.5	650.3	670.7
25°	32.5	35.7	42.0	61.9	151.4	287.4	460.5	667.0	712.2	734.4
27.5°	28.9	32.1	37.1	45.6	103.0	254.4	482.2	726.3	771.4	801.7
30°	25.3	28.0	33.0	38.9	71.4	217.4	500.7	769.6	833.4	842.8
32.5°	22.6	24.9	28.5	33.4	52.9	165.0	515.7	814.4	868.2	888.9
35°	19.4	22.1	24.4	28.5	40.2	124.3	506.6	849.2	919.2	944.1
37.5°	17.2	19.0	21.2	24.0	33.9	97.2	488.1	890.8	963.1	986.1
40°	14.5	15.8	18.5	21.2	30.7	75.0	466.8	940.9	1024.5	1065.2
42.5°	12.2	13.6	15.4	19.9	25.3	55.6	423.9	979.8	1074.2	1108.6
45°	9.5	11.3	14.0	19.9	20.3	41.1	379.6	1008.7	1102.3	1119.4
47.5°	7.2	9.0	13.6	17.2	16.3	28.5	327.2	1041.7	1131.2	1147.0
50°	5.4	7.2	15.4	14.9	13.6	21.7	294.2	1064.7	1133.0	1141.6
52.5°	3.6	5.4	12.7	11.3	11.3	19.0	285.2	1063.8	1137.5	1119.0
55°	2.7	4.1	7.2	8.1	9.9	16.7	277.0	1097.7	1138.9	1152.0
57.5°	1.8	3.2	5.0	6.3	8.6	14.5	260.3	1138.4	1180.9	1187.7
60°	0.9	2.3	3.6	5.0	7.2	12.7	236.8	1168.2	1232.0	1239.2
62.5°	0.5	1.4	2.7	4.1	5.9	9.9	212.4	1120.8	1209.8	1222.5
65°	0.0	0.9	1.8	2.7	3.6	7.2	172.6	1011.9	1122.1	1168.7
67.5°	0.0	0.0	0.9	1.8	2.3	5.4	130.2	920.6	1041.2	1104.5
70°	0.0	0.0	0.5	0.5	1.4	4.1	83.2	762.4	929.6	964.4
72.5°	0.0	0.0	0.0	0.0	0.5	2.7	48.4	566.3	728.5	793.1
75°	0.0	0.0	0.0	0.0	0.0	2.3	24.4	364.3	507.1	593.8
77.5°	0.0	0.0	0.0	0.0	0.0	1.8	13.1	235.0	373.7	446.5
80°	0.0	0.0	0.0	0.0	0.0	0.5	7.7	136.5	239.1	289.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.2	66.9	142.8	167.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	35.7	71.4	94.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	5.0	9.5
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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