

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: P677506

Luminaire Tested: **CCW-SA-1D-850-U-SLR-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677506
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1D-850-U-SLR-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/
SLR distribution lens and House Side Shield
Light Source: (16) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3497.2 lumens
Efficiency: N/A
Efficacy: 79.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

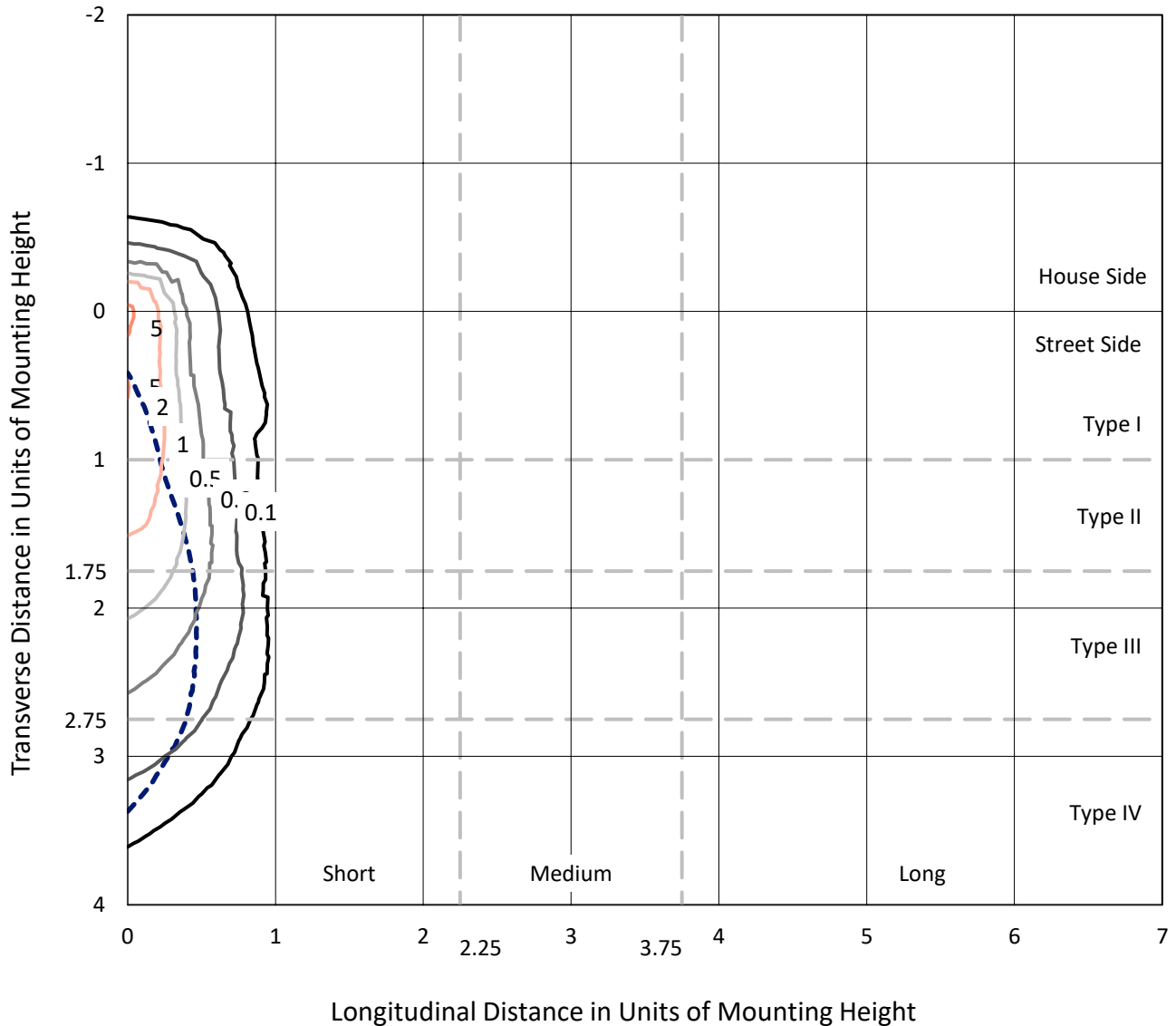
Input Watts (W): 44
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

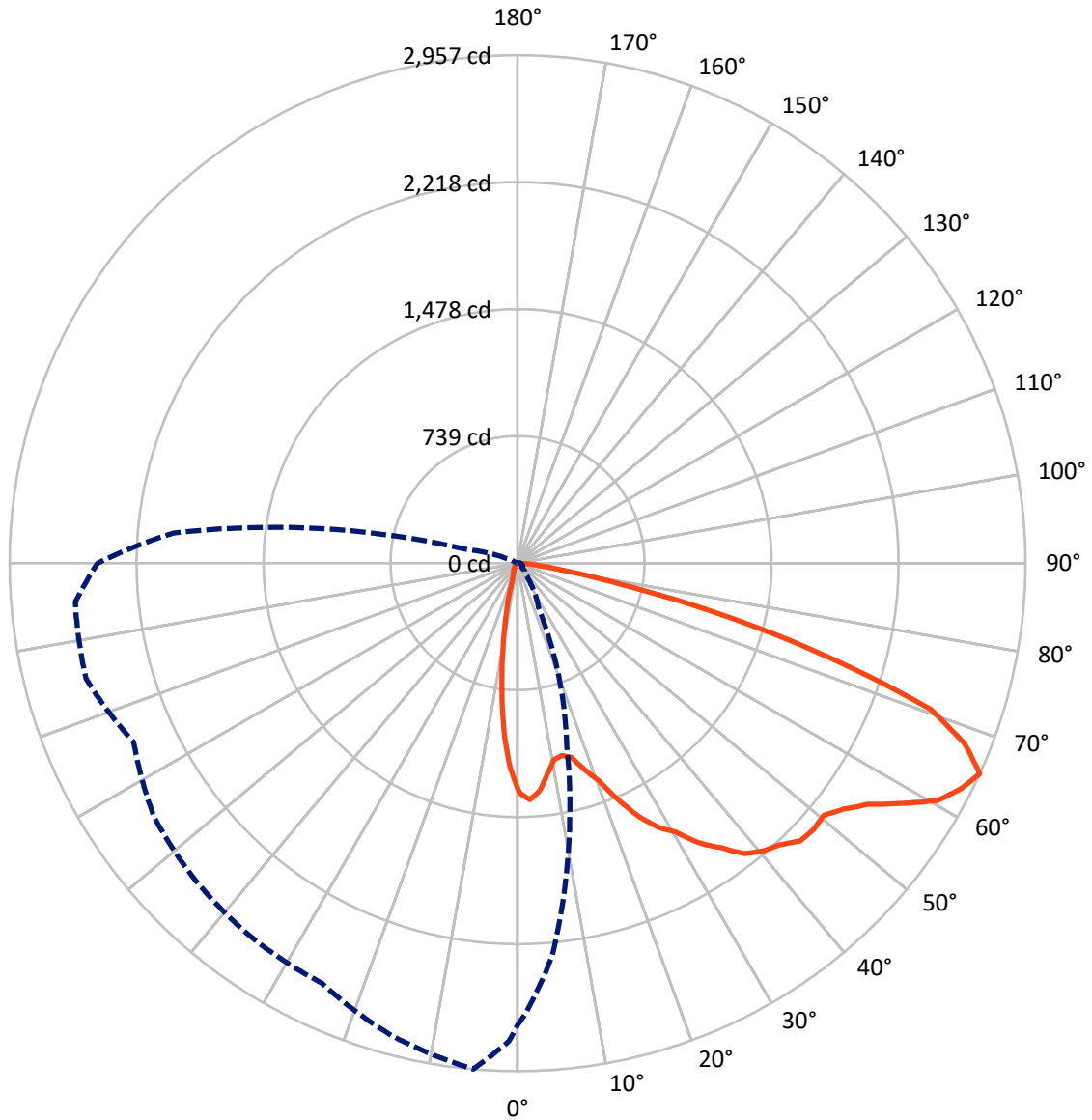
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.9 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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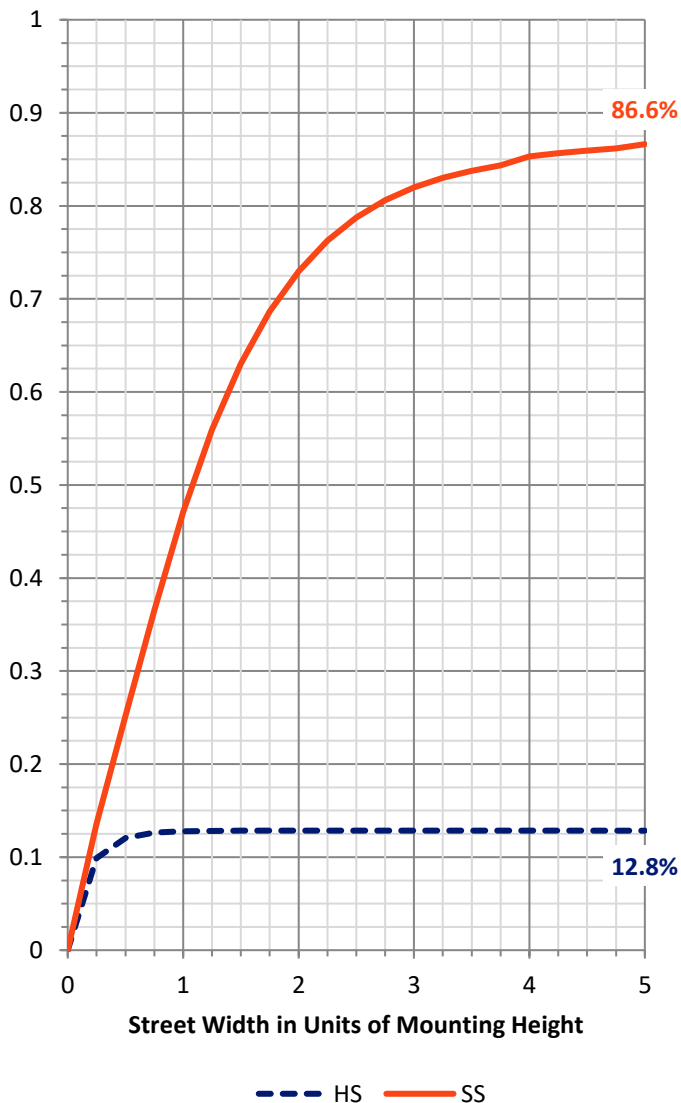
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	454.1	0.0	454.1
	% Fixture	13.0	0.0	13.0
Street Side	Lumens	3043.1	0.0	3043.1
	% Fixture	87.0	0.0	87.0
Total	Lumens	3497.2	0.0	3497.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.3	2.9
10°-20°	196.1	5.6
20°-30°	273.1	7.8
30°-40°	388.1	11.1
40°-50°	538.2	15.4
50°-60°	733.3	21.0
60°-70°	806.2	23.1
70°-80°	396.2	11.3
80°-90°	64.7	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°	3497.2	100.0
0°-180°	3497.2	100.0



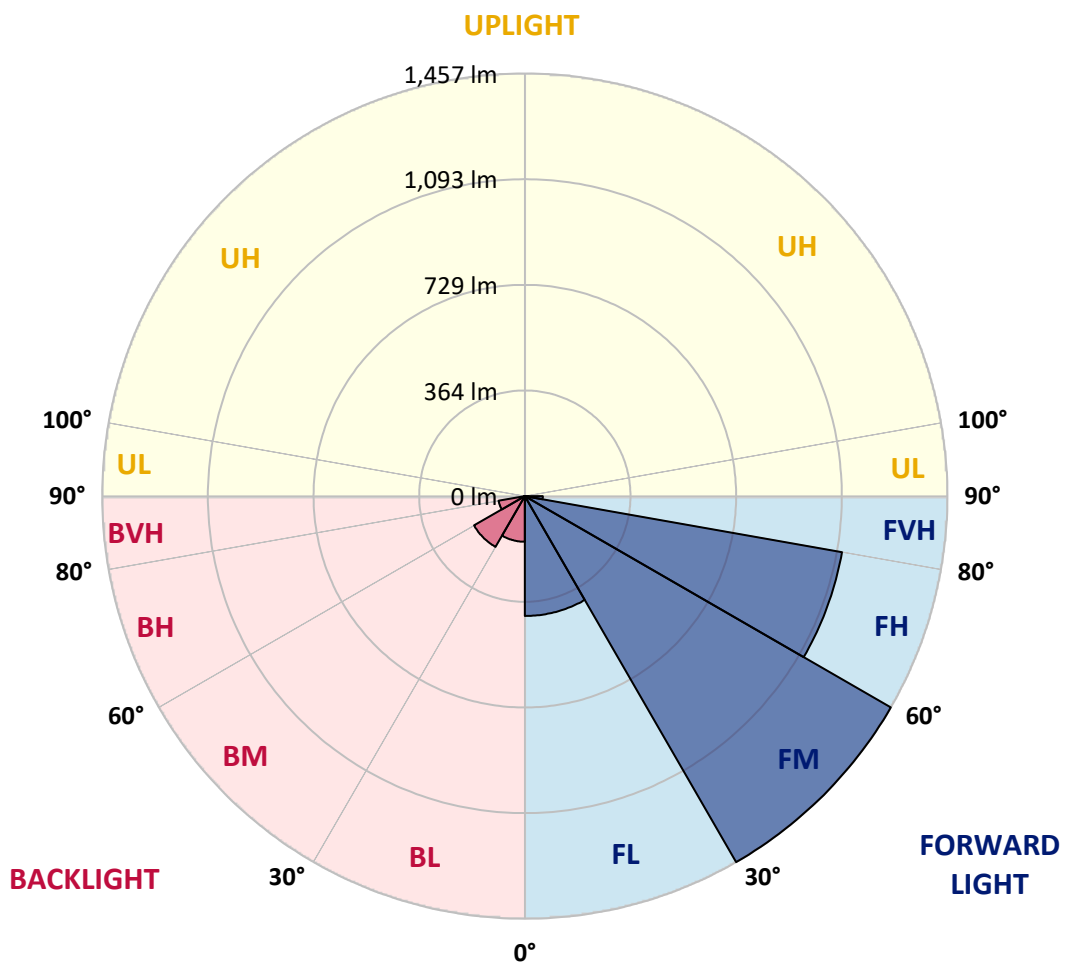
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	413.3	11.8			
FM (30°-60°)	1457.4	41.7			
FH (60°-80°)	1110.6	31.8			G1/1800
FVH (80°-90°)	61.8	1.8			G1/100
BL (0°-30°)	157.2	4.5	B1/500		
BM (30°-60°)	202.2	5.8	B0/220		
BH (60°-80°)	91.8	2.6	B0/110		G0/110
BVH (80°-90°)	2.9	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-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0
2.5°	1364.3	1380.3	1365.2	1312.4	1303.0	1277.6	1238.9	1236.1	1195.5	1200.2	1178.6
5°	1282.3	1298.3	1266.2	1196.5	1131.4	1079.6	1048.4	992.8	980.6	953.2	953.2
7.5°	1198.4	1197.4	1142.7	1084.3	987.2	891.9	848.6	768.4	721.3	695.8	671.3
10°	1128.6	1113.5	1079.6	958.9	853.3	754.3	700.5	647.7	598.7	556.3	513.9
12.5°	1079.6	1089.0	1035.2	904.2	767.5	698.6	641.1	585.5	527.1	479.0	431.8
15°	1105.0	1089.9	1026.8	891.9	753.3	659.0	582.7	514.8	449.7	386.6	350.7
17.5°	1184.2	1145.6	1071.1	891.9	724.1	598.7	506.3	426.2	356.4	299.8	255.5
20°	1290.8	1246.4	1166.3	924.9	702.4	554.4	428.1	327.2	254.6	201.8	167.8
22.5°	1400.1	1365.2	1244.6	938.1	677.0	495.0	337.5	236.7	169.7	135.8	118.8
25°	1531.2	1482.2	1350.2	990.9	639.3	437.5	265.9	165.0	126.3	108.4	98.1
27.5°	1635.8	1627.4	1449.2	1023.0	611.0	390.3	210.3	131.1	104.7	91.5	84.9
30°	1767.8	1721.6	1569.8	1087.1	578.9	336.6	175.4	117.9	96.2	82.0	77.3
32.5°	1847.0	1825.4	1633.0	1122.9	543.1	292.3	150.9	103.7	87.7	77.3	72.6
35°	1962.1	1918.7	1723.5	1145.6	524.2	266.8	135.8	94.3	73.5	63.2	57.5
37.5°	2090.3	2074.3	1832.0	1144.6	496.9	251.7	125.4	87.7	69.8	58.5	51.9
40°	2221.3	2156.3	1898.0	1171.0	482.7	240.4	117.9	83.9	66.0	55.6	47.1
42.5°	2319.4	2244.9	1974.3	1161.6	465.8	220.6	115.0	78.3	63.2	50.9	43.4
45°	2345.8	2319.4	2043.1	1158.8	453.5	204.6	110.3	77.3	61.3	48.1	40.5
47.5°	2396.7	2378.8	2128.0	1163.5	444.1	192.3	99.0	79.2	58.5	45.3	38.7
50°	2419.3	2387.3	2196.8	1174.8	422.4	177.3	88.6	83.0	57.5	44.3	36.8
52.5°	2512.7	2484.4	2291.1	1206.8	404.5	157.5	78.3	79.2	59.4	41.5	34.9
55°	2604.1	2572.1	2436.3	1280.4	379.0	141.4	66.9	69.8	56.6	37.7	31.1
57.5°	2729.5	2676.7	2533.4	1310.6	356.4	119.7	59.4	57.5	52.8	33.9	27.3
60°	2748.4	2770.1	2519.3	1291.7	332.8	105.6	51.9	44.3	56.6	30.2	23.6
62.5°	2811.6	2721.1	2453.3	1248.3	315.9	97.1	46.2	36.8	49.0	26.4	19.8
65°	2689.9	2623.0	2298.7	1108.8	294.2	98.1	40.5	30.2	31.1	21.7	16.0
67.5°	2511.7	2458.9	2042.2	957.0	272.5	96.2	35.8	26.4	23.6	18.9	14.1
70°	2204.4	2090.3	1734.8	776.9	240.4	89.6	30.2	23.6	19.8	15.1	10.4
72.5°	1603.8	1557.6	1244.6	600.6	215.9	81.1	28.3	19.8	17.0	11.3	8.5
75°	1079.6	1003.2	785.4	394.1	173.5	70.7	23.6	17.9	13.2	8.5	6.6
77.5°	570.4	539.3	445.0	187.6	96.2	33.0	13.2	10.4	7.5	6.6	3.8
80°	247.0	219.7	192.3	76.4	33.9	15.1	8.5	5.7	4.7	3.8	1.9
82.5°	126.3	120.7	99.9	33.0	19.8	11.3	4.7	3.8	2.8	1.9	0.9
85°	62.2	64.1	52.8	10.4	11.3	6.6	0.9	0.9	0.0	0.0	0.0
87.5°	4.7	4.7	3.8	1.9	2.8	0.9	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°	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0
2.5°	1170.1	1183.3	1160.6	1174.8	1168.2	1171.0	1173.8	1166.3	1168.2	1194.6	1195.5
5°	937.2	962.6	953.2	966.4	989.0	977.7	988.1	986.2	988.1	991.9	1008.8
7.5°	668.5	660.9	678.8	713.7	754.3	778.8	766.5	759.9	756.2	746.7	758.0
10°	504.4	500.7	495.9	506.3	532.7	560.1	575.1	549.7	535.5	517.6	511.0
12.5°	418.6	395.1	381.9	365.8	373.4	397.9	398.8	374.3	351.7	342.3	352.6
15°	330.0	314.0	290.4	267.8	256.5	275.3	259.3	235.7	206.5	202.7	201.8
17.5°	235.7	226.3	209.3	199.9	186.7	182.0	165.0	129.2	108.4	102.8	104.7
20°	160.3	152.7	151.8	143.3	137.7	133.9	106.5	83.0	76.4	77.3	78.3
22.5°	118.8	115.0	110.3	109.4	104.7	99.9	78.3	69.8	65.1	65.1	67.9
25°	97.1	95.2	90.5	88.6	86.7	80.1	66.0	59.4	57.5	55.6	58.5
27.5°	83.0	82.0	79.2	76.4	74.5	67.9	57.5	51.9	50.0	50.0	50.0
30°	74.5	74.5	70.7	65.1	65.1	57.5	49.0	45.3	43.4	43.4	42.4
32.5°	69.8	67.9	63.2	59.4	56.6	49.0	43.4	39.6	36.8	36.8	37.7
35°	56.6	56.6	55.6	52.8	49.0	41.5	36.8	33.0	31.1	30.2	31.1
37.5°	50.0	47.1	43.4	44.3	42.4	35.8	31.1	28.3	25.5	25.5	25.5
40°	45.3	42.4	38.7	35.8	34.9	32.1	27.3	22.6	19.8	18.9	18.9
42.5°	40.5	38.7	33.0	28.3	27.3	27.3	20.7	17.0	14.1	14.1	14.1
45°	37.7	34.9	30.2	24.5	19.8	20.7	17.0	12.3	10.4	9.4	9.4
47.5°	35.8	33.0	26.4	20.7	15.1	15.1	12.3	8.5	6.6	5.7	5.7
50°	33.0	30.2	23.6	17.0	11.3	9.4	7.5	4.7	2.8	1.9	1.9
52.5°	31.1	28.3	20.7	14.1	9.4	6.6	4.7	0.9	0.0	0.0	0.0
55°	28.3	24.5	17.9	11.3	7.5	3.8	0.9	0.0	0.0	0.0	0.0
57.5°	24.5	21.7	14.1	8.5	4.7	0.9	0.0	0.0	0.0	0.0	0.0
60°	20.7	17.9	11.3	6.6	1.9	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	17.0	15.1	8.5	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	14.1	11.3	6.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	12.3	9.4	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	9.4	6.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	6.6	4.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	4.7	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	2.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.9	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°	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0
2.5°	1199.3	1227.6	1254.0	1261.5	1282.3	1339.8	1339.8	1367.1	1416.2	1434.1	1437.8
5°	1011.7	1041.8	1047.5	1106.0	1133.3	1191.8	1230.4	1322.8	1378.4	1413.3	1435.0
7.5°	769.4	779.7	801.4	856.1	909.8	980.6	1054.1	1172.0	1270.0	1309.6	1383.2
10°	528.9	560.1	607.2	656.2	740.1	818.4	913.6	1024.9	1145.6	1194.6	1257.8
12.5°	356.4	399.8	475.2	545.0	622.3	701.5	792.0	941.0	1077.7	1145.6	1208.7
15°	208.4	261.2	326.2	439.4	542.1	630.8	721.3	872.1	1038.1	1125.8	1203.1
17.5°	105.6	121.6	175.4	273.4	409.2	554.4	689.2	881.6	1068.2	1175.7	1239.8
20°	79.2	83.9	99.0	145.2	280.0	458.2	659.0	895.7	1152.2	1283.2	1318.1
22.5°	68.8	72.6	79.2	94.3	157.5	350.7	616.6	930.6	1266.2	1389.8	1463.3
25°	58.5	62.2	67.9	77.3	100.9	238.5	564.8	967.4	1368.1	1523.6	1592.5
27.5°	50.9	53.7	59.4	66.9	82.0	151.8	475.2	1016.4	1523.6	1685.8	1703.7
30°	43.4	46.2	50.9	59.4	69.8	107.5	348.9	1023.0	1609.4	1756.5	1806.5
32.5°	37.7	38.7	44.3	51.9	58.5	84.9	245.1	1029.6	1672.6	1848.0	1858.4
35°	31.1	33.0	38.7	43.4	50.9	66.9	185.7	996.6	1754.6	1942.3	1939.4
37.5°	25.5	28.3	32.1	35.8	41.5	56.6	148.0	935.3	1857.4	2088.4	1999.8
40°	19.8	22.6	26.4	31.1	34.9	50.9	111.3	842.9	1964.9	2160.1	2065.8
42.5°	14.1	16.0	19.8	24.5	31.1	42.4	80.1	733.5	2007.3	2244.0	2145.0
45°	10.4	12.3	15.1	20.7	32.1	33.9	55.6	633.6	2052.6	2280.7	2127.1
47.5°	5.7	7.5	11.3	17.9	28.3	25.5	39.6	544.0	2104.4	2313.7	2141.2
50°	1.9	2.8	6.6	18.9	22.6	19.8	31.1	495.9	2155.3	2320.3	2169.5
52.5°	0.0	0.0	3.8	19.8	17.0	15.1	27.3	477.1	2142.1	2341.1	2151.6
55°	0.0	0.0	0.9	8.5	9.4	11.3	22.6	476.1	2235.5	2347.7	2249.6
57.5°	0.0	0.0	0.0	2.8	5.7	9.4	19.8	446.0	2294.9	2511.7	2381.6
60°	0.0	0.0	0.0	0.9	3.8	6.6	15.1	419.6	2355.2	2585.3	2523.1
62.5°	0.0	0.0	0.0	0.0	0.9	2.8	10.4	379.0	2233.6	2579.6	2659.8
65°	0.0	0.0	0.0	0.0	0.0	0.0	6.6	299.8	2009.2	2444.8	2584.3
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.8	207.4	1759.4	2275.1	2445.7
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	125.4	1419.9	1995.1	2074.3
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.7	1013.6	1584.0	1701.8
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.7	627.0	1157.8	1303.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	406.4	876.8	989.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	216.9	549.7	639.3
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.3	333.8	384.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.2	202.7	231.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.1	41.5
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°	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0	1337.0
2.5°	1439.7	1467.1	1477.4	1461.4	1463.3	1430.3	1425.6	1379.4	1360.5	1364.3
5°	1505.7	1545.3	1567.0	1549.1	1508.6	1445.4	1387.9	1333.2	1299.2	1282.3
7.5°	1490.6	1535.0	1562.3	1579.3	1533.1	1431.2	1343.6	1240.8	1197.4	1198.4
10°	1407.7	1500.1	1555.7	1534.0	1512.3	1410.5	1274.7	1163.5	1124.8	1128.6
12.5°	1340.7	1443.5	1476.5	1493.5	1449.2	1368.1	1276.6	1149.3	1106.0	1079.6
15°	1299.2	1375.6	1377.5	1403.9	1386.0	1386.0	1296.4	1172.0	1134.2	1105.0
17.5°	1299.2	1316.2	1314.3	1323.8	1353.9	1389.8	1346.4	1263.4	1188.9	1184.2
20°	1328.5	1275.7	1263.4	1267.2	1292.6	1399.2	1456.7	1353.0	1305.8	1290.8
22.5°	1396.4	1280.4	1205.9	1192.7	1271.0	1398.2	1527.4	1494.4	1412.4	1400.1
25°	1489.7	1271.9	1190.8	1173.8	1233.2	1432.2	1624.5	1631.1	1556.6	1531.2
27.5°	1578.3	1309.6	1188.9	1185.2	1263.4	1424.6	1691.5	1740.5	1656.6	1635.8
30°	1608.5	1347.3	1223.8	1173.8	1274.7	1452.0	1689.6	1817.8	1763.1	1767.8
32.5°	1644.3	1385.0	1227.6	1207.8	1322.8	1496.3	1743.3	1942.3	1902.7	1847.0
35°	1697.1	1436.0	1263.4	1245.5	1356.8	1535.9	1754.6	2033.7	2027.1	1962.1
37.5°	1742.4	1485.9	1337.9	1340.7	1460.5	1600.0	1804.6	2145.9	2134.6	2090.3
40°	1774.4	1555.7	1453.9	1461.4	1551.0	1671.7	1893.2	2202.5	2286.4	2221.3
42.5°	1779.2	1617.9	1586.8	1647.2	1731.1	1782.9	1929.1	2241.1	2361.8	2319.4
45°	1797.1	1716.9	1803.7	1848.0	1916.8	1881.0	1927.2	2307.1	2367.5	2345.8
47.5°	1866.8	1897.0	2006.4	2141.2	2165.7	2047.9	1972.4	2317.5	2399.5	2396.7
50°	1939.4	2090.3	2244.0	2333.5	2364.7	2162.9	2014.9	2309.0	2442.0	2419.3
52.5°	2020.5	2258.1	2479.7	2590.0	2573.0	2290.2	2062.9	2377.9	2520.2	2512.7
55°	2071.4	2333.5	2631.5	2785.2	2772.0	2432.5	2215.7	2476.9	2623.0	2604.1
57.5°	2206.3	2456.1	2782.3	2854.0	2888.9	2619.2	2322.2	2639.0	2708.8	2729.5
60°	2317.5	2536.3	2821.9	2925.7	2937.9	2730.5	2508.9	2805.9	2818.2	2748.4
62.5°	2480.6	2567.4	2738.0	2831.4	2894.5	2793.7	2676.7	2895.5	2816.3	2811.6
65°	2600.4	2465.5	2581.5	2633.4	2673.9	2697.5	2845.5	2956.8	2781.4	2689.9
67.5°	2533.4	2273.2	2251.5	2254.3	2266.6	2409.0	2788.9	2806.9	2587.2	2511.7
70°	2229.8	1865.0	1835.7	1858.4	1797.1	1968.7	2559.8	2551.3	2282.6	2204.4
72.5°	1803.7	1359.6	1309.6	1340.7	1354.9	1536.8	2153.5	1934.7	1665.1	1603.8
75°	1433.1	996.6	841.0	916.4	964.5	1119.2	1682.0	1314.3	1162.5	1079.6
77.5°	1125.8	754.3	654.3	624.2	668.5	813.7	1223.8	690.2	609.1	570.4
80°	713.7	554.4	601.5	558.2	577.0	580.8	637.4	314.0	249.9	247.0
82.5°	429.9	379.0	450.7	248.0	451.6	403.5	264.9	142.4	126.3	126.3
85°	304.5	234.8	155.6	100.9	200.8	221.6	102.8	73.5	64.1	62.2
87.5°	152.7	72.6	34.9	22.6	25.5	41.5	12.3	5.7	5.7	4.7
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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