

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: P677509

Luminaire Tested: **CCW-SA-2A-850-U-SLR-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677509
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2A-850-U-SLR-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @350mA w/
SLR distribution lens and House Side Shield
Light Source: (32) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3431.2 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

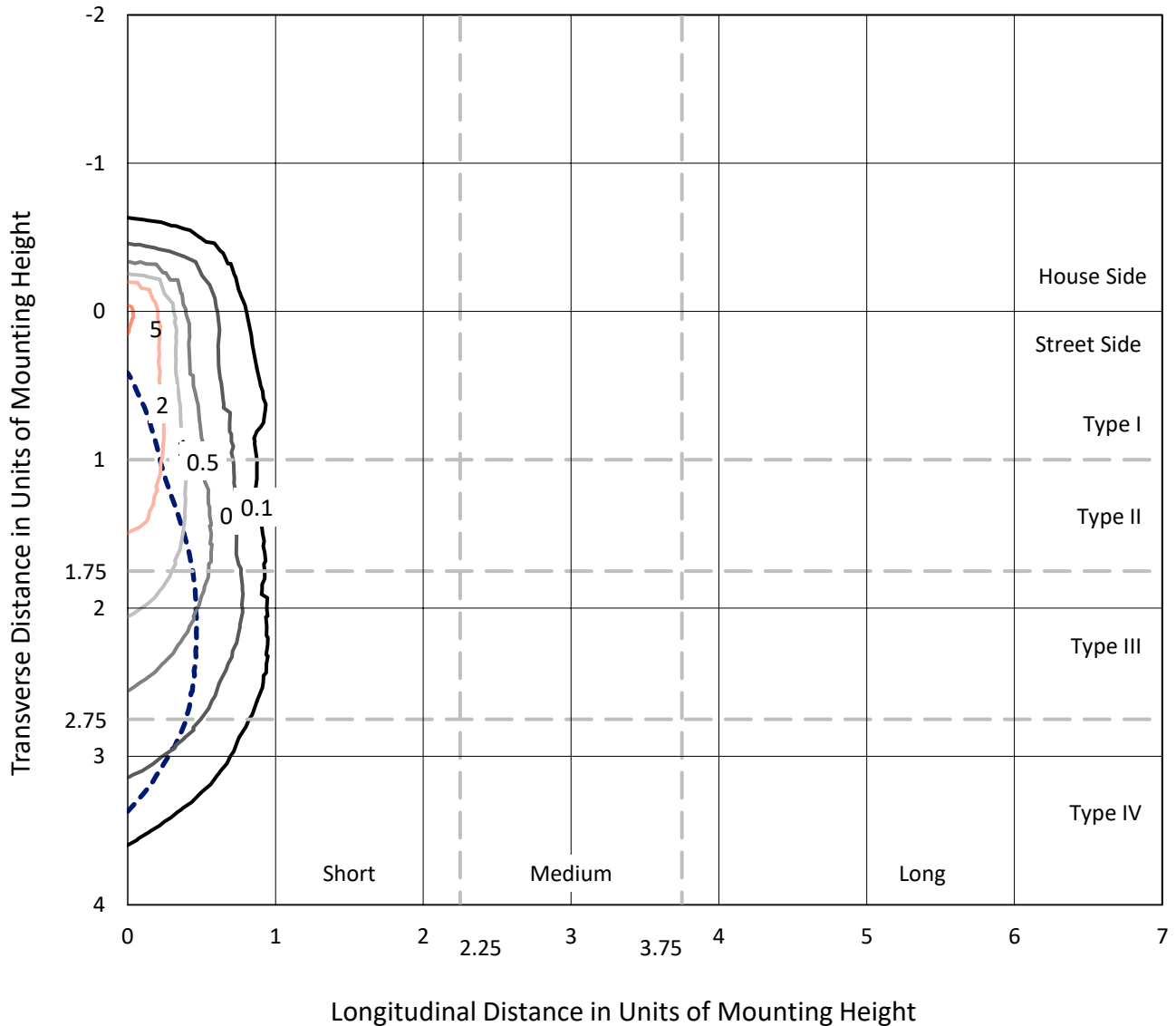
Input Watts (W): 36.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

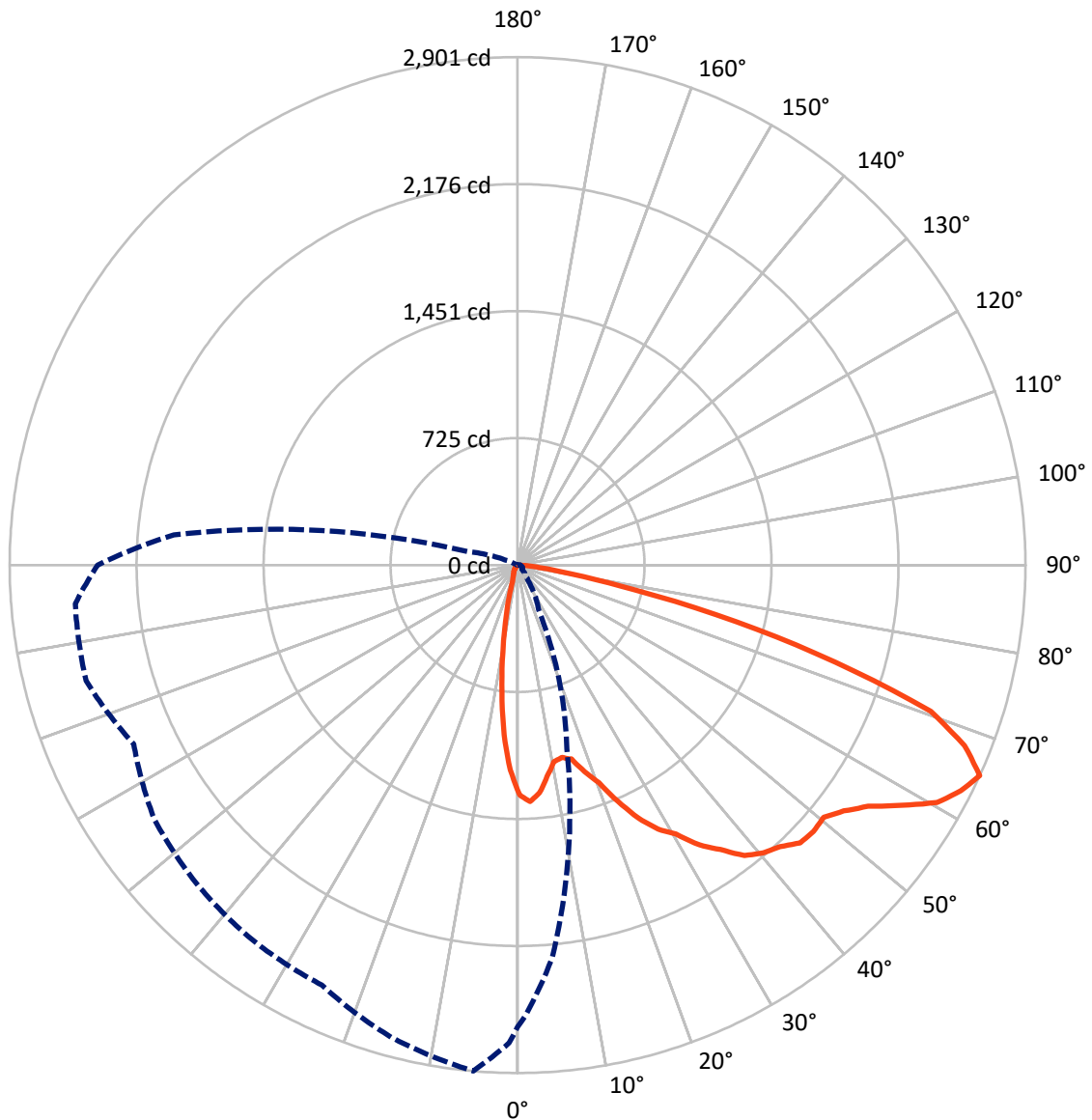
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.8 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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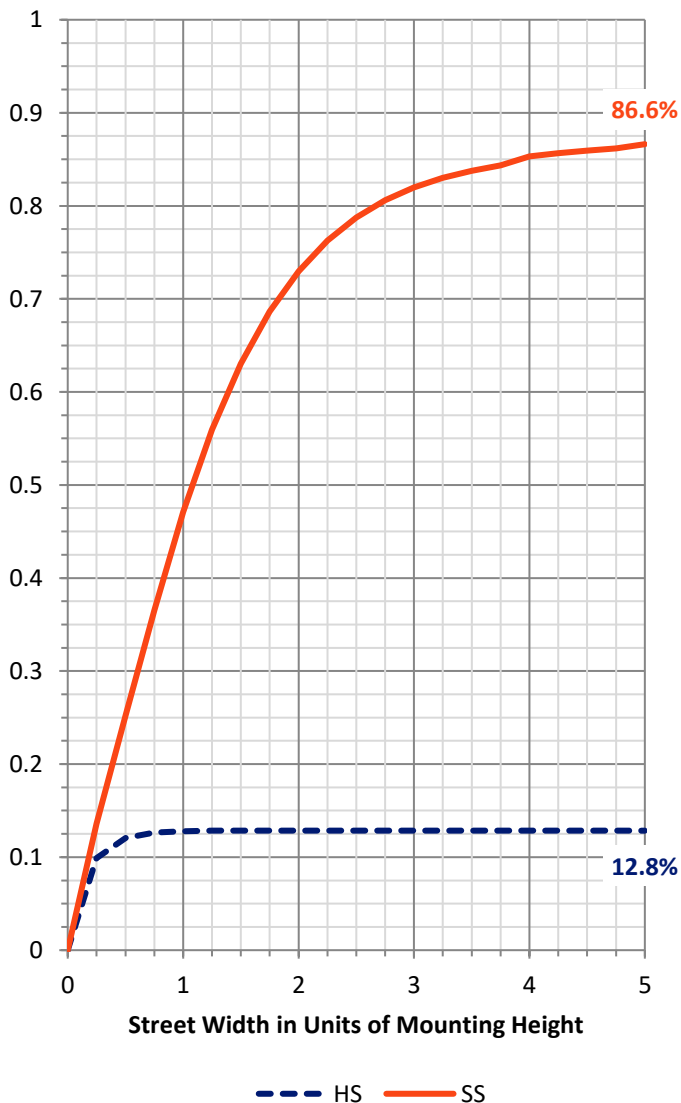
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	445.5	0.0	445.5
	% Fixture	13.0	0.0	13.0
Street Side	Lumens	2985.7	0.0	2985.7
	% Fixture	87.0	0.0	87.0
Total	Lumens	3431.2	0.0	3431.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.4	2.9
10°-20°	192.4	5.6
20°-30°	268.0	7.8
30°-40°	380.8	11.1
40°-50°	528.0	15.4
50°-60°	719.4	21.0
60°-70°	791.0	23.1
70°-80°	388.8	11.3
80°-90°	63.5	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°	3431.2	100.0
0°-180°	3431.2	100.0



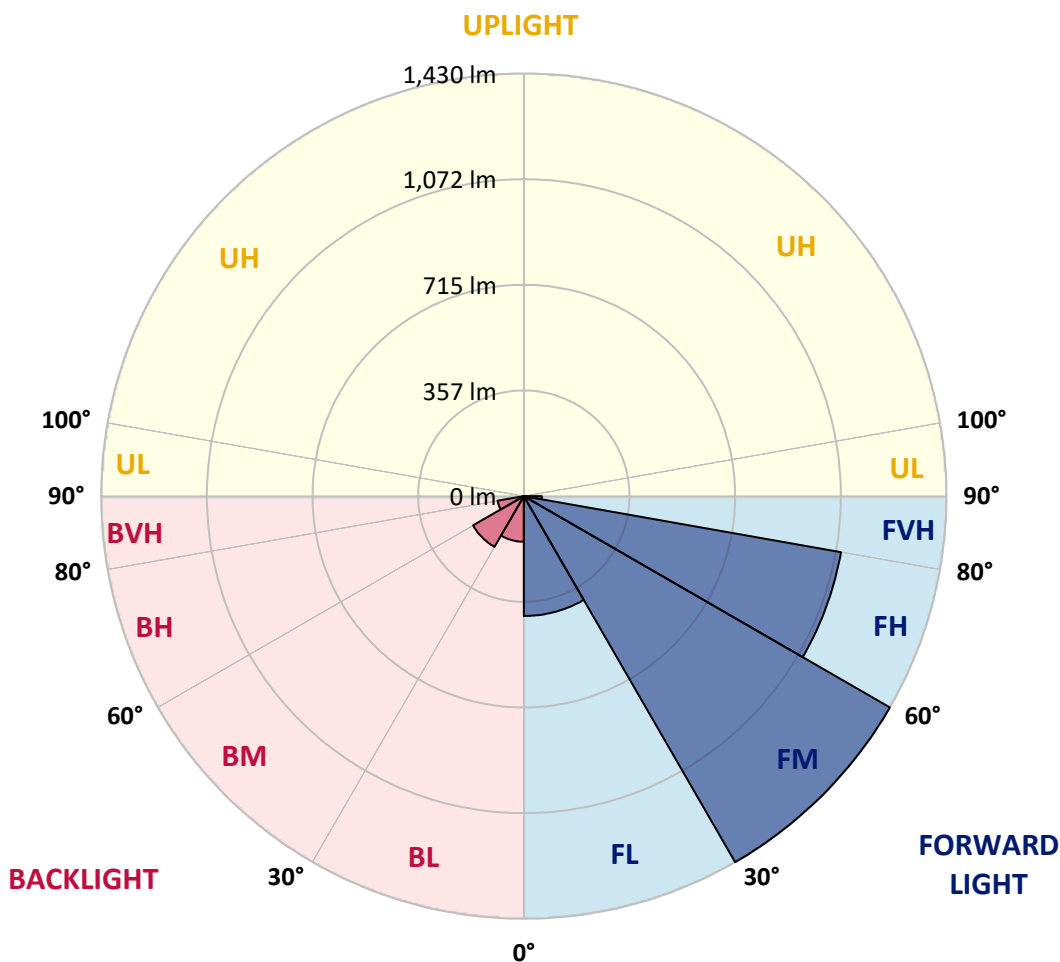
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	405.5	11.8			
FM (30°-60°)	1429.9	41.7			
FH (60°-80°)	1089.7	31.8			G1/1800
FVH (80°-90°)	60.6	1.8			G1/100
BL (0°-30°)	154.3	4.5	B1/500		
BM (30°-60°)	198.4	5.8	B0/220		
BH (60°-80°)	90.0	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°	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7
2.5°	1338.5	1354.3	1339.5	1287.7	1278.4	1253.4	1215.5	1212.7	1173.0	1177.6	1156.3
5°	1258.1	1273.8	1242.3	1173.9	1110.1	1059.2	1028.7	974.1	962.1	935.2	935.2
7.5°	1175.7	1174.8	1121.2	1063.8	968.5	875.1	832.5	753.9	707.7	682.7	658.6
10°	1107.3	1092.5	1059.2	940.8	837.2	740.0	687.3	635.5	587.4	545.8	504.2
12.5°	1059.2	1068.4	1015.7	887.1	753.0	685.5	629.0	574.5	517.1	469.9	423.7
15°	1084.2	1069.4	1007.4	875.1	739.1	646.6	571.7	505.1	441.2	379.3	344.1
17.5°	1161.9	1123.9	1050.9	875.1	710.4	587.4	496.8	418.1	349.7	294.2	250.7
20°	1266.4	1222.9	1144.3	907.5	689.2	543.9	420.0	321.0	249.8	198.0	164.7
22.5°	1373.7	1339.5	1221.1	920.4	664.2	485.7	331.2	232.2	166.5	133.2	116.6
25°	1502.3	1454.2	1324.7	972.2	627.2	429.2	260.9	161.9	124.0	106.4	96.2
27.5°	1605.0	1596.6	1421.8	1003.7	599.4	383.0	206.3	128.6	102.7	89.7	83.3
30°	1734.5	1689.1	1540.2	1066.6	568.0	330.2	172.1	115.6	94.4	80.5	75.9
32.5°	1812.2	1790.9	1602.2	1101.7	532.8	286.8	148.0	101.8	86.0	75.9	71.2
35°	1925.0	1882.5	1691.0	1123.9	514.3	261.8	133.2	92.5	72.2	62.0	56.4
37.5°	2050.8	2035.1	1797.4	1123.0	487.5	247.0	123.0	86.0	68.5	57.4	50.9
40°	2179.4	2115.6	1862.1	1148.9	473.6	235.9	115.6	82.3	64.8	54.6	46.3
42.5°	2275.6	2202.5	1937.1	1139.7	457.0	216.5	112.9	76.8	62.0	50.0	42.6
45°	2301.5	2275.6	2004.6	1136.9	444.9	200.7	108.2	75.9	60.1	47.2	39.8
47.5°	2351.5	2333.9	2087.8	1141.5	435.7	188.7	97.1	77.7	57.4	44.4	37.9
50°	2373.7	2342.2	2155.4	1152.6	414.4	173.9	87.0	81.4	56.4	43.5	36.1
52.5°	2465.3	2437.5	2247.9	1184.1	396.8	154.5	76.8	77.7	58.3	40.7	34.2
55°	2555.0	2523.5	2390.3	1256.2	371.9	138.8	65.7	68.5	55.5	37.0	30.5
57.5°	2678.0	2626.2	2485.6	1285.8	349.7	117.5	58.3	56.4	51.8	33.3	26.8
60°	2696.5	2717.8	2471.7	1267.3	326.5	103.6	50.9	43.5	55.5	29.6	23.1
62.5°	2758.5	2669.7	2407.0	1224.8	309.9	95.3	45.3	36.1	48.1	25.9	19.4
65°	2639.2	2573.5	2255.3	1087.9	288.6	96.2	39.8	29.6	30.5	21.3	15.7
67.5°	2464.3	2412.5	2003.7	938.9	267.3	94.4	35.2	25.9	23.1	18.5	13.9
70°	2162.8	2050.8	1702.1	762.2	235.9	87.9	29.6	23.1	19.4	14.8	10.2
72.5°	1573.5	1528.2	1221.1	589.3	211.8	79.6	27.8	19.4	16.7	11.1	8.3
75°	1059.2	984.3	770.6	386.7	170.2	69.4	23.1	17.6	13.0	8.3	6.5
77.5°	559.7	529.1	436.6	184.1	94.4	32.4	13.0	10.2	7.4	6.5	3.7
80°	242.4	215.5	188.7	74.9	33.3	14.8	8.3	5.6	4.6	3.7	1.9
82.5°	124.0	118.4	98.1	32.4	19.4	11.1	4.6	3.7	2.8	1.9	0.9
85°	61.1	62.9	51.8	10.2	11.1	6.5	0.9	0.9	0.0	0.0	0.0
87.5°	4.6	4.6	3.7	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°	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7
2.5°	1148.0	1160.9	1138.7	1152.6	1146.1	1148.9	1151.7	1144.3	1146.1	1172.0	1173.0
5°	919.5	944.5	935.2	948.2	970.4	959.3	969.5	967.6	969.5	973.2	989.8
7.5°	655.9	648.5	666.0	700.3	740.0	764.1	752.1	745.6	741.9	732.6	743.7
10°	494.9	491.2	486.6	496.8	522.7	549.5	564.3	539.3	525.4	507.9	501.4
12.5°	410.7	387.6	374.6	358.9	366.3	390.4	391.3	367.2	345.0	335.8	346.0
15°	323.8	308.0	284.9	262.7	251.6	270.1	254.4	231.3	202.6	198.9	198.0
17.5°	231.3	222.0	205.4	196.1	183.2	178.5	161.9	126.7	106.4	100.8	102.7
20°	157.3	149.9	148.9	140.6	135.1	131.4	104.5	81.4	74.9	75.9	76.8
22.5°	116.6	112.9	108.2	107.3	102.7	98.1	76.8	68.5	63.8	63.8	66.6
25°	95.3	93.4	88.8	87.0	85.1	78.6	64.8	58.3	56.4	54.6	57.4
27.5°	81.4	80.5	77.7	74.9	73.1	66.6	56.4	50.9	49.0	49.0	49.0
30°	73.1	73.1	69.4	63.8	63.8	56.4	48.1	44.4	42.6	42.6	41.6
32.5°	68.5	66.6	62.0	58.3	55.5	48.1	42.6	38.9	36.1	36.1	37.0
35°	55.5	55.5	54.6	51.8	48.1	40.7	36.1	32.4	30.5	29.6	30.5
37.5°	49.0	46.3	42.6	43.5	41.6	35.2	30.5	27.8	25.0	25.0	25.0
40°	44.4	41.6	37.9	35.2	34.2	31.5	26.8	22.2	19.4	18.5	18.5
42.5°	39.8	37.9	32.4	27.8	26.8	26.8	20.4	16.7	13.9	13.9	13.9
45°	37.0	34.2	29.6	24.1	19.4	20.4	16.7	12.0	10.2	9.3	9.3
47.5°	35.2	32.4	25.9	20.4	14.8	14.8	12.0	8.3	6.5	5.6	5.6
50°	32.4	29.6	23.1	16.7	11.1	9.3	7.4	4.6	2.8	1.9	1.9
52.5°	30.5	27.8	20.4	13.9	9.3	6.5	4.6	0.9	0.0	0.0	0.0
55°	27.8	24.1	17.6	11.1	7.4	3.7	0.9	0.0	0.0	0.0	0.0
57.5°	24.1	21.3	13.9	8.3	4.6	0.9	0.0	0.0	0.0	0.0	0.0
60°	20.4	17.6	11.1	6.5	1.9	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	16.7	14.8	8.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	13.9	11.1	6.5	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	12.0	9.3	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	9.3	6.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	6.5	4.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	4.6	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°	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7
2.5°	1176.7	1204.4	1230.3	1237.7	1258.1	1314.5	1314.5	1341.3	1389.4	1407.0	1410.7
5°	992.6	1022.2	1027.7	1085.1	1111.9	1169.3	1207.2	1297.8	1352.4	1386.7	1407.9
7.5°	754.8	765.0	786.3	839.9	892.7	962.1	1034.2	1149.8	1246.0	1284.9	1357.0
10°	519.0	549.5	595.7	643.8	726.2	802.9	896.4	1005.5	1123.9	1172.0	1234.0
12.5°	349.7	392.2	466.2	534.7	610.5	688.2	777.0	923.2	1057.3	1123.9	1185.9
15°	204.4	256.2	320.1	431.1	531.9	618.9	707.7	855.7	1018.5	1104.5	1180.4
17.5°	103.6	119.3	172.1	268.3	401.5	543.9	676.2	864.9	1048.1	1153.5	1216.4
20°	77.7	82.3	97.1	142.5	274.7	449.6	646.6	878.8	1130.4	1259.0	1293.2
22.5°	67.5	71.2	77.7	92.5	154.5	344.1	605.0	913.0	1242.3	1363.5	1435.7
25°	57.4	61.1	66.6	75.9	99.0	234.0	554.1	949.1	1342.2	1494.9	1562.4
27.5°	50.0	52.7	58.3	65.7	80.5	148.9	466.2	997.2	1494.9	1654.0	1671.6
30°	42.6	45.3	50.0	58.3	68.5	105.5	342.3	1003.7	1579.1	1723.4	1772.4
32.5°	37.0	37.9	43.5	50.9	57.4	83.3	240.5	1010.2	1641.0	1813.1	1823.3
35°	30.5	32.4	37.9	42.6	50.0	65.7	182.2	977.8	1721.5	1905.6	1902.8
37.5°	25.0	27.8	31.5	35.2	40.7	55.5	145.2	917.7	1822.4	2049.0	1962.0
40°	19.4	22.2	25.9	30.5	34.2	50.0	109.2	827.0	1927.8	2119.3	2026.8
42.5°	13.9	15.7	19.4	24.1	30.5	41.6	78.6	719.7	1969.4	2201.6	2104.5
45°	10.2	12.0	14.8	20.4	31.5	33.3	54.6	621.6	2013.8	2237.7	2086.9
47.5°	5.6	7.4	11.1	17.6	27.8	25.0	38.9	533.8	2064.7	2270.1	2100.8
50°	1.9	2.8	6.5	18.5	22.2	19.4	30.5	486.6	2114.7	2276.6	2128.5
52.5°	0.0	0.0	3.7	19.4	16.7	14.8	26.8	468.1	2101.7	2296.9	2111.0
55°	0.0	0.0	0.9	8.3	9.3	11.1	22.2	467.2	2193.3	2303.4	2207.2
57.5°	0.0	0.0	0.0	2.8	5.6	9.3	19.4	437.5	2251.6	2464.3	2336.7
60°	0.0	0.0	0.0	0.9	3.7	6.5	14.8	411.6	2310.8	2536.5	2475.4
62.5°	0.0	0.0	0.0	0.0	0.9	2.8	10.2	371.9	2191.4	2530.9	2609.6
65°	0.0	0.0	0.0	0.0	0.0	0.0	6.5	294.2	1971.3	2398.7	2535.6
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.7	203.5	1726.1	2232.1	2399.6
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	123.0	1393.1	1957.4	2035.1
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.7	994.4	1554.1	1669.7
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.3	615.2	1136.0	1278.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	398.7	860.3	970.4
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	212.8	539.3	627.2
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.5	327.5	377.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.6	198.9	226.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.5	40.7
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°	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7	1311.7
2.5°	1412.6	1439.4	1449.6	1433.8	1435.7	1403.3	1398.7	1353.3	1334.8	1338.5
5°	1477.3	1516.2	1537.4	1519.9	1480.1	1418.1	1361.7	1308.0	1274.7	1258.1
7.5°	1462.5	1506.0	1532.8	1549.5	1504.1	1404.2	1318.2	1217.4	1174.8	1175.7
10°	1381.1	1471.8	1526.3	1505.1	1483.8	1383.9	1250.7	1141.5	1103.6	1107.3
12.5°	1315.4	1416.3	1448.6	1465.3	1421.8	1342.2	1252.5	1127.6	1085.1	1059.2
15°	1274.7	1349.6	1351.5	1377.4	1359.8	1359.8	1271.9	1149.8	1112.8	1084.2
17.5°	1274.7	1291.4	1289.5	1298.8	1328.4	1363.5	1321.0	1239.6	1166.5	1161.9
20°	1303.4	1251.6	1239.6	1243.3	1268.2	1372.8	1429.2	1327.4	1281.2	1266.4
22.5°	1370.0	1256.2	1183.1	1170.2	1247.0	1371.9	1498.6	1466.2	1385.7	1373.7
25°	1461.6	1247.9	1168.3	1151.7	1210.0	1405.2	1593.9	1600.3	1527.3	1502.3
27.5°	1548.5	1284.9	1166.5	1162.8	1239.6	1397.8	1659.5	1707.6	1625.3	1605.0
30°	1578.1	1321.9	1200.7	1151.7	1250.7	1424.6	1657.7	1783.5	1729.8	1734.5
32.5°	1613.3	1358.9	1204.4	1185.0	1297.8	1468.1	1710.4	1905.6	1866.8	1812.2
35°	1665.1	1408.9	1239.6	1222.0	1331.1	1506.9	1721.5	1995.3	1988.9	1925.0
37.5°	1709.5	1457.9	1312.6	1315.4	1432.9	1569.8	1770.5	2105.4	2094.3	2050.8
40°	1740.9	1526.3	1426.4	1433.8	1521.7	1640.1	1857.5	2160.9	2243.2	2179.4
42.5°	1745.6	1587.4	1556.9	1616.1	1698.4	1749.3	1892.7	2198.8	2317.3	2275.6
45°	1763.1	1684.5	1769.6	1813.1	1880.6	1845.5	1890.8	2263.6	2322.8	2301.5
47.5°	1831.6	1861.2	1968.5	2100.8	2124.8	2009.2	1935.2	2273.8	2354.3	2351.5
50°	1902.8	2050.8	2201.6	2289.5	2320.0	2122.1	1976.8	2265.4	2395.9	2373.7
52.5°	1982.4	2215.5	2432.9	2541.1	2524.5	2246.9	2024.0	2333.0	2472.7	2465.3
55°	2032.3	2289.5	2581.8	2732.6	2719.6	2386.6	2173.9	2430.1	2573.5	2555.0
57.5°	2164.6	2409.8	2729.8	2800.1	2834.4	2569.8	2278.4	2589.2	2657.7	2678.0
60°	2273.8	2488.4	2768.7	2870.4	2882.5	2678.9	2461.6	2753.0	2765.0	2696.5
62.5°	2433.8	2518.9	2686.3	2777.9	2839.9	2740.9	2626.2	2840.8	2763.1	2758.5
65°	2551.3	2419.0	2532.8	2583.7	2623.4	2646.6	2791.8	2901.0	2728.9	2639.2
67.5°	2485.6	2230.3	2209.0	2211.8	2223.8	2363.5	2736.3	2753.9	2538.3	2464.3
70°	2187.7	1829.8	1801.1	1823.3	1763.1	1931.5	2511.5	2503.2	2239.5	2162.8
72.5°	1769.6	1333.9	1284.9	1315.4	1329.3	1507.8	2112.8	1898.2	1633.6	1573.5
75°	1406.1	977.8	825.1	899.1	946.3	1098.0	1650.3	1289.5	1140.6	1059.2
77.5°	1104.5	740.0	642.0	612.4	655.9	798.3	1200.7	677.1	597.6	559.7
80°	700.3	543.9	590.2	547.6	566.1	569.8	625.3	308.0	245.1	242.4
82.5°	421.8	371.9	442.2	243.3	443.1	395.9	259.9	139.7	124.0	124.0
85°	298.8	230.3	152.6	99.0	197.0	217.4	100.8	72.2	62.9	61.1
87.5°	149.9	71.2	34.2	22.2	25.0	40.7	12.0	5.6	5.6	4.6
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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