

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: P677320

Luminaire Tested: **CCW-SA-1F-827-U-SLL-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677320
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1F-827-U-SLL-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1200mA w/
SLL distribution lens and House Side Shield
Light Source: (16) 2700K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

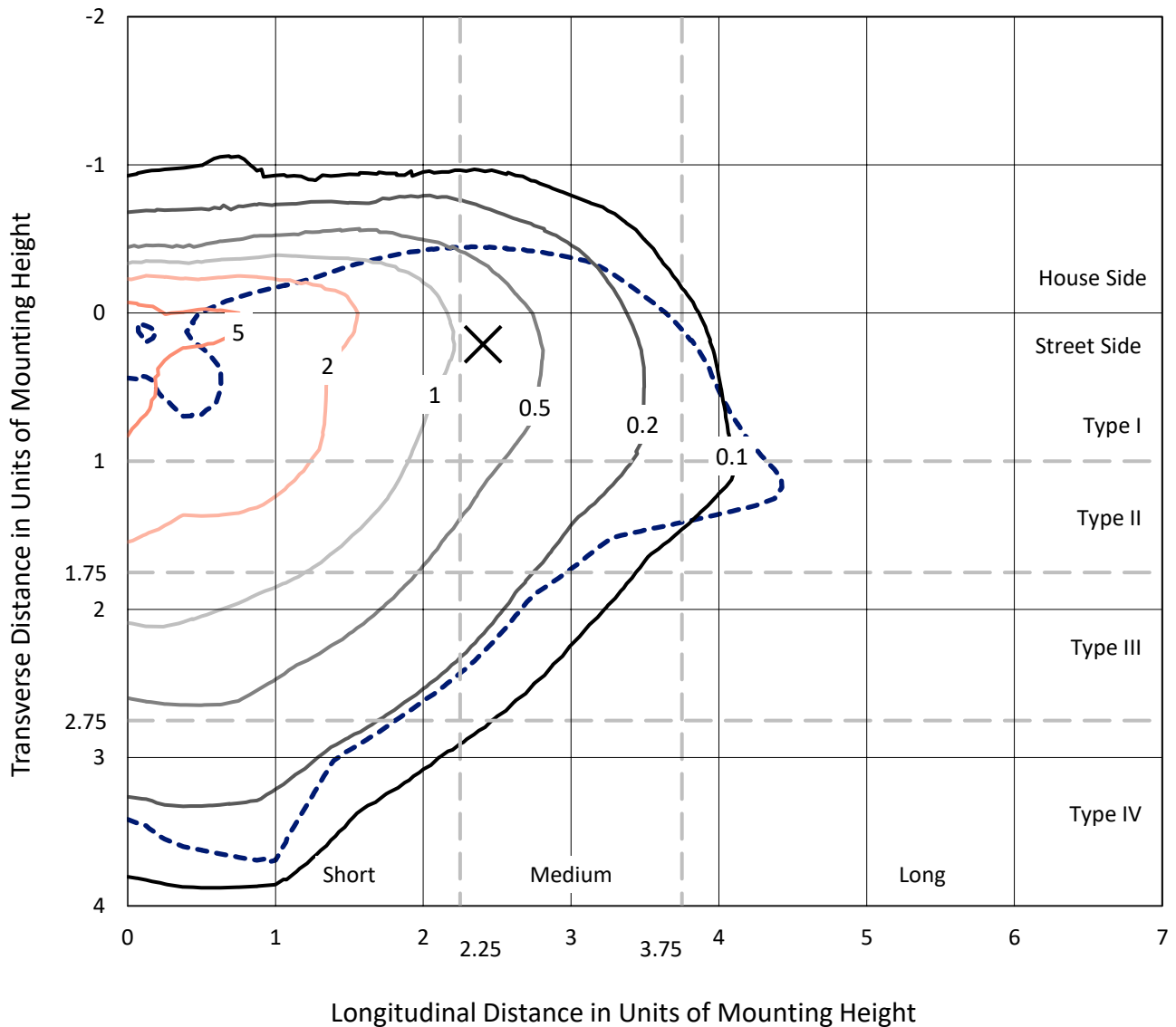
Lumens per Lamp: N/A
Luminaire Lumens: 3998.8 lumens
Efficiency: N/A
Efficacy: 59.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

Input Watts (W): 67
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

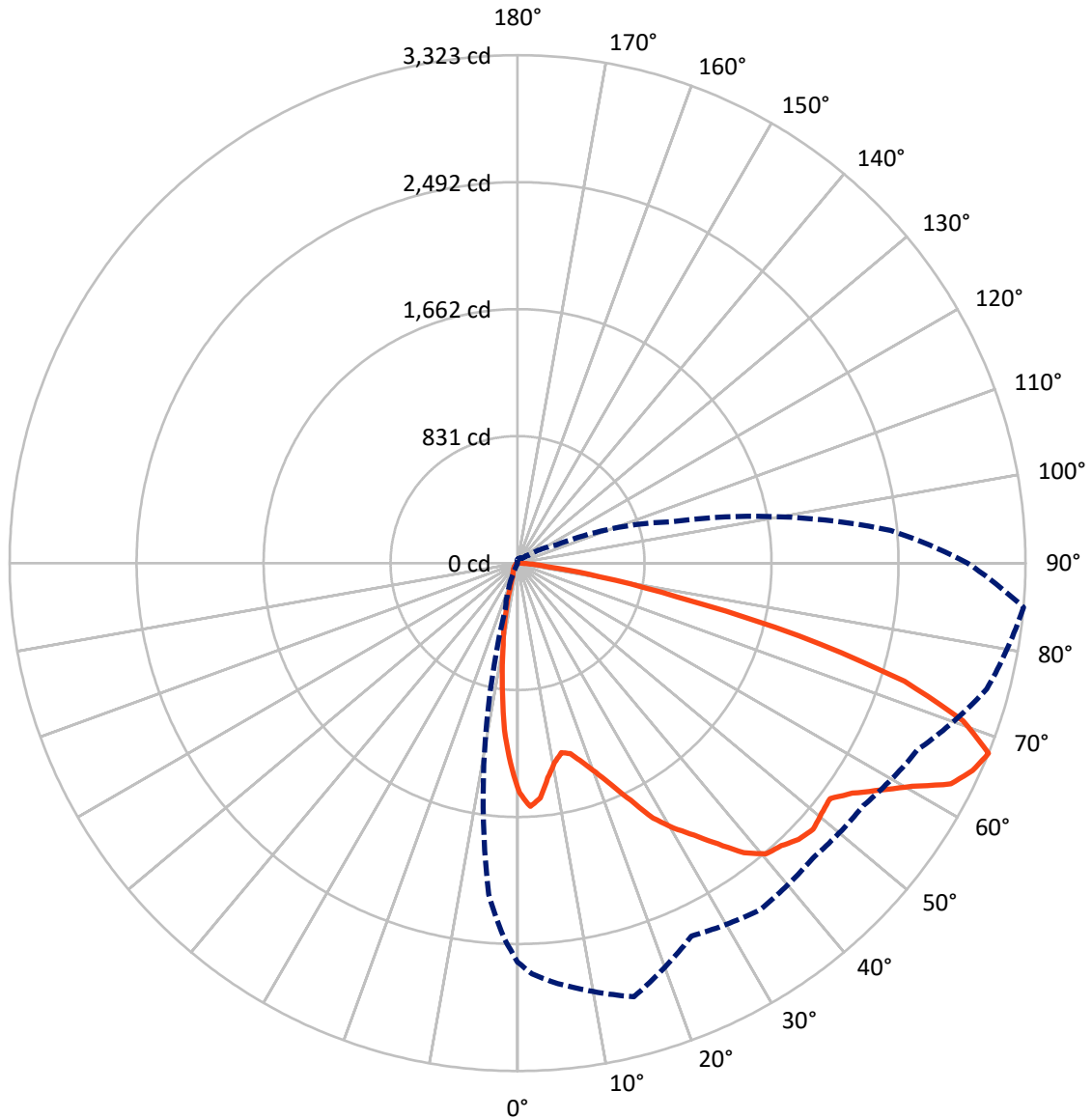
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 7.5 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	694.3	0.0	694.3
	% Fixture	17.4	0.0	17.4
Street Side	Lumens	3304.5	0.0	3304.5
	% Fixture	82.6	0.0	82.6
Total	Lumens	3998.8	0.0	3998.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.2	2.9
10°-20°	224.0	5.6
20°-30°	310.0	7.8
30°-40°	438.1	11.0
40°-50°	596.4	14.9
50°-60°	789.9	19.8
60°-70°	917.2	22.9
70°-80°	519.4	13.0
80°-90°	89.7	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°	3998.8	100.0
0°-180°	3998.8	100.0



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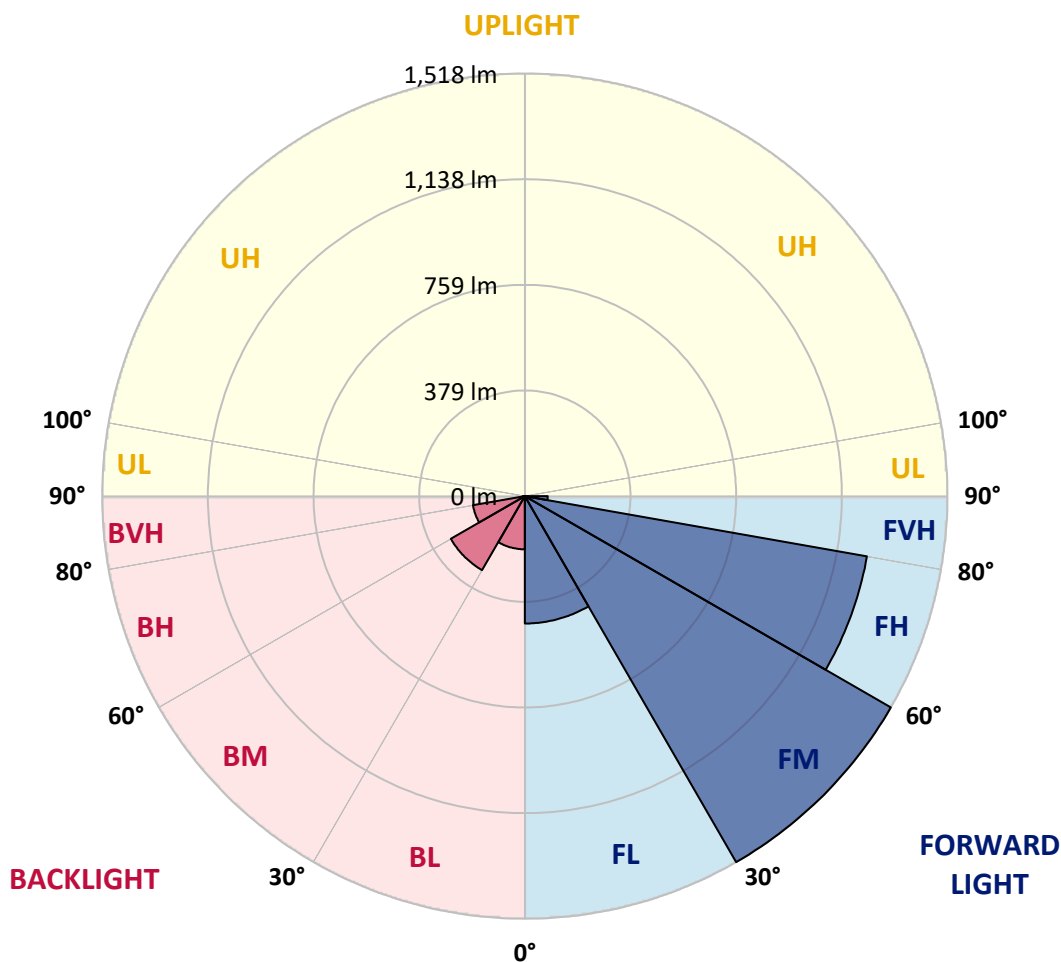
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	457.3	11.4			
FM (30°-60°)	1517.6	38.0			
FH (60°-80°)	1247.4	31.2			G1/1800
FVH (80°-90°)	82.2	2.1			G1/100
BL (0°-30°)	190.9	4.8	B1/500		
BM (30°-60°)	306.8	7.7	B1/1000		
BH (60°-80°)	189.1	4.7	B1/500		G1/500
BVH (80°-90°)	7.6	0.2			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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5
2.5°	1562.3	1595.4	1596.4	1611.4	1626.3	1626.3	1661.6	1653.0	1622.1	1616.7	1594.3
5°	1574.0	1585.8	1594.3	1670.1	1734.2	1727.8	1747.0	1734.2	1674.4	1597.5	1545.2
7.5°	1472.6	1485.4	1519.6	1648.8	1735.3	1764.1	1800.4	1720.3	1657.3	1518.5	1418.1
10°	1338.0	1362.6	1425.6	1572.9	1679.7	1771.6	1771.6	1707.5	1585.8	1450.1	1327.3
12.5°	1263.3	1312.4	1346.6	1496.1	1634.9	1697.9	1695.8	1661.6	1582.6	1411.7	1272.9
15°	1276.1	1290.0	1362.6	1479.0	1570.8	1567.6	1606.1	1595.4	1539.8	1445.9	1293.2
17.5°	1334.8	1356.2	1419.2	1479.0	1522.8	1509.9	1508.9	1560.1	1563.3	1503.5	1369.0
20°	1430.9	1493.9	1523.8	1542.0	1488.6	1434.1	1427.7	1499.3	1554.8	1577.2	1459.8
22.5°	1584.7	1626.3	1687.2	1594.3	1455.5	1387.1	1374.3	1453.3	1565.5	1664.8	1577.2
25°	1735.3	1767.3	1826.0	1706.4	1492.9	1377.5	1355.1	1423.4	1606.1	1786.5	1719.2
27.5°	1894.4	1922.1	1928.5	1788.7	1513.1	1358.3	1331.6	1423.4	1640.2	1850.6	1889.0
30°	1991.5	2024.6	2031.1	1861.3	1546.3	1374.3	1361.5	1429.9	1663.7	1905.0	2010.8
32.5°	2100.5	2109.0	2103.7	1874.1	1582.6	1421.3	1367.9	1472.6	1690.4	1970.2	2121.8
35°	2230.7	2245.7	2191.2	1932.8	1663.7	1451.2	1432.0	1524.9	1736.3	2000.1	2256.4
37.5°	2330.1	2377.0	2254.2	1955.2	1679.7	1514.2	1517.4	1633.8	1768.4	2036.4	2404.8
40°	2516.9	2437.9	2361.0	2032.1	1740.6	1621.0	1603.9	1745.9	1876.2	2059.9	2502.0
42.5°	2619.4	2577.8	2402.7	2039.6	1834.6	1768.4	1772.6	1873.0	1932.8	2126.1	2528.7
45°	2645.1	2601.3	2459.3	2044.9	1927.5	1942.4	2016.1	2035.3	2016.1	2169.9	2578.9
47.5°	2710.2	2615.2	2452.9	2116.5	2078.0	2135.7	2229.7	2271.3	2129.3	2153.9	2602.4
50°	2697.4	2642.9	2439.0	2146.4	2261.7	2414.4	2477.4	2460.3	2255.3	2120.8	2576.7
52.5°	2644.0	2585.3	2481.7	2227.5	2433.6	2618.4	2705.9	2663.2	2367.4	2195.5	2559.6
55°	2722.0	2677.1	2537.2	2337.5	2562.8	2797.8	2859.7	2827.7	2505.2	2264.9	2656.8
57.5°	2806.3	2796.7	2687.8	2466.7	2715.5	2982.5	2982.5	2943.0	2624.8	2365.3	2801.0
60°	2928.1	2949.4	2798.8	2552.2	2767.9	2971.8	3126.7	3080.8	2745.4	2541.5	2964.4
62.5°	2888.5	2956.9	2941.9	2735.8	2827.7	3024.2	3108.5	3142.7	2894.9	2756.1	3182.2
65°	2761.5	2834.1	2940.9	2856.5	2782.8	2897.1	2939.8	3043.4	2969.7	2958.0	3271.9
67.5°	2609.8	2688.9	2755.1	2937.7	2692.1	2767.9	2730.5	2763.6	2888.5	3179.0	3323.2
70°	2278.8	2354.6	2459.3	2757.2	2451.8	2383.4	2373.8	2357.8	2552.2	3100.0	3090.4
72.5°	1874.1	1909.3	2082.3	2241.4	1814.3	1801.5	1816.4	1798.3	2023.6	2806.3	2647.2
75°	1403.2	1438.4	1536.6	1721.4	1235.5	1161.8	1247.3	1331.6	1545.2	2178.4	1901.8
77.5°	1055.0	1099.9	1161.8	1287.8	906.6	791.3	803.0	883.1	1117.0	1744.9	1065.7
80°	684.5	679.2	798.8	886.3	682.4	703.7	673.8	732.5	809.4	933.3	544.6
82.5°	395.1	400.4	450.6	508.3	475.2	543.5	391.9	654.6	577.7	380.2	202.9
85°	222.1	231.7	277.6	352.4	297.9	199.7	163.4	324.6	363.1	155.9	98.2
87.5°	22.4	19.2	37.4	133.5	81.2	33.1	49.1	78.0	87.6	58.7	28.8
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5
2.5°	1562.3	1562.3	1535.6	1490.7	1472.6	1440.5	1396.8	1410.6	1395.7	1341.2	1327.3
5°	1498.2	1446.9	1391.4	1323.1	1283.6	1202.4	1176.8	1130.9	1138.3	1092.4	1094.5
7.5°	1364.7	1324.1	1230.2	1140.5	1062.5	992.0	892.7	855.4	819.0	800.9	822.2
10°	1286.8	1210.9	1082.8	965.3	861.8	798.8	732.5	681.3	634.3	599.1	591.6
12.5°	1230.2	1162.9	1008.1	865.0	783.8	732.5	671.7	601.2	555.3	494.4	476.3
15°	1213.1	1130.9	967.5	825.5	746.4	662.1	592.7	523.2	463.4	399.4	377.0
17.5°	1271.8	1176.8	966.4	793.4	682.4	591.6	495.5	417.5	356.7	297.9	284.0
20°	1371.1	1225.9	997.4	774.2	621.5	499.8	390.8	312.9	244.5	206.1	196.5
22.5°	1484.3	1309.2	1000.6	722.9	560.6	407.9	285.1	206.1	167.7	149.5	144.2
25°	1623.1	1442.7	1039.0	681.3	489.1	309.7	202.9	158.0	135.6	124.9	122.8
27.5°	1737.4	1535.6	1080.7	637.5	418.6	229.6	159.1	129.2	117.5	106.8	105.7
30°	1855.9	1642.4	1092.4	610.8	357.7	189.0	136.7	114.3	101.4	96.1	95.0
32.5°	1959.5	1758.8	1129.8	567.0	300.1	166.6	123.9	102.5	94.0	85.4	84.4
35°	2093.0	1826.0	1147.9	543.5	278.7	150.6	113.2	94.0	81.2	75.8	73.7
37.5°	2236.1	1891.2	1159.7	525.4	260.6	141.0	106.8	88.6	76.9	69.4	67.3
40°	2369.6	1983.0	1142.6	503.0	246.7	129.2	102.5	82.2	71.5	64.1	60.9
42.5°	2472.1	2072.7	1137.3	481.6	231.7	124.9	97.2	79.0	67.3	58.7	57.7
45°	2529.7	2133.6	1099.9	464.5	220.0	127.1	95.0	74.7	64.1	56.6	52.3
47.5°	2515.9	2180.6	1109.5	459.2	204.0	118.5	94.0	71.5	58.7	52.3	49.1
50°	2592.7	2275.6	1093.5	442.1	192.2	106.8	102.5	71.5	57.7	50.2	47.0
52.5°	2605.6	2362.1	1127.7	411.1	174.1	98.2	101.4	70.5	55.5	48.1	43.8
55°	2712.3	2462.5	1193.9	394.0	159.1	85.4	92.9	68.3	50.2	43.8	41.6
57.5°	2857.6	2670.7	1236.6	378.0	138.8	74.7	78.0	67.3	45.9	40.6	37.4
60°	2997.5	2754.0	1239.8	349.2	119.6	67.3	60.9	67.3	42.7	36.3	33.1
62.5°	3102.1	2754.0	1218.4	324.6	104.6	59.8	53.4	64.1	38.4	32.0	29.9
65°	3045.5	2680.3	1162.9	304.3	95.0	52.3	45.9	49.1	34.2	27.8	25.6
67.5°	2944.1	2450.7	1040.1	279.8	94.0	45.9	39.5	36.3	29.9	24.6	22.4
70°	2781.8	2141.0	866.0	252.0	91.8	41.6	35.2	31.0	26.7	21.4	19.2
72.5°	2241.4	1768.4	711.2	236.0	89.7	36.3	29.9	26.7	22.4	18.2	16.0
75°	1552.7	1129.8	547.8	201.8	87.6	33.1	27.8	23.5	19.2	14.9	13.9
77.5°	931.2	755.0	353.5	151.6	57.7	26.7	23.5	18.2	16.0	12.8	11.7
80°	435.7	356.7	143.1	58.7	27.8	19.2	16.0	13.9	12.8	10.7	9.6
82.5°	170.9	150.6	69.4	34.2	22.4	14.9	12.8	11.7	10.7	8.5	7.5
85°	91.8	81.2	33.1	23.5	16.0	10.7	10.7	9.6	8.5	7.5	6.4
87.5°	20.3	14.9	13.9	13.9	11.7	8.5	8.5	7.5	6.4	5.3	4.3
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°	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5
2.5°	1319.9	1335.9	1310.3	1326.3	1303.8	1320.9	1323.1	1307.1	1311.3	1332.7	1342.3
5°	1124.4	1113.8	1090.3	1082.8	1083.9	1070.0	1075.3	1082.8	1094.5	1101.0	1120.2
7.5°	810.5	835.1	834.0	852.1	853.2	851.1	836.1	804.1	814.8	806.2	816.9
10°	579.8	590.5	610.8	622.6	643.9	632.2	598.0	585.2	578.8	577.7	588.4
12.5°	463.4	437.8	435.7	440.0	450.6	436.8	419.7	404.7	412.2	427.1	438.9
15°	358.8	337.4	309.7	305.4	307.5	301.1	283.0	263.8	269.1	284.0	292.6
17.5°	275.5	250.9	231.7	218.9	214.6	192.2	165.5	149.5	145.2	144.2	151.6
20°	185.8	181.5	178.3	162.3	162.3	130.3	107.9	96.1	96.1	98.2	99.3
22.5°	138.8	133.5	134.5	131.3	122.8	97.2	85.4	82.2	82.2	84.4	84.4
25°	120.7	113.2	111.1	110.0	101.4	83.3	74.7	71.5	71.5	73.7	73.7
27.5°	102.5	100.4	97.2	92.9	85.4	71.5	66.2	63.0	64.1	65.1	64.1
30°	94.0	88.6	84.4	84.4	75.8	64.1	59.8	57.7	55.5	57.7	58.7
32.5°	83.3	80.1	78.0	74.7	65.1	56.6	52.3	50.2	49.1	49.1	50.2
35°	71.5	71.5	69.4	65.1	56.6	51.3	45.9	43.8	42.7	43.8	43.8
37.5°	64.1	60.9	61.9	57.7	50.2	44.8	39.5	37.4	37.4	36.3	37.4
40°	59.8	54.5	51.3	49.1	44.8	38.4	34.2	32.0	31.0	31.0	31.0
42.5°	53.4	49.1	42.7	41.6	40.6	33.1	27.8	26.7	25.6	24.6	24.6
45°	50.2	43.8	38.4	33.1	33.1	27.8	23.5	21.4	20.3	19.2	20.3
47.5°	45.9	39.5	33.1	27.8	26.7	22.4	18.2	16.0	14.9	14.9	14.9
50°	43.8	35.2	28.8	23.5	20.3	18.2	13.9	11.7	10.7	10.7	10.7
52.5°	40.6	33.1	25.6	20.3	16.0	13.9	10.7	8.5	7.5	7.5	7.5
55°	36.3	29.9	22.4	17.1	13.9	10.7	7.5	5.3	4.3	4.3	4.3
57.5°	34.2	26.7	19.2	14.9	10.7	7.5	4.3	3.2	3.2	2.1	3.2
60°	31.0	23.5	16.0	11.7	8.5	5.3	3.2	1.1	1.1	1.1	1.1
62.5°	26.7	20.3	13.9	9.6	6.4	3.2	1.1	0.0	0.0	0.0	0.0
65°	22.4	16.0	10.7	7.5	4.3	1.1	0.0	0.0	0.0	0.0	0.0
67.5°	19.2	13.9	8.5	5.3	3.2	0.0	0.0	0.0	0.0	0.0	0.0
70°	17.1	11.7	6.4	4.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	13.9	9.6	5.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	11.7	7.5	3.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	9.6	5.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	7.5	4.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.4	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.2	1.1	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°	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5	1503.5
2.5°	1356.2	1349.8	1381.8	1434.1	1460.8	1513.1	1526.0	1559.1	1550.5	1562.3
5°	1122.3	1135.1	1182.1	1259.0	1286.8	1362.6	1434.1	1505.7	1551.6	1574.0
7.5°	832.9	875.6	933.3	1003.8	1075.3	1174.6	1296.4	1379.7	1424.5	1472.6
10°	620.4	666.3	732.5	802.0	918.4	1029.4	1151.1	1254.7	1293.2	1338.0
12.5°	488.0	559.6	636.4	711.2	780.6	886.3	1036.9	1187.5	1229.1	1263.3
15°	339.6	427.1	537.1	634.3	731.5	823.3	979.2	1161.8	1218.4	1276.1
17.5°	187.9	257.4	383.4	520.0	663.1	804.1	998.4	1208.8	1294.2	1334.8
20°	108.9	136.7	226.4	388.7	577.7	762.4	1008.1	1297.4	1410.6	1430.9
22.5°	89.7	99.3	128.1	243.5	473.1	735.8	1057.2	1421.3	1536.6	1584.7
25°	76.9	84.4	99.3	146.3	357.7	679.2	1088.1	1576.2	1682.9	1735.3
27.5°	68.3	75.8	87.6	107.9	243.5	601.2	1139.4	1716.0	1822.8	1894.4
30°	59.8	66.2	78.0	91.8	168.7	513.6	1183.2	1818.6	1969.1	1991.5
32.5°	53.4	58.7	67.3	79.0	124.9	389.8	1218.4	1924.3	2051.3	2100.5
35°	45.9	52.3	57.7	67.3	95.0	293.7	1197.1	2006.5	2172.0	2230.7
37.5°	40.6	44.8	50.2	56.6	80.1	229.6	1153.3	2104.7	2275.6	2330.1
40°	34.2	37.4	43.8	50.2	72.6	177.3	1103.1	2223.3	2420.8	2516.9
42.5°	28.8	32.0	36.3	47.0	59.8	131.3	1001.6	2315.1	2538.3	2619.4
45°	22.4	26.7	33.1	47.0	48.1	97.2	897.0	2383.4	2604.5	2645.1
47.5°	17.1	21.4	32.0	40.6	38.4	67.3	773.1	2461.4	2672.8	2710.2
50°	12.8	17.1	36.3	35.2	32.0	51.3	695.2	2515.9	2677.1	2697.4
52.5°	8.5	12.8	29.9	26.7	26.7	44.8	673.8	2513.7	2687.8	2644.0
55°	6.4	9.6	17.1	19.2	23.5	39.5	654.6	2593.8	2691.0	2722.0
57.5°	4.3	7.5	11.7	14.9	20.3	34.2	615.1	2689.9	2790.3	2806.3
60°	2.1	5.3	8.5	11.7	17.1	29.9	559.6	2760.4	2911.0	2928.1
62.5°	1.1	3.2	6.4	9.6	13.9	23.5	501.9	2648.3	2858.6	2888.5
65°	0.0	2.1	4.3	6.4	8.5	17.1	407.9	2390.9	2651.5	2761.5
67.5°	0.0	0.0	2.1	4.3	5.3	12.8	307.5	2175.2	2460.3	2609.8
70°	0.0	0.0	1.1	1.1	3.2	9.6	196.5	1801.5	2196.6	2278.8
72.5°	0.0	0.0	0.0	0.0	1.1	6.4	114.3	1338.0	1721.4	1874.1
75°	0.0	0.0	0.0	0.0	0.0	5.3	57.7	860.7	1198.1	1403.2
77.5°	0.0	0.0	0.0	0.0	0.0	4.3	31.0	555.3	883.1	1055.0
80°	0.0	0.0	0.0	0.0	0.0	1.1	18.2	322.5	564.9	684.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	7.5	158.0	337.4	395.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	2.1	84.4	168.7	222.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	11.7	22.4
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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