

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: P677362

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

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677362
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-SLL-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/
SLL distribution lens and House Side Shield
Light Source: (16) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

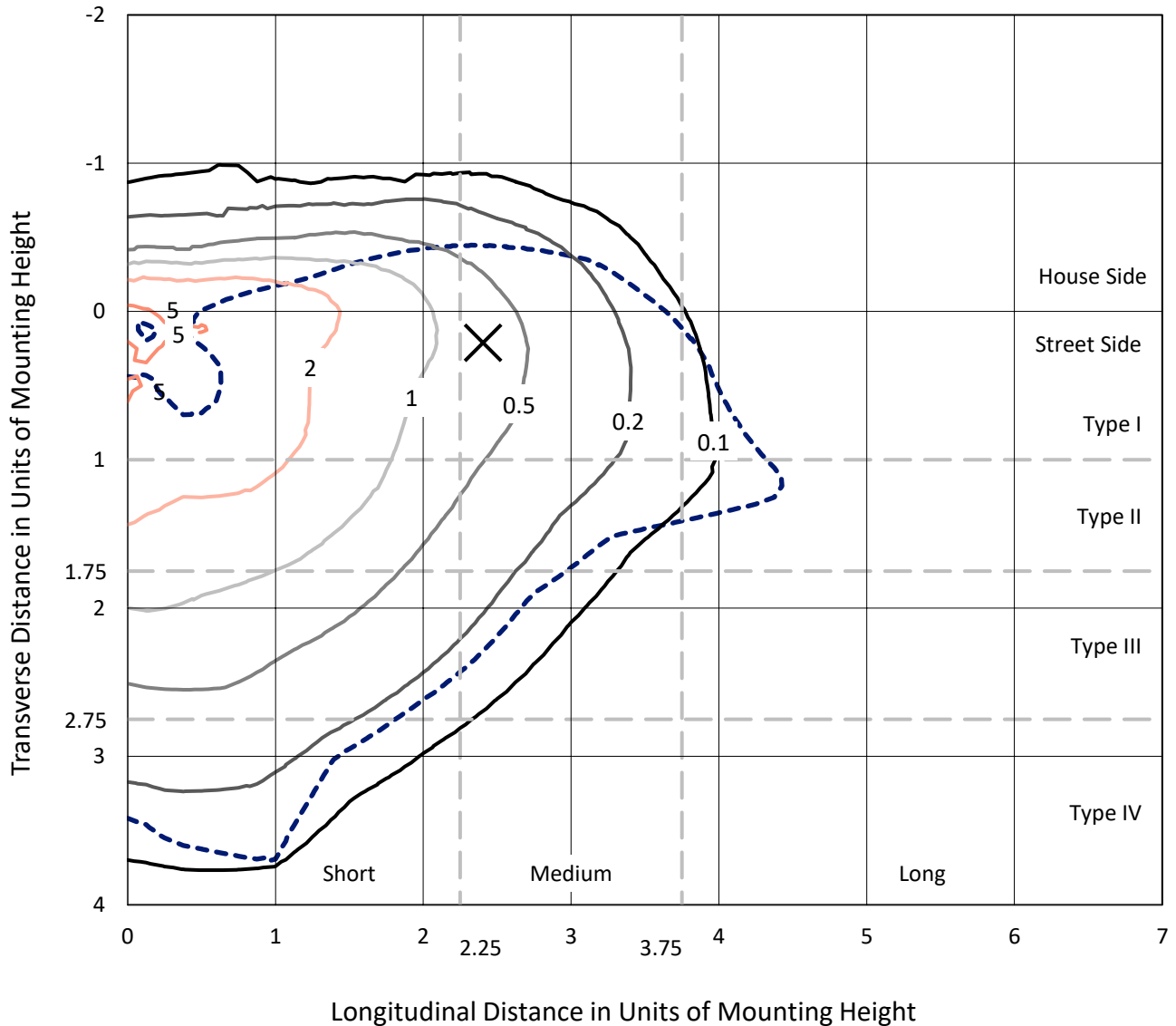
Lumens per Lamp: N/A
Luminaire Lumens: 3530.8 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

Input Watts (W): 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

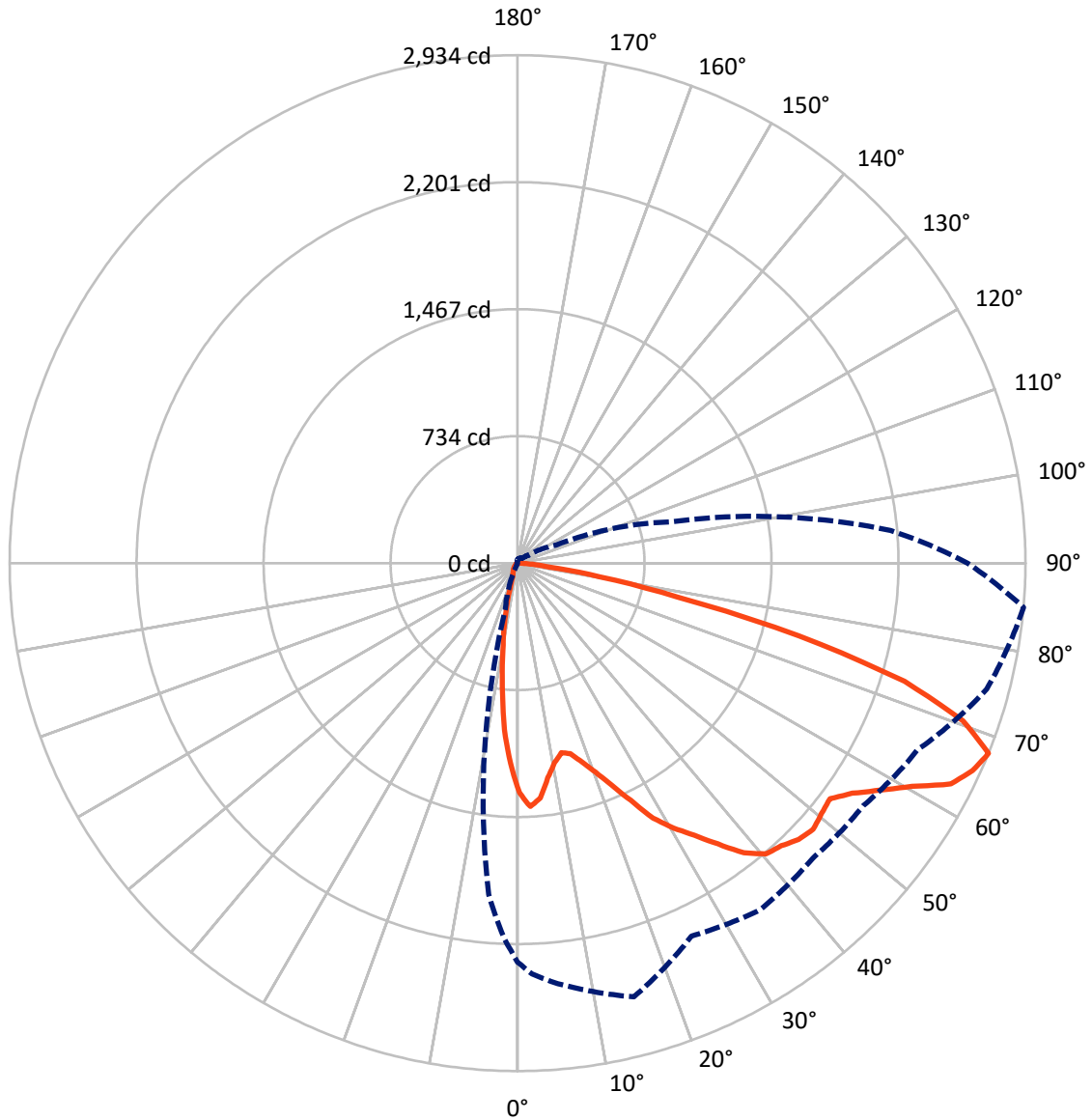
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 6.6 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	613.1	0.0	613.1
	% Fixture	17.4	0.0	17.4
Street Side	Lumens	2917.7	0.0	2917.7
	% Fixture	82.6	0.0	82.6
Total	Lumens	3530.8	0.0	3530.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	2.9
10°-20°	197.8	5.6
20°-30°	273.7	7.8
30°-40°	386.8	11.0
40°-50°	526.6	14.9
50°-60°	697.5	19.8
60°-70°	809.8	22.9
70°-80°	458.6	13.0
80°-90°	79.2	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°	3530.8	100.0
0°-180°	3530.8	100.0

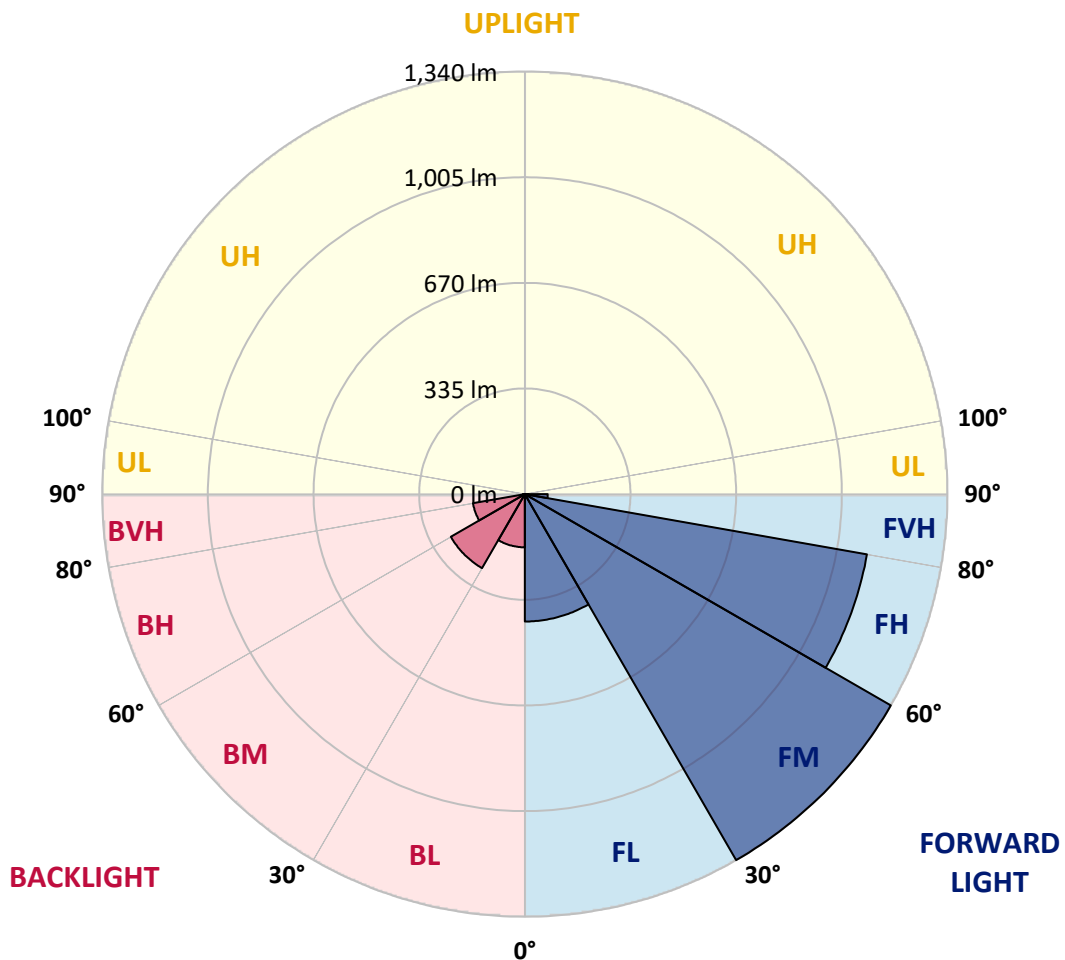


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	403.8	11.4			
FM (30°-60°)	1340.0	38.0			
FH (60°-80°)	1101.4	31.2			G1/1800
FVH (80°-90°)	72.6	2.1			G1/100
BL (0°-30°)	168.5	4.8	B1/500		
BM (30°-60°)	270.9	7.7	B1/1000		
BH (60°-80°)	167.0	4.7	B1/500		G1/500
BVH (80°-90°)	6.7	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°	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5
2.5°	1379.4	1408.6	1409.6	1422.8	1436.0	1436.0	1467.1	1459.5	1432.2	1427.5	1407.7
5°	1389.8	1400.1	1407.7	1474.6	1531.2	1525.5	1542.5	1531.2	1478.4	1410.5	1364.3
7.5°	1300.2	1311.5	1341.7	1455.8	1532.1	1557.6	1589.7	1518.9	1463.3	1340.7	1252.1
10°	1181.4	1203.1	1258.7	1388.8	1483.1	1564.2	1564.2	1507.6	1400.1	1280.4	1172.0
12.5°	1115.4	1158.8	1188.9	1320.9	1443.5	1499.1	1497.3	1467.1	1397.3	1246.5	1123.9
15°	1126.7	1139.0	1203.1	1305.9	1386.9	1384.1	1418.1	1408.6	1359.6	1276.6	1141.8
17.5°	1178.6	1197.4	1253.1	1305.9	1344.5	1333.2	1332.3	1377.5	1380.3	1327.5	1208.7
20°	1263.4	1319.1	1345.5	1361.5	1314.3	1266.3	1260.6	1323.8	1372.8	1392.6	1288.9
22.5°	1399.2	1436.0	1489.7	1407.7	1285.1	1224.8	1213.5	1283.2	1382.2	1469.9	1392.6
25°	1532.1	1560.4	1612.3	1506.7	1318.1	1216.3	1196.5	1256.8	1418.1	1577.4	1518.0
27.5°	1672.6	1697.1	1702.8	1579.3	1336.0	1199.3	1175.7	1256.8	1448.2	1634.0	1667.9
30°	1758.4	1787.7	1793.3	1643.4	1365.3	1213.5	1202.1	1262.5	1469.0	1682.1	1775.4
32.5°	1854.6	1862.1	1857.4	1654.7	1397.3	1254.9	1207.8	1300.2	1492.5	1739.6	1873.5
35°	1969.6	1982.8	1934.7	1706.6	1469.0	1281.3	1264.4	1346.4	1533.1	1766.0	1992.3
37.5°	2057.3	2098.8	1990.4	1726.4	1483.1	1337.0	1339.8	1442.6	1561.4	1798.0	2123.3
40°	2222.3	2152.5	2084.7	1794.3	1536.9	1431.3	1416.2	1541.6	1656.6	1818.8	2209.1
42.5°	2312.8	2276.1	2121.4	1800.9	1619.8	1561.4	1565.1	1653.8	1706.6	1877.2	2232.7
45°	2335.5	2296.8	2171.4	1805.6	1701.9	1715.1	1780.1	1797.1	1780.1	1915.9	2277.0
47.5°	2393.0	2309.1	2165.7	1868.7	1834.8	1885.7	1968.7	2005.5	1880.1	1901.7	2297.7
50°	2381.7	2333.6	2153.5	1895.1	1997.0	2131.8	2187.4	2172.3	1991.3	1872.5	2275.1
52.5°	2334.5	2282.7	2191.2	1966.8	2148.8	2311.9	2389.2	2351.5	2090.3	1938.5	2260.0
55°	2403.3	2363.7	2240.2	2063.9	2262.9	2470.3	2525.0	2496.7	2211.9	1999.8	2345.8
57.5°	2477.8	2469.3	2373.2	2178.0	2397.7	2633.4	2633.4	2598.5	2317.5	2088.4	2473.1
60°	2585.3	2604.2	2471.2	2253.4	2443.9	2624.0	2760.7	2720.1	2424.1	2244.0	2617.4
62.5°	2550.4	2610.8	2597.6	2415.6	2496.7	2670.2	2744.7	2774.8	2556.1	2433.5	2809.7
65°	2438.2	2502.3	2596.6	2522.1	2457.1	2558.0	2595.7	2687.1	2622.1	2611.7	2888.9
67.5°	2304.3	2374.1	2432.6	2593.8	2376.9	2443.9	2410.9	2440.1	2550.4	2806.9	2934.2
70°	2012.1	2079.0	2171.4	2434.5	2164.8	2104.5	2096.0	2081.8	2253.4	2737.1	2728.6
72.5°	1654.7	1685.8	1838.6	1979.1	1601.9	1590.6	1603.8	1587.8	1786.7	2477.8	2337.3
75°	1238.9	1270.0	1356.8	1519.9	1090.9	1025.8	1101.3	1175.7	1364.3	1923.4	1679.2
77.5°	931.5	971.1	1025.8	1137.1	800.5	698.7	709.0	779.7	986.2	1540.6	941.0
80°	604.4	599.7	705.3	782.6	602.5	621.3	594.9	646.8	714.7	824.1	480.9
82.5°	348.9	353.6	397.9	448.8	419.6	479.9	346.0	578.0	510.1	335.7	179.1
85°	196.1	204.6	245.1	311.1	263.1	176.3	144.3	286.6	320.6	137.7	86.7
87.5°	19.8	17.0	33.0	117.9	71.7	29.2	43.4	68.8	77.3	51.9	25.5
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5
2.5°	1379.4	1379.4	1355.8	1316.2	1300.2	1271.9	1233.3	1245.5	1232.3	1184.2	1172.0
5°	1322.8	1277.6	1228.5	1168.2	1133.3	1061.7	1039.0	998.5	1005.1	964.5	966.4
7.5°	1205.0	1169.1	1086.2	1007.0	938.1	875.9	788.2	755.2	723.2	707.1	726.0
10°	1136.1	1069.2	956.1	852.3	760.9	705.3	646.8	601.5	560.1	528.9	522.3
12.5°	1086.2	1026.8	890.1	763.7	692.1	646.8	593.1	530.8	490.3	436.5	420.5
15°	1071.1	998.5	854.2	728.8	659.1	584.6	523.3	462.0	409.2	352.6	332.8
17.5°	1122.9	1039.0	853.3	700.5	602.5	522.3	437.5	368.7	314.9	263.1	250.8
20°	1210.6	1082.4	880.6	683.6	548.7	441.3	345.1	276.3	215.9	182.0	173.5
22.5°	1310.6	1155.9	883.5	638.3	495.0	360.2	251.7	182.0	148.0	132.0	127.3
25°	1433.1	1273.8	917.4	601.5	431.8	273.4	179.1	139.5	119.7	110.3	108.4
27.5°	1534.0	1355.8	954.2	562.9	369.6	202.7	140.5	114.1	103.7	94.3	93.3
30°	1638.7	1450.1	964.5	539.3	315.9	166.9	120.7	100.9	89.6	84.9	83.9
32.5°	1730.1	1552.9	997.5	500.7	264.9	147.1	109.4	90.5	83.0	75.4	74.5
35°	1848.0	1612.3	1013.6	479.9	246.1	132.9	99.9	83.0	71.7	66.9	65.1
37.5°	1974.3	1669.8	1023.9	463.9	230.1	124.5	94.3	78.3	67.9	61.3	59.4
40°	2092.2	1750.9	1008.9	444.1	217.8	114.1	90.5	72.6	63.2	56.6	53.7
42.5°	2182.7	1830.1	1004.1	425.2	204.6	110.3	85.8	69.8	59.4	51.9	50.9
45°	2233.6	1883.8	971.1	410.1	194.2	112.2	83.9	66.0	56.6	50.0	46.2
47.5°	2221.4	1925.3	979.6	405.4	180.1	104.7	83.0	63.2	51.9	46.2	43.4
50°	2289.3	2009.2	965.5	390.3	169.7	94.3	90.5	63.2	50.9	44.3	41.5
52.5°	2300.6	2085.6	995.7	363.0	153.7	86.7	89.6	62.2	49.0	42.4	38.7
55°	2394.9	2174.2	1054.1	347.9	140.5	75.4	82.0	60.3	44.3	38.7	36.8
57.5°	2523.1	2358.1	1091.8	333.8	122.6	66.0	68.8	59.4	40.5	35.8	33.0
60°	2646.6	2431.6	1094.7	308.3	105.6	59.4	53.7	59.4	37.7	32.1	29.2
62.5°	2739.0	2431.6	1075.8	286.6	92.4	52.8	47.1	56.6	33.9	28.3	26.4
65°	2689.0	2366.6	1026.8	268.7	83.9	46.2	40.5	43.4	30.2	24.5	22.6
67.5°	2599.5	2163.9	918.3	247.0	83.0	40.5	34.9	32.1	26.4	21.7	19.8
70°	2456.1	1890.4	764.7	222.5	81.1	36.8	31.1	27.3	23.6	18.9	17.0
72.5°	1979.1	1561.4	627.9	208.4	79.2	32.1	26.4	23.6	19.8	16.0	14.1
75°	1370.9	997.5	483.7	178.2	77.3	29.2	24.5	20.7	17.0	13.2	12.3
77.5°	822.2	666.6	312.1	133.9	50.9	23.6	20.7	16.0	14.1	11.3	10.4
80°	384.7	314.9	126.3	51.9	24.5	17.0	14.1	12.3	11.3	9.4	8.5
82.5°	150.9	132.9	61.3	30.2	19.8	13.2	11.3	10.4	9.4	7.5	6.6
85°	81.1	71.7	29.2	20.7	14.1	9.4	9.4	8.5	7.5	6.6	5.7
87.5°	17.9	13.2	12.3	12.3	10.4	7.5	7.5	6.6	5.7	4.7	3.8
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°	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5
2.5°	1165.4	1179.5	1156.9	1171.0	1151.2	1166.3	1168.2	1154.1	1157.8	1176.7	1185.2
5°	992.8	983.4	962.7	956.1	957.0	944.7	949.5	956.1	966.4	972.1	989.1
7.5°	715.6	737.3	736.4	752.4	753.3	751.5	738.3	710.0	719.4	711.9	721.3
10°	512.0	521.4	539.3	549.7	568.5	558.2	528.0	516.7	511.0	510.1	519.5
12.5°	409.2	386.6	384.7	388.5	397.9	385.6	370.5	357.3	363.9	377.1	387.5
15°	316.8	297.9	273.4	269.7	271.5	265.9	249.9	232.9	237.6	250.8	258.3
17.5°	243.3	221.6	204.6	193.3	189.5	169.7	146.1	132.0	128.2	127.3	133.9
20°	164.1	160.3	157.5	143.3	143.3	115.0	95.2	84.9	84.9	86.7	87.7
22.5°	122.6	117.9	118.8	116.0	108.4	85.8	75.4	72.6	72.6	74.5	74.5
25°	106.5	99.9	98.1	97.1	89.6	73.5	66.0	63.2	63.2	65.1	65.1
27.5°	90.5	88.6	85.8	82.0	75.4	63.2	58.5	55.6	56.6	57.5	56.6
30°	83.0	78.3	74.5	74.5	66.9	56.6	52.8	50.9	49.0	50.9	51.9
32.5°	73.5	70.7	68.8	66.0	57.5	50.0	46.2	44.3	43.4	43.4	44.3
35°	63.2	63.2	61.3	57.5	50.0	45.3	40.5	38.7	37.7	38.7	38.7
37.5°	56.6	53.7	54.7	50.9	44.3	39.6	34.9	33.0	33.0	32.1	33.0
40°	52.8	48.1	45.3	43.4	39.6	33.9	30.2	28.3	27.3	27.3	27.3
42.5°	47.1	43.4	37.7	36.8	35.8	29.2	24.5	23.6	22.6	21.7	21.7
45°	44.3	38.7	33.9	29.2	29.2	24.5	20.7	18.9	17.9	17.0	17.9
47.5°	40.5	34.9	29.2	24.5	23.6	19.8	16.0	14.1	13.2	13.2	13.2
50°	38.7	31.1	25.5	20.7	17.9	16.0	12.3	10.4	9.4	9.4	9.4
52.5°	35.8	29.2	22.6	17.9	14.1	12.3	9.4	7.5	6.6	6.6	6.6
55°	32.1	26.4	19.8	15.1	12.3	9.4	6.6	4.7	3.8	3.8	3.8
57.5°	30.2	23.6	17.0	13.2	9.4	6.6	3.8	2.8	2.8	1.9	2.8
60°	27.3	20.7	14.1	10.4	7.5	4.7	2.8	0.9	0.9	0.9	0.9
62.5°	23.6	17.9	12.3	8.5	5.7	2.8	0.9	0.0	0.0	0.0	0.0
65°	19.8	14.1	9.4	6.6	3.8	0.9	0.0	0.0	0.0	0.0	0.0
67.5°	17.0	12.3	7.5	4.7	2.8	0.0	0.0	0.0	0.0	0.0	0.0
70°	15.1	10.4	5.7	3.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	12.3	8.5	4.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	10.4	6.6	2.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	8.5	4.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	6.6	3.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.7	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	0.9	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°	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5	1327.5
2.5°	1197.4	1191.8	1220.1	1266.3	1289.8	1336.0	1347.3	1376.6	1369.0	1379.4
5°	990.9	1002.3	1043.7	1111.6	1136.1	1203.1	1266.3	1329.4	1370.0	1389.8
7.5°	735.4	773.1	824.1	886.3	949.5	1037.1	1144.6	1218.2	1257.8	1300.2
10°	547.8	588.3	646.8	708.1	810.9	908.9	1016.4	1107.9	1141.8	1181.4
12.5°	430.9	494.1	561.9	627.9	689.2	782.6	915.5	1048.5	1085.2	1115.4
15°	299.8	377.1	474.3	560.1	645.9	726.9	864.6	1025.8	1075.8	1126.7
17.5°	165.9	227.2	338.5	459.2	585.5	710.0	881.6	1067.3	1142.7	1178.6
20°	96.2	120.7	199.9	343.2	510.1	673.2	890.1	1145.6	1245.5	1263.4
22.5°	79.2	87.7	113.1	215.0	417.7	649.6	933.4	1254.9	1356.8	1399.2
25°	67.9	74.5	87.7	129.2	315.9	599.7	960.8	1391.7	1485.9	1532.1
27.5°	60.3	66.9	77.3	95.2	215.0	530.8	1006.0	1515.2	1609.5	1672.6
30°	52.8	58.5	68.8	81.1	149.0	453.5	1044.7	1605.7	1738.6	1758.4
32.5°	47.1	51.9	59.4	69.8	110.3	344.1	1075.8	1699.0	1811.2	1854.6
35°	40.5	46.2	50.9	59.4	83.9	259.3	1056.9	1771.6	1917.8	1969.6
37.5°	35.8	39.6	44.3	50.0	70.7	202.7	1018.3	1858.4	2009.2	2057.3
40°	30.2	33.0	38.7	44.3	64.1	156.5	974.0	1963.0	2137.5	2222.3
42.5°	25.5	28.3	32.1	41.5	52.8	116.0	884.4	2044.1	2241.2	2312.8
45°	19.8	23.6	29.2	41.5	42.4	85.8	792.0	2104.5	2299.6	2335.5
47.5°	15.1	18.9	28.3	35.8	33.9	59.4	682.6	2173.3	2360.0	2393.0
50°	11.3	15.1	32.1	31.1	28.3	45.3	613.8	2221.4	2363.7	2381.7
52.5°	7.5	11.3	26.4	23.6	23.6	39.6	594.9	2219.5	2373.2	2334.5
55°	5.7	8.5	15.1	17.0	20.7	34.9	578.0	2290.2	2376.0	2403.3
57.5°	3.8	6.6	10.4	13.2	17.9	30.2	543.1	2375.1	2463.7	2477.8
60°	1.9	4.7	7.5	10.4	15.1	26.4	494.1	2437.3	2570.2	2585.3
62.5°	0.9	2.8	5.7	8.5	12.3	20.7	443.1	2338.3	2524.0	2550.4
65°	0.0	1.9	3.8	5.7	7.5	15.1	360.2	2111.1	2341.1	2438.2
67.5°	0.0	0.0	1.9	3.8	4.7	11.3	271.5	1920.6	2172.3	2304.3
70°	0.0	0.0	0.9	0.9	2.8	8.5	173.5	1590.6	1939.5	2012.1
72.5°	0.0	0.0	0.0	0.0	0.9	5.7	100.9	1181.4	1519.9	1654.7
75°	0.0	0.0	0.0	0.0	0.0	4.7	50.9	759.9	1057.9	1238.9
77.5°	0.0	0.0	0.0	0.0	0.0	3.8	27.3	490.3	779.7	931.5
80°	0.0	0.0	0.0	0.0	0.0	0.9	16.0	284.7	498.8	604.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	6.6	139.5	297.9	348.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.9	74.5	149.0	196.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	10.4	19.8
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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