

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: P676200

Luminaire Tested: **CCW-SA-1E-840-U-T1**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676200
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1E-840-U-T1
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @1050mA w/
T1 distribution lens
Light Source: (16) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

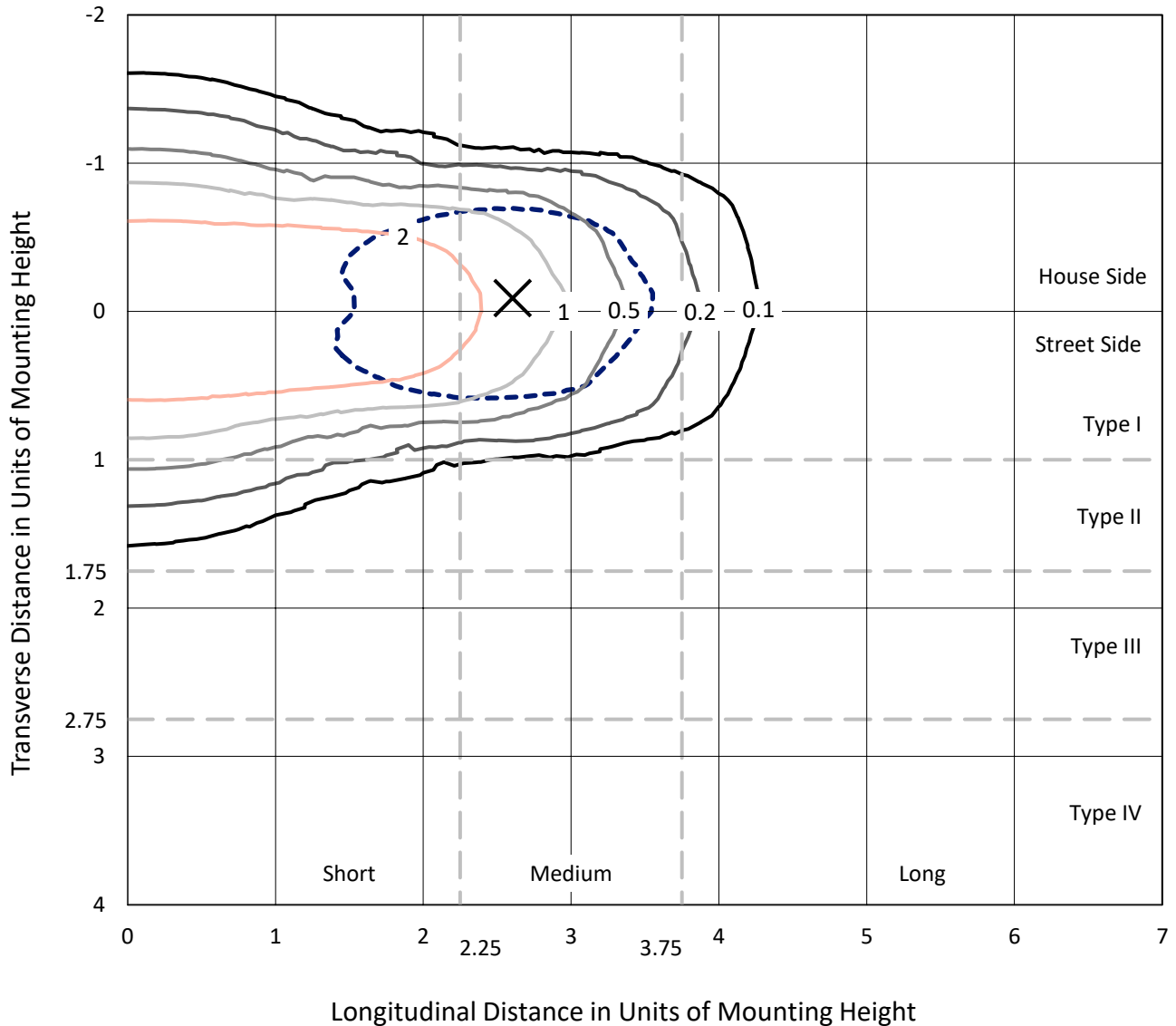
Lumens per Lamp: N/A
Luminaire Lumens: 5676.4 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type I - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 56.1
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

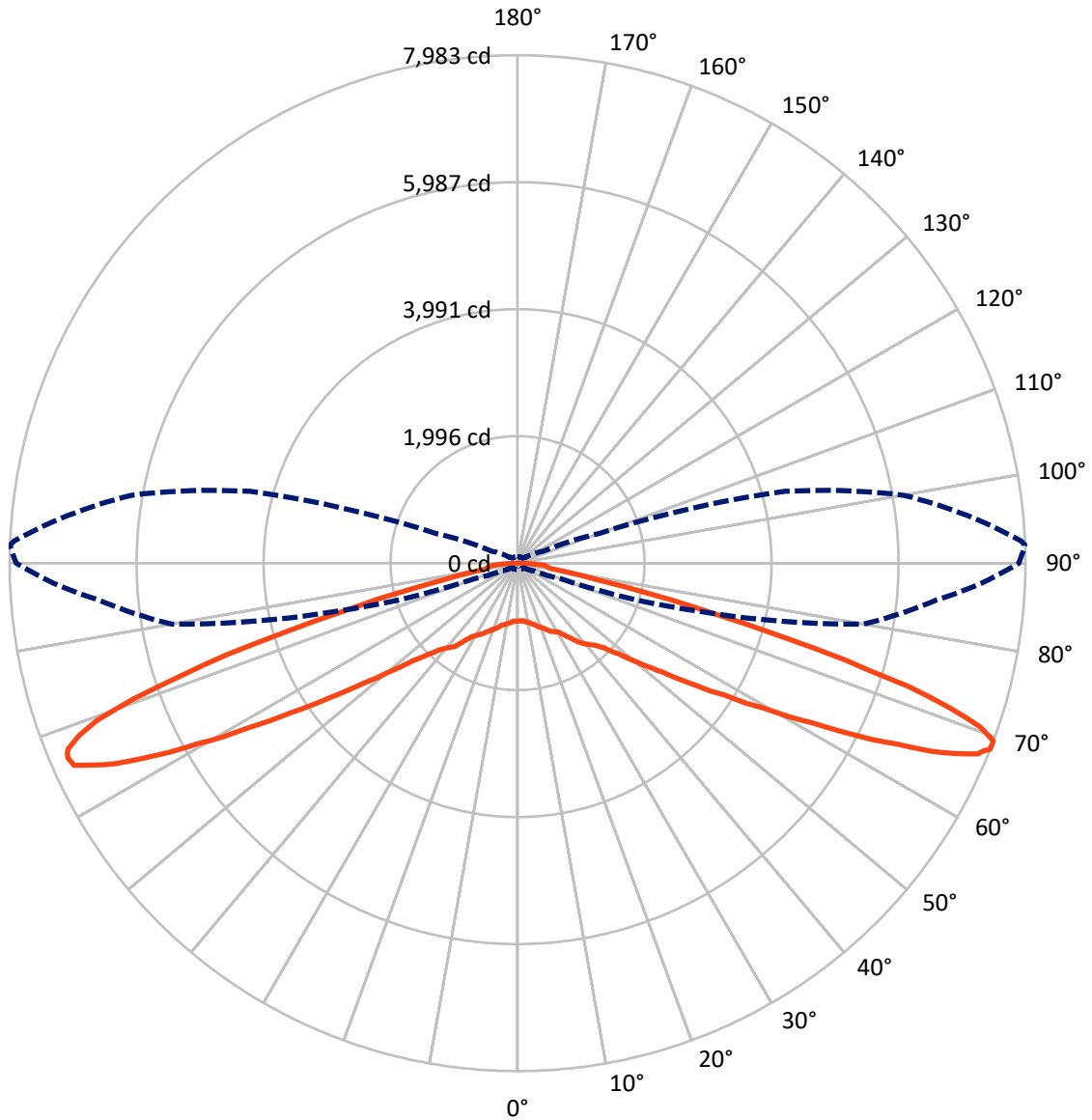
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 4.4 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 92-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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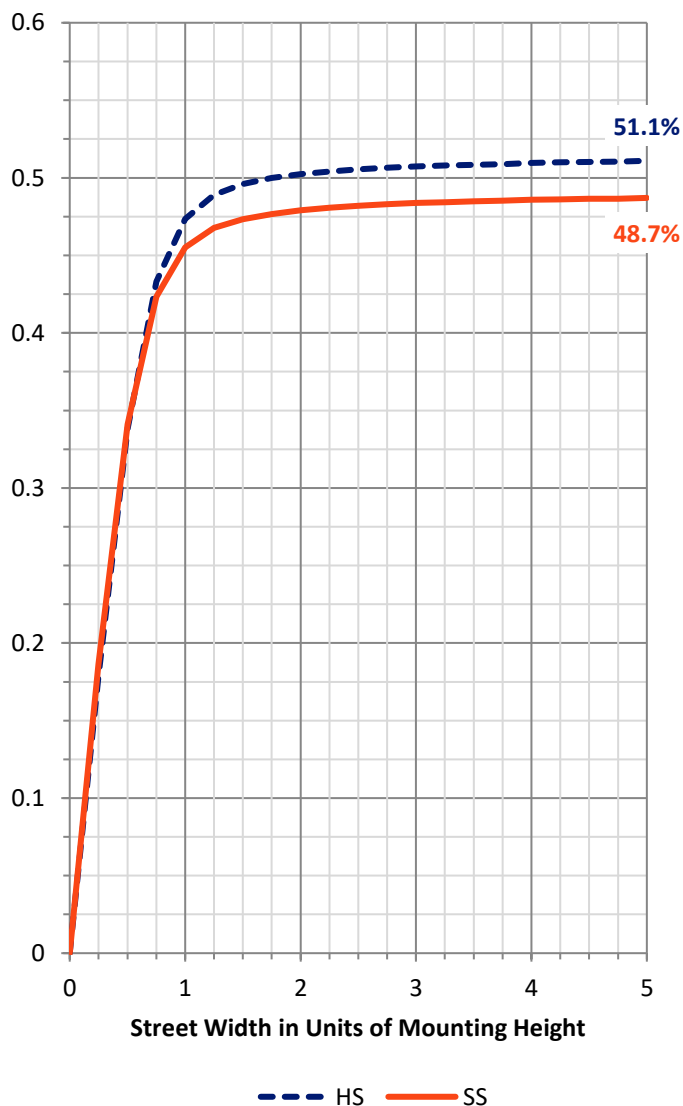
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2923.3	0.0	2923.3
	% Fixture	51.5	0.0	51.5
Street Side	Lumens	2753.1	0.0	2753.1
	% Fixture	48.5	0.0	48.5
Total	Lumens	5676.4	0.0	5676.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.9	1.6
10°-20°	294.5	5.2
20°-30°	502.5	8.9
30°-40°	701.7	12.4
40°-50°	892.6	15.7
50°-60°	1128.5	19.9
60°-70°	1391.8	24.5
70°-80°	608.0	10.7
80°-90°	65.9	1.2
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°	5676.4	100.0
0°-180°	5676.4	100.0



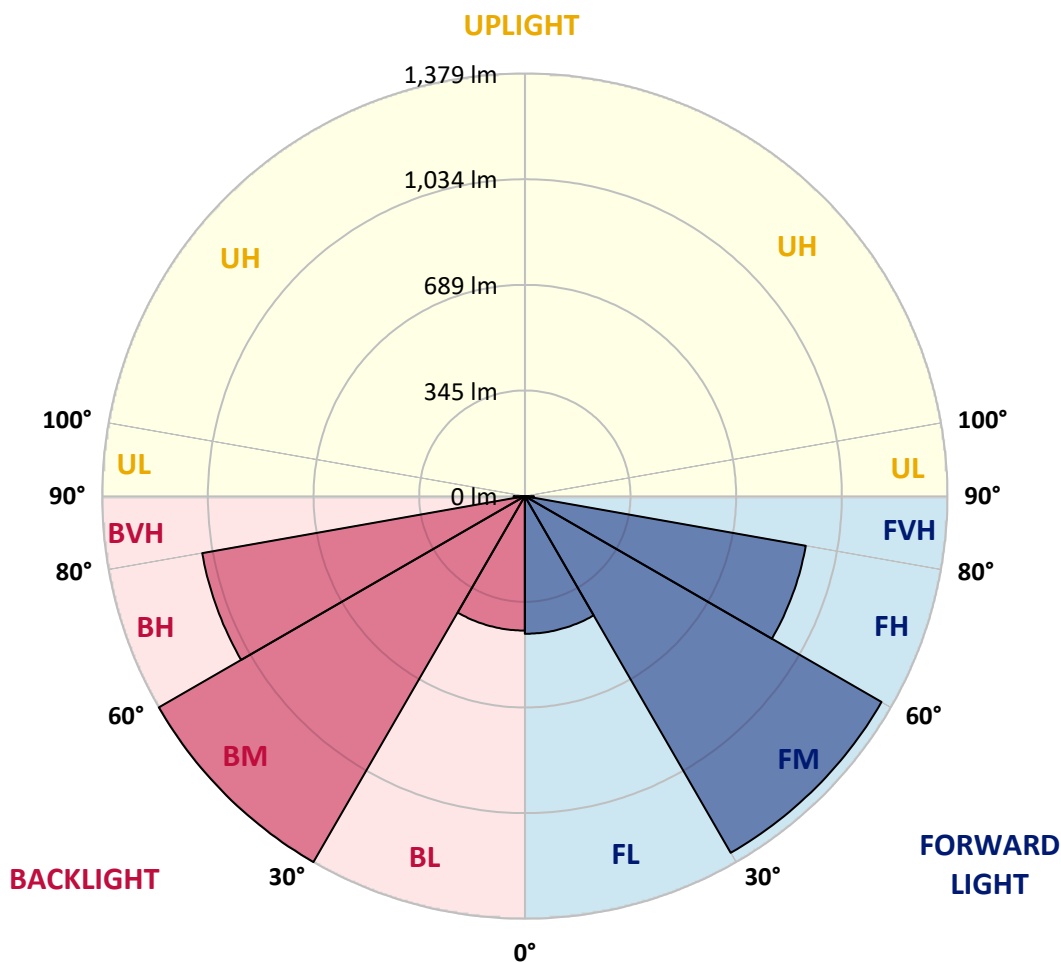
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	449.2	7.9			
FM (30°-60°)	1343.9	23.7			
FH (60°-80°)	930.8	16.4			G1/1800
FVH (80°-90°)	29.2	0.5			G1/100
BL (0°-30°)	438.7	7.7	B1/500		
BM (30°-60°)	1378.9	24.3	B2/2500		
BH (60°-80°)	1069.0	18.8	B3/2500		G3/2500
BVH (80°-90°)	36.7	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
0°	907.7	907.7	907.7	907.7	907.7	907.7	907.7	907.7	907.7	907.7	907.7
2.5°	926.9	925.8	929.0	931.1	921.6	924.7	922.6	920.5	913.0	909.8	903.4
5°	952.4	955.6	966.3	956.7	961.0	955.6	938.6	943.9	934.3	932.2	925.8
7.5°	997.2	990.8	1005.7	995.1	998.3	987.6	980.1	970.6	968.4	953.5	954.6
10°	1006.8	1019.6	1026.0	1023.8	1026.0	1031.3	1017.4	1002.5	982.3	978.0	963.1
12.5°	1000.4	1012.1	1029.2	1043.0	1052.6	1054.7	1049.4	1046.2	1037.7	1013.2	1012.1
15°	994.0	985.5	996.1	1044.1	1076.0	1097.3	1104.8	1086.7	1088.8	1056.9	1044.1
17.5°	951.4	938.6	980.1	1027.0	1066.4	1113.3	1149.5	1144.2	1144.2	1118.6	1100.5
20°	894.9	916.2	937.5	997.2	1069.6	1140.0	1209.2	1206.0	1193.2	1185.8	1146.3
22.5°	847.0	856.6	896.0	958.8	1049.4	1147.4	1229.4	1288.0	1258.2	1228.4	1204.9
25°	813.9	805.4	855.5	920.5	1030.2	1134.6	1267.8	1328.5	1344.5	1322.1	1277.4
27.5°	767.1	767.1	806.5	868.3	968.4	1128.2	1305.1	1397.8	1421.2	1388.2	1323.2
30°	713.8	720.2	754.3	824.6	922.6	1081.4	1320.0	1477.7	1496.9	1468.1	1401.0
32.5°	672.3	672.3	710.6	785.2	890.7	1060.1	1310.4	1556.5	1592.7	1571.4	1502.2
35°	627.5	624.3	652.0	734.0	839.5	1018.5	1307.2	1619.4	1700.3	1701.4	1629.0
37.5°	563.6	576.4	611.5	676.5	799.0	978.0	1297.6	1695.0	1839.9	1864.4	1814.3
40°	521.0	526.3	558.3	629.6	736.2	930.1	1283.8	1756.8	1932.6	2016.8	1947.5
42.5°	459.2	466.6	491.1	579.6	675.5	861.9	1223.1	1800.5	2064.7	2160.6	2102.0
45°	394.2	398.5	434.7	507.1	610.5	780.9	1158.1	1870.8	2192.6	2388.6	2354.5
47.5°	316.4	318.5	349.4	425.1	532.7	700.0	1057.9	1867.6	2295.9	2616.6	2712.5
50°	247.2	252.5	275.9	337.7	438.9	600.9	941.8	1842.0	2425.9	2876.5	3065.1
52.5°	197.1	198.2	213.1	262.1	338.8	501.8	817.1	1761.1	2548.4	3131.2	3497.6
55°	163.0	163.0	171.5	201.4	260.0	381.4	671.2	1626.8	2563.3	3412.4	3969.6
56°	156.6	154.5	161.9	187.5	234.4	344.1	603.0	1536.3	2584.6	3542.4	4206.1
57°	148.1	149.2	153.4	171.5	210.9	304.7	527.4	1447.9	2569.7	3648.9	4380.8
58°	143.8	141.7	150.2	161.9	186.4	270.6	475.2	1343.4	2546.3	3736.3	4635.5
59°	137.4	136.4	141.7	152.3	173.7	240.8	411.2	1230.5	2500.4	3849.2	4825.1
60°	135.3	134.2	136.4	144.9	159.8	210.9	362.2	1098.4	2377.9	3965.3	5060.6
61°	128.9	130.0	134.2	139.6	151.3	189.6	326.0	963.1	2298.0	4063.4	5320.5
62°	130.0	127.8	130.0	134.2	142.8	174.7	285.5	829.9	2155.3	4174.2	5515.5
63°	123.6	122.5	125.7	131.0	135.3	157.7	249.3	717.0	1993.3	4199.7	5680.6
64°	121.5	120.4	121.5	128.9	130.0	148.1	220.5	612.6	1758.9	4243.4	5892.6
65°	116.1	116.1	118.3	121.5	125.7	139.6	197.1	531.6	1525.6	4128.3	5957.6
66°	111.9	112.9	112.9	118.3	121.5	130.0	181.1	451.7	1301.9	3945.1	6020.5
67°	108.7	108.7	109.7	114.0	117.2	122.5	163.0	391.0	1098.4	3726.7	5923.5
67.5°	106.5	107.6	107.6	111.9	115.1	122.5	155.5	370.8	982.3	3487.0	5851.1
68°	103.3	104.4	104.4	108.7	111.9	118.3	150.2	338.8	905.6	3331.4	5716.8
69°	101.2	100.1	100.1	104.4	108.7	112.9	139.6	296.2	720.2	2896.8	5520.8
70°	94.8	94.8	96.9	100.1	103.3	107.6	128.9	261.0	609.4	2398.2	5015.8
71°	91.6	90.6	91.6	94.8	98.0	103.3	118.3	231.2	498.6	1991.2	4519.3
72°	85.2	87.4	87.4	90.6	93.8	96.9	110.8	201.4	418.7	1591.7	3972.8
72.5°	84.2	84.2	85.2	88.4	90.6	95.9	106.5	192.8	382.5	1403.1	3743.7
73°	81.0	81.0	82.0	85.2	87.4	92.7	103.3	173.7	348.4	1248.6	3315.5
74°	77.8	76.7	76.7	81.0	82.0	87.4	96.9	153.4	291.9	940.7	2661.3
75°	72.4	72.4	73.5	75.6	76.7	81.0	89.5	136.4	246.1	729.8	2081.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
77.5°	59.7	60.7	61.8	63.9	63.9	67.1	73.5	94.8	150.2	369.7	955.6
80°	43.7	45.8	49.0	52.2	51.1	51.1	57.5	68.2	89.5	166.2	366.5
82.5°	35.2	37.3	34.1	38.4	38.4	36.2	41.5	50.1	60.7	82.0	131.0
85°	23.4	24.5	20.2	23.4	22.4	22.4	27.7	29.8	37.3	45.8	65.0
87.5°	10.7	10.7	8.5	9.6	9.6	9.6	13.8	10.7	16.0	22.4	38.4
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):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
0°	907.7	907.7	907.7	907.7	907.7	907.7	907.7	907.7	907.7	907.7	907.7
2.5°	909.8	914.1	914.1	909.8	906.6	909.8	907.7	902.4	907.7	909.8	910.9
5°	922.6	914.1	918.4	908.8	915.2	914.1	912.0	917.3	918.4	918.4	925.8
7.5°	936.5	947.1	933.3	934.3	937.5	924.7	929.0	931.1	926.9	935.4	941.8
10°	961.0	965.2	961.0	945.0	955.6	947.1	943.9	953.5	951.4	953.5	963.1
12.5°	983.3	990.8	979.1	978.0	972.7	965.2	969.5	968.4	983.3	985.5	997.2
15°	1029.2	1010.0	1005.7	1004.7	1002.5	999.3	1001.5	1002.5	1021.7	1024.9	1052.6
17.5°	1068.6	1065.4	1041.9	1050.5	1050.5	1037.7	1032.4	1050.5	1065.4	1081.4	1100.5
20°	1109.1	1105.9	1080.3	1081.4	1071.8	1083.5	1077.1	1094.1	1119.7	1125.0	1142.1
22.5°	1157.0	1143.2	1125.0	1127.2	1130.4	1121.8	1117.6	1141.0	1166.6	1181.5	1182.6
25°	1232.6	1197.5	1182.6	1184.7	1180.4	1174.0	1177.2	1207.1	1219.9	1251.8	1245.4
27.5°	1273.1	1252.9	1242.2	1217.7	1218.8	1209.2	1222.0	1266.7	1292.3	1316.8	1267.8
30°	1322.1	1309.4	1262.5	1254.0	1252.9	1248.6	1272.1	1329.6	1367.9	1381.8	1311.5
32.5°	1418.0	1366.9	1355.2	1347.7	1330.7	1336.0	1347.7	1423.3	1484.1	1480.9	1352.0
35°	1527.8	1492.6	1459.6	1453.2	1451.0	1436.1	1456.4	1544.8	1591.7	1577.8	1366.9
37.5°	1703.5	1650.3	1605.5	1581.0	1576.8	1566.1	1614.0	1684.4	1745.1	1690.8	1378.6
40°	1789.8	1730.2	1688.6	1673.7	1676.9	1691.8	1738.7	1846.3	1872.9	1772.8	1388.2
42.5°	1913.4	1848.4	1766.4	1758.9	1749.4	1756.8	1847.4	1992.3	2014.6	1883.6	1352.0
45°	2132.9	2034.9	1940.1	1897.4	1899.6	1919.8	2060.4	2219.2	2177.6	1960.3	1294.4
47.5°	2409.9	2266.1	2189.4	2131.8	2159.5	2137.2	2360.9	2487.7	2346.0	2057.2	1224.1
50°	2826.5	2625.1	2520.7	2451.4	2463.2	2482.3	2709.3	2816.9	2532.4	2104.1	1116.5
52.5°	3351.7	3092.8	2939.4	2846.7	2855.2	2896.8	3189.7	3156.7	2745.5	2143.5	972.7
55°	3980.3	3713.9	3416.7	3378.3	3368.7	3467.8	3790.6	3512.6	2937.3	2080.7	823.5
56°	4312.7	4029.3	3720.3	3641.5	3618.0	3687.3	4066.6	3690.5	3003.3	2010.4	752.2
57°	4595.0	4324.4	3985.6	3851.3	3881.2	4011.2	4340.4	3857.7	3064.0	1937.9	685.0
58°	4982.8	4673.8	4315.9	4213.6	4186.9	4290.3	4635.5	4026.1	3084.3	1863.3	623.2
59°	5369.5	4998.8	4676.0	4489.5	4497.0	4685.5	4926.3	4226.4	3115.2	1768.5	544.4
60°	5663.6	5477.1	5045.6	4906.1	4886.9	5159.6	5216.1	4360.6	3148.2	1640.7	489.0
61°	6080.1	5837.2	5435.6	5255.5	5307.7	5526.1	5529.3	4528.9	3099.2	1478.7	420.8
62°	6379.5	6315.6	5893.7	5722.2	5706.2	5996.0	5855.3	4677.0	3056.6	1325.3	371.8
63°	6730.0	6730.0	6345.4	6211.2	6218.6	6447.7	5997.0	4825.1	3007.6	1155.9	327.1
64°	6912.2	7141.2	6786.5	6597.9	6646.9	6845.1	6249.5	4922.1	2856.3	984.4	287.7
65°	7069.9	7414.0	7216.9	7129.5	7054.9	7172.1	6467.9	5012.6	2625.1	837.4	255.7
66°	7203.0	7670.7	7605.7	7512.0	7504.5	7477.9	6510.5	5009.4	2386.4	707.4	223.7
67°	7135.9	7676.1	7794.3	7833.7	7822.0	7540.8	6436.0	4895.4	2080.7	597.7	199.2
67.5°	7075.2	7632.4	7907.2	7884.9	7933.9	7594.0	6448.7	4755.9	1863.3	541.2	187.5
68°	7021.9	7573.8	7953.1	7981.8	7957.3	7600.4	6378.4	4645.1	1715.3	508.2	176.9
69°	6618.1	7295.7	7879.5	7982.9	7920.0	7356.4	6154.7	4356.3	1362.6	433.6	163.0
70°	6213.3	6935.6	7522.6	7712.3	7634.5	6884.5	5872.4	3897.2	1124.0	370.8	147.0
71°	5652.9	6266.6	7047.5	7161.5	7067.7	6347.5	5288.5	3412.4	874.7	314.3	131.0
72°	4892.2	5413.2	6159.0	6434.9	6296.4	5575.1	4698.3	2820.1	708.5	264.2	119.3
72.5°	4515.1	5048.8	5768.0	5790.3	5817.0	5239.5	4448.0	2477.0	617.9	245.0	116.1
73°	4157.1	4680.2	5302.4	5381.2	5268.3	4673.8	4074.0	2214.9	564.7	223.7	111.9
74°	3368.7	3667.0	4182.7	4259.4	4160.3	3810.9	3329.3	1698.2	449.6	192.8	102.3
75°	2650.7	2814.7	3281.4	3234.5	3086.4	2963.9	2581.4	1297.6	364.4	169.4	94.8



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CANDELA DISTRIBUTION (continued):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
77.5°	1191.1	1290.2	1367.9	1367.9	1376.5	1313.6	1190.0	595.5	224.8	122.5	77.8
80°	453.9	508.2	525.2	526.3	533.8	552.9	514.6	293.0	133.2	87.4	62.9
82.5°	329.2	460.2	495.4	469.8	472.0	426.2	197.1	130.0	84.2	60.7	45.8
85°	298.3	400.6	424.0	420.8	421.9	394.2	116.1	63.9	49.0	38.4	32.0
87.5°	144.9	141.7	150.2	169.4	165.1	214.1	98.0	32.0	21.3	16.0	16.0
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):

	135°	145°	155°	165°	175°	180°
0°	907.7	907.7	907.7	907.7	907.7	907.7
2.5°	902.4	901.3	916.2	901.3	909.8	903.4
5°	913.0	917.3	920.5	926.9	912.0	926.9
7.5°	945.0	949.3	950.3	955.6	949.3	948.2
10°	969.5	980.1	986.5	965.2	978.0	977.0
12.5°	1017.4	1006.8	1005.7	1001.5	989.7	985.5
15°	1051.5	1035.5	1026.0	1008.9	995.1	989.7
17.5°	1099.5	1068.6	1029.2	994.0	969.5	950.3
20°	1129.3	1073.9	995.1	953.5	916.2	924.7
22.5°	1148.5	1068.6	964.2	910.9	873.6	884.3
25°	1154.9	1041.9	942.9	876.8	840.6	833.1
27.5°	1136.8	1011.0	901.3	826.7	794.8	801.2
30°	1128.2	966.3	863.0	789.4	746.8	753.2
32.5°	1105.9	920.5	811.8	737.2	706.3	695.7
35°	1073.9	882.1	762.8	692.5	655.2	646.7
37.5°	1034.5	834.2	720.2	635.0	601.9	595.5
40°	975.9	776.7	658.4	584.9	546.5	545.5
42.5°	924.7	721.3	600.9	525.2	486.9	489.0
45°	859.8	646.7	534.8	469.8	431.5	433.6
47.5°	776.7	577.4	472.0	399.5	367.6	365.4
50°	678.6	498.6	395.3	333.5	306.8	301.5
52.5°	584.9	418.7	323.9	268.5	246.1	244.0
55°	466.6	326.0	252.5	210.9	193.9	195.0
56°	424.0	300.4	230.1	192.8	180.0	180.0
57°	383.5	266.3	208.8	177.9	166.2	166.2
58°	338.8	234.4	189.6	160.9	155.5	151.3
59°	307.9	213.1	171.5	152.3	143.8	142.8
60°	271.7	191.8	159.8	142.8	136.4	135.3
61°	240.8	172.6	147.0	133.2	131.0	131.0
62°	215.2	159.8	136.4	128.9	127.8	124.6
63°	192.8	147.0	131.0	122.5	119.3	122.5
64°	172.6	135.3	126.8	120.4	116.1	118.3
65°	156.6	130.0	121.5	117.2	112.9	114.0
66°	146.0	121.5	117.2	111.9	109.7	110.8
67°	132.1	117.2	112.9	107.6	106.5	107.6
67.5°	127.8	114.0	110.8	105.5	104.4	105.5
68°	124.6	111.9	109.7	104.4	103.3	102.3
69°	116.1	107.6	104.4	102.3	100.1	99.1
70°	108.7	103.3	101.2	98.0	95.9	94.8
71°	104.4	98.0	96.9	93.8	91.6	90.6
72°	99.1	94.8	92.7	88.4	87.4	88.4
72.5°	98.0	92.7	91.6	87.4	86.3	86.3
73°	94.8	88.4	89.5	85.2	83.1	85.2
74°	88.4	86.3	84.2	81.0	79.9	79.9
75°	83.1	81.0	78.8	76.7	76.7	76.7



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CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
77.5°	70.3	69.2	70.3	66.1	65.0	63.9
80°	56.5	56.5	57.5	54.3	52.2	51.1
82.5°	42.6	43.7	45.8	42.6	40.5	38.4
85°	27.7	28.8	28.8	25.6	29.8	27.7
87.5°	13.8	14.9	13.8	12.8	14.9	14.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)