

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: P676201

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

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676201
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1F-840-U-T1
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @1200mA w/
T1 distribution lens
Light Source: (16) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

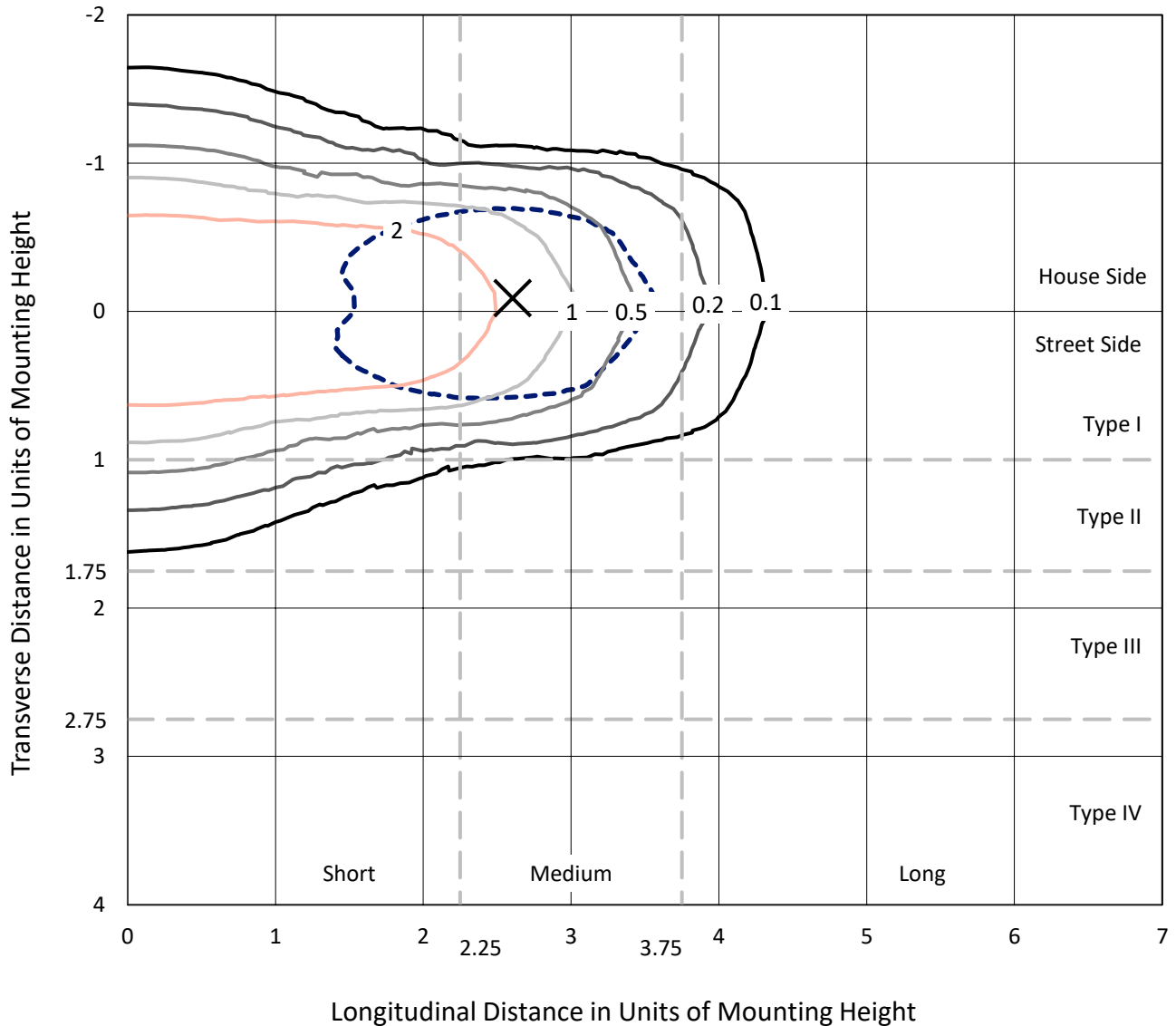
Lumens per Lamp: N/A
Luminaire Lumens: 6224.9 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type I - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 67
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

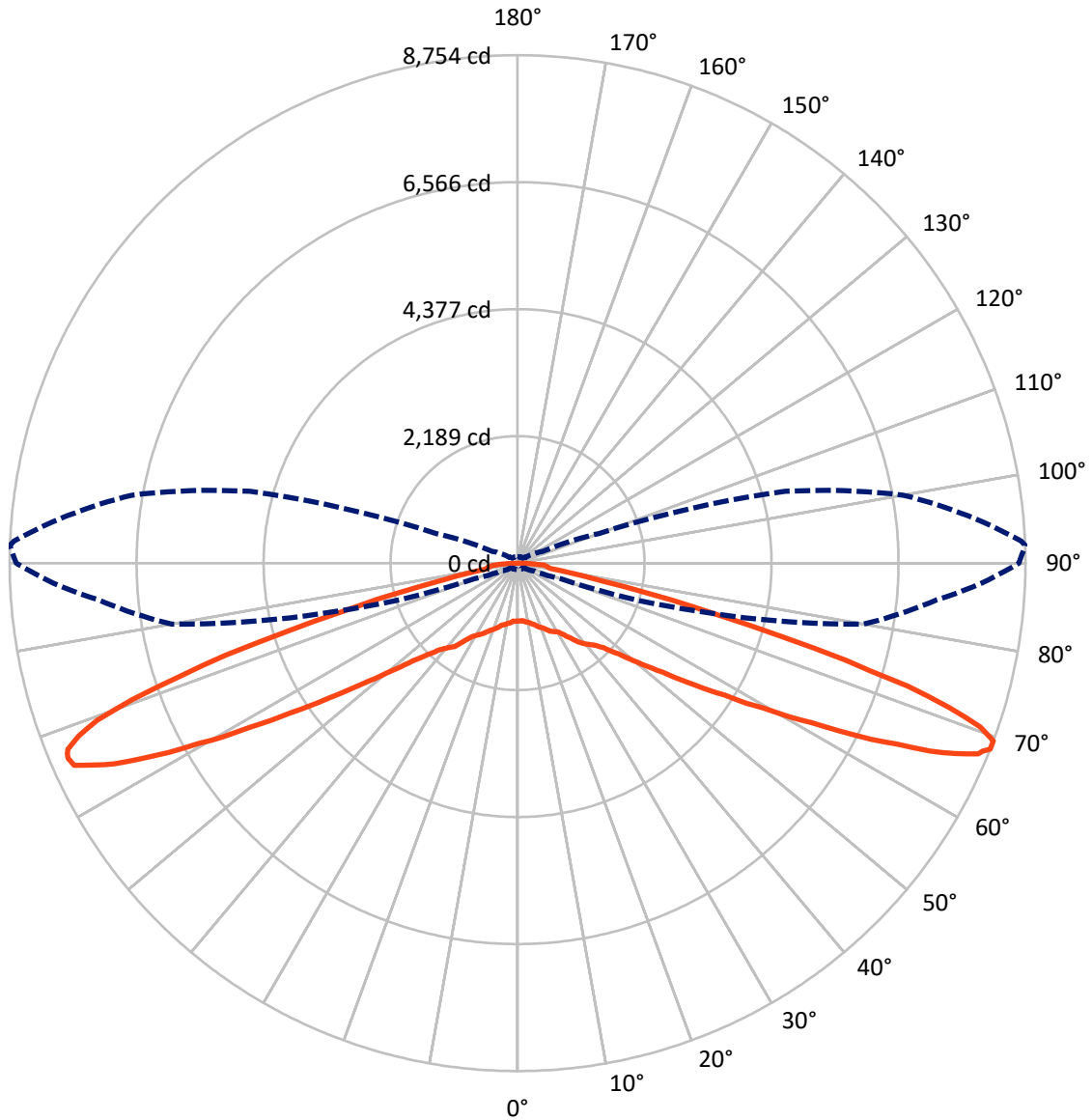
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 4.8 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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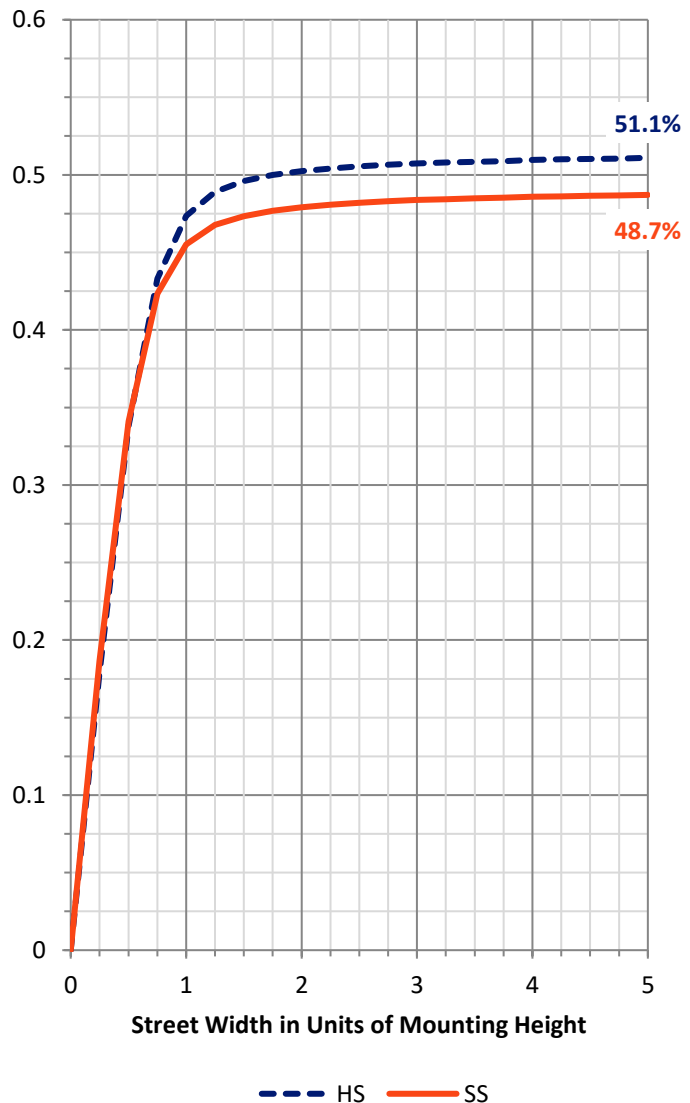
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3205.7	0.0	3205.7
	% Fixture	51.5	0.0	51.5
Street Side	Lumens	3019.2	0.0	3019.2
	% Fixture	48.5	0.0	48.5
Total	Lumens	6224.9	0.0	6224.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.7	1.6
10°-20°	322.9	5.2
20°-30°	551.1	8.9
30°-40°	769.5	12.4
40°-50°	978.8	15.7
50°-60°	1237.6	19.9
60°-70°	1526.3	24.5
70°-80°	666.7	10.7
80°-90°	72.3	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°	6224.9	100.0
0°-180°	6224.9	100.0



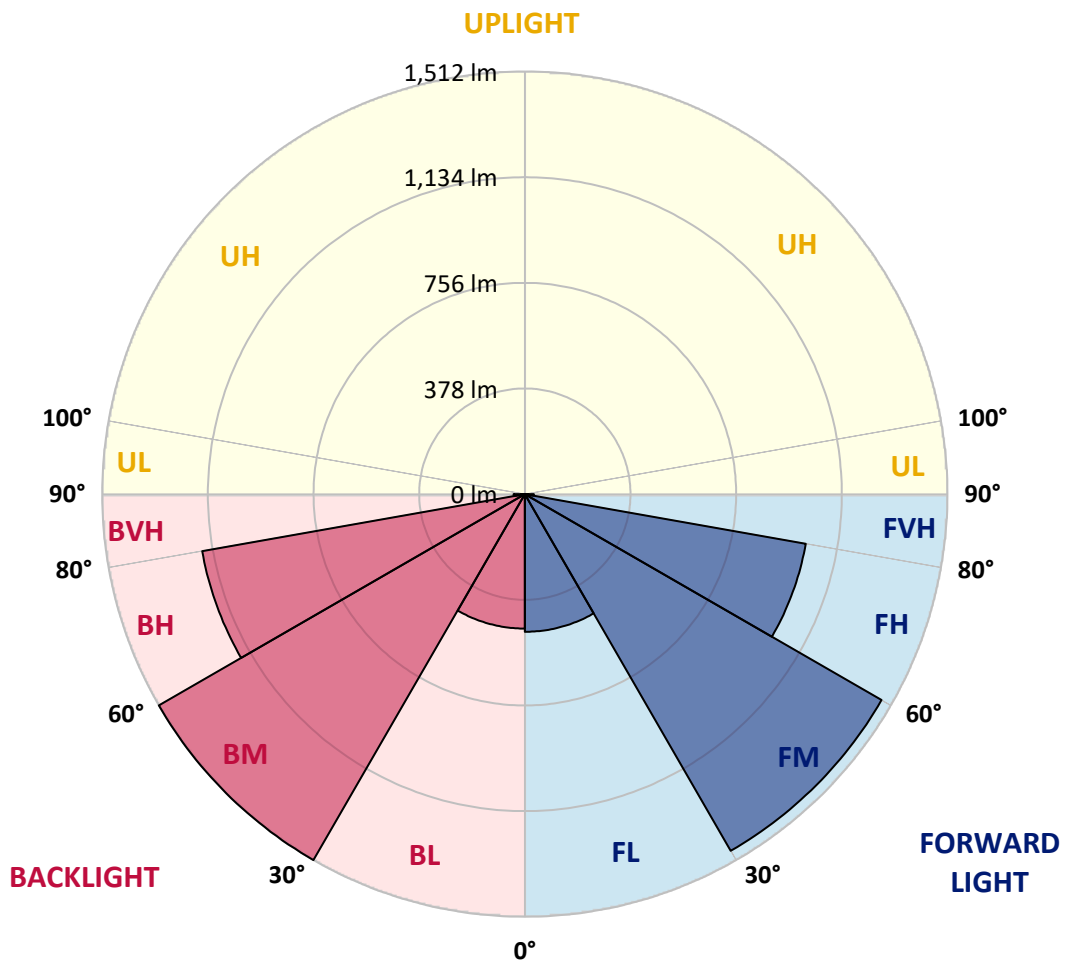
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	492.6	7.9			
FM (30°-60°)	1473.7	23.7			
FH (60°-80°)	1020.8	16.4			G1/1800
FVH (80°-90°)	32.1	0.5			G1/100
BL (0°-30°)	481.1	7.7	B1/500		
BM (30°-60°)	1512.2	24.3	B2/2500		
BH (60°-80°)	1172.2	18.8	B3/2500		G3/2500
BVH (80°-90°)	40.2	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°	995.4	995.4	995.4	995.4	995.4	995.4	995.4	995.4	995.4	995.4	995.4
2.5°	1016.4	1015.3	1018.8	1021.1	1010.6	1014.1	1011.8	1009.4	1001.3	997.7	990.7
5°	1044.5	1048.0	1059.7	1049.2	1053.8	1048.0	1029.3	1035.1	1024.6	1022.3	1015.3
7.5°	1093.6	1086.5	1102.9	1091.2	1094.7	1083.0	1074.9	1064.3	1062.0	1045.7	1046.8
10°	1104.1	1118.1	1125.1	1122.8	1125.1	1130.9	1115.7	1099.4	1077.2	1072.5	1056.2
12.5°	1097.1	1109.9	1128.6	1143.8	1154.3	1156.6	1150.8	1147.3	1137.9	1111.1	1109.9
15°	1090.0	1080.7	1092.4	1145.0	1180.0	1203.4	1211.6	1191.7	1194.0	1159.0	1145.0
17.5°	1043.3	1029.3	1074.9	1126.3	1169.5	1220.9	1260.6	1254.8	1254.8	1226.7	1206.9
20°	981.4	1004.8	1028.1	1093.6	1173.0	1250.1	1326.0	1322.5	1308.5	1300.3	1257.1
22.5°	928.8	939.3	982.6	1051.5	1150.8	1258.3	1348.2	1412.5	1379.8	1347.1	1321.4
25°	892.6	883.3	938.2	1009.4	1129.8	1244.3	1390.3	1456.9	1474.4	1449.9	1400.8
27.5°	841.2	841.2	884.4	952.2	1062.0	1237.3	1431.2	1532.8	1558.5	1522.3	1451.1
30°	782.8	789.8	827.2	904.3	1011.8	1185.8	1447.6	1620.5	1641.5	1610.0	1536.3
32.5°	737.2	737.2	779.3	861.1	976.7	1162.5	1437.0	1706.9	1746.6	1723.3	1647.3
35°	688.1	684.6	715.0	805.0	920.6	1116.9	1433.5	1775.9	1864.6	1865.8	1786.4
37.5°	618.0	632.1	670.6	741.9	876.2	1072.5	1423.0	1858.8	2017.7	2044.6	1989.7
40°	571.3	577.2	612.2	690.5	807.3	1019.9	1407.8	1926.6	2119.3	2211.6	2135.7
42.5°	503.5	511.7	538.6	635.6	740.7	945.2	1341.2	1974.5	2264.2	2369.4	2305.1
45°	432.3	437.0	476.7	556.1	669.4	856.4	1270.0	2051.6	2404.4	2619.4	2582.0
47.5°	347.0	349.3	383.2	466.2	584.2	767.6	1160.1	2048.1	2517.7	2869.4	2974.6
50°	271.1	276.9	302.6	370.4	481.3	658.9	1032.8	2020.0	2660.3	3154.5	3361.3
52.5°	216.1	217.3	233.7	287.4	371.5	550.3	896.1	1931.2	2794.6	3433.7	3835.6
55°	178.8	178.8	188.1	220.8	285.1	418.3	736.0	1784.0	2811.0	3742.1	4353.2
56°	171.7	169.4	177.6	205.6	257.0	377.4	661.3	1684.7	2834.4	3884.7	4612.5
57°	162.4	163.6	168.2	188.1	231.3	334.1	578.3	1587.8	2818.0	4001.5	4804.1
58°	157.7	155.4	164.7	177.6	204.5	296.8	521.1	1473.3	2792.3	4097.3	5083.4
59°	150.7	149.5	155.4	167.1	190.4	264.0	451.0	1349.4	2742.1	4221.2	5291.3
60°	148.4	147.2	149.5	158.9	175.2	231.3	397.2	1204.5	2607.7	4348.5	5549.5
61°	141.4	142.5	147.2	153.1	165.9	208.0	357.5	1056.2	2520.1	4456.0	5834.6
62°	142.5	140.2	142.5	147.2	156.6	191.6	313.1	910.1	2363.5	4577.5	6048.4
63°	135.5	134.4	137.9	143.7	148.4	172.9	273.4	786.3	2185.9	4605.5	6229.5
64°	133.2	132.0	133.2	141.4	142.5	162.4	241.8	671.8	1928.9	4653.4	6462.0
65°	127.3	127.3	129.7	133.2	137.9	153.1	216.1	583.0	1673.0	4527.3	6533.3
66°	122.7	123.8	123.8	129.7	133.2	142.5	198.6	495.4	1427.7	4326.3	6602.2
67°	119.2	119.2	120.3	125.0	128.5	134.4	178.8	428.8	1204.5	4086.8	6495.9
67.5°	116.8	118.0	118.0	122.7	126.2	134.4	170.6	406.6	1077.2	3823.9	6416.4
68°	113.3	114.5	114.5	119.2	122.7	129.7	164.7	371.5	993.1	3653.4	6269.2
69°	111.0	109.8	109.8	114.5	119.2	123.8	153.1	324.8	789.8	3176.7	6054.3
70°	104.0	104.0	106.3	109.8	113.3	118.0	141.4	286.2	668.3	2629.9	5500.5
71°	100.5	99.3	100.5	104.0	107.5	113.3	129.7	253.5	546.8	2183.6	4956.0
72°	93.5	95.8	95.8	99.3	102.8	106.3	121.5	220.8	459.2	1745.5	4356.7
72.5°	92.3	92.3	93.5	97.0	99.3	105.1	116.8	211.5	419.4	1538.7	4105.5
73°	88.8	88.8	90.0	93.5	95.8	101.6	113.3	190.4	382.0	1369.3	3635.8
74°	85.3	84.1	84.1	88.8	90.0	95.8	106.3	168.2	320.1	1031.6	2918.5
75°	79.4	79.4	80.6	83.0	84.1	88.8	98.1	149.5	269.9	800.3	2282.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
77.5°	65.4	66.6	67.8	70.1	70.1	73.6	80.6	104.0	164.7	405.4	1048.0
80°	47.9	50.2	53.7	57.2	56.1	56.1	63.1	74.8	98.1	182.3	401.9
82.5°	38.6	40.9	37.4	42.1	42.1	39.7	45.6	54.9	66.6	90.0	143.7
85°	25.7	26.9	22.2	25.7	24.5	24.5	30.4	32.7	40.9	50.2	71.3
87.5°	11.7	11.7	9.3	10.5	10.5	10.5	15.2	11.7	17.5	24.5	42.1
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°	995.4	995.4	995.4	995.4	995.4	995.4	995.4	995.4	995.4	995.4	995.4
2.5°	997.7	1002.4	1002.4	997.7	994.2	997.7	995.4	989.6	995.4	997.7	998.9
5°	1011.8	1002.4	1007.1	996.6	1003.6	1002.4	1000.1	1005.9	1007.1	1007.1	1015.3
7.5°	1027.0	1038.6	1023.5	1024.6	1028.1	1014.1	1018.8	1021.1	1016.4	1025.8	1032.8
10°	1053.8	1058.5	1053.8	1036.3	1048.0	1038.6	1035.1	1045.7	1043.3	1045.7	1056.2
12.5°	1078.4	1086.5	1073.7	1072.5	1066.7	1058.5	1063.2	1062.0	1078.4	1080.7	1093.6
15°	1128.6	1107.6	1102.9	1101.7	1099.4	1095.9	1098.2	1099.4	1120.4	1123.9	1154.3
17.5°	1171.8	1168.3	1142.6	1152.0	1152.0	1137.9	1132.1	1152.0	1168.3	1185.8	1206.9
20°	1216.2	1212.7	1184.7	1185.8	1175.3	1188.2	1181.2	1199.9	1227.9	1233.8	1252.4
22.5°	1268.8	1253.6	1233.8	1236.1	1239.6	1230.2	1225.6	1251.3	1279.3	1295.7	1296.8
25°	1351.8	1313.2	1296.8	1299.2	1294.5	1287.5	1291.0	1323.7	1337.7	1372.8	1365.8
27.5°	1396.1	1373.9	1362.3	1335.4	1336.6	1326.0	1340.1	1389.1	1417.2	1444.0	1390.3
30°	1449.9	1435.9	1384.5	1375.1	1373.9	1369.3	1395.0	1458.1	1500.1	1515.3	1438.2
32.5°	1555.0	1499.0	1486.1	1477.9	1459.2	1465.1	1477.9	1560.9	1627.5	1624.0	1482.6
35°	1675.4	1636.8	1600.6	1593.6	1591.3	1574.9	1597.1	1694.1	1745.5	1730.3	1499.0
37.5°	1868.2	1809.7	1760.7	1733.8	1729.1	1717.4	1770.0	1847.1	1913.7	1854.1	1511.8
40°	1962.8	1897.4	1851.8	1835.4	1838.9	1855.3	1906.7	2024.7	2053.9	1944.1	1522.3
42.5°	2098.3	2027.0	1937.1	1928.9	1918.4	1926.6	2025.9	2184.8	2209.3	2065.6	1482.6
45°	2339.0	2231.5	2127.5	2080.8	2083.1	2105.3	2259.5	2433.6	2388.1	2149.7	1419.5
47.5°	2642.7	2485.0	2400.9	2337.8	2368.2	2343.7	2589.0	2728.0	2572.7	2256.0	1342.4
50°	3099.6	2878.8	2764.3	2688.3	2701.2	2722.2	2971.0	3089.0	2777.1	2307.4	1224.4
52.5°	3675.5	3391.6	3223.4	3121.8	3131.1	3176.7	3498.0	3461.7	3010.8	2350.7	1066.7
55°	4364.9	4072.8	3746.8	3704.8	3694.2	3802.9	4156.9	3852.0	3221.1	2281.7	903.1
56°	4729.4	4418.6	4079.8	3993.3	3967.6	4043.6	4459.5	4047.1	3293.5	2204.6	824.8
57°	5039.0	4742.2	4370.7	4223.5	4256.2	4398.7	4759.8	4230.5	3360.1	2125.2	751.2
58°	5464.3	5125.4	4732.9	4620.7	4591.5	4704.8	5083.4	4415.1	3382.3	2043.4	683.5
59°	5888.4	5481.8	5127.8	4923.3	4931.5	5138.3	5402.3	4634.7	3416.2	1939.4	597.0
60°	6210.8	6006.4	5533.2	5380.1	5359.1	5658.2	5720.1	4782.0	3452.4	1799.2	536.3
61°	6667.6	6401.2	5960.8	5763.3	5820.6	6060.1	6063.6	4966.5	3398.7	1621.6	461.5
62°	6995.9	6925.8	6463.2	6275.1	6257.5	6575.3	6421.1	5128.9	3351.9	1453.4	407.7
63°	7380.3	7380.3	6958.5	6811.3	6819.5	7070.7	6576.5	5291.3	3298.2	1267.6	358.7
64°	7580.1	7831.3	7442.2	7235.4	7289.2	7506.5	6853.4	5397.7	3132.3	1079.5	315.4
65°	7753.0	8130.4	7914.2	7818.4	7736.6	7865.2	7092.9	5497.0	2878.8	918.3	280.4
66°	7899.0	8411.9	8340.7	8237.9	8229.7	8200.5	7139.6	5493.5	2617.0	775.8	245.3
67°	7825.4	8417.8	8547.5	8590.7	8577.8	8269.4	7057.8	5368.5	2281.7	655.4	218.5
67.5°	7758.8	8369.9	8671.3	8646.8	8700.5	8327.8	7071.9	5215.4	2043.4	593.5	205.6
68°	7700.4	8305.6	8721.5	8753.1	8726.2	8334.8	6994.8	5093.9	1881.0	557.3	193.9
69°	7257.6	8000.7	8640.9	8754.3	8685.3	8067.3	6749.4	4777.3	1494.3	475.5	178.8
70°	6813.7	7605.8	8249.5	8457.5	8372.2	7549.7	6439.8	4273.7	1232.6	406.6	161.2
71°	6199.1	6872.1	7728.5	7853.5	7750.7	6960.9	5799.6	3742.1	959.2	344.7	143.7
72°	5364.9	5936.3	6754.1	7056.7	6904.8	6113.8	5152.3	3092.6	776.9	289.7	130.9
72.5°	4951.4	5536.7	6325.3	6349.8	6379.1	5745.8	4877.8	2716.4	677.6	268.7	127.3
73°	4558.8	5132.4	5814.8	5901.2	5777.4	5125.4	4467.7	2428.9	619.2	245.3	122.7
74°	3694.2	4021.4	4586.8	4671.0	4562.3	4179.1	3651.0	1862.3	493.0	211.5	112.2
75°	2906.8	3086.7	3598.4	3547.0	3384.6	3250.3	2830.9	1423.0	399.6	185.8	104.0



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CANDELA DISTRIBUTION (continued):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
77.5°	1306.2	1414.8	1500.1	1500.1	1509.5	1440.5	1305.0	653.1	246.5	134.4	85.3
80°	497.7	557.3	576.0	577.2	585.3	606.4	564.3	321.3	146.0	95.8	68.9
82.5°	361.0	504.7	543.3	515.2	517.6	467.3	216.1	142.5	92.3	66.6	50.2
85°	327.1	439.3	465.0	461.5	462.7	432.3	127.3	70.1	53.7	42.1	35.0
87.5°	158.9	155.4	164.7	185.8	181.1	234.8	107.5	35.0	23.4	17.5	17.5
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):

	135°	145°	155°	165°	175°	180°
0°	995.4	995.4	995.4	995.4	995.4	995.4
2.5°	989.6	988.4	1004.8	988.4	997.7	990.7
5°	1001.3	1005.9	1009.4	1016.4	1000.1	1016.4
7.5°	1036.3	1041.0	1042.1	1048.0	1041.0	1039.8
10°	1063.2	1074.9	1081.9	1058.5	1072.5	1071.4
12.5°	1115.7	1104.1	1102.9	1098.2	1085.4	1080.7
15°	1153.1	1135.6	1125.1	1106.4	1091.2	1085.4
17.5°	1205.7	1171.8	1128.6	1090.0	1063.2	1042.1
20°	1238.4	1177.7	1091.2	1045.7	1004.8	1014.1
22.5°	1259.5	1171.8	1057.3	998.9	958.0	969.7
25°	1266.5	1142.6	1034.0	961.5	921.8	913.6
27.5°	1246.6	1108.7	988.4	906.6	871.6	878.6
30°	1237.3	1059.7	946.3	865.7	819.0	826.0
32.5°	1212.7	1009.4	890.3	808.5	774.6	762.9
35°	1177.7	967.4	836.5	759.4	718.5	709.2
37.5°	1134.4	914.8	789.8	696.3	660.1	653.1
40°	1070.2	851.7	722.0	641.4	599.4	598.2
42.5°	1014.1	791.0	658.9	576.0	533.9	536.3
45°	942.8	709.2	586.5	515.2	473.2	475.5
47.5°	851.7	633.2	517.6	438.1	403.1	400.7
50°	744.2	546.8	433.4	365.7	336.5	330.6
52.5°	641.4	459.2	355.2	294.4	269.9	267.5
55°	511.7	357.5	276.9	231.3	212.6	213.8
56°	465.0	329.5	252.4	211.5	197.4	197.4
57°	420.6	292.1	229.0	195.1	182.3	182.3
58°	371.5	257.0	208.0	176.4	170.6	165.9
59°	337.6	233.7	188.1	167.1	157.7	156.6
60°	297.9	210.3	175.2	156.6	149.5	148.4
61°	264.0	189.3	161.2	146.0	143.7	143.7
62°	236.0	175.2	149.5	141.4	140.2	136.7
63°	211.5	161.2	143.7	134.4	130.9	134.4
64°	189.3	148.4	139.0	132.0	127.3	129.7
65°	171.7	142.5	133.2	128.5	123.8	125.0
66°	160.1	133.2	128.5	122.7	120.3	121.5
67°	144.9	128.5	123.8	118.0	116.8	118.0
67.5°	140.2	125.0	121.5	115.7	114.5	115.7
68°	136.7	122.7	120.3	114.5	113.3	112.2
69°	127.3	118.0	114.5	112.2	109.8	108.7
70°	119.2	113.3	111.0	107.5	105.1	104.0
71°	114.5	107.5	106.3	102.8	100.5	99.3
72°	108.7	104.0	101.6	97.0	95.8	97.0
72.5°	107.5	101.6	100.5	95.8	94.6	94.6
73°	104.0	97.0	98.1	93.5	91.1	93.5
74°	97.0	94.6	92.3	88.8	87.6	87.6
75°	91.1	88.8	86.5	84.1	84.1	84.1



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	135°	145°	155°	165°	175°	180°
77.5°	77.1	75.9	77.1	72.4	71.3	70.1
80°	61.9	61.9	63.1	59.6	57.2	56.1
82.5°	46.7	47.9	50.2	46.7	44.4	42.1
85°	30.4	31.5	31.5	28.0	32.7	30.4
87.5°	15.2	16.4	15.2	14.0	16.4	16.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)