

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: McGRAW-EDISON

Report Number: P228760

Luminaire Tested: **ISS-AF-1000-LED-E1-RW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228760
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29765)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-1000-LED-E1-RW
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-RECTANGULAR WIDE TYPE I
Light Source: (16) 4000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5900.4 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 54.6
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

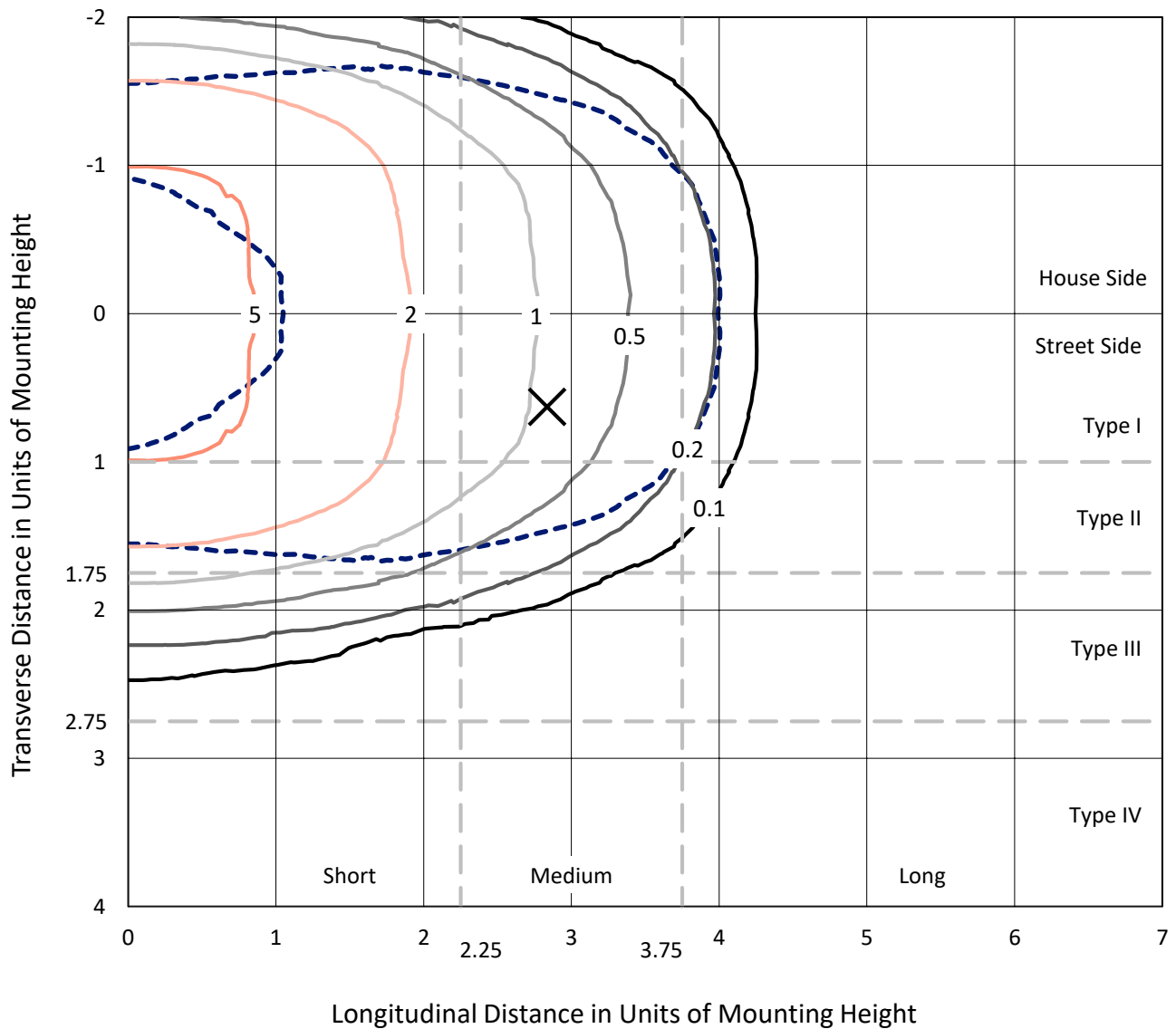


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

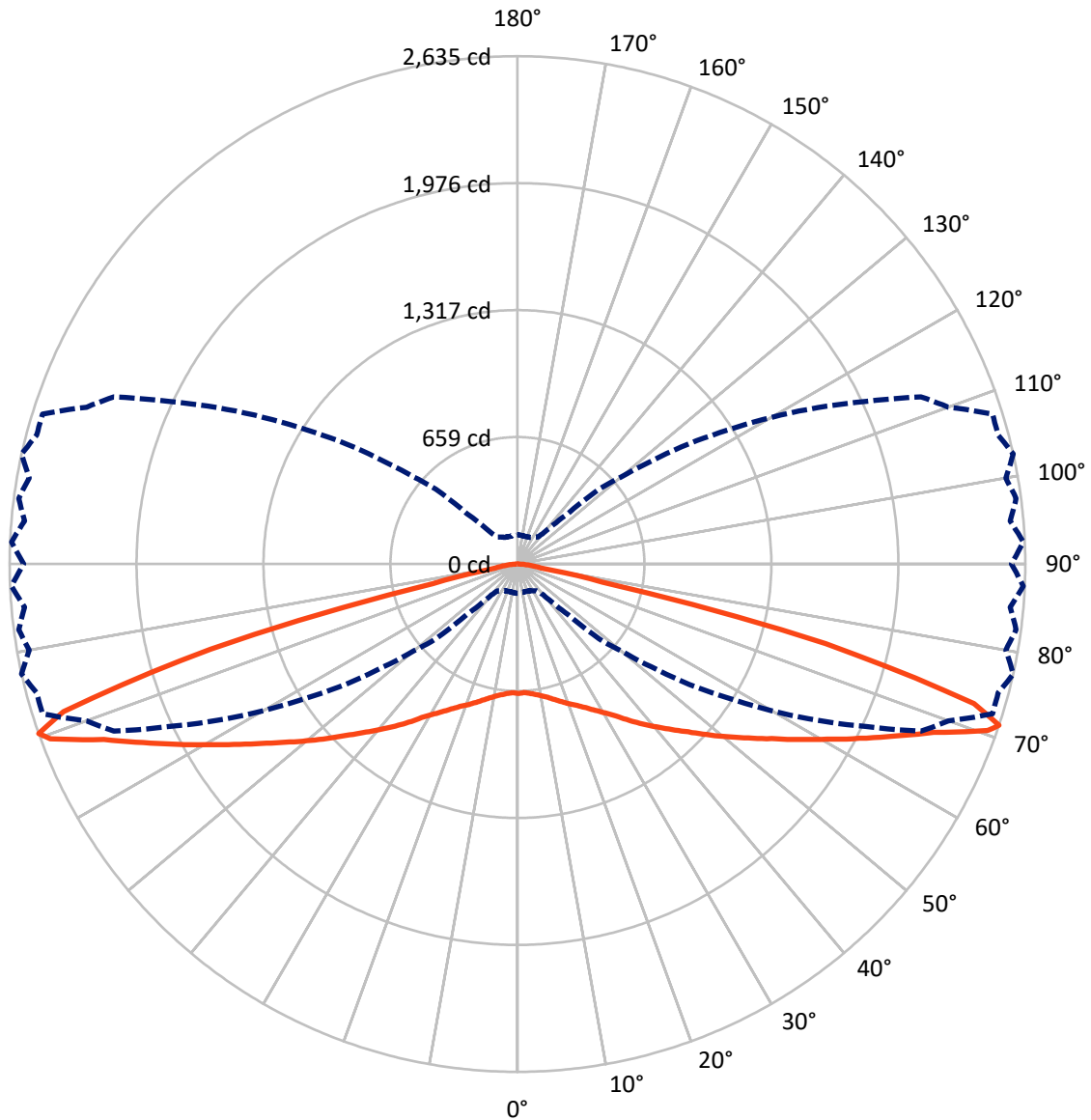


Based on 10 foot mounting height. Maximum calculated value = 6.9 fc
 Type II - Medium - Full Cutoff

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CATALOG NUMBER: ISS-AF-1000-LED-E1-RW

Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2950.2 | 0.0 | 2950.2 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 2950.2 | 0.0 | 2950.2 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 5900.4 | 0.0 | 5900.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 64.9 | 1.1 |
| 10°-20° | 202.8 | 3.4 |
| 20°-30° | 379.6 | 6.4 |
| 30°-40° | 660.6 | 11.2 |
| 40°-50° | 1077.9 | 18.3 |
| 50°-60° | 1487.5 | 25.2 |
| 60°-70° | 1411.1 | 23.9 |
| 70°-80° | 580.8 | 9.8 |
| 80°-90° | 35.1 | 0.6 |
| 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° | 5900.4 | 100.0 |
| 0°-180° | 5900.4 | 100.0 |



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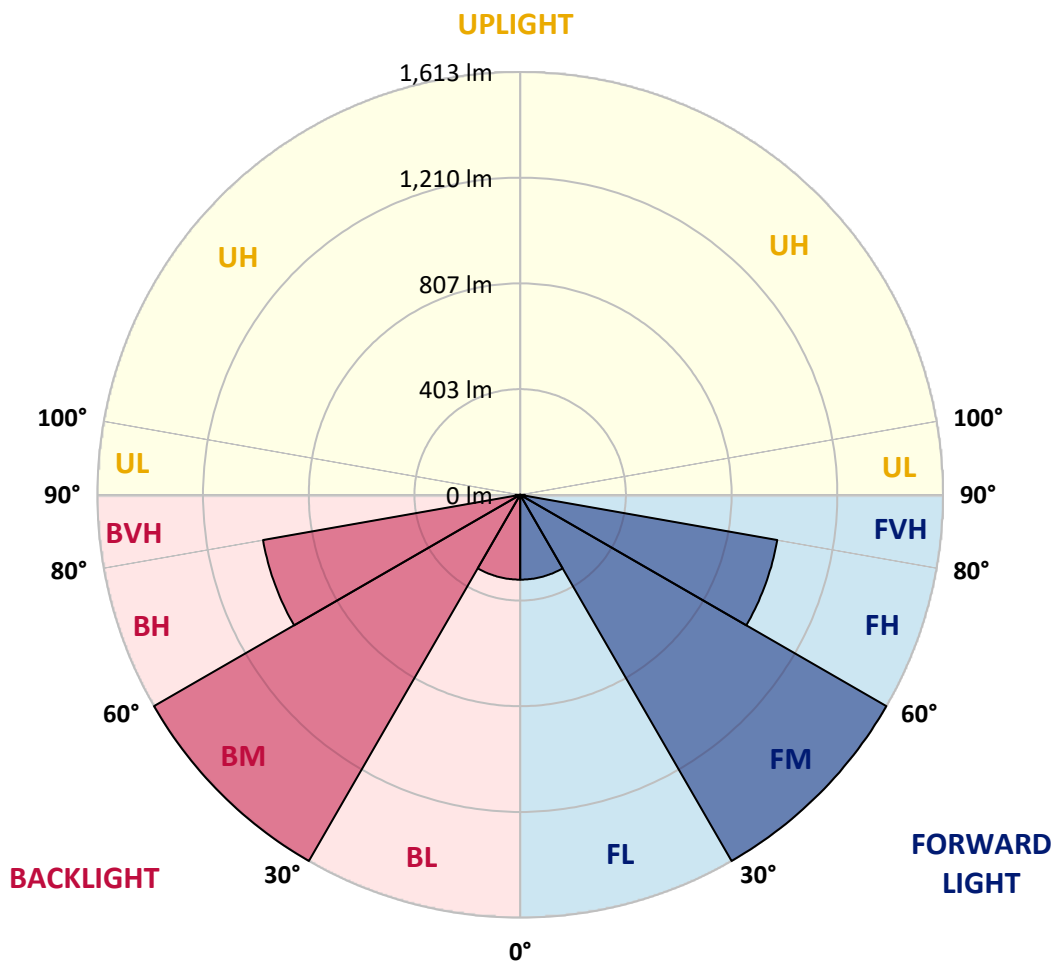
CATALOG NUMBER: ISS-AF-1000-LED-E1-RW

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 323.6 | 5.5 | | | |
| FM | (30°-60°) | 1613.0 | 27.3 | | | |
| FH | (60°-80°) | 995.9 | 16.9 | | | G1/1800 |
| FVH | (80°-90°) | 17.5 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 323.6 | 5.5 | B1/500 | | |
| BM | (30°-60°) | 1613.0 | 27.3 | B2/2500 | | |
| BH | (60°-80°) | 995.9 | 16.9 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 17.5 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 37.5° | 40° | 42.5° | 45° | 47.5° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 |
| 2.5° | 669.9 | 668.0 | 669.9 | 669.9 | 671.9 | 671.9 | 671.9 | 671.9 | 669.9 | 673.8 | 673.8 |
| 5° | 669.9 | 669.9 | 671.9 | 671.9 | 675.8 | 679.6 | 673.8 | 675.8 | 677.7 | 675.8 | 679.6 |
| 7.5° | 669.9 | 669.9 | 669.9 | 673.8 | 679.6 | 683.5 | 679.6 | 681.6 | 685.6 | 685.6 | 689.5 |
| 10° | 664.1 | 662.1 | 666.0 | 673.8 | 683.5 | 689.5 | 687.5 | 695.3 | 693.4 | 695.3 | 699.2 |
| 12.5° | 654.3 | 654.3 | 662.1 | 673.8 | 691.4 | 695.3 | 697.2 | 701.1 | 707.1 | 705.0 | 711.0 |
| 15° | 656.2 | 658.2 | 666.0 | 681.6 | 703.1 | 707.1 | 709.0 | 709.0 | 718.7 | 714.8 | 726.5 |
| 17.5° | 669.9 | 671.9 | 679.6 | 695.3 | 720.7 | 720.7 | 722.6 | 726.5 | 740.2 | 732.4 | 748.1 |
| 20° | 691.4 | 693.4 | 701.1 | 718.7 | 742.2 | 740.2 | 744.1 | 748.1 | 765.6 | 757.8 | 773.5 |
| 22.5° | 716.8 | 720.7 | 730.5 | 750.0 | 775.4 | 763.6 | 771.5 | 779.3 | 796.9 | 783.2 | 804.7 |
| 25° | 752.0 | 757.8 | 767.5 | 789.0 | 816.4 | 802.7 | 810.5 | 816.4 | 836.0 | 816.4 | 837.9 |
| 27.5° | 802.7 | 806.6 | 814.5 | 837.9 | 861.3 | 851.5 | 855.5 | 859.4 | 882.8 | 861.3 | 884.8 |
| 30° | 863.3 | 869.1 | 877.0 | 898.5 | 921.9 | 906.2 | 914.0 | 918.0 | 937.4 | 916.0 | 935.5 |
| 32.5° | 939.5 | 945.3 | 955.0 | 974.6 | 994.1 | 970.7 | 972.6 | 978.5 | 998.0 | 976.5 | 998.0 |
| 35° | 1029.3 | 1033.2 | 1046.9 | 1070.3 | 1083.9 | 1046.9 | 1048.8 | 1048.8 | 1074.2 | 1044.9 | 1068.4 |
| 37.5° | 1123.0 | 1126.9 | 1142.5 | 1166.0 | 1181.6 | 1140.6 | 1140.6 | 1142.5 | 1166.0 | 1132.8 | 1154.3 |
| 40° | 1220.7 | 1232.3 | 1249.9 | 1273.4 | 1285.1 | 1238.3 | 1242.2 | 1240.2 | 1267.5 | 1228.5 | 1249.9 |
| 42.5° | 1318.4 | 1328.1 | 1353.5 | 1380.9 | 1394.5 | 1347.6 | 1349.6 | 1343.7 | 1371.1 | 1330.0 | 1347.6 |
| 45° | 1402.4 | 1410.1 | 1441.3 | 1480.4 | 1501.9 | 1453.1 | 1453.1 | 1453.1 | 1480.4 | 1429.7 | 1451.2 |
| 47.5° | 1470.7 | 1476.5 | 1509.8 | 1566.3 | 1601.5 | 1552.7 | 1556.6 | 1548.8 | 1589.8 | 1527.3 | 1556.6 |
| 50° | 1519.5 | 1521.4 | 1564.4 | 1628.8 | 1689.4 | 1644.5 | 1650.3 | 1654.3 | 1693.3 | 1638.7 | 1664.0 |
| 52.5° | 1535.1 | 1539.0 | 1587.8 | 1666.0 | 1753.8 | 1724.6 | 1746.1 | 1753.8 | 1789.0 | 1730.4 | 1765.6 |
| 55° | 1480.4 | 1490.2 | 1564.4 | 1679.7 | 1798.8 | 1789.0 | 1814.4 | 1830.1 | 1875.0 | 1826.2 | 1863.2 |
| 57.5° | 1296.9 | 1308.6 | 1412.1 | 1601.5 | 1808.6 | 1824.2 | 1859.3 | 1884.7 | 1949.2 | 1919.9 | 1960.9 |
| 60° | 1035.1 | 1044.9 | 1150.4 | 1378.8 | 1685.5 | 1781.3 | 1861.3 | 1933.6 | 2000.0 | 2005.8 | 2058.6 |
| 62.5° | 711.0 | 724.6 | 826.1 | 1044.9 | 1417.9 | 1544.9 | 1660.1 | 1779.2 | 1890.6 | 2025.3 | 2093.7 |
| 65° | 347.7 | 355.5 | 441.4 | 652.3 | 1041.0 | 1203.1 | 1337.8 | 1505.8 | 1609.3 | 1802.7 | 1914.0 |
| 67.5° | 191.4 | 191.4 | 205.1 | 271.5 | 556.6 | 716.8 | 861.3 | 1072.3 | 1177.7 | 1416.0 | 1558.6 |
| 70° | 160.2 | 160.2 | 156.2 | 166.0 | 210.9 | 250.0 | 324.2 | 445.3 | 591.8 | 832.0 | 961.0 |
| 71° | 152.3 | 150.4 | 148.4 | 152.3 | 169.9 | 177.7 | 209.0 | 273.4 | 371.1 | 574.2 | 701.1 |
| 72.5° | 142.6 | 138.7 | 132.8 | 134.7 | 144.5 | 144.5 | 150.4 | 160.2 | 197.2 | 269.5 | 361.3 |
| 75° | 123.1 | 119.2 | 113.2 | 113.2 | 115.2 | 117.2 | 119.2 | 123.1 | 125.0 | 128.9 | 144.5 |
| 77.5° | 101.6 | 97.7 | 91.8 | 91.8 | 89.8 | 91.8 | 95.7 | 97.7 | 93.7 | 101.6 | 103.5 |
| 80° | 78.2 | 72.2 | 70.3 | 70.3 | 68.3 | 66.4 | 66.4 | 66.4 | 68.3 | 72.2 | 74.3 |
| 82.5° | 48.8 | 44.9 | 46.9 | 44.9 | 43.0 | 43.0 | 43.0 | 43.0 | 44.9 | 44.9 | 48.8 |
| 85° | 23.4 | 23.4 | 25.4 | 23.4 | 19.5 | 19.5 | 17.6 | 15.7 | 17.6 | 15.7 | 19.5 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 |
| 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):

| | 52.5° | 55° | 57.5° | 60° | 62.5° | 65° | 67.5° | 70° | 72.5° | 75° | 77.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 |
| 2.5° | 668.0 | 671.9 | 669.9 | 671.9 | 668.0 | 671.9 | 666.0 | 671.9 | 669.9 | 671.9 | 668.0 |
| 5° | 673.8 | 679.6 | 673.8 | 681.6 | 673.8 | 681.6 | 673.8 | 681.6 | 675.8 | 681.6 | 673.8 |
| 7.5° | 679.6 | 691.4 | 683.5 | 693.4 | 683.5 | 695.3 | 683.5 | 695.3 | 687.5 | 697.2 | 683.5 |
| 10° | 691.4 | 705.0 | 693.4 | 705.0 | 693.4 | 707.1 | 693.4 | 709.0 | 697.2 | 712.9 | 695.3 |
| 12.5° | 701.1 | 716.8 | 705.0 | 720.7 | 703.1 | 724.6 | 707.1 | 730.5 | 711.0 | 734.4 | 711.0 |
| 15° | 714.8 | 734.4 | 722.6 | 740.2 | 722.6 | 746.0 | 724.6 | 752.0 | 730.5 | 755.9 | 730.5 |
| 17.5° | 734.4 | 755.9 | 740.2 | 761.7 | 742.2 | 767.5 | 744.1 | 773.5 | 752.0 | 777.3 | 752.0 |
| 20° | 761.7 | 779.3 | 763.6 | 787.1 | 765.6 | 789.0 | 769.6 | 793.0 | 775.4 | 798.8 | 775.4 |
| 22.5° | 793.0 | 808.5 | 796.9 | 810.5 | 791.0 | 810.5 | 791.0 | 810.5 | 796.9 | 816.4 | 796.9 |
| 25° | 828.1 | 839.8 | 826.1 | 839.8 | 822.2 | 837.9 | 820.3 | 836.0 | 822.2 | 839.8 | 826.1 |
| 27.5° | 875.0 | 880.9 | 865.2 | 877.0 | 855.5 | 871.0 | 851.5 | 867.2 | 853.6 | 869.1 | 859.4 |
| 30° | 925.8 | 931.6 | 916.0 | 923.8 | 900.4 | 910.1 | 888.6 | 902.3 | 890.6 | 902.3 | 896.5 |
| 32.5° | 982.4 | 990.2 | 972.6 | 976.5 | 957.0 | 959.0 | 941.4 | 947.3 | 937.4 | 941.4 | 939.5 |
| 35° | 1046.9 | 1056.6 | 1037.1 | 1043.0 | 1021.4 | 1021.4 | 1005.9 | 1003.9 | 999.9 | 996.0 | 996.0 |
| 37.5° | 1128.9 | 1132.8 | 1117.2 | 1117.2 | 1091.8 | 1091.8 | 1072.3 | 1072.3 | 1064.5 | 1056.6 | 1052.7 |
| 40° | 1218.7 | 1220.7 | 1195.3 | 1193.4 | 1167.9 | 1167.9 | 1146.4 | 1140.6 | 1126.9 | 1117.2 | 1111.3 |
| 42.5° | 1314.4 | 1312.4 | 1275.4 | 1279.3 | 1242.2 | 1244.1 | 1216.8 | 1210.9 | 1197.3 | 1185.5 | 1173.8 |
| 45° | 1412.1 | 1404.3 | 1367.2 | 1365.2 | 1322.3 | 1324.2 | 1291.0 | 1287.1 | 1267.5 | 1255.9 | 1242.2 |
| 47.5° | 1511.7 | 1507.8 | 1466.8 | 1457.0 | 1412.1 | 1410.1 | 1367.2 | 1367.2 | 1347.6 | 1335.9 | 1322.3 |
| 50° | 1615.2 | 1613.3 | 1566.3 | 1560.5 | 1513.7 | 1505.8 | 1455.0 | 1455.0 | 1431.6 | 1427.7 | 1408.2 |
| 52.5° | 1728.5 | 1720.7 | 1669.9 | 1667.9 | 1623.0 | 1617.2 | 1562.5 | 1558.6 | 1523.4 | 1521.4 | 1500.0 |
| 55° | 1839.8 | 1826.2 | 1792.9 | 1777.3 | 1732.4 | 1730.4 | 1681.6 | 1671.8 | 1626.9 | 1626.9 | 1599.6 |
| 57.5° | 1941.4 | 1929.7 | 1902.3 | 1888.7 | 1845.7 | 1839.8 | 1787.1 | 1787.1 | 1748.0 | 1746.1 | 1716.7 |
| 60° | 2046.8 | 2050.7 | 2021.5 | 2015.6 | 1974.6 | 1972.7 | 1919.9 | 1919.9 | 1880.8 | 1878.9 | 1845.7 |
| 62.5° | 2136.6 | 2175.7 | 2164.1 | 2167.9 | 2132.8 | 2126.9 | 2074.1 | 2070.2 | 2025.3 | 2019.5 | 1992.2 |
| 65° | 2048.8 | 2185.5 | 2273.4 | 2332.0 | 2328.0 | 2326.1 | 2275.3 | 2267.6 | 2210.9 | 2195.3 | 2150.3 |
| 67.5° | 1720.7 | 1898.4 | 2058.6 | 2234.3 | 2363.2 | 2460.9 | 2490.2 | 2478.5 | 2429.6 | 2384.7 | 2330.1 |
| 70° | 1152.4 | 1357.4 | 1560.5 | 1779.2 | 2000.0 | 2214.8 | 2435.5 | 2531.2 | 2632.8 | 2597.6 | 2587.9 |
| 71° | 877.0 | 1087.9 | 1291.0 | 1521.4 | 1755.8 | 1994.1 | 2265.6 | 2378.9 | 2584.0 | 2582.0 | 2634.7 |
| 72.5° | 494.1 | 681.6 | 898.5 | 1099.6 | 1320.3 | 1566.3 | 1845.7 | 1970.7 | 2265.6 | 2324.1 | 2476.6 |
| 75° | 158.3 | 216.8 | 287.1 | 453.2 | 589.8 | 814.5 | 1021.4 | 1146.4 | 1341.8 | 1439.4 | 1652.3 |
| 77.5° | 105.5 | 117.2 | 121.1 | 140.7 | 158.3 | 224.6 | 304.6 | 373.1 | 410.1 | 429.6 | 451.1 |
| 80° | 76.2 | 82.0 | 85.9 | 95.7 | 97.7 | 109.4 | 109.4 | 121.1 | 119.2 | 126.9 | 121.1 |
| 82.5° | 48.8 | 54.7 | 56.7 | 60.6 | 62.5 | 70.3 | 74.3 | 82.0 | 82.0 | 85.9 | 84.0 |
| 85° | 23.4 | 27.3 | 27.3 | 31.2 | 31.2 | 37.1 | 37.1 | 43.0 | 43.0 | 48.8 | 46.9 |
| 87.5° | 1.9 | 1.9 | 1.9 | 3.9 | 3.9 | 3.9 | 5.8 | 7.8 | 7.8 | 7.8 | 7.8 |
| 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):

| | 80° | 82.5° | 85° | 87.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 671.9 | 671.9 | 671.9 | 671.9 | 671.9 |
| 2.5° | 673.8 | 671.9 | 673.8 | 669.9 | 673.8 |
| 5° | 683.5 | 675.8 | 685.6 | 675.8 | 685.6 |
| 7.5° | 699.2 | 689.5 | 701.1 | 685.6 | 699.2 |
| 10° | 712.9 | 699.2 | 714.8 | 699.2 | 712.9 |
| 12.5° | 736.3 | 714.8 | 740.2 | 714.8 | 740.2 |
| 15° | 759.7 | 734.4 | 765.6 | 738.3 | 763.6 |
| 17.5° | 781.2 | 757.8 | 787.1 | 759.7 | 785.1 |
| 20° | 800.8 | 779.3 | 804.7 | 777.3 | 804.7 |
| 22.5° | 820.3 | 806.6 | 826.1 | 806.6 | 826.1 |
| 25° | 845.7 | 836.0 | 849.6 | 836.0 | 849.6 |
| 27.5° | 875.0 | 871.0 | 878.9 | 869.1 | 880.9 |
| 30° | 908.2 | 910.1 | 912.1 | 910.1 | 914.0 |
| 32.5° | 949.2 | 959.0 | 955.0 | 955.0 | 955.0 |
| 35° | 1005.9 | 1023.5 | 1011.7 | 1015.6 | 1013.6 |
| 37.5° | 1058.5 | 1083.9 | 1068.4 | 1074.2 | 1070.3 |
| 40° | 1117.2 | 1134.8 | 1130.9 | 1130.9 | 1126.9 |
| 42.5° | 1181.6 | 1203.1 | 1197.3 | 1199.2 | 1195.3 |
| 45° | 1251.9 | 1271.4 | 1263.7 | 1261.7 | 1263.7 |
| 47.5° | 1332.0 | 1353.5 | 1343.7 | 1341.8 | 1343.7 |
| 50° | 1416.0 | 1441.3 | 1433.6 | 1429.7 | 1433.6 |
| 52.5° | 1507.8 | 1539.0 | 1535.1 | 1531.3 | 1537.1 |
| 55° | 1615.2 | 1644.5 | 1640.6 | 1644.5 | 1646.4 |
| 57.5° | 1722.6 | 1755.8 | 1748.0 | 1757.7 | 1761.7 |
| 60° | 1857.4 | 1876.9 | 1878.9 | 1880.8 | 1882.7 |
| 62.5° | 1994.1 | 2001.9 | 2007.7 | 2013.7 | 2015.6 |
| 65° | 2152.3 | 2154.2 | 2158.1 | 2152.3 | 2158.1 |
| 67.5° | 2304.6 | 2291.0 | 2289.1 | 2294.9 | 2298.8 |
| 70° | 2541.0 | 2541.0 | 2521.5 | 2548.8 | 2525.4 |
| 71° | 2572.2 | 2609.3 | 2566.4 | 2626.9 | 2562.5 |
| 72.5° | 2419.9 | 2488.2 | 2439.4 | 2494.1 | 2429.6 |
| 75° | 1683.6 | 1841.7 | 1839.8 | 1917.9 | 1855.4 |
| 77.5° | 466.8 | 437.5 | 466.8 | 402.3 | 384.7 |
| 80° | 126.9 | 115.2 | 125.0 | 105.5 | 119.2 |
| 82.5° | 84.0 | 72.2 | 70.3 | 56.7 | 60.6 |
| 85° | 48.8 | 37.1 | 37.1 | 29.3 | 31.2 |
| 87.5° | 7.8 | 1.9 | 7.8 | 3.9 | 5.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)