

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: P227825

Luminaire Tested: **ISS-AF-800-LED-E1-T4FT**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227825
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29760)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-800-LED-E1-T4FT
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV FORWARD THROW
Light Source: (16) 4000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4950.1 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

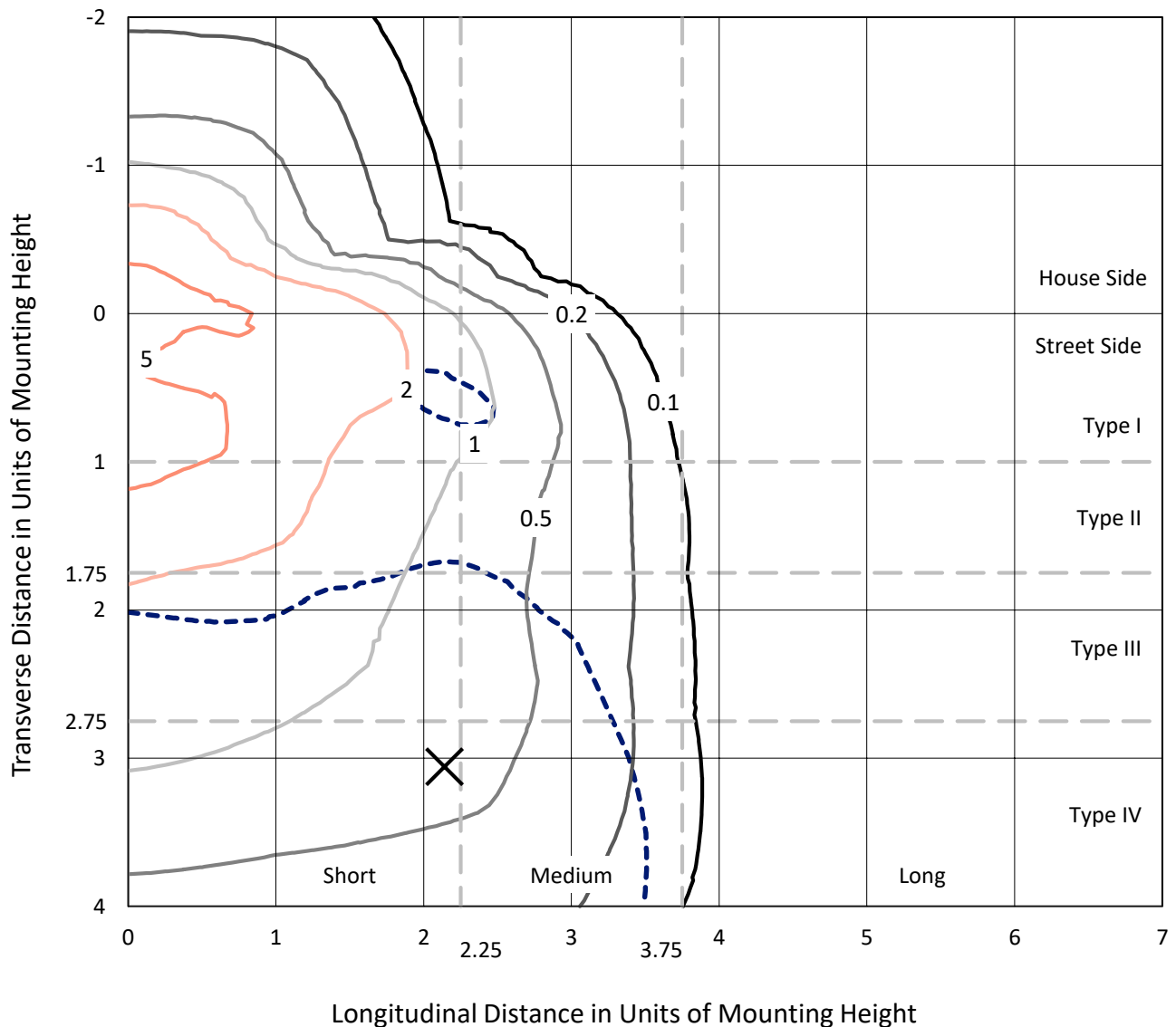
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

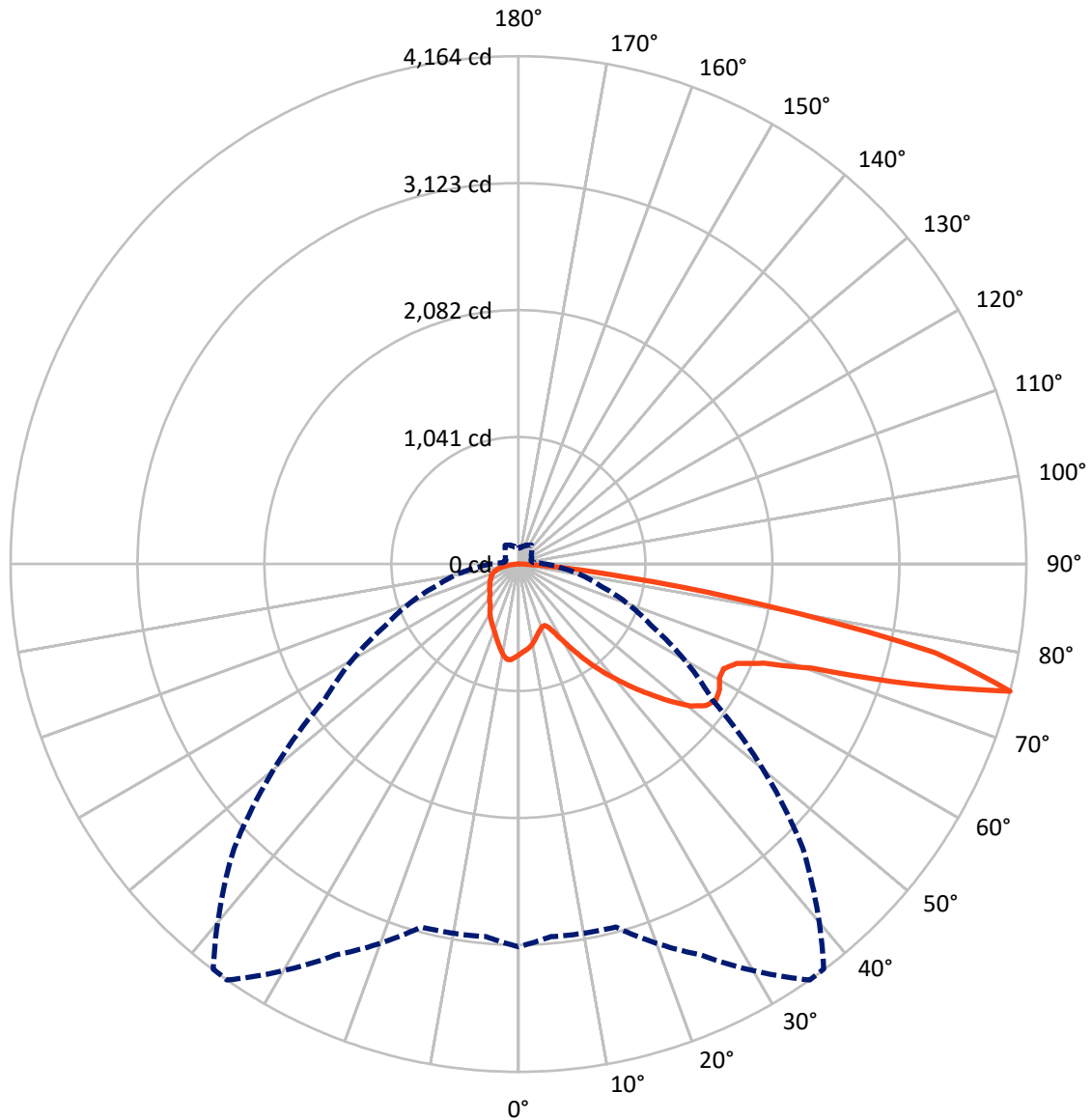
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 993.5 | 0.0 | 993.5 |
| | % Fixture | 20.1 | 0.0 | 20.1 |
| Street Side | Lumens | 3956.6 | 0.0 | 3956.6 |
| | % Fixture | 79.9 | 0.0 | 79.9 |
| Total | Lumens | 4950.1 | 0.0 | 4950.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 69.8 | 1.4 |
| 10°-20° | 184.2 | 3.7 |
| 20°-30° | 291.4 | 5.9 |
| 30°-40° | 470.4 | 9.5 |
| 40°-50° | 695.9 | 14.1 |
| 50°-60° | 894.8 | 18.1 |
| 60°-70° | 1107.9 | 22.4 |
| 70°-80° | 1116.4 | 22.6 |
| 80°-90° | 119.2 | 2.4 |
| 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° | 4950.1 | 100.0 |
| 0°-180° | 4950.1 | 100.0 |



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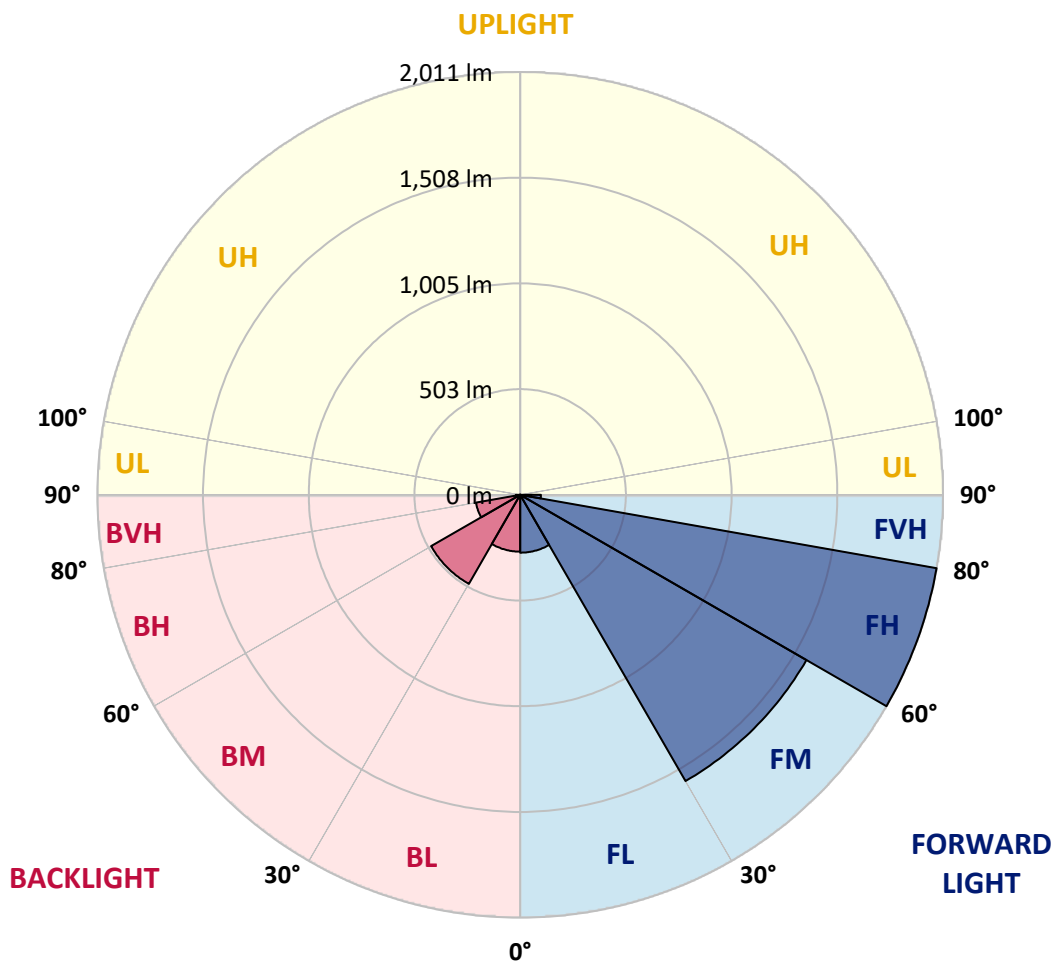
CATALOG NUMBER: ISS-AF-800-LED-E1-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 275.2 | 5.6 | | | |
| FM (30°-60°) | 1571.8 | 31.8 | | | |
| FH (60°-80°) | 2010.9 | 40.6 | | | G2/5000 |
| FVH (80°-90°) | 98.6 | 2.0 | | | G1/100 |
| BL (0°-30°) | 270.2 | 5.5 | B1/500 | | |
| BM (30°-60°) | 489.2 | 9.9 | B1/1000 | | |
| BH (60°-80°) | 213.4 | 4.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 20.6 | 0.4 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 37° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 |
| 2.5° | 722.1 | 720.5 | 718.8 | 718.8 | 722.1 | 722.1 | 723.8 | 725.5 | 727.1 | 732.0 | 738.7 |
| 5° | 702.4 | 700.6 | 699.0 | 700.6 | 705.6 | 705.6 | 710.5 | 713.9 | 717.2 | 725.5 | 733.7 |
| 7.5° | 675.9 | 675.9 | 674.2 | 680.9 | 685.8 | 684.1 | 690.7 | 694.1 | 702.4 | 710.5 | 723.8 |
| 10° | 641.2 | 641.2 | 641.2 | 649.5 | 657.7 | 657.7 | 662.7 | 671.0 | 677.5 | 689.1 | 705.6 |
| 12.5° | 611.4 | 609.8 | 609.8 | 616.4 | 626.3 | 628.0 | 636.2 | 647.7 | 656.0 | 671.0 | 689.1 |
| 15° | 601.5 | 598.2 | 589.9 | 589.9 | 594.9 | 594.9 | 608.1 | 624.6 | 637.9 | 652.7 | 674.2 |
| 17.5° | 603.1 | 598.2 | 576.7 | 570.1 | 570.1 | 571.7 | 585.0 | 603.1 | 619.7 | 637.9 | 665.9 |
| 20° | 618.1 | 609.8 | 570.1 | 555.3 | 552.0 | 553.6 | 565.2 | 583.3 | 603.1 | 628.0 | 659.4 |
| 22.5° | 682.5 | 669.2 | 594.9 | 561.8 | 547.0 | 547.0 | 553.6 | 573.5 | 598.2 | 631.3 | 671.0 |
| 25° | 831.2 | 809.8 | 677.5 | 618.1 | 573.5 | 568.5 | 556.9 | 576.7 | 606.5 | 646.1 | 704.0 |
| 27.5° | 983.3 | 961.8 | 780.0 | 715.6 | 646.1 | 631.3 | 588.3 | 593.2 | 626.3 | 679.1 | 753.5 |
| 30° | 1110.5 | 1092.3 | 908.9 | 834.5 | 741.9 | 725.5 | 659.4 | 628.0 | 661.0 | 725.5 | 827.9 |
| 32.5° | 1120.4 | 1112.2 | 1047.7 | 971.7 | 859.3 | 836.2 | 748.6 | 699.0 | 715.6 | 788.3 | 908.9 |
| 35° | 1212.9 | 1206.4 | 1171.6 | 1099.0 | 986.5 | 960.1 | 867.6 | 791.6 | 786.5 | 857.6 | 1001.4 |
| 37.5° | 1303.9 | 1295.6 | 1272.4 | 1222.8 | 1118.7 | 1097.2 | 1024.6 | 902.2 | 867.6 | 938.7 | 1092.3 |
| 40° | 1389.8 | 1378.2 | 1348.5 | 1320.3 | 1244.3 | 1244.3 | 1166.7 | 1008.0 | 945.2 | 1009.7 | 1168.3 |
| 42.5° | 1548.4 | 1512.0 | 1432.7 | 1411.3 | 1389.8 | 1389.8 | 1275.7 | 1080.7 | 1008.0 | 1087.3 | 1241.0 |
| 45° | 1700.5 | 1665.7 | 1558.3 | 1515.3 | 1527.0 | 1520.3 | 1363.3 | 1122.1 | 1064.2 | 1160.0 | 1310.4 |
| 47.5° | 1821.1 | 1789.7 | 1680.6 | 1650.8 | 1683.9 | 1657.5 | 1436.0 | 1155.1 | 1135.3 | 1237.8 | 1368.3 |
| 50° | 1928.5 | 1854.1 | 1748.3 | 1788.0 | 1829.3 | 1784.7 | 1500.5 | 1204.6 | 1206.4 | 1320.3 | 1452.6 |
| 52.5° | 1781.4 | 1773.1 | 1796.3 | 1888.8 | 1928.5 | 1878.9 | 1558.3 | 1267.4 | 1282.4 | 1426.1 | 1548.4 |
| 55° | 1604.6 | 1603.0 | 1738.4 | 1918.5 | 1966.5 | 1920.2 | 1596.3 | 1343.4 | 1361.6 | 1556.6 | 1669.0 |
| 57.5° | 1569.9 | 1553.4 | 1645.9 | 1855.7 | 1943.3 | 1910.3 | 1616.2 | 1414.5 | 1437.7 | 1721.9 | 1788.0 |
| 60° | 1682.2 | 1650.8 | 1636.0 | 1788.0 | 1893.8 | 1877.2 | 1640.9 | 1498.8 | 1530.2 | 1910.3 | 1898.7 |
| 62.5° | 1926.8 | 1883.9 | 1778.1 | 1792.9 | 1888.8 | 1875.6 | 1700.5 | 1598.0 | 1634.4 | 2098.7 | 1961.5 |
| 65° | 2250.7 | 2219.3 | 2050.7 | 1930.1 | 1966.5 | 1948.3 | 1807.9 | 1723.6 | 1743.4 | 2234.2 | 1890.4 |
| 67.5° | 2606.0 | 2563.0 | 2379.6 | 2214.4 | 2168.0 | 2133.4 | 1978.1 | 1872.3 | 1801.2 | 2214.4 | 1700.5 |
| 70° | 3007.6 | 2961.2 | 2802.7 | 2632.5 | 2553.1 | 2515.1 | 2275.5 | 2001.2 | 1779.7 | 1996.2 | 1341.8 |
| 72.5° | 3501.7 | 3438.9 | 3351.3 | 3369.4 | 3356.2 | 3250.4 | 2749.8 | 2044.2 | 1622.7 | 1485.6 | 801.5 |
| 75° | 3138.1 | 3067.0 | 3081.9 | 3536.3 | 4164.3 | 4159.3 | 3298.4 | 1938.4 | 1209.6 | 700.6 | 347.0 |
| 77.5° | 1125.3 | 1244.3 | 1835.9 | 2648.9 | 3491.7 | 3486.7 | 2553.1 | 1212.9 | 518.8 | 299.1 | 209.9 |
| 80° | 282.5 | 287.6 | 456.1 | 1087.3 | 2039.2 | 2022.7 | 1447.6 | 457.8 | 216.5 | 181.8 | 143.7 |
| 82.5° | 90.8 | 97.5 | 166.9 | 375.1 | 872.5 | 852.7 | 449.5 | 150.4 | 135.5 | 117.3 | 87.6 |
| 85° | 29.8 | 29.8 | 59.5 | 128.9 | 287.6 | 276.0 | 90.8 | 54.5 | 74.4 | 61.2 | 39.7 |
| 87.5° | 0.0 | 0.0 | 1.6 | 3.3 | 6.6 | 3.3 | 0.0 | 3.3 | 9.9 | 11.6 | 8.3 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 | 743.6 |
| 2.5° | 743.6 | 741.9 | 748.6 | 753.5 | 755.1 | 760.2 | 765.1 | 768.4 | 766.8 | 765.1 | 765.1 |
| 5° | 741.9 | 743.6 | 755.1 | 765.1 | 773.4 | 781.6 | 788.3 | 791.6 | 789.9 | 789.9 | 789.9 |
| 7.5° | 732.0 | 738.7 | 751.9 | 768.4 | 780.0 | 784.9 | 786.5 | 781.6 | 778.4 | 773.4 | 773.4 |
| 10° | 715.6 | 725.5 | 747.0 | 765.1 | 770.1 | 763.4 | 753.5 | 743.6 | 730.4 | 722.1 | 722.1 |
| 12.5° | 702.4 | 713.9 | 740.3 | 755.1 | 748.6 | 732.0 | 710.5 | 694.1 | 680.9 | 671.0 | 669.2 |
| 15° | 690.7 | 705.6 | 733.7 | 737.0 | 722.1 | 694.1 | 665.9 | 647.7 | 632.9 | 626.3 | 626.3 |
| 17.5° | 682.5 | 702.4 | 727.1 | 717.2 | 687.4 | 651.1 | 624.6 | 609.8 | 598.2 | 591.6 | 589.9 |
| 20° | 684.1 | 708.9 | 720.5 | 692.4 | 649.5 | 611.4 | 586.7 | 578.4 | 570.1 | 566.8 | 566.8 |
| 22.5° | 702.4 | 725.5 | 718.8 | 671.0 | 614.7 | 571.7 | 555.3 | 553.6 | 550.2 | 547.0 | 545.3 |
| 25° | 741.9 | 758.5 | 723.8 | 649.5 | 578.4 | 535.4 | 527.1 | 532.1 | 530.5 | 527.1 | 527.1 |
| 27.5° | 796.5 | 799.8 | 732.0 | 628.0 | 538.7 | 500.7 | 500.7 | 509.0 | 505.6 | 500.7 | 504.0 |
| 30° | 862.7 | 844.4 | 735.4 | 593.2 | 492.4 | 467.7 | 472.6 | 477.6 | 474.2 | 467.7 | 467.7 |
| 32.5° | 933.6 | 890.7 | 735.4 | 548.6 | 447.8 | 437.9 | 439.6 | 441.2 | 434.7 | 426.4 | 426.4 |
| 35° | 1003.1 | 935.3 | 727.1 | 495.7 | 413.2 | 408.2 | 406.5 | 413.2 | 408.2 | 396.6 | 396.6 |
| 37.5° | 1069.2 | 970.1 | 705.6 | 441.2 | 386.7 | 385.0 | 389.9 | 386.7 | 380.0 | 363.6 | 360.3 |
| 40° | 1115.4 | 993.2 | 662.7 | 396.6 | 365.2 | 375.1 | 371.8 | 353.6 | 343.7 | 332.2 | 332.2 |
| 42.5° | 1156.8 | 1004.7 | 609.8 | 361.9 | 350.4 | 363.6 | 350.4 | 327.2 | 313.9 | 312.3 | 313.9 |
| 45° | 1194.8 | 1014.7 | 558.5 | 333.8 | 332.2 | 350.4 | 333.8 | 309.0 | 294.1 | 294.1 | 295.8 |
| 47.5° | 1231.1 | 1024.6 | 507.3 | 307.4 | 310.7 | 330.5 | 320.6 | 295.8 | 280.9 | 271.0 | 271.0 |
| 50° | 1288.9 | 1047.7 | 432.9 | 279.3 | 285.9 | 313.9 | 310.7 | 282.5 | 266.1 | 251.1 | 247.9 |
| 52.5° | 1358.4 | 1087.3 | 352.0 | 249.5 | 267.7 | 299.1 | 299.1 | 271.0 | 252.9 | 233.0 | 229.7 |
| 55° | 1450.9 | 1130.3 | 282.5 | 228.0 | 249.5 | 282.5 | 287.6 | 266.1 | 239.6 | 221.5 | 218.1 |
| 57.5° | 1543.4 | 1145.2 | 228.0 | 206.5 | 226.4 | 266.1 | 279.3 | 256.1 | 224.7 | 211.5 | 209.9 |
| 60° | 1607.9 | 1097.2 | 191.7 | 188.4 | 209.9 | 246.2 | 267.7 | 244.6 | 214.8 | 201.6 | 201.6 |
| 62.5° | 1598.0 | 951.9 | 171.9 | 176.9 | 196.6 | 231.4 | 257.8 | 234.7 | 208.2 | 200.0 | 198.4 |
| 65° | 1457.5 | 718.8 | 155.3 | 166.9 | 185.1 | 216.5 | 247.9 | 229.7 | 204.9 | 196.6 | 193.3 |
| 67.5° | 1227.8 | 477.6 | 143.7 | 157.0 | 173.5 | 204.9 | 239.6 | 223.1 | 195.0 | 190.1 | 186.7 |
| 70° | 889.0 | 279.3 | 132.2 | 147.1 | 161.9 | 191.7 | 228.0 | 209.9 | 183.4 | 180.1 | 171.9 |
| 72.5° | 480.9 | 175.1 | 119.0 | 133.8 | 147.1 | 175.1 | 209.9 | 193.3 | 168.6 | 155.3 | 150.4 |
| 75° | 219.8 | 127.3 | 105.8 | 119.0 | 128.9 | 153.6 | 188.4 | 170.2 | 150.4 | 133.8 | 130.5 |
| 77.5° | 147.1 | 95.9 | 89.2 | 102.5 | 107.4 | 128.9 | 166.9 | 135.5 | 117.3 | 105.8 | 102.5 |
| 80° | 100.8 | 71.1 | 72.7 | 84.3 | 82.7 | 102.5 | 125.6 | 109.0 | 92.6 | 95.9 | 87.6 |
| 82.5° | 64.4 | 49.6 | 56.2 | 59.5 | 57.8 | 77.6 | 97.5 | 82.7 | 69.4 | 57.8 | 49.6 |
| 85° | 28.1 | 26.4 | 33.0 | 34.7 | 34.7 | 43.0 | 51.2 | 41.3 | 31.4 | 23.1 | 23.1 |
| 87.5° | 1.6 | 3.3 | 3.3 | 4.9 | 3.3 | 1.6 | 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 |

(END OF REPORT)