

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: P227969

Luminaire Tested: **ISS-AF-450-LED-E1-T4W-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P227969  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29757)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISS-AF-450-LED-E1-T4W-7030  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE  
Light Source: (16) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

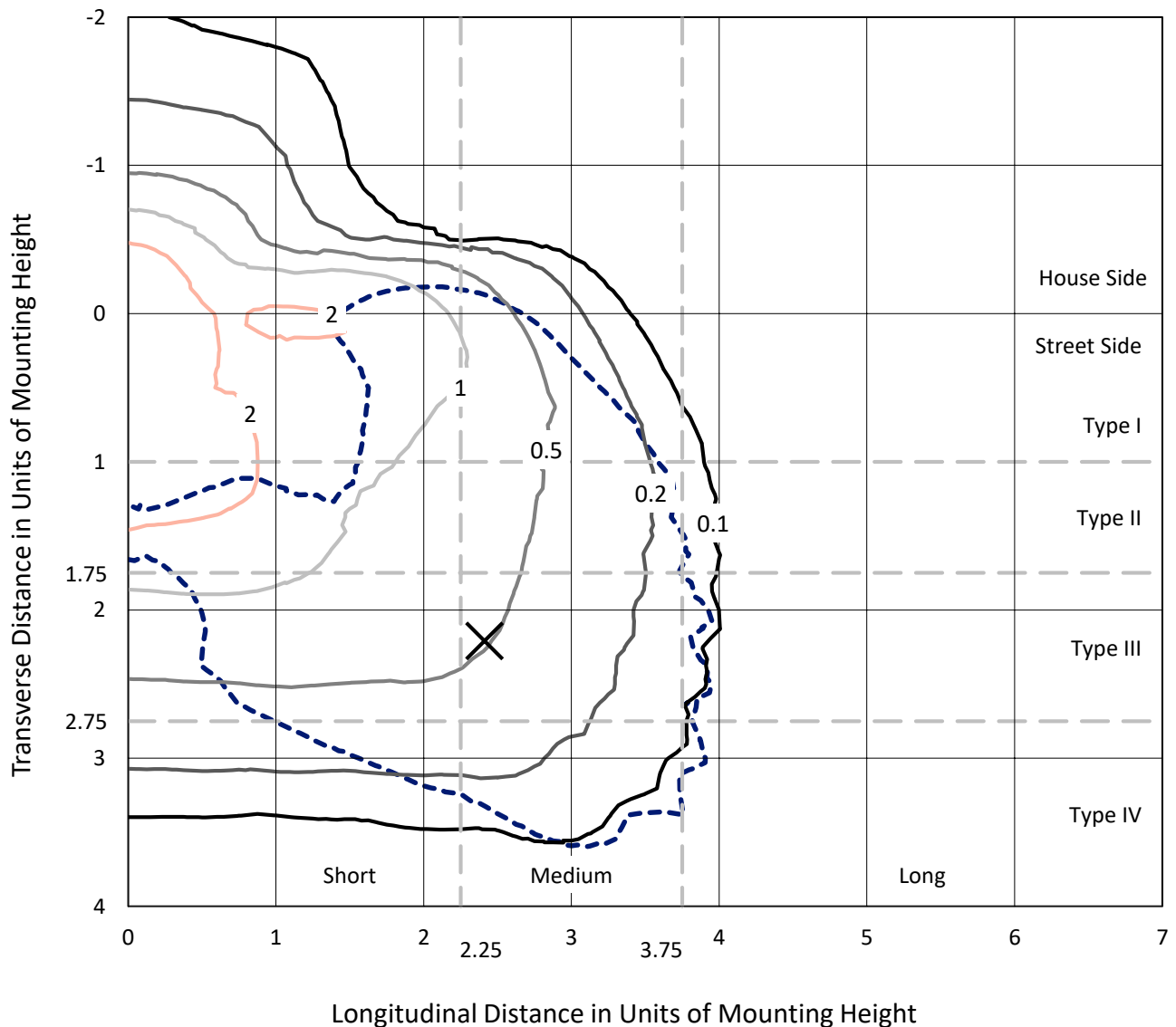
Lumens per Lamp: N/A  
Luminaire Lumens: 2652 lumens  
Efficiency: N/A  
Efficacy: 104.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 25.31  
Input Voltage (V): 120  
Input Current (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

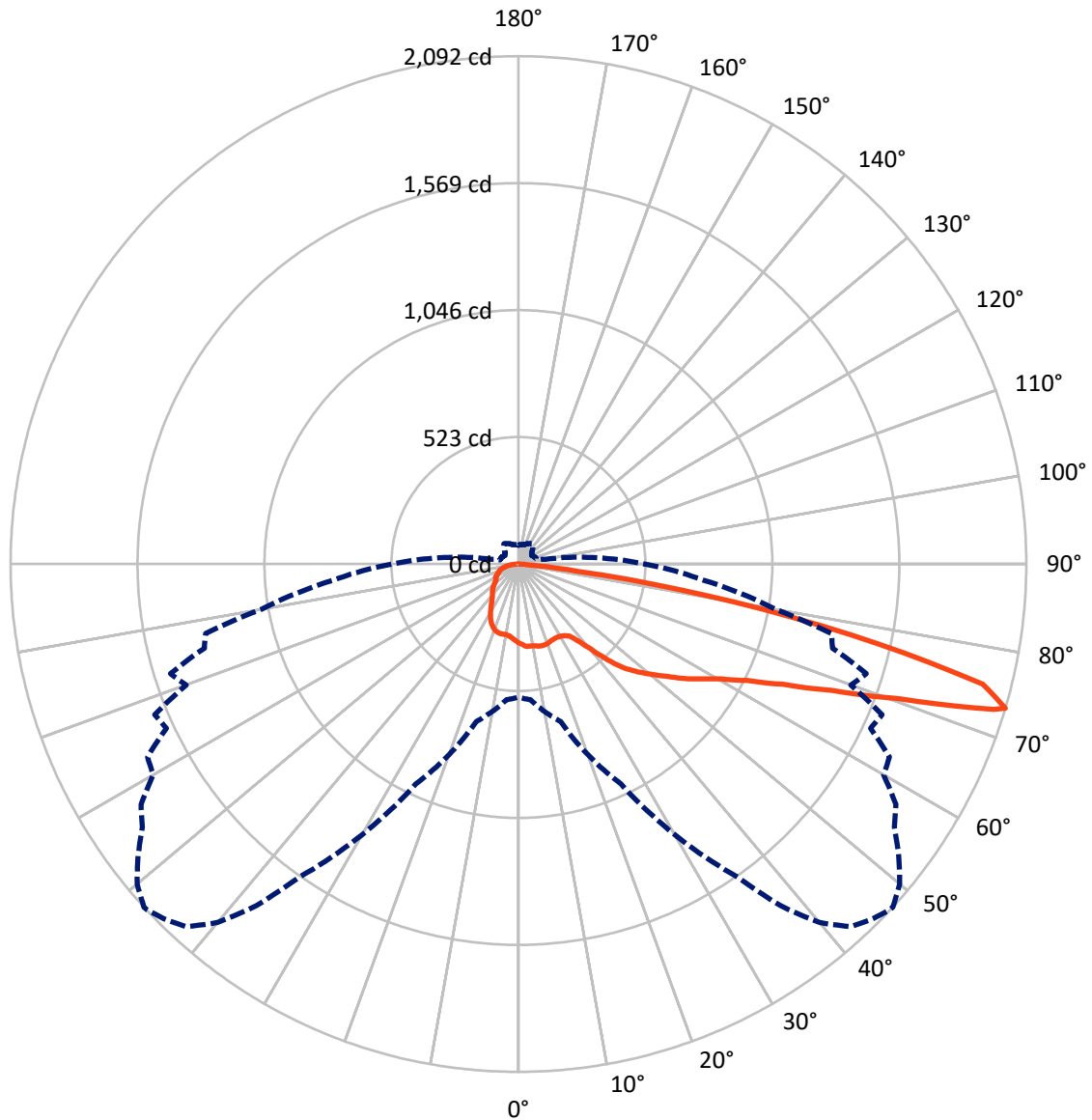
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.8 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 529.8    | 0.0    | 529.8  |
|                    | % Fixture | 20.0     | 0.0    | 20.0   |
| <b>Street Side</b> | Lumens    | 2122.2   | 0.0    | 2122.2 |
|                    | % Fixture | 80.0     | 0.0    | 80.0   |
| <b>Total</b>       | Lumens    | 2652.0   | 0.0    | 2652.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 31.0   | 1.2       |
| 10°-20°   | 92.3   | 3.5       |
| 20°-30°   | 141.8  | 5.3       |
| 30°-40°   | 206.9  | 7.8       |
| 40°-50°   | 341.2  | 12.9      |
| 50°-60°   | 534.2  | 20.1      |
| 60°-70°   | 724.6  | 27.3      |
| 70°-80°   | 536.6  | 20.2      |
| 80°-90°   | 43.4   | 1.6       |
| 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°    | 2652.0 | 100.0     |
| 0°-180°   | 2652.0 | 100.0     |



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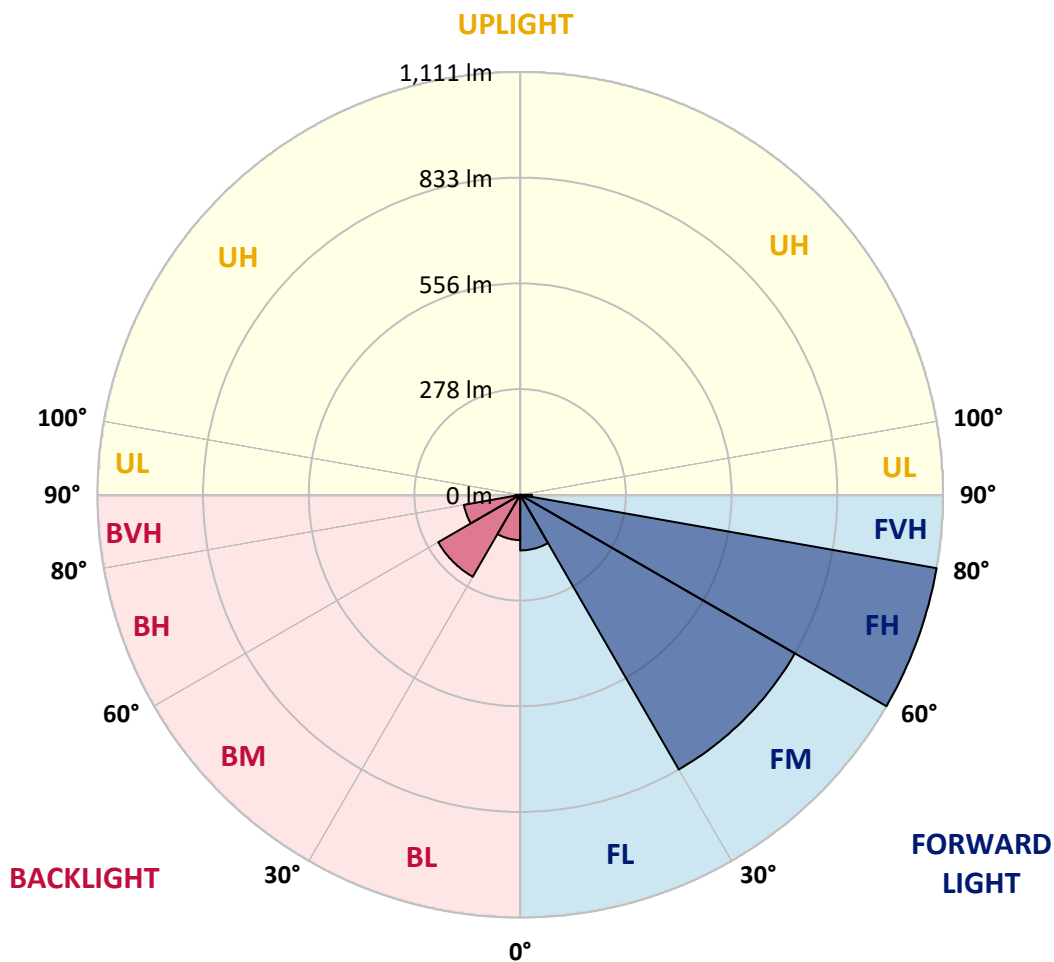
CATALOG NUMBER: ISS-AF-450-LED-E1-T4W-7030

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 146.2  | 5.5       |                         |      |         |
| FM   | (30°-60°)   | 833.5  | 31.4      |                         |      |         |
| FH   | (60°-80°)   | 1111.2 | 41.9      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 31.3   | 1.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 118.9  | 4.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 248.8  | 9.4       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 150.0  | 5.7       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 12.1   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 37.5°  | 40°    | 42.5°  | 45°    | 47°    | 47.5°  |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  |
| 2.5°  | 344.9  | 344.1  | 341.4  | 340.5  | 337.9  | 336.2  | 335.3  | 334.4  | 337.0  | 335.3  | 332.7  |
| 5°    | 366.8  | 365.1  | 361.6  | 356.3  | 351.1  | 347.6  | 346.7  | 344.9  | 344.9  | 343.2  | 341.4  |
| 7.5°  | 382.6  | 381.7  | 376.4  | 368.6  | 359.8  | 353.7  | 350.2  | 347.6  | 348.4  | 346.7  | 341.4  |
| 10°   | 397.5  | 395.7  | 386.9  | 377.3  | 364.2  | 357.2  | 352.8  | 348.4  | 351.9  | 349.3  | 342.3  |
| 12.5° | 408.8  | 407.1  | 394.8  | 382.6  | 367.7  | 359.8  | 355.4  | 352.8  | 356.3  | 354.6  | 346.7  |
| 15°   | 415.0  | 413.2  | 401.0  | 386.1  | 370.3  | 361.6  | 359.8  | 358.1  | 360.7  | 357.2  | 350.2  |
| 17.5° | 411.5  | 411.5  | 400.1  | 384.3  | 371.2  | 362.4  | 359.8  | 358.1  | 361.6  | 358.1  | 350.2  |
| 20°   | 398.3  | 400.1  | 392.2  | 375.6  | 365.9  | 359.8  | 357.2  | 353.7  | 357.2  | 353.7  | 348.4  |
| 22.5° | 381.7  | 383.4  | 379.1  | 364.2  | 357.2  | 352.8  | 351.9  | 348.4  | 351.1  | 348.4  | 343.2  |
| 25°   | 366.8  | 366.8  | 365.1  | 351.9  | 351.1  | 347.6  | 348.4  | 346.7  | 348.4  | 344.9  | 341.4  |
| 27.5° | 367.7  | 367.7  | 360.7  | 347.6  | 346.7  | 346.7  | 346.7  | 346.7  | 347.6  | 344.9  | 341.4  |
| 30°   | 419.3  | 421.1  | 401.0  | 364.2  | 351.1  | 349.3  | 350.2  | 349.3  | 350.2  | 349.3  | 344.9  |
| 32.5° | 497.3  | 497.3  | 478.0  | 421.1  | 374.7  | 363.3  | 358.9  | 358.1  | 355.4  | 354.6  | 351.1  |
| 35°   | 574.3  | 573.4  | 554.2  | 491.1  | 432.5  | 410.6  | 396.6  | 383.4  | 377.3  | 371.2  | 365.1  |
| 37.5° | 639.1  | 636.4  | 633.8  | 562.0  | 500.8  | 475.4  | 458.7  | 439.5  | 427.2  | 416.7  | 402.7  |
| 40°   | 699.5  | 703.9  | 713.5  | 627.7  | 569.0  | 545.4  | 528.8  | 504.3  | 492.0  | 478.9  | 462.2  |
| 42.5° | 782.6  | 788.8  | 789.7  | 698.6  | 631.2  | 615.4  | 602.3  | 583.9  | 570.8  | 555.0  | 540.2  |
| 45°   | 863.2  | 864.1  | 866.7  | 774.8  | 707.4  | 687.2  | 677.6  | 660.1  | 643.5  | 623.3  | 611.1  |
| 47.5° | 918.3  | 915.7  | 927.1  | 862.3  | 796.7  | 773.9  | 759.9  | 733.6  | 708.2  | 682.8  | 664.5  |
| 50°   | 985.8  | 983.1  | 983.1  | 962.1  | 900.0  | 873.7  | 849.2  | 800.2  | 773.0  | 741.5  | 715.2  |
| 52.5° | 1045.3 | 1035.7 | 1041.8 | 1054.0 | 1008.5 | 975.2  | 932.4  | 877.2  | 841.3  | 802.8  | 769.5  |
| 55°   | 1126.7 | 1076.8 | 1090.8 | 1133.7 | 1116.2 | 1064.5 | 1007.6 | 949.0  | 907.8  | 864.1  | 833.4  |
| 57.5° | 1098.7 | 1064.5 | 1105.7 | 1181.0 | 1180.1 | 1132.0 | 1083.8 | 1012.0 | 970.9  | 929.7  | 892.1  |
| 60°   | 998.0  | 1015.5 | 1104.8 | 1213.4 | 1217.7 | 1180.1 | 1140.7 | 1074.2 | 1041.8 | 998.9  | 961.2  |
| 62.5° | 920.1  | 945.5  | 1068.0 | 1210.7 | 1260.6 | 1225.6 | 1193.2 | 1153.8 | 1131.1 | 1095.2 | 1056.7 |
| 65°   | 915.7  | 930.6  | 1049.7 | 1208.1 | 1321.0 | 1302.7 | 1287.8 | 1269.4 | 1265.0 | 1238.8 | 1194.1 |
| 67.5° | 957.7  | 971.7  | 1081.2 | 1275.5 | 1410.3 | 1402.5 | 1424.4 | 1420.8 | 1440.1 | 1427.0 | 1390.2 |
| 70°   | 875.4  | 883.3  | 1018.1 | 1299.2 | 1614.3 | 1649.3 | 1698.4 | 1695.7 | 1736.9 | 1705.4 | 1662.5 |
| 72.5° | 614.6  | 630.3  | 749.4  | 1073.3 | 1618.7 | 1806.0 | 1919.9 | 2016.2 | 2060.8 | 2068.7 | 2048.5 |
| 73°   | 548.9  | 561.2  | 671.5  | 999.8  | 1574.9 | 1774.5 | 1927.7 | 2026.7 | 2066.1 | 2090.6 | 2092.3 |
| 75°   | 190.8  | 197.0  | 293.3  | 605.8  | 1258.9 | 1548.7 | 1745.6 | 1834.9 | 1825.3 | 1897.1 | 1975.9 |
| 77.5° | 61.3   | 62.2   | 76.2   | 156.7  | 607.6  | 961.2  | 1181.0 | 1263.3 | 1216.0 | 1293.9 | 1399.0 |
| 80°   | 37.6   | 39.4   | 49.9   | 70.9   | 159.3  | 291.5  | 493.8  | 618.1  | 592.7  | 665.3  | 777.4  |
| 82.5° | 22.8   | 23.6   | 30.6   | 43.8   | 63.9   | 70.9   | 92.8   | 126.1  | 155.0  | 186.5  | 244.2  |
| 85°   | 10.5   | 11.4   | 14.9   | 20.1   | 26.3   | 27.1   | 26.3   | 24.5   | 28.0   | 32.4   | 37.6   |
| 87.5° | 0.0    | 0.0    | 0.9    | 1.8    | 0.9    | 0.0    | 0.0    | 0.0    | 0.0    | 0.9    | 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):**

|       | 50°    | 52.5°  | 55°    | 57.5°  | 60°    | 62.5°  | 65°    | 67.5°  | 70°    | 72.5°  | 75°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  |
| 2.5°  | 335.3  | 332.7  | 332.7  | 329.2  | 330.9  | 327.4  | 329.2  | 325.7  | 327.4  | 323.0  | 325.7  |
| 5°    | 340.5  | 336.2  | 336.2  | 330.9  | 331.8  | 325.7  | 328.3  | 321.3  | 324.8  | 316.9  | 322.2  |
| 7.5°  | 343.2  | 335.3  | 338.8  | 329.2  | 333.5  | 323.0  | 328.3  | 316.9  | 323.9  | 311.7  | 320.4  |
| 10°   | 346.7  | 335.3  | 341.4  | 330.9  | 336.2  | 323.9  | 330.9  | 316.9  | 325.7  | 310.8  | 318.7  |
| 12.5° | 351.9  | 339.7  | 344.9  | 332.7  | 339.7  | 325.7  | 332.7  | 318.7  | 327.4  | 310.8  | 320.4  |
| 15°   | 355.4  | 343.2  | 348.4  | 336.2  | 341.4  | 325.7  | 334.4  | 317.8  | 327.4  | 309.9  | 320.4  |
| 17.5° | 354.6  | 343.2  | 348.4  | 334.4  | 340.5  | 324.8  | 333.5  | 316.9  | 325.7  | 307.3  | 318.7  |
| 20°   | 351.1  | 341.4  | 344.9  | 332.7  | 337.9  | 322.2  | 330.0  | 313.4  | 323.0  | 304.7  | 316.0  |
| 22.5° | 346.7  | 337.0  | 341.4  | 330.0  | 335.3  | 319.5  | 326.5  | 311.7  | 321.3  | 302.9  | 313.4  |
| 25°   | 344.1  | 336.2  | 338.8  | 327.4  | 334.4  | 320.4  | 327.4  | 310.8  | 321.3  | 302.9  | 315.2  |
| 27.5° | 343.2  | 336.2  | 341.4  | 330.9  | 337.0  | 324.8  | 331.8  | 316.9  | 325.7  | 306.4  | 318.7  |
| 30°   | 348.4  | 342.3  | 346.7  | 337.9  | 343.2  | 330.9  | 337.9  | 323.9  | 332.7  | 314.3  | 328.3  |
| 32.5° | 354.6  | 348.4  | 352.8  | 344.9  | 352.8  | 340.5  | 349.3  | 335.3  | 345.8  | 327.4  | 340.5  |
| 35°   | 367.7  | 360.7  | 366.8  | 358.1  | 366.8  | 357.2  | 366.8  | 351.9  | 365.1  | 346.7  | 360.7  |
| 37.5° | 401.8  | 382.6  | 388.7  | 379.1  | 387.8  | 375.6  | 392.2  | 377.3  | 392.2  | 374.7  | 394.0  |
| 40°   | 456.1  | 422.0  | 428.1  | 408.0  | 421.1  | 402.7  | 422.8  | 411.5  | 431.6  | 409.7  | 434.2  |
| 42.5° | 527.0  | 494.6  | 488.5  | 457.9  | 469.2  | 447.4  | 467.5  | 447.4  | 474.5  | 453.5  | 484.1  |
| 45°   | 591.8  | 557.7  | 548.0  | 518.3  | 526.1  | 497.3  | 522.6  | 494.6  | 530.5  | 506.0  | 544.5  |
| 47.5° | 645.2  | 604.9  | 597.1  | 562.9  | 576.9  | 549.8  | 581.3  | 551.5  | 595.3  | 570.8  | 615.4  |
| 50°   | 694.2  | 644.3  | 642.6  | 605.8  | 629.4  | 602.3  | 647.0  | 626.8  | 669.7  | 645.2  | 697.7  |
| 52.5° | 750.3  | 687.2  | 696.0  | 662.7  | 700.4  | 677.6  | 729.2  | 700.4  | 756.4  | 730.1  | 787.9  |
| 55°   | 809.8  | 743.3  | 766.0  | 745.9  | 790.5  | 775.6  | 819.4  | 793.2  | 848.3  | 822.0  | 883.3  |
| 57.5° | 875.4  | 818.5  | 858.8  | 849.2  | 888.6  | 870.2  | 919.2  | 895.6  | 950.7  | 928.8  | 990.1  |
| 60°   | 961.2  | 923.6  | 963.0  | 962.1  | 996.3  | 995.4  | 1026.9 | 1012.9 | 1065.4 | 1055.8 | 1111.8 |
| 62.5° | 1072.4 | 1042.7 | 1084.7 | 1073.3 | 1114.4 | 1107.4 | 1146.0 | 1146.0 | 1183.6 | 1196.7 | 1252.8 |
| 65°   | 1222.1 | 1182.7 | 1232.6 | 1215.1 | 1256.3 | 1258.0 | 1282.5 | 1286.9 | 1332.4 | 1347.3 | 1395.5 |
| 67.5° | 1425.2 | 1379.7 | 1419.1 | 1385.8 | 1433.1 | 1430.5 | 1451.5 | 1460.2 | 1466.4 | 1502.3 | 1507.5 |
| 70°   | 1717.6 | 1649.3 | 1685.2 | 1639.7 | 1648.5 | 1654.6 | 1615.2 | 1644.1 | 1574.1 | 1631.0 | 1553.9 |
| 72.5° | 2033.7 | 1955.7 | 1893.6 | 1848.1 | 1757.9 | 1744.8 | 1630.1 | 1654.6 | 1505.8 | 1554.8 | 1399.0 |
| 73°   | 2050.3 | 1975.0 | 1891.0 | 1843.7 | 1736.9 | 1722.9 | 1600.3 | 1621.3 | 1456.7 | 1503.1 | 1339.4 |
| 75°   | 1863.8 | 1884.0 | 1681.7 | 1701.0 | 1515.4 | 1537.3 | 1345.6 | 1370.1 | 1167.8 | 1202.9 | 991.9  |
| 77.5° | 1256.3 | 1323.7 | 1096.9 | 1181.9 | 951.6  | 1036.5 | 776.5  | 784.4  | 572.5  | 534.9  | 363.3  |
| 80°   | 622.4  | 680.2  | 482.4  | 527.0  | 353.7  | 347.6  | 211.9  | 176.0  | 149.7  | 153.2  | 157.6  |
| 82.5° | 179.5  | 202.2  | 125.2  | 124.3  | 88.4   | 84.0   | 84.0   | 89.3   | 91.0   | 101.6  | 98.9   |
| 85°   | 34.1   | 41.1   | 35.9   | 48.1   | 42.9   | 47.3   | 43.8   | 50.8   | 47.3   | 58.7   | 50.8   |
| 87.5° | 0.9    | 0.0    | 0.9    | 2.6    | 2.6    | 6.1    | 4.4    | 7.0    | 7.0    | 12.3   | 11.4   |
| 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):**

|       | 77.5°  | 80°    | 85°    | 90°    | 95°    | 100°  | 102.5° | 105°  | 107.5° | 110°  | 112.5° |
|-------|--------|--------|--------|--------|--------|-------|--------|-------|--------|-------|--------|
| 0°    | 325.7  | 325.7  | 325.7  | 325.7  | 325.7  | 325.7 | 325.7  | 325.7 | 325.7  | 325.7 | 325.7  |
| 2.5°  | 322.2  | 326.5  | 324.8  | 323.0  | 321.3  | 320.4 | 316.9  | 318.7 | 314.3  | 317.8 | 314.3  |
| 5°    | 315.2  | 320.4  | 317.8  | 314.3  | 312.5  | 310.8 | 304.7  | 309.0 | 302.0  | 308.2 | 302.9  |
| 7.5°  | 307.3  | 316.0  | 313.4  | 309.9  | 306.4  | 304.7 | 292.4  | 302.0 | 291.5  | 300.3 | 291.5  |
| 10°   | 304.7  | 314.3  | 310.8  | 306.4  | 302.9  | 301.2 | 286.3  | 297.7 | 286.3  | 295.9 | 284.5  |
| 12.5° | 302.9  | 314.3  | 309.0  | 304.7  | 301.2  | 298.5 | 281.9  | 295.9 | 281.0  | 295.0 | 281.9  |
| 15°   | 301.2  | 314.3  | 307.3  | 302.0  | 298.5  | 295.9 | 278.4  | 294.1 | 277.5  | 293.3 | 278.4  |
| 17.5° | 299.4  | 311.7  | 305.5  | 299.4  | 295.9  | 294.1 | 274.9  | 291.5 | 274.0  | 291.5 | 276.6  |
| 20°   | 296.8  | 309.0  | 302.0  | 295.9  | 292.4  | 289.8 | 270.5  | 288.0 | 269.6  | 287.1 | 270.5  |
| 22.5° | 293.3  | 306.4  | 300.3  | 294.1  | 290.6  | 286.3 | 265.3  | 283.6 | 264.4  | 281.9 | 266.1  |
| 25°   | 294.1  | 308.2  | 300.3  | 294.1  | 288.9  | 284.5 | 261.8  | 281.9 | 260.0  | 277.5 | 260.0  |
| 27.5° | 298.5  | 310.8  | 302.9  | 297.7  | 290.6  | 285.4 | 261.8  | 280.1 | 258.3  | 273.1 | 254.8  |
| 30°   | 307.3  | 319.5  | 312.5  | 304.7  | 298.5  | 291.5 | 266.1  | 281.0 | 258.3  | 267.9 | 249.5  |
| 32.5° | 322.2  | 333.5  | 326.5  | 320.4  | 313.4  | 302.9 | 274.9  | 285.4 | 260.0  | 264.4 | 245.1  |
| 35°   | 341.4  | 355.4  | 351.9  | 347.6  | 338.8  | 320.4 | 289.8  | 291.5 | 263.5  | 260.9 | 239.0  |
| 37.5° | 372.9  | 392.2  | 391.3  | 390.4  | 380.8  | 347.6 | 306.4  | 303.8 | 267.0  | 258.3 | 231.1  |
| 40°   | 414.1  | 436.8  | 443.0  | 449.1  | 429.0  | 379.9 | 325.7  | 316.0 | 268.8  | 253.0 | 218.9  |
| 42.5° | 462.2  | 492.9  | 511.3  | 522.6  | 485.9  | 415.8 | 347.6  | 330.0 | 268.8  | 245.1 | 204.9  |
| 45°   | 521.8  | 557.7  | 592.7  | 604.9  | 548.9  | 454.4 | 370.3  | 341.4 | 265.3  | 232.9 | 186.5  |
| 47.5° | 594.4  | 636.4  | 684.6  | 690.7  | 617.2  | 495.5 | 386.1  | 349.3 | 253.9  | 216.2 | 169.8  |
| 50°   | 675.0  | 725.7  | 796.7  | 792.3  | 689.9  | 538.4 | 396.6  | 354.6 | 233.7  | 197.0 | 149.7  |
| 52.5° | 765.1  | 829.0  | 929.7  | 909.6  | 778.3  | 591.8 | 406.2  | 361.6 | 209.2  | 174.2 | 129.6  |
| 55°   | 878.1  | 954.2  | 1080.3 | 1037.4 | 876.3  | 650.5 | 420.2  | 362.4 | 176.8  | 147.1 | 114.7  |
| 57.5° | 999.8  | 1081.2 | 1242.3 | 1164.3 | 968.2  | 696.0 | 414.1  | 334.4 | 144.4  | 124.3 | 103.3  |
| 60°   | 1146.0 | 1244.9 | 1404.2 | 1282.5 | 1045.3 | 711.7 | 371.2  | 275.8 | 123.4  | 112.1 | 98.0   |
| 62.5° | 1309.7 | 1407.7 | 1537.3 | 1364.8 | 1089.1 | 685.5 | 275.8  | 190.8 | 105.9  | 99.8  | 90.2   |
| 65°   | 1483.9 | 1576.7 | 1601.2 | 1371.8 | 1060.2 | 569.9 | 170.7  | 125.2 | 91.9   | 89.3  | 83.2   |
| 67.5° | 1644.1 | 1652.8 | 1540.8 | 1258.0 | 920.1  | 397.5 | 116.4  | 99.8  | 84.9   | 84.0  | 80.5   |
| 70°   | 1685.2 | 1533.8 | 1280.8 | 979.6  | 664.5  | 236.4 | 94.5   | 86.7  | 81.4   | 81.4  | 78.8   |
| 72.5° | 1407.7 | 1167.8 | 856.2  | 593.6  | 362.4  | 126.1 | 80.5   | 78.8  | 77.0   | 77.0  | 75.3   |
| 73°   | 1320.2 | 1075.9 | 766.9  | 518.3  | 306.4  | 112.9 | 78.8   | 77.0  | 76.2   | 75.3  | 74.4   |
| 75°   | 877.2  | 675.8  | 435.1  | 262.6  | 142.7  | 81.4  | 70.0   | 70.0  | 69.2   | 70.0  | 69.2   |
| 77.5° | 337.9  | 254.8  | 168.1  | 112.9  | 81.4   | 63.9  | 59.5   | 60.4  | 59.5   | 61.3  | 60.4   |
| 80°   | 148.8  | 147.1  | 111.2  | 79.7   | 59.5   | 48.1  | 48.1   | 48.1  | 49.0   | 49.9  | 49.9   |
| 82.5° | 101.6  | 85.8   | 65.7   | 49.0   | 35.9   | 35.0  | 35.9   | 35.9  | 36.8   | 37.6  | 36.8   |
| 85°   | 56.0   | 47.3   | 35.0   | 21.9   | 19.3   | 23.6  | 23.6   | 23.6  | 22.8   | 22.8  | 21.9   |
| 87.5° | 17.5   | 13.1   | 9.6    | 2.6    | 4.4    | 4.4   | 6.1    | 5.3   | 5.3    | 6.1   | 6.1    |
| 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):**

|       | 115°  | 117.5° | 120°  | 122.5° | 125°  | 127.5° | 130°  | 135°  | 145°  | 155°  | 165°  |
|-------|-------|--------|-------|--------|-------|--------|-------|-------|-------|-------|-------|
| 0°    | 325.7 | 325.7  | 325.7 | 325.7  | 325.7 | 325.7  | 325.7 | 325.7 | 325.7 | 325.7 | 325.7 |
| 2.5°  | 317.8 | 315.2  | 317.8 | 313.4  | 316.9 | 313.4  | 316.0 | 316.0 | 315.2 | 315.2 | 315.2 |
| 5°    | 307.3 | 302.9  | 307.3 | 304.7  | 307.3 | 303.8  | 306.4 | 307.3 | 308.2 | 310.8 | 309.9 |
| 7.5°  | 299.4 | 290.6  | 300.3 | 291.5  | 299.4 | 291.5  | 298.5 | 299.4 | 302.0 | 305.5 | 308.2 |
| 10°   | 295.9 | 284.5  | 295.9 | 285.4  | 295.0 | 286.3  | 295.0 | 295.9 | 298.5 | 302.9 | 307.3 |
| 12.5° | 294.1 | 281.9  | 294.1 | 283.6  | 294.1 | 285.4  | 294.1 | 296.8 | 298.5 | 302.0 | 307.3 |
| 15°   | 292.4 | 280.1  | 294.1 | 282.8  | 294.1 | 285.4  | 295.0 | 296.8 | 299.4 | 302.9 | 307.3 |
| 17.5° | 291.5 | 277.5  | 292.4 | 281.9  | 292.4 | 283.6  | 294.1 | 294.1 | 297.7 | 302.0 | 304.7 |
| 20°   | 288.0 | 274.9  | 288.0 | 277.5  | 288.0 | 280.1  | 288.9 | 288.9 | 292.4 | 294.1 | 298.5 |
| 22.5° | 282.8 | 268.8  | 281.0 | 271.4  | 281.0 | 273.1  | 280.1 | 280.1 | 282.8 | 285.4 | 288.0 |
| 25°   | 274.9 | 261.8  | 272.3 | 263.5  | 270.5 | 263.5  | 268.8 | 267.9 | 269.6 | 271.4 | 273.1 |
| 27.5° | 266.1 | 253.0  | 261.8 | 252.1  | 256.5 | 249.5  | 253.0 | 251.3 | 252.1 | 253.0 | 253.9 |
| 30°   | 256.5 | 243.4  | 247.8 | 239.0  | 239.9 | 232.9  | 234.6 | 232.0 | 231.1 | 230.2 | 228.5 |
| 32.5° | 246.0 | 232.0  | 232.0 | 223.2  | 221.5 | 215.4  | 215.4 | 211.9 | 209.2 | 205.7 | 202.2 |
| 35°   | 232.9 | 220.6  | 214.5 | 207.5  | 204.0 | 197.9  | 197.0 | 192.6 | 186.5 | 180.3 | 176.8 |
| 37.5° | 219.7 | 205.7  | 197.0 | 190.0  | 186.5 | 182.1  | 181.2 | 177.7 | 170.7 | 163.7 | 158.5 |
| 40°   | 202.2 | 188.2  | 178.6 | 176.0  | 173.3 | 169.8  | 170.7 | 166.3 | 159.3 | 151.5 | 147.1 |
| 42.5° | 184.7 | 172.5  | 164.6 | 163.7  | 162.0 | 161.1  | 162.0 | 158.5 | 150.6 | 143.6 | 138.3 |
| 45°   | 169.8 | 157.6  | 149.7 | 148.8  | 148.0 | 151.5  | 152.3 | 151.5 | 142.7 | 135.7 | 128.7 |
| 47.5° | 155.0 | 140.1  | 134.8 | 133.1  | 133.9 | 139.2  | 140.9 | 143.6 | 135.7 | 127.8 | 118.2 |
| 50°   | 137.4 | 123.4  | 121.7 | 119.9  | 120.8 | 125.2  | 129.6 | 134.8 | 127.8 | 116.4 | 103.3 |
| 52.5° | 121.7 | 109.4  | 110.3 | 108.6  | 110.3 | 113.8  | 117.3 | 126.1 | 117.3 | 105.9 | 99.8  |
| 55°   | 109.4 | 99.8   | 101.6 | 99.8   | 101.6 | 105.9  | 108.6 | 115.6 | 115.6 | 112.9 | 107.7 |
| 57.5° | 100.7 | 93.7   | 95.4  | 93.7   | 96.3  | 99.8   | 102.4 | 117.3 | 126.1 | 119.1 | 108.6 |
| 60°   | 95.4  | 89.3   | 90.2  | 88.4   | 90.2  | 95.4   | 100.7 | 118.2 | 132.2 | 118.2 | 110.3 |
| 62.5° | 87.5  | 82.3   | 81.4  | 81.4   | 83.2  | 91.9   | 94.5  | 110.3 | 130.4 | 117.3 | 111.2 |
| 65°   | 82.3  | 77.9   | 77.0  | 76.2   | 77.9  | 84.0   | 86.7  | 102.4 | 126.1 | 111.2 | 100.7 |
| 67.5° | 79.7  | 76.2   | 74.4  | 72.7   | 74.4  | 79.7   | 82.3  | 96.3  | 119.1 | 105.9 | 94.5  |
| 70°   | 77.0  | 73.5   | 72.7  | 70.9   | 71.8  | 75.3   | 78.8  | 88.4  | 112.9 | 99.8  | 88.4  |
| 72.5° | 73.5  | 70.0   | 69.2  | 66.5   | 67.4  | 70.9   | 72.7  | 83.2  | 105.1 | 93.7  | 82.3  |
| 73°   | 72.7  | 69.2   | 68.3  | 65.7   | 66.5  | 69.2   | 70.9  | 81.4  | 103.3 | 92.8  | 81.4  |
| 75°   | 68.3  | 64.8   | 63.9  | 62.2   | 63.0  | 63.0   | 64.8  | 74.4  | 98.0  | 87.5  | 76.2  |
| 77.5° | 60.4  | 57.8   | 56.9  | 55.2   | 54.3  | 53.4   | 56.0  | 65.7  | 89.3  | 78.8  | 61.3  |
| 80°   | 49.9  | 47.3   | 46.4  | 42.9   | 42.9  | 42.9   | 46.4  | 56.0  | 66.5  | 56.9  | 47.3  |
| 82.5° | 36.8  | 35.0   | 35.0  | 32.4   | 31.5  | 30.6   | 33.3  | 38.5  | 52.5  | 44.6  | 36.8  |
| 85°   | 21.9  | 21.0   | 21.9  | 19.3   | 20.1  | 19.3   | 21.9  | 27.1  | 28.9  | 22.8  | 17.5  |
| 87.5° | 5.3   | 6.1    | 6.1   | 6.1    | 5.3   | 5.3    | 4.4   | 3.5   | 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):**

|       | 175°  | 180°  |
|-------|-------|-------|
| 0°    | 325.7 | 325.7 |
| 2.5°  | 314.3 | 313.4 |
| 5°    | 309.9 | 309.9 |
| 7.5°  | 308.2 | 308.2 |
| 10°   | 309.0 | 309.0 |
| 12.5° | 309.0 | 310.8 |
| 15°   | 311.7 | 310.8 |
| 17.5° | 309.0 | 309.0 |
| 20°   | 302.0 | 303.8 |
| 22.5° | 292.4 | 292.4 |
| 25°   | 276.6 | 277.5 |
| 27.5° | 255.6 | 257.4 |
| 30°   | 229.4 | 231.1 |
| 32.5° | 199.6 | 201.4 |
| 35°   | 176.0 | 176.8 |
| 37.5° | 160.2 | 160.2 |
| 40°   | 147.1 | 147.1 |
| 42.5° | 134.8 | 133.9 |
| 45°   | 122.6 | 120.8 |
| 47.5° | 110.3 | 109.4 |
| 50°   | 99.8  | 99.8  |
| 52.5° | 101.6 | 101.6 |
| 55°   | 109.4 | 109.4 |
| 57.5° | 110.3 | 109.4 |
| 60°   | 119.9 | 119.1 |
| 62.5° | 125.2 | 127.8 |
| 65°   | 109.4 | 105.9 |
| 67.5° | 104.2 | 98.9  |
| 70°   | 93.7  | 85.8  |
| 72.5° | 83.2  | 78.8  |
| 73°   | 80.5  | 77.0  |
| 75°   | 71.8  | 70.0  |
| 77.5° | 54.3  | 53.4  |
| 80°   | 45.5  | 44.6  |
| 82.5° | 30.6  | 28.9  |
| 85°   | 13.1  | 12.3  |
| 87.5° | 0.0   | 0.0   |
| 90°   | 0.0   | 0.0   |

(END OF REPORT)