

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: P594839

Luminaire Tested: **ISS-PA1E-830-U-T2R-HSS**

Issue Date: 3/22/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P594839  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2201-510-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/22/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: ISS-PA1E-830-U-T2R-HSS  
Description: IMPACT ELITE LED QUARTER SPHERE LUMINAIRE  
(1) 80 CRI, 3000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7028 lumens  
Efficiency: N/A  
Efficacy: 85.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B0 - U0 - G2

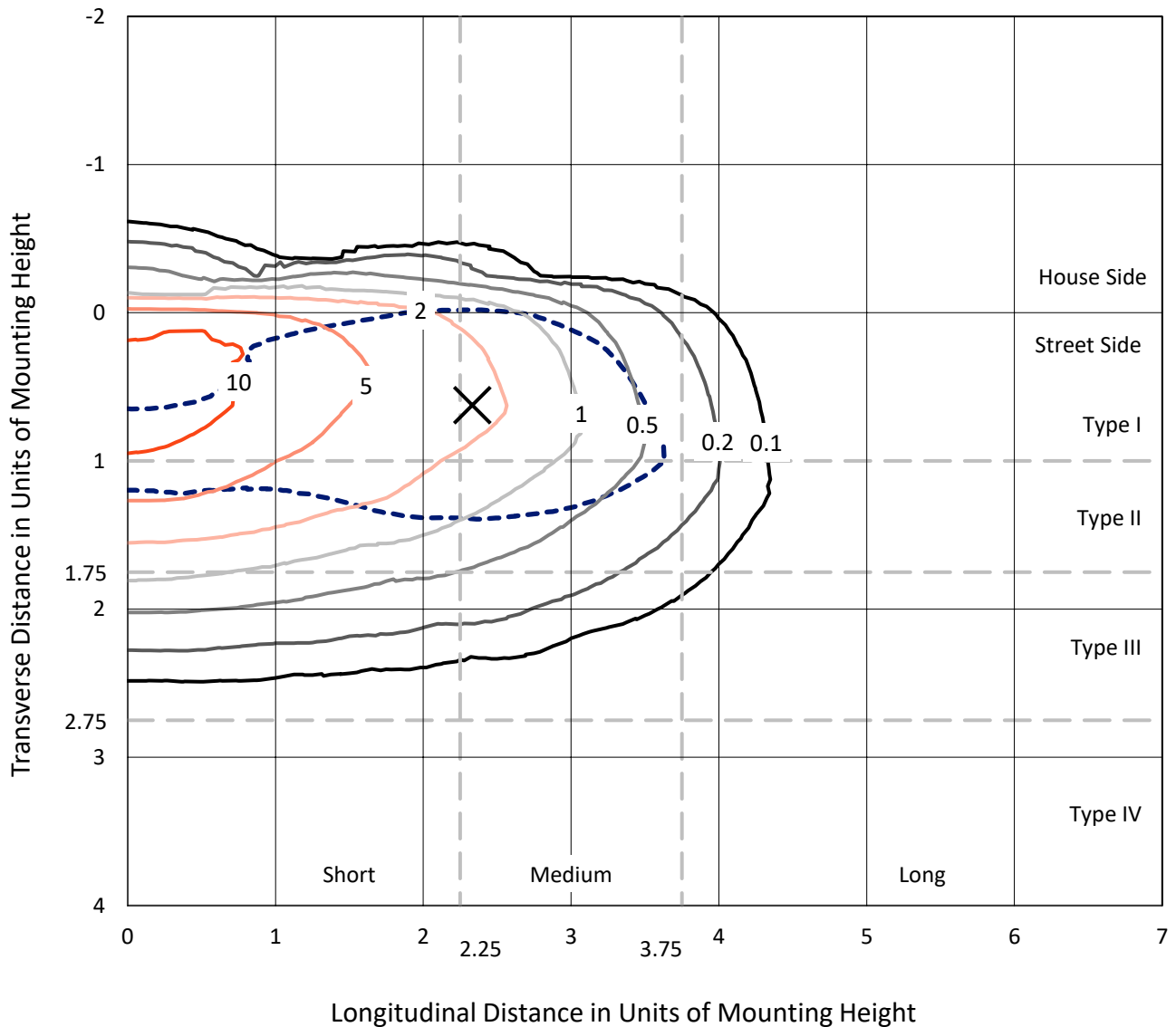
Input Watts (W): 82.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

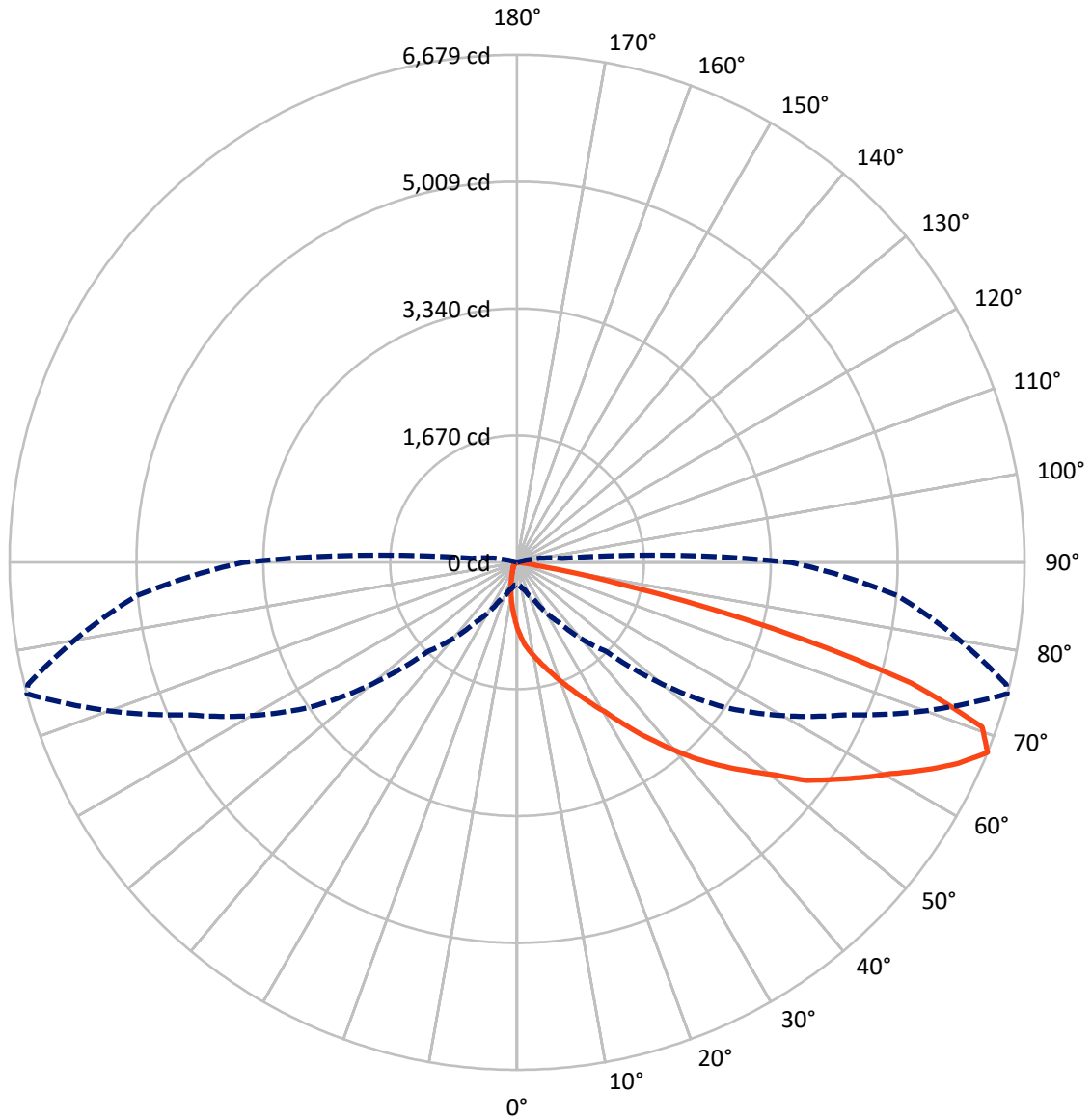
× Max cd  
 - - - 1/2 Max cd



Based on 12 foot mounting height. Maximum calculated value = 13.8 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 354.3    | 0.0    | 354.3  |
|                    | % Fixture | 5.0      | 0.0    | 5.0    |
| <b>Street Side</b> | Lumens    | 6673.7   | 0.0    | 6673.7 |
|                    | % Fixture | 95.0     | 0.0    | 95.0   |
| <b>Total</b>       | Lumens    | 7028.0   | 0.0    | 7028.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 78.8   | 1.1       |
| 10°-20°   | 254.2  | 3.6       |
| 20°-30°   | 511.0  | 7.3       |
| 30°-40°   | 966.6  | 13.8      |
| 40°-50°   | 1446.0 | 20.6      |
| 50°-60°   | 1669.5 | 23.8      |
| 60°-70°   | 1479.9 | 21.1      |
| 70°-80°   | 598.1  | 8.5       |
| 80°-90°   | 23.9   | 0.3       |
| 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°    | 7028.0 | 100.0     |
| 0°-180°   | 7028.0 | 100.0     |

**Coefficient of Utilization**

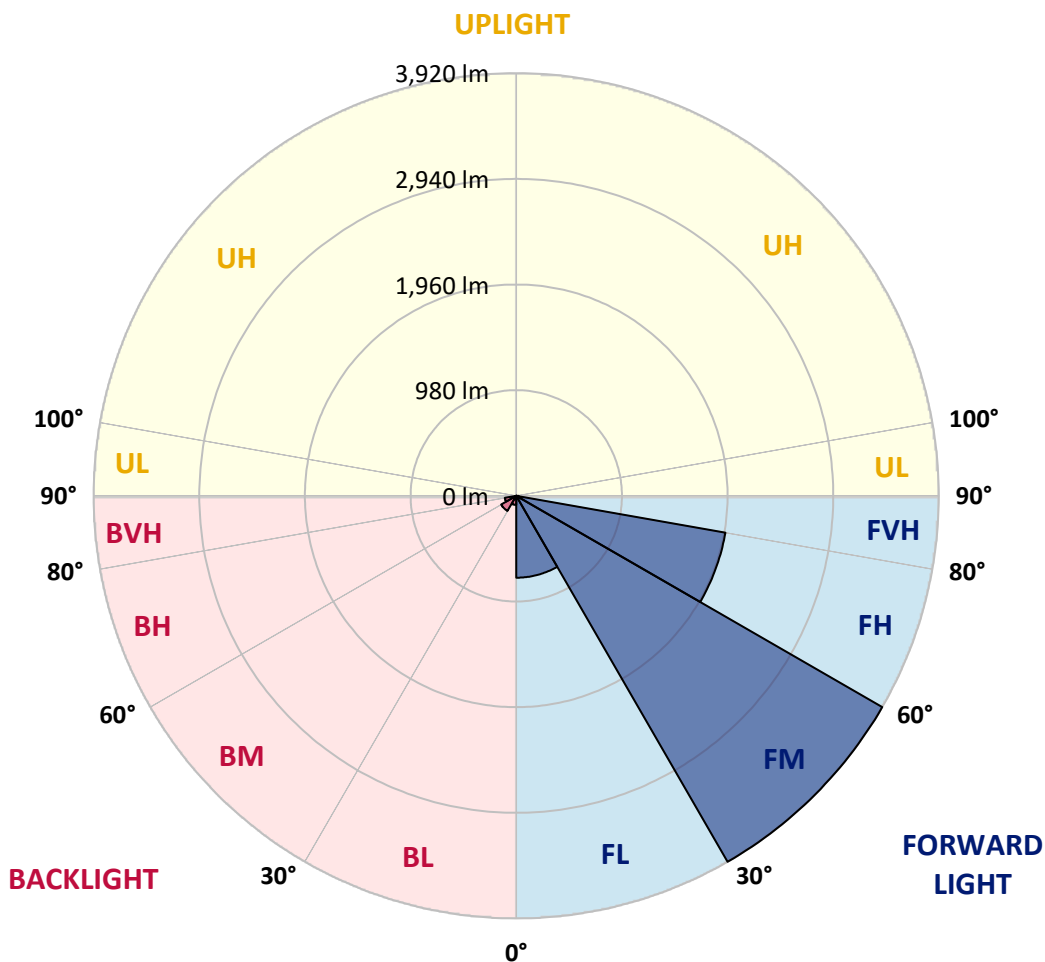


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 759.8  | 10.8      |                         |      |         |
| FM (30°-60°)   | 3920.5 | 55.8      |                         |      |         |
| FH (60°-80°)   | 1970.6 | 28.0      |                         |      | G2/5000 |
| FVH (80°-90°)  | 22.8   | 0.3       |                         |      | G1/100  |
| BL (0°-30°)    | 84.2   | 1.2       | B0/110                  |      |         |
| BM (30°-60°)   | 161.6  | 2.3       | B0/220                  |      |         |
| BH (60°-80°)   | 107.4  | 1.5       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 1.0    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G2**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 76°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 873.4  | 873.4  | 873.4  | 873.4  | 873.4  | 873.4  | 873.4  | 873.4  | 873.4  | 873.4  | 873.4  |
| 2.5°  | 1215.2 | 1219.4 | 1211.0 | 1192.0 | 1175.1 | 1135.0 | 1103.4 | 1046.4 | 985.2  | 985.2  | 911.4  |
| 5°    | 1358.6 | 1354.4 | 1350.2 | 1335.4 | 1322.8 | 1289.0 | 1246.8 | 1185.6 | 1090.7 | 1082.3 | 959.9  |
| 7.5°  | 1428.3 | 1424.0 | 1415.6 | 1409.3 | 1409.3 | 1386.1 | 1346.0 | 1282.7 | 1177.2 | 1168.8 | 1004.2 |
| 10°   | 1510.5 | 1502.1 | 1502.1 | 1485.2 | 1481.0 | 1453.6 | 1432.5 | 1377.6 | 1261.6 | 1251.1 | 1054.8 |
| 12.5° | 1607.6 | 1599.2 | 1601.3 | 1586.5 | 1580.2 | 1550.6 | 1521.1 | 1468.3 | 1352.3 | 1341.8 | 1113.9 |
| 15°   | 1662.4 | 1658.2 | 1670.9 | 1673.0 | 1677.2 | 1651.9 | 1624.5 | 1569.6 | 1453.6 | 1438.8 | 1183.5 |
| 17.5° | 1694.1 | 1694.1 | 1708.9 | 1736.3 | 1767.9 | 1753.2 | 1732.1 | 1687.8 | 1557.0 | 1548.5 | 1257.4 |
| 20°   | 1755.3 | 1748.9 | 1774.3 | 1799.6 | 1839.7 | 1852.3 | 1846.0 | 1812.2 | 1681.4 | 1656.1 | 1337.5 |
| 22.5° | 1856.5 | 1848.1 | 1871.3 | 1902.9 | 1951.5 | 1955.7 | 1959.9 | 1943.0 | 1808.0 | 1782.7 | 1421.9 |
| 25°   | 2094.9 | 2073.8 | 2052.7 | 2048.5 | 2067.5 | 2084.4 | 2071.7 | 2084.4 | 1951.5 | 1928.3 | 1512.7 |
| 27.5° | 2559.1 | 2523.2 | 2421.9 | 2310.1 | 2232.1 | 2246.8 | 2206.7 | 2229.9 | 2116.0 | 2086.5 | 1597.0 |
| 30°   | 3004.2 | 2968.3 | 2886.1 | 2687.8 | 2508.4 | 2428.3 | 2369.2 | 2360.8 | 2284.8 | 2251.0 | 1694.1 |
| 32.5° | 3314.3 | 3291.1 | 3236.3 | 3103.4 | 2879.7 | 2675.1 | 2561.2 | 2521.1 | 2510.5 | 2457.8 | 1818.6 |
| 35°   | 3525.3 | 3504.2 | 3466.2 | 3358.6 | 3194.1 | 2966.2 | 2770.0 | 2681.4 | 2761.6 | 2698.3 | 1959.9 |
| 37.5° | 3651.9 | 3637.1 | 3594.9 | 3521.1 | 3432.5 | 3282.7 | 3029.5 | 2888.2 | 3014.8 | 2955.7 | 2141.3 |
| 40°   | 3744.7 | 3706.7 | 3677.2 | 3620.2 | 3590.7 | 3542.2 | 3324.9 | 3103.4 | 3289.0 | 3227.8 | 2320.7 |
| 42.5° | 3753.2 | 3736.3 | 3713.1 | 3679.3 | 3683.5 | 3715.2 | 3639.2 | 3352.3 | 3565.4 | 3508.4 | 2510.5 |
| 45°   | 3751.0 | 3734.2 | 3717.3 | 3683.5 | 3704.6 | 3822.8 | 3892.4 | 3613.9 | 3835.4 | 3776.4 | 2711.0 |
| 47.5° | 3689.9 | 3677.2 | 3681.4 | 3681.4 | 3708.8 | 3869.2 | 4088.6 | 3879.7 | 4105.5 | 4048.5 | 2953.6 |
| 50°   | 3474.7 | 3487.3 | 3571.7 | 3616.0 | 3664.5 | 3871.3 | 4225.7 | 4158.2 | 4396.6 | 4356.5 | 3187.8 |
| 52.5° | 2793.2 | 2865.0 | 3206.7 | 3440.9 | 3582.3 | 3829.1 | 4314.3 | 4451.5 | 4765.8 | 4704.6 | 3453.6 |
| 55°   | 2135.0 | 2139.2 | 2468.3 | 3012.6 | 3419.8 | 3753.2 | 4365.0 | 4649.8 | 5046.4 | 5012.6 | 3687.8 |
| 57.5° | 1732.1 | 1730.0 | 1892.4 | 2381.8 | 2997.9 | 3632.9 | 4377.6 | 4795.3 | 5343.9 | 5280.6 | 3957.8 |
| 60°   | 1415.6 | 1407.2 | 1504.2 | 1805.9 | 2449.4 | 3350.2 | 4331.2 | 4913.5 | 5649.8 | 5626.6 | 4240.5 |
| 62.5° | 1023.2 | 1031.6 | 1160.3 | 1394.5 | 1888.2 | 2829.1 | 4232.1 | 4949.3 | 6019.0 | 5995.8 | 4556.9 |
| 65°   | 588.6  | 613.9  | 755.3  | 1004.2 | 1447.3 | 2213.1 | 3949.4 | 4921.9 | 6379.7 | 6377.6 | 4850.2 |
| 67.5° | 295.4  | 297.5  | 373.4  | 561.2  | 972.6  | 1656.1 | 3324.9 | 4748.9 | 6679.3 | 6632.9 | 5019.0 |
| 70°   | 189.9  | 194.1  | 219.4  | 289.0  | 538.0  | 1147.7 | 2540.1 | 4259.5 | 6491.5 | 6474.7 | 4772.1 |
| 72.5° | 145.6  | 149.8  | 170.9  | 189.9  | 280.6  | 651.9  | 1719.4 | 3310.1 | 5419.8 | 5373.4 | 3721.5 |
| 75°   | 113.9  | 116.0  | 137.1  | 154.0  | 187.8  | 305.9  | 862.9  | 2063.3 | 3491.5 | 3371.3 | 2118.1 |
| 77.5° | 90.7   | 92.8   | 103.4  | 122.4  | 143.5  | 170.9  | 255.3  | 928.3  | 1419.8 | 1267.9 | 687.8  |
| 80°   | 59.1   | 61.2   | 78.1   | 94.9   | 122.4  | 111.8  | 99.2   | 267.9  | 303.8  | 274.3  | 122.4  |
| 82.5° | 33.8   | 35.9   | 52.7   | 75.9   | 92.8   | 63.3   | 57.0   | 78.1   | 71.7   | 69.6   | 38.0   |
| 85°   | 10.5   | 10.5   | 35.9   | 52.7   | 42.2   | 19.0   | 35.9   | 27.4   | 23.2   | 21.1   | 12.7   |
| 87.5° | 2.1    | 2.1    | 16.9   | 19.0   | 6.3    | 2.1    | 4.2    | 6.3    | 8.4    | 10.5   | 6.3    |
| 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°    | 873.4  | 873.4 | 873.4 | 873.4 | 873.4 | 873.4 | 873.4 | 873.4 | 873.4 | 873.4 | 873.4 |
| 2.5°  | 875.5  | 833.3 | 755.3 | 687.8 | 622.4 | 565.4 | 525.3 | 489.4 | 464.1 | 457.8 | 447.3 |
| 5°    | 881.9  | 799.6 | 649.8 | 523.2 | 413.5 | 324.9 | 274.3 | 240.5 | 223.6 | 213.1 | 213.1 |
| 7.5°  | 888.2  | 765.8 | 550.6 | 381.9 | 261.6 | 198.3 | 166.7 | 151.9 | 145.6 | 143.5 | 141.3 |
| 10°   | 900.8  | 740.5 | 466.2 | 274.3 | 179.3 | 149.8 | 137.1 | 130.8 | 126.6 | 124.5 | 124.5 |
| 12.5° | 921.9  | 719.4 | 388.2 | 202.5 | 147.7 | 132.9 | 124.5 | 116.0 | 111.8 | 109.7 | 109.7 |
| 15°   | 949.4  | 704.6 | 320.7 | 162.4 | 135.0 | 120.3 | 109.7 | 101.3 | 94.9  | 92.8  | 92.8  |
| 17.5° | 987.3  | 694.1 | 263.7 | 143.5 | 124.5 | 107.6 | 94.9  | 86.5  | 80.2  | 78.1  | 78.1  |
| 20°   | 1025.3 | 694.1 | 217.3 | 132.9 | 113.9 | 94.9  | 82.3  | 71.7  | 65.4  | 63.3  | 63.3  |
| 22.5° | 1075.9 | 692.0 | 181.4 | 122.4 | 101.3 | 82.3  | 69.6  | 57.0  | 52.7  | 50.6  | 50.6  |
| 25°   | 1118.1 | 692.0 | 156.1 | 111.8 | 88.6  | 71.7  | 57.0  | 46.4  | 42.2  | 40.1  | 40.1  |
| 27.5° | 1168.8 | 685.7 | 132.9 | 99.2  | 75.9  | 59.1  | 46.4  | 38.0  | 33.8  | 31.6  | 31.6  |
| 30°   | 1213.1 | 677.2 | 118.1 | 88.6  | 65.4  | 48.5  | 38.0  | 29.5  | 27.4  | 27.4  | 27.4  |
| 32.5° | 1286.9 | 670.9 | 105.5 | 75.9  | 54.9  | 40.1  | 29.5  | 23.2  | 21.1  | 21.1  | 21.1  |
| 35°   | 1375.5 | 670.9 | 97.0  | 65.4  | 46.4  | 33.8  | 23.2  | 19.0  | 16.9  | 16.9  | 16.9  |
| 37.5° | 1491.6 | 677.2 | 86.5  | 57.0  | 38.0  | 27.4  | 19.0  | 14.8  | 12.7  | 12.7  | 12.7  |
| 40°   | 1613.9 | 692.0 | 78.1  | 50.6  | 33.8  | 21.1  | 14.8  | 10.5  | 8.4   | 10.5  | 10.5  |
| 42.5° | 1759.5 | 706.7 | 69.6  | 44.3  | 27.4  | 16.9  | 10.5  | 6.3   | 4.2   | 6.3   | 6.3   |
| 45°   | 1902.9 | 721.5 | 65.4  | 38.0  | 23.2  | 12.7  | 6.3   | 4.2   | 2.1   | 4.2   | 4.2   |
| 47.5° | 2080.2 | 757.4 | 61.2  | 33.8  | 19.0  | 10.5  | 4.2   | 2.1   | 0.0   | 2.1   | 2.1   |
| 50°   | 2284.8 | 797.5 | 54.9  | 27.4  | 14.8  | 8.4   | 4.2   | 0.0   | 0.0   | 0.0   | 0.0   |
| 52.5° | 2481.0 | 831.2 | 48.5  | 23.2  | 12.7  | 6.3   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 55°   | 2677.2 | 852.3 | 42.2  | 19.0  | 10.5  | 6.3   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 57.5° | 2888.2 | 865.0 | 38.0  | 16.9  | 8.4   | 4.2   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60°   | 3122.4 | 865.0 | 31.6  | 14.8  | 6.3   | 4.2   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 62.5° | 3381.8 | 839.7 | 29.5  | 12.7  | 6.3   | 4.2   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 65°   | 3592.8 | 748.9 | 25.3  | 10.5  | 6.3   | 4.2   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 67.5° | 3601.3 | 592.8 | 23.2  | 8.4   | 6.3   | 4.2   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°   | 3211.0 | 405.1 | 19.0  | 6.3   | 4.2   | 4.2   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 2402.9 | 217.3 | 16.9  | 6.3   | 4.2   | 2.1   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 1295.4 | 84.4  | 10.5  | 6.3   | 4.2   | 2.1   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 377.6  | 42.2  | 6.3   | 4.2   | 4.2   | 2.1   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 69.6   | 21.1  | 4.2   | 4.2   | 4.2   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 19.0   | 8.4   | 2.1   | 2.1   | 2.1   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 8.4    | 4.2   | 2.1   | 2.1   | 2.1   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 4.2    | 2.1   | 2.1   | 2.1   | 2.1   | 2.1   | 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)