

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: P594921

Luminaire Tested: **ISS-PA1F-830-U-T2R**

Issue Date: 3/22/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P594921  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2201-510-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/22/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: ISS-PA1F-830-U-T2R  
Description: IMPACT ELITE LED QUARTER SPHERE LUMINAIRE  
(1) 80 CRI, 3000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9337 lumens  
Efficiency: N/A  
Efficacy: 98.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

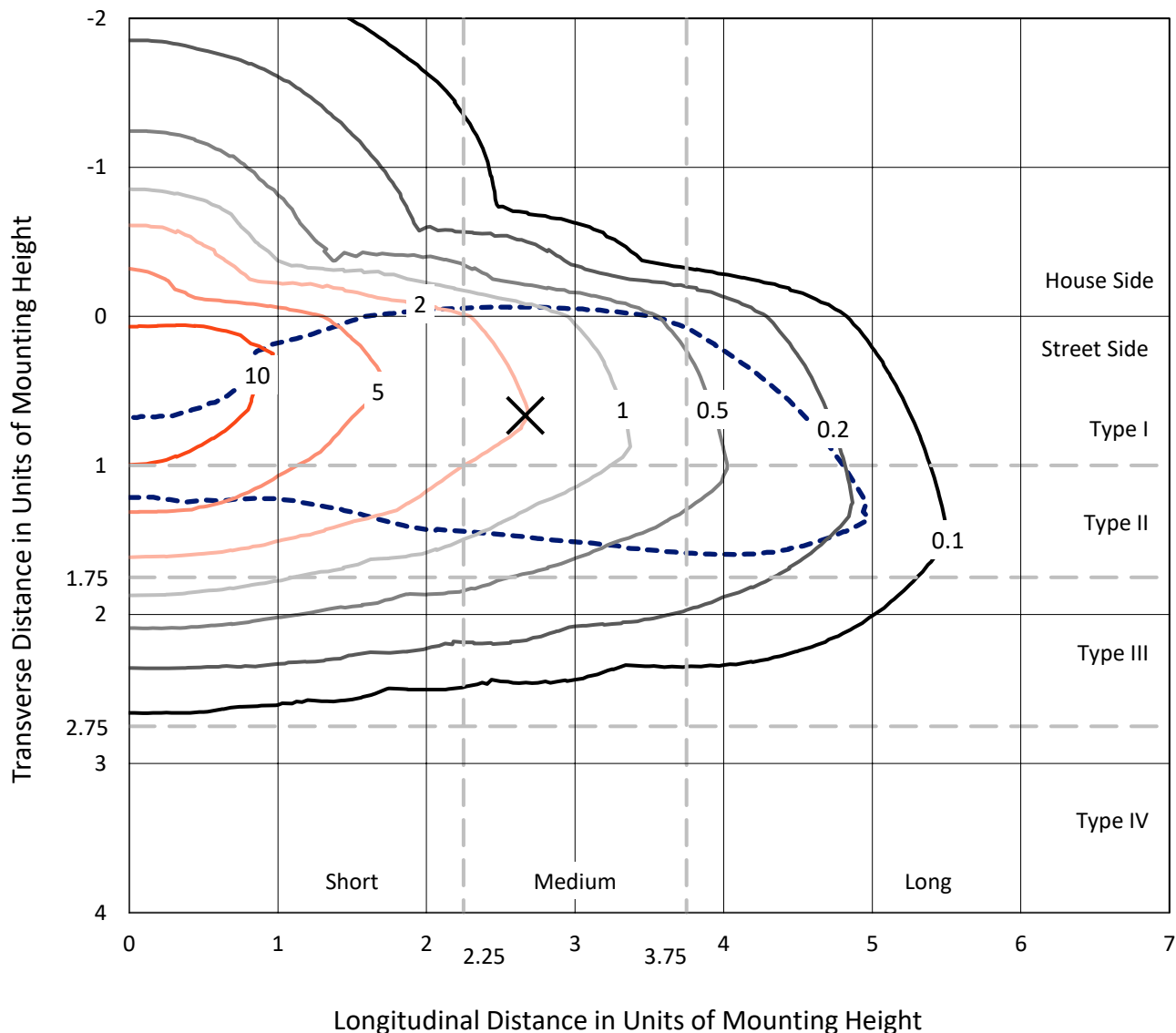
Input Watts (W): 94.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

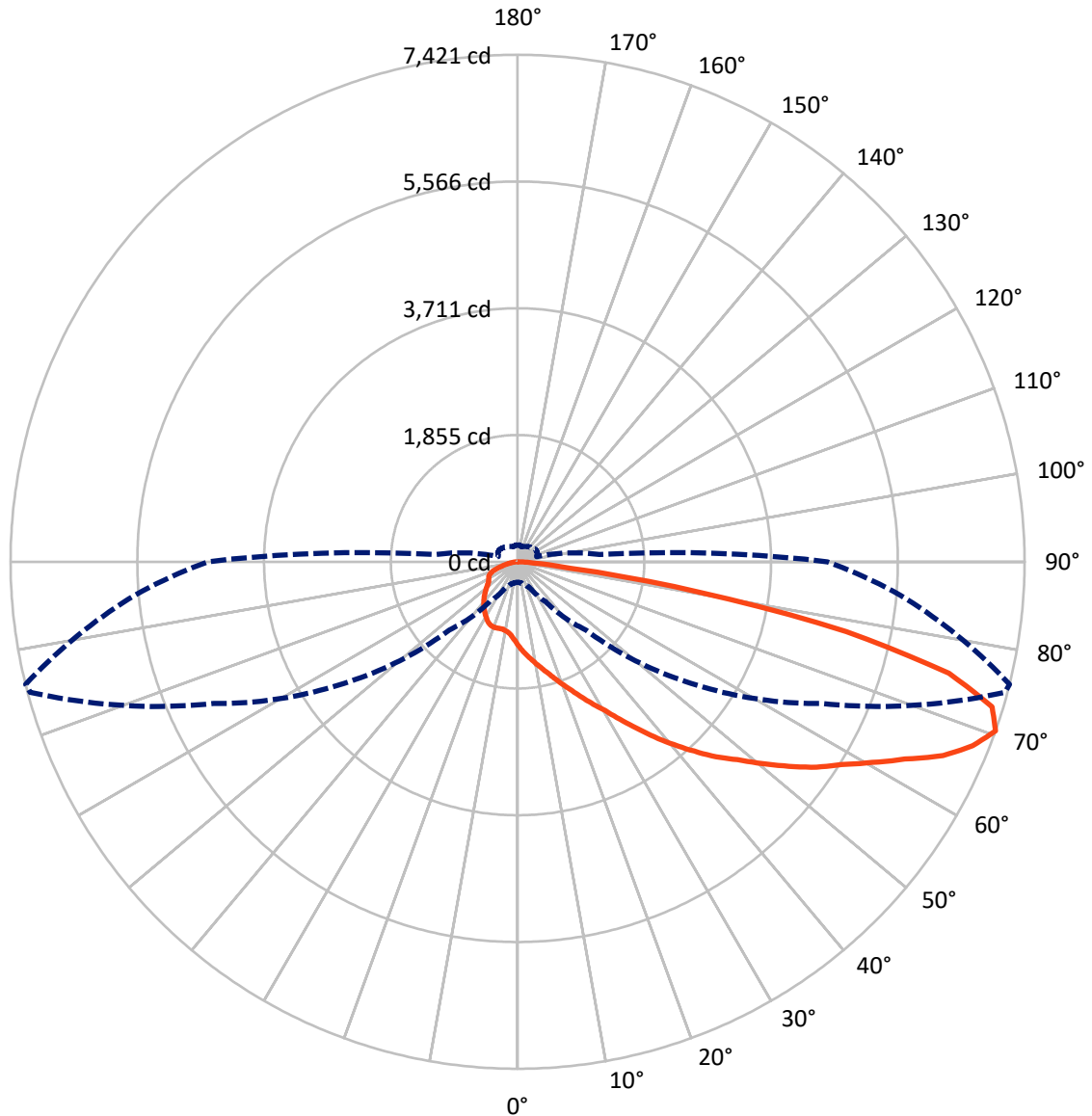
✕ Max cd  
 - - - 1/2 Max cd



Based on 12 foot mounting height. Maximum calculated value = 14.7 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1497.6   | 0.0    | 1497.6 |
|                    | % Fixture | 16.0     | 0.0    | 16.0   |
| <b>Street Side</b> | Lumens    | 7839.4   | 0.0    | 7839.4 |
|                    | % Fixture | 84.0     | 0.0    | 84.0   |
| <b>Total</b>       | Lumens    | 9337.0   | 0.0    | 9337.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 119.4  | 1.3       |
| 10°-20°   | 393.9  | 4.2       |
| 20°-30°   | 726.0  | 7.8       |
| 30°-40°   | 1216.4 | 13.0      |
| 40°-50°   | 1728.4 | 18.5      |
| 50°-60°   | 1995.5 | 21.4      |
| 60°-70°   | 1834.4 | 19.6      |
| 70°-80°   | 1156.7 | 12.4      |
| 80°-90°   | 166.4  | 1.8       |
| 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°    | 9337.0 | 100.0     |
| 0°-180°   | 9337.0 | 100.0     |

**Coefficient of Utilization**

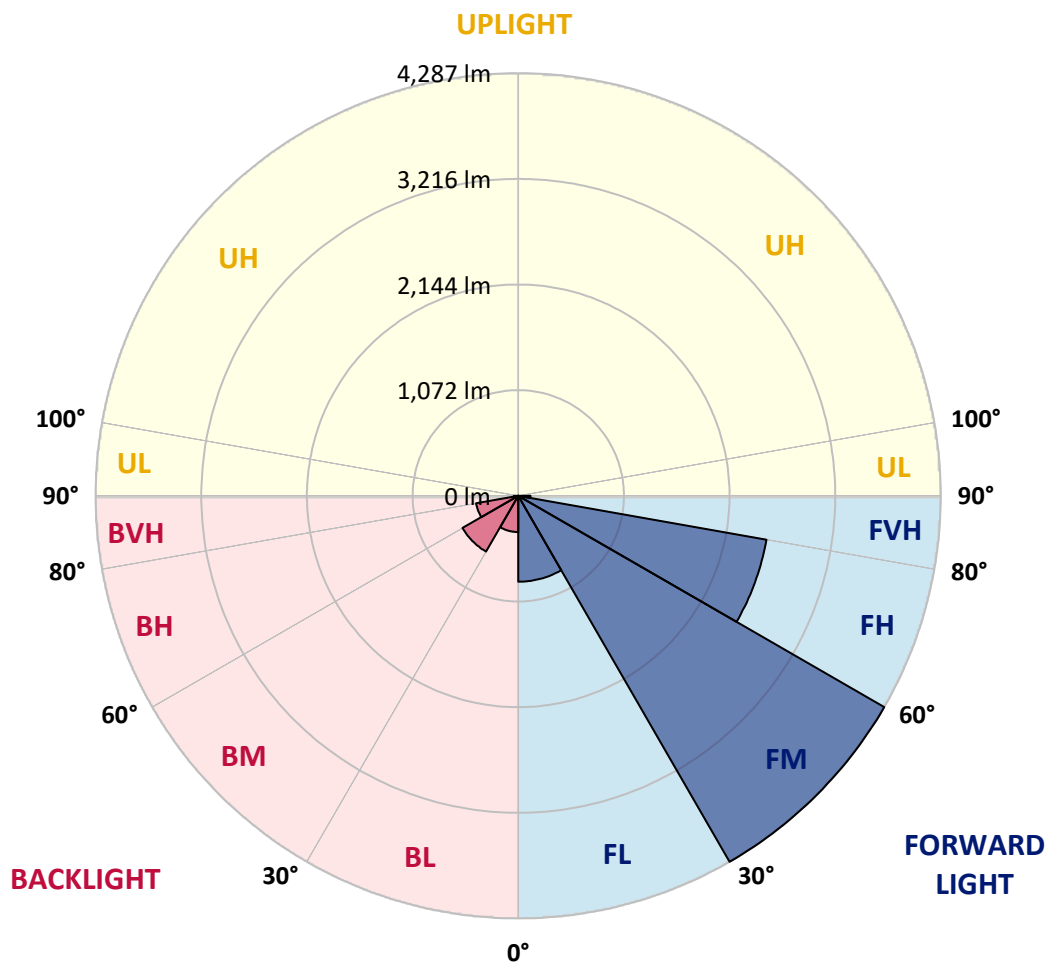


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 871.7  | 9.3       |                         |      |         |
| FM (30°-60°)   | 4287.3 | 45.9      |                         |      |         |
| FH (60°-80°)   | 2557.1 | 27.4      |                         |      | G2/5000 |
| FVH (80°-90°)  | 123.3  | 1.3       |                         |      | G2/225  |
| BL (0°-30°)    | 367.6  | 3.9       | B1/500                  |      |         |
| BM (30°-60°)   | 652.9  | 7.0       | B1/1000                 |      |         |
| BH (60°-80°)   | 434.0  | 4.6       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 43.0   | 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-G2**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 76°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 |
| 2.5°  | 1474.3 | 1472.1 | 1465.4 | 1454.1 | 1445.1 | 1418.2 | 1382.2 | 1350.7 | 1303.5 | 1299.0 | 1251.8 |
| 5°    | 1606.9 | 1598.0 | 1598.0 | 1586.7 | 1575.5 | 1546.3 | 1501.3 | 1445.1 | 1377.7 | 1373.2 | 1283.3 |
| 7.5°  | 1669.9 | 1672.1 | 1667.6 | 1658.6 | 1660.9 | 1636.2 | 1595.7 | 1539.5 | 1447.4 | 1442.9 | 1326.0 |
| 10°   | 1759.8 | 1757.5 | 1748.5 | 1741.8 | 1739.5 | 1717.1 | 1681.1 | 1629.4 | 1532.8 | 1523.8 | 1375.5 |
| 12.5° | 1847.4 | 1840.7 | 1842.9 | 1840.7 | 1836.2 | 1813.7 | 1780.0 | 1728.3 | 1609.2 | 1604.7 | 1436.1 |
| 15°   | 1896.9 | 1894.6 | 1910.4 | 1914.9 | 1932.8 | 1912.6 | 1883.4 | 1825.0 | 1717.1 | 1699.1 | 1508.1 |
| 17.5° | 1928.3 | 1926.1 | 1941.8 | 1977.8 | 2011.5 | 2011.5 | 2002.5 | 1939.6 | 1820.5 | 1807.0 | 1589.0 |
| 20°   | 1982.3 | 1991.3 | 2018.2 | 2047.5 | 2096.9 | 2105.9 | 2103.6 | 2076.7 | 1939.6 | 1926.1 | 1678.9 |
| 22.5° | 2090.2 | 2085.7 | 2108.1 | 2153.1 | 2198.0 | 2211.5 | 2213.8 | 2213.8 | 2076.7 | 2051.9 | 1771.0 |
| 25°   | 2321.6 | 2310.4 | 2292.4 | 2287.9 | 2341.9 | 2339.6 | 2332.9 | 2348.6 | 2220.5 | 2202.5 | 1876.6 |
| 27.5° | 2762.1 | 2737.4 | 2667.8 | 2528.4 | 2496.9 | 2508.2 | 2474.5 | 2476.7 | 2384.6 | 2362.1 | 1966.5 |
| 30°   | 3180.2 | 3168.9 | 3103.8 | 2935.2 | 2757.7 | 2694.7 | 2636.3 | 2611.6 | 2566.6 | 2528.4 | 2063.2 |
| 32.5° | 3557.8 | 3560.0 | 3481.3 | 3297.0 | 3115.0 | 2917.2 | 2816.1 | 2764.4 | 2782.4 | 2748.7 | 2195.8 |
| 35°   | 3814.0 | 3793.7 | 3744.3 | 3620.7 | 3422.9 | 3234.1 | 3040.8 | 2926.2 | 3022.9 | 2984.6 | 2328.4 |
| 37.5° | 3964.5 | 3948.8 | 3908.4 | 3820.7 | 3721.8 | 3539.8 | 3294.8 | 3119.5 | 3308.3 | 3252.1 | 2496.9 |
| 40°   | 4041.0 | 4018.5 | 3978.0 | 3942.1 | 3894.9 | 3796.0 | 3580.2 | 3339.8 | 3569.0 | 3519.5 | 2663.3 |
| 42.5° | 4050.0 | 4034.2 | 4011.7 | 3993.8 | 4009.5 | 3996.0 | 3858.9 | 3596.0 | 3843.2 | 3789.2 | 2854.3 |
| 45°   | 4043.2 | 4054.4 | 4027.5 | 3996.0 | 4027.5 | 4142.1 | 4142.1 | 3852.2 | 4115.1 | 4074.7 | 3036.3 |
| 47.5° | 4047.7 | 4036.5 | 4027.5 | 4018.5 | 4023.0 | 4180.3 | 4337.6 | 4092.7 | 4375.8 | 4328.6 | 3249.9 |
| 50°   | 3861.2 | 3876.9 | 3953.3 | 3987.0 | 4007.3 | 4189.3 | 4495.0 | 4353.4 | 4699.5 | 4641.0 | 3488.1 |
| 52.5° | 3267.8 | 3276.8 | 3625.2 | 3876.9 | 3957.8 | 4153.3 | 4605.1 | 4643.3 | 5018.6 | 4973.7 | 3744.3 |
| 55°   | 2517.2 | 2564.4 | 2894.8 | 3510.6 | 3845.4 | 4092.7 | 4638.8 | 4832.1 | 5344.5 | 5308.5 | 4002.8 |
| 57.5° | 2072.2 | 2078.9 | 2270.0 | 2820.6 | 3490.3 | 4036.5 | 4672.5 | 5005.1 | 5636.7 | 5596.2 | 4272.5 |
| 60°   | 1719.3 | 1703.6 | 1820.5 | 2175.6 | 2899.2 | 3811.7 | 4679.2 | 5142.2 | 5976.0 | 5962.6 | 4551.1 |
| 62.5° | 1263.1 | 1281.1 | 1393.4 | 1694.6 | 2267.7 | 3355.5 | 4645.5 | 5259.1 | 6380.6 | 6362.6 | 4861.3 |
| 65°   | 775.4  | 797.9  | 935.0  | 1211.4 | 1717.1 | 2663.3 | 4425.3 | 5319.8 | 6805.4 | 6845.8 | 5196.2 |
| 67.5° | 411.3  | 427.0  | 507.9  | 732.7  | 1177.7 | 2029.5 | 3894.9 | 5243.4 | 7165.0 | 7182.9 | 5517.6 |
| 70°   | 301.2  | 303.4  | 330.4  | 413.5  | 710.2  | 1411.4 | 3101.5 | 4910.7 | 7385.2 | 7421.2 | 5623.2 |
| 72.5° | 263.0  | 265.2  | 276.4  | 296.7  | 386.6  | 860.8  | 2222.8 | 4330.9 | 7293.1 | 7261.6 | 5445.6 |
| 75°   | 238.2  | 238.2  | 247.2  | 254.0  | 283.2  | 476.5  | 1362.0 | 3544.3 | 6589.6 | 6519.9 | 4643.3 |
| 77.5° | 204.5  | 204.5  | 213.5  | 222.5  | 245.0  | 307.9  | 712.5  | 2627.3 | 5038.8 | 4919.7 | 3175.7 |
| 80°   | 164.1  | 164.1  | 175.3  | 186.5  | 215.8  | 231.5  | 348.4  | 1757.5 | 2881.3 | 2706.0 | 1445.1 |
| 82.5° | 112.4  | 121.4  | 141.6  | 155.1  | 179.8  | 164.1  | 204.5  | 759.6  | 908.0  | 786.6  | 325.9  |
| 85°   | 67.4   | 71.9   | 101.1  | 116.9  | 134.8  | 87.7   | 125.9  | 292.2  | 271.9  | 238.2  | 74.2   |
| 87.5° | 6.7    | 11.2   | 40.5   | 47.2   | 47.2   | 24.7   | 53.9   | 69.7   | 78.7   | 80.9   | 18.0   |
| 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):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 | 1224.9 |
| 2.5°  | 1224.9 | 1197.9 | 1146.2 | 1099.0 | 1051.8 | 1020.4 | 988.9  | 977.7  | 961.9  | 950.7  | 959.7  |
| 5°    | 1236.1 | 1179.9 | 1081.0 | 997.9  | 941.7  | 899.0  | 878.8  | 867.5  | 858.5  | 856.3  | 854.0  |
| 7.5°  | 1249.6 | 1166.4 | 1033.8 | 941.7  | 887.8  | 867.5  | 863.0  | 863.0  | 863.0  | 865.3  | 867.5  |
| 10°   | 1278.8 | 1170.9 | 1009.1 | 910.2  | 881.0  | 876.5  | 878.8  | 887.8  | 887.8  | 890.0  | 890.0  |
| 12.5° | 1312.5 | 1182.2 | 991.1  | 905.7  | 887.8  | 890.0  | 892.2  | 896.7  | 896.7  | 903.5  | 901.2  |
| 15°   | 1362.0 | 1204.6 | 988.9  | 910.2  | 894.5  | 890.0  | 890.0  | 887.8  | 887.8  | 887.8  | 892.2  |
| 17.5° | 1424.9 | 1236.1 | 991.1  | 910.2  | 887.8  | 878.8  | 872.0  | 865.3  | 856.3  | 860.8  | 856.3  |
| 20°   | 1487.8 | 1274.3 | 991.1  | 899.0  | 869.8  | 847.3  | 827.1  | 815.8  | 804.6  | 802.3  | 804.6  |
| 22.5° | 1566.5 | 1319.3 | 979.9  | 874.3  | 831.6  | 800.1  | 770.9  | 755.2  | 737.2  | 730.4  | 725.9  |
| 25°   | 1633.9 | 1355.2 | 957.4  | 838.3  | 788.9  | 743.9  | 705.7  | 678.7  | 656.3  | 651.8  | 651.8  |
| 27.5° | 1703.6 | 1386.7 | 923.7  | 793.4  | 728.2  | 678.7  | 636.0  | 602.3  | 579.8  | 577.6  | 575.4  |
| 30°   | 1768.8 | 1413.7 | 878.8  | 743.9  | 674.2  | 615.8  | 566.4  | 537.1  | 516.9  | 505.7  | 498.9  |
| 32.5° | 1854.2 | 1449.6 | 836.1  | 694.5  | 611.3  | 552.9  | 507.9  | 483.2  | 456.2  | 438.3  | 431.5  |
| 35°   | 1962.0 | 1492.3 | 788.9  | 640.5  | 555.1  | 496.7  | 469.7  | 433.8  | 400.1  | 379.8  | 373.1  |
| 37.5° | 2083.4 | 1553.0 | 739.4  | 584.3  | 498.9  | 456.2  | 440.5  | 384.3  | 348.4  | 341.6  | 339.4  |
| 40°   | 2234.0 | 1611.4 | 683.2  | 525.9  | 445.0  | 433.8  | 406.8  | 348.4  | 330.4  | 328.1  | 325.9  |
| 42.5° | 2384.6 | 1674.4 | 629.3  | 467.5  | 402.3  | 406.8  | 368.6  | 339.4  | 323.6  | 319.1  | 316.9  |
| 45°   | 2559.9 | 1737.3 | 575.4  | 415.8  | 368.6  | 368.6  | 348.4  | 330.4  | 316.9  | 312.4  | 312.4  |
| 47.5° | 2744.2 | 1800.2 | 516.9  | 370.8  | 343.9  | 330.4  | 332.6  | 319.1  | 310.2  | 305.7  | 303.4  |
| 50°   | 2975.7 | 1860.9 | 463.0  | 339.4  | 328.1  | 310.2  | 316.9  | 307.9  | 303.4  | 298.9  | 296.7  |
| 52.5° | 3193.7 | 1887.9 | 413.5  | 321.4  | 319.1  | 301.2  | 303.4  | 298.9  | 296.7  | 289.9  | 287.7  |
| 55°   | 3407.2 | 1881.1 | 375.3  | 312.4  | 307.9  | 298.9  | 294.4  | 292.2  | 289.9  | 283.2  | 280.9  |
| 57.5° | 3645.4 | 1872.1 | 350.6  | 310.2  | 301.2  | 292.2  | 292.2  | 285.4  | 276.4  | 276.4  | 276.4  |
| 60°   | 3892.6 | 1842.9 | 339.4  | 310.2  | 298.9  | 292.2  | 287.7  | 280.9  | 271.9  | 274.2  | 271.9  |
| 62.5° | 4171.3 | 1786.7 | 332.6  | 316.9  | 301.2  | 289.9  | 285.4  | 276.4  | 265.2  | 267.4  | 265.2  |
| 65°   | 4416.3 | 1672.1 | 328.1  | 323.6  | 305.7  | 292.2  | 280.9  | 269.7  | 256.2  | 258.5  | 256.2  |
| 67.5° | 4582.6 | 1478.8 | 314.6  | 328.1  | 312.4  | 289.9  | 276.4  | 260.7  | 242.7  | 251.7  | 249.5  |
| 70°   | 4535.4 | 1202.4 | 289.9  | 319.1  | 319.1  | 292.2  | 269.7  | 249.5  | 229.2  | 247.2  | 240.5  |
| 72.5° | 4169.1 | 903.5  | 242.7  | 287.7  | 314.6  | 292.2  | 256.2  | 231.5  | 213.5  | 224.7  | 211.3  |
| 75°   | 3422.9 | 613.6  | 193.3  | 229.2  | 294.4  | 294.4  | 245.0  | 213.5  | 191.0  | 184.3  | 179.8  |
| 77.5° | 2135.1 | 382.1  | 150.6  | 168.6  | 247.2  | 292.2  | 233.7  | 191.0  | 159.6  | 155.1  | 150.6  |
| 80°   | 845.1  | 204.5  | 119.1  | 121.4  | 182.0  | 267.4  | 218.0  | 161.8  | 128.1  | 123.6  | 114.6  |
| 82.5° | 193.3  | 103.4  | 83.2   | 80.9   | 112.4  | 218.0  | 197.8  | 128.1  | 98.9   | 98.9   | 83.2   |
| 85°   | 58.4   | 53.9   | 53.9   | 51.7   | 56.2   | 112.4  | 152.8  | 87.7   | 67.4   | 47.2   | 40.5   |
| 87.5° | 15.7   | 22.5   | 20.2   | 18.0   | 18.0   | 15.7   | 49.4   | 22.5   | 13.5   | 6.7    | 4.5    |
| 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)