

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: P594843

Luminaire Tested: **ISS-PA1E-830-U-T3-HSS**

Issue Date: 3/22/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P594843  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2201-510-11)  
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-T3-HSS  
Description: IMPACT ELITE LED QUARTER SPHERE LUMINAIRE  
(1) 80 CRI, 3000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6302 lumens  
Efficiency: N/A  
Efficacy: 76.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G2

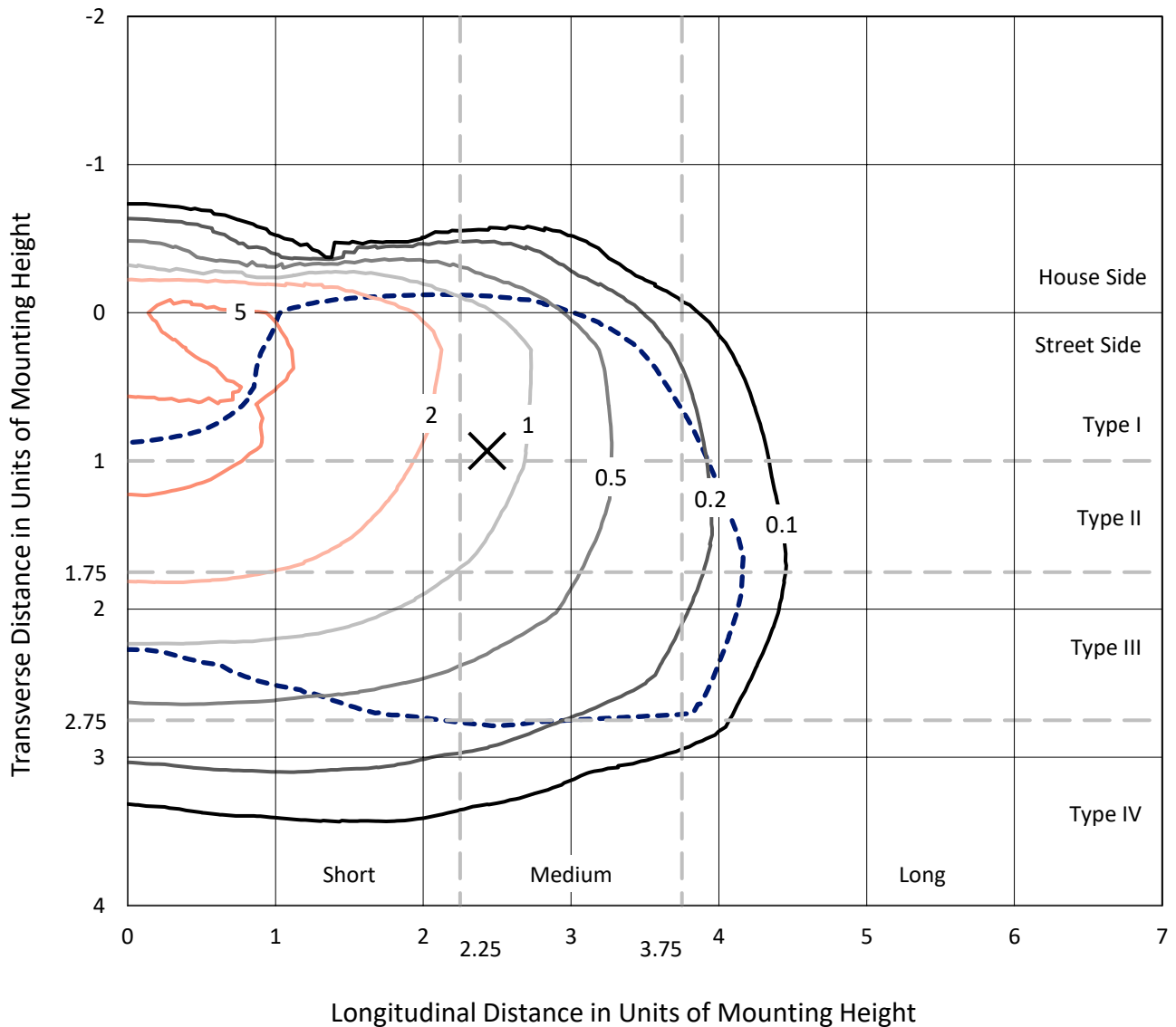
Input Watts (W): 82.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

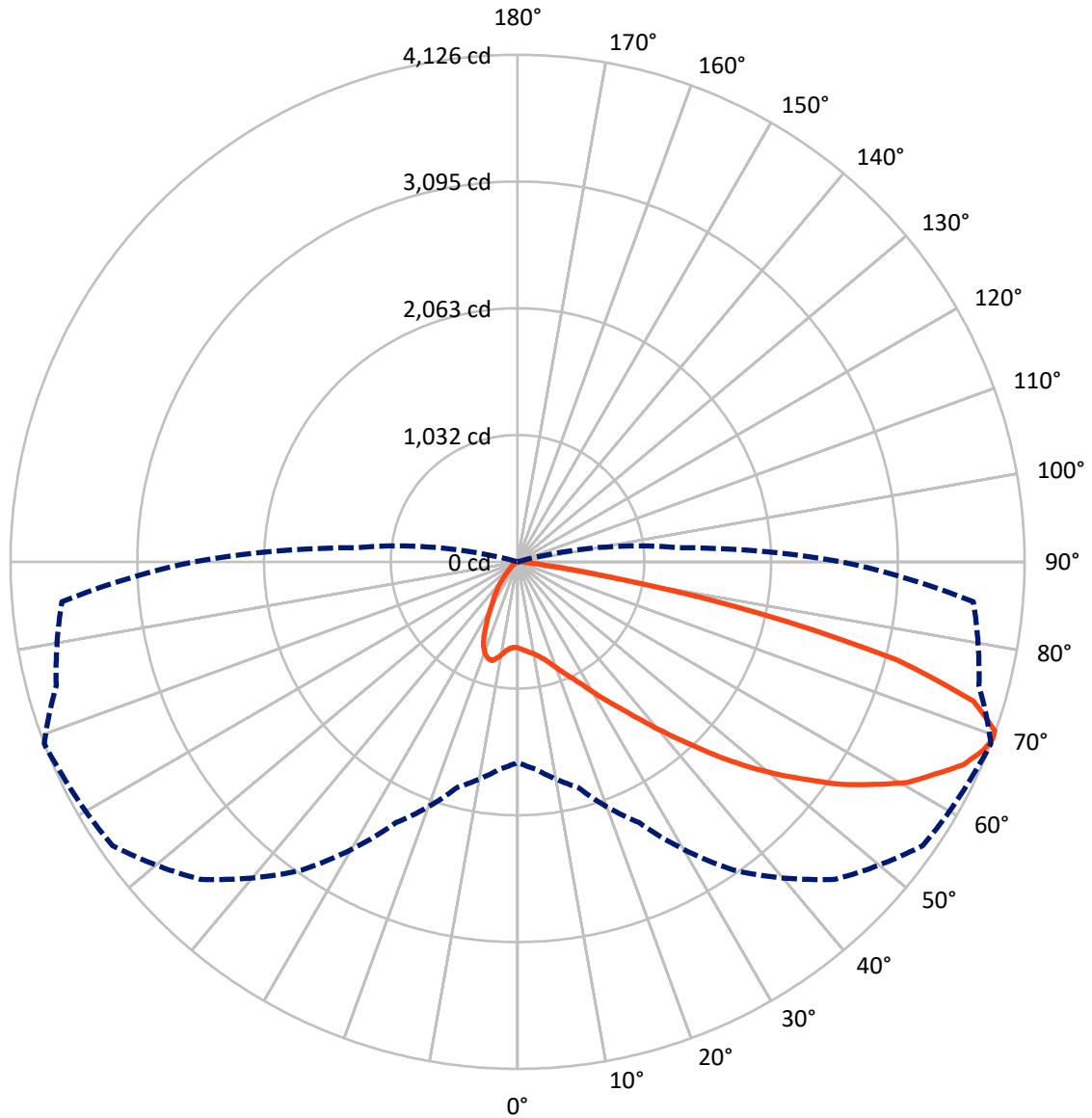
× Max cd  
 - - - 1/2 Max cd



Based on 12 foot mounting height. Maximum calculated value = 6.1 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 69-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 614.1    | 0.0    | 614.1  |
|                    | % Fixture | 9.7      | 0.0    | 9.7    |
| <b>Street Side</b> | Lumens    | 5687.9   | 0.0    | 5687.9 |
|                    | % Fixture | 90.3     | 0.0    | 90.3   |
| <b>Total</b>       | Lumens    | 6302.0   | 0.0    | 6302.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 66.8   | 1.1       |
| 10°-20°   | 176.8  | 2.8       |
| 20°-30°   | 294.4  | 4.7       |
| 30°-40°   | 530.1  | 8.4       |
| 40°-50°   | 961.2  | 15.3      |
| 50°-60°   | 1502.1 | 23.8      |
| 60°-70°   | 1737.9 | 27.6      |
| 70°-80°   | 971.9  | 15.4      |
| 80°-90°   | 60.7   | 1.0       |
| 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°    | 6302.0 | 100.0     |
| 0°-180°   | 6302.0 | 100.0     |

**Coefficient of Utilization**

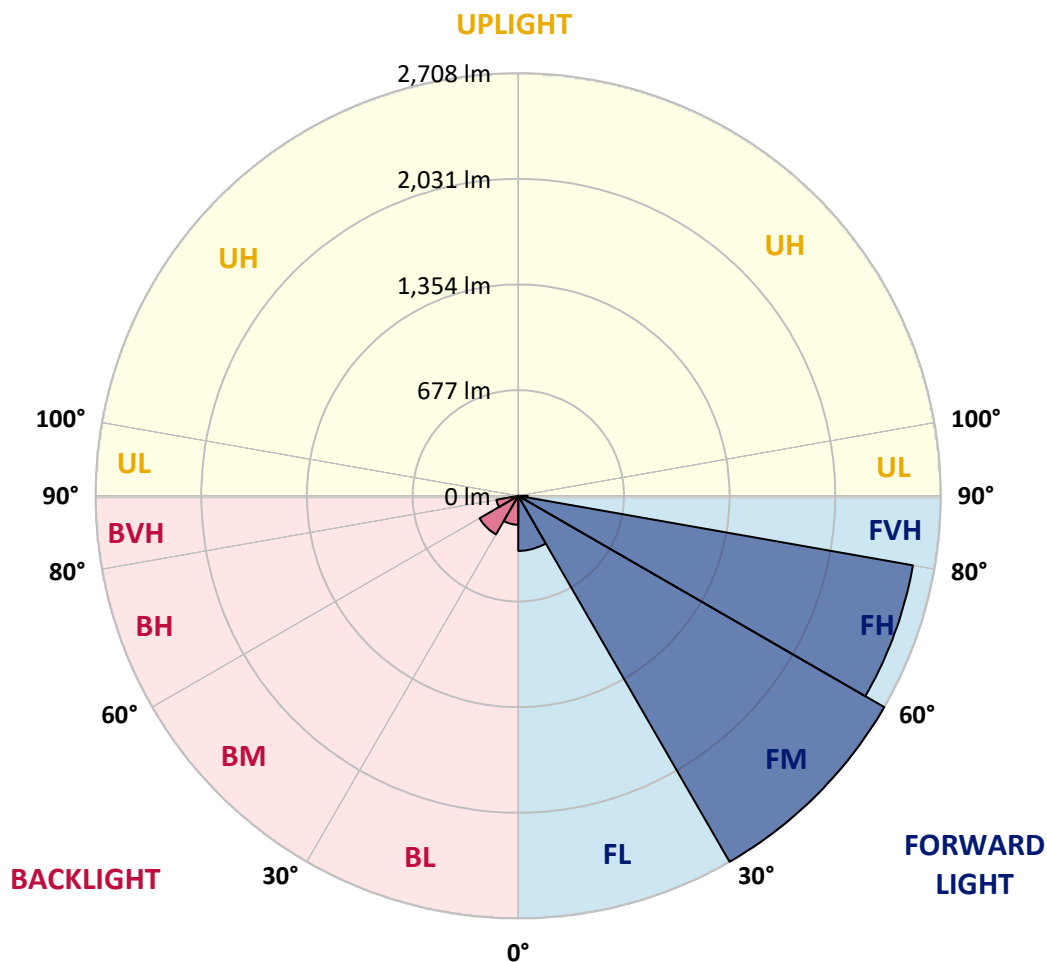


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 352.6  | 5.6       |                         |      |         |
| FM (30°-60°)   | 2707.5 | 43.0      |                         |      |         |
| FH (60°-80°)   | 2567.6 | 40.7      |                         |      | G2/5000 |
| FVH (80°-90°)  | 60.2   | 1.0       |                         |      | G1/100  |
| BL (0°-30°)    | 185.6  | 2.9       | B1/500                  |      |         |
| BM (30°-60°)   | 285.9  | 4.5       | B1/1000                 |      |         |
| BH (60°-80°)   | 142.2  | 2.3       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 0.4    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 69°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 701.0  | 701.0  | 701.0  | 701.0  | 701.0  | 701.0  | 701.0  | 701.0  | 701.0  | 701.0  | 701.0  |
| 2.5°  | 726.2  | 726.2  | 726.2  | 722.0  | 724.1  | 722.0  | 719.9  | 713.6  | 715.7  | 713.6  | 707.3  |
| 5°    | 701.0  | 703.1  | 709.4  | 713.6  | 724.1  | 728.3  | 730.4  | 730.4  | 728.3  | 724.1  | 719.9  |
| 7.5°  | 652.7  | 652.7  | 659.0  | 671.6  | 692.6  | 715.7  | 734.6  | 745.1  | 747.2  | 747.2  | 740.9  |
| 10°   | 640.1  | 640.1  | 648.5  | 656.9  | 677.9  | 705.2  | 734.6  | 759.8  | 764.0  | 768.2  | 766.1  |
| 12.5° | 633.8  | 635.9  | 644.3  | 659.0  | 686.3  | 711.5  | 743.0  | 778.7  | 791.2  | 801.7  | 803.8  |
| 15°   | 642.2  | 642.2  | 650.6  | 665.3  | 696.8  | 732.5  | 772.4  | 812.2  | 824.8  | 839.5  | 850.0  |
| 17.5° | 654.8  | 659.0  | 663.2  | 677.9  | 707.3  | 751.4  | 803.8  | 856.3  | 871.0  | 889.9  | 898.3  |
| 20°   | 675.8  | 675.8  | 680.0  | 692.6  | 724.1  | 776.6  | 850.0  | 913.0  | 925.6  | 938.2  | 948.7  |
| 22.5° | 701.0  | 703.1  | 703.1  | 713.6  | 749.3  | 805.9  | 889.9  | 967.5  | 988.5  | 994.8  | 999.0  |
| 25°   | 776.6  | 772.4  | 757.7  | 751.4  | 778.7  | 839.5  | 938.2  | 1032.6 | 1055.7 | 1062.0 | 1053.6 |
| 27.5° | 934.0  | 917.2  | 877.3  | 835.3  | 831.1  | 892.0  | 1003.2 | 1114.5 | 1139.6 | 1141.7 | 1112.4 |
| 30°   | 1131.2 | 1133.3 | 1068.3 | 978.0  | 917.2  | 948.7  | 1074.6 | 1217.3 | 1242.5 | 1232.0 | 1185.8 |
| 32.5° | 1374.7 | 1364.2 | 1315.9 | 1185.8 | 1064.1 | 1036.8 | 1152.2 | 1324.3 | 1353.7 | 1336.9 | 1276.1 |
| 35°   | 1582.5 | 1588.8 | 1530.0 | 1414.6 | 1261.4 | 1173.2 | 1246.7 | 1444.0 | 1479.6 | 1450.3 | 1374.7 |
| 37.5° | 1756.7 | 1765.1 | 1729.4 | 1635.0 | 1498.5 | 1360.0 | 1370.5 | 1584.6 | 1632.9 | 1603.5 | 1509.0 |
| 40°   | 1949.8 | 1956.1 | 1941.4 | 1838.5 | 1716.8 | 1582.5 | 1536.3 | 1746.2 | 1811.3 | 1771.4 | 1672.7 |
| 42.5° | 2161.8 | 2184.8 | 2159.7 | 2077.8 | 1951.9 | 1836.4 | 1767.2 | 1943.5 | 2008.5 | 1983.4 | 1851.1 |
| 45°   | 2451.4 | 2453.5 | 2424.1 | 2342.3 | 2212.1 | 2117.7 | 2033.7 | 2153.4 | 2237.3 | 2205.8 | 2050.5 |
| 47.5° | 2665.5 | 2680.2 | 2663.4 | 2606.7 | 2501.8 | 2438.8 | 2323.4 | 2384.2 | 2472.4 | 2432.5 | 2256.2 |
| 50°   | 2829.2 | 2869.0 | 2854.4 | 2871.1 | 2818.7 | 2791.4 | 2615.1 | 2623.5 | 2709.5 | 2676.0 | 2466.1 |
| 52.5° | 2919.4 | 2969.8 | 2974.0 | 3060.0 | 3104.1 | 3171.3 | 2898.4 | 2885.8 | 2940.4 | 2911.0 | 2680.2 |
| 55°   | 2906.8 | 2919.4 | 3024.4 | 3181.8 | 3353.9 | 3507.1 | 3175.5 | 3123.0 | 3198.6 | 3116.7 | 2906.8 |
| 57.5° | 2785.1 | 2816.6 | 3001.3 | 3196.5 | 3500.8 | 3723.3 | 3414.7 | 3356.0 | 3418.9 | 3309.8 | 3139.8 |
| 60°   | 2610.9 | 2657.1 | 2894.2 | 3173.4 | 3586.8 | 3853.4 | 3647.7 | 3588.9 | 3645.6 | 3513.4 | 3404.2 |
| 62.5° | 2453.5 | 2474.5 | 2692.7 | 3076.8 | 3536.5 | 3847.1 | 3828.2 | 3773.6 | 3807.2 | 3668.7 | 3630.9 |
| 65°   | 2228.9 | 2237.3 | 2453.5 | 2902.6 | 3425.2 | 3805.1 | 3926.8 | 3947.8 | 3983.5 | 3798.8 | 3792.5 |
| 67.5° | 1882.6 | 1901.5 | 2115.6 | 2598.3 | 3240.5 | 3723.3 | 4004.5 | 4046.5 | 4088.4 | 3868.1 | 3821.9 |
| 69°   | 1632.9 | 1693.7 | 1899.4 | 2342.3 | 3062.1 | 3654.0 | 4025.5 | 4092.6 | 4126.2 | 3887.0 | 3723.3 |
| 70°   | 1429.3 | 1481.7 | 1718.9 | 2145.0 | 2904.7 | 3576.3 | 4040.2 | 4086.3 | 4119.9 | 3847.1 | 3561.6 |
| 72.5° | 717.8  | 784.9  | 1110.3 | 1565.7 | 2308.7 | 3221.6 | 3964.6 | 3914.2 | 3878.6 | 3538.6 | 2881.6 |
| 75°   | 277.0  | 287.5  | 476.4  | 892.0  | 1444.0 | 2365.3 | 3385.3 | 3290.9 | 3186.0 | 2684.4 | 1708.4 |
| 77.5° | 153.2  | 151.1  | 207.8  | 394.6  | 614.9  | 1156.4 | 2289.8 | 2138.7 | 1993.9 | 1441.9 | 692.6  |
| 80°   | 65.1   | 69.3   | 90.2   | 188.9  | 323.2  | 400.9  | 1112.4 | 988.5  | 787.0  | 457.5  | 165.8  |
| 82.5° | 39.9   | 42.0   | 63.0   | 115.4  | 224.6  | 153.2  | 361.0  | 308.5  | 226.7  | 123.8  | 39.9   |
| 85°   | 12.6   | 14.7   | 44.1   | 77.7   | 109.1  | 63.0   | 81.9   | 71.4   | 63.0   | 52.5   | 12.6   |
| 87.5° | 2.1    | 2.1    | 16.8   | 42.0   | 29.4   | 10.5   | 8.4    | 14.7   | 23.1   | 25.2   | 4.2    |
| 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°    | 701.0  | 701.0  | 701.0 | 701.0 | 701.0 | 701.0 | 701.0 | 701.0 | 701.0 | 701.0 | 701.0 |
| 2.5°  | 705.2  | 701.0  | 696.8 | 694.7 | 694.7 | 690.5 | 688.4 | 686.3 | 686.3 | 684.2 | 684.2 |
| 5°    | 713.6  | 709.4  | 705.2 | 703.1 | 698.9 | 696.8 | 696.8 | 696.8 | 694.7 | 696.8 | 698.9 |
| 7.5°  | 734.6  | 728.3  | 726.2 | 724.1 | 724.1 | 717.8 | 707.3 | 680.0 | 652.7 | 644.3 | 635.9 |
| 10°   | 764.0  | 761.9  | 761.9 | 761.9 | 747.2 | 692.6 | 617.0 | 549.9 | 514.2 | 484.8 | 484.8 |
| 12.5° | 805.9  | 805.9  | 803.8 | 797.5 | 722.0 | 589.8 | 472.2 | 371.5 | 312.7 | 279.1 | 283.3 |
| 15°   | 852.1  | 850.0  | 854.2 | 814.3 | 635.9 | 455.4 | 285.4 | 201.5 | 170.0 | 165.8 | 165.8 |
| 17.5° | 900.4  | 904.6  | 900.4 | 770.3 | 522.6 | 281.2 | 170.0 | 153.2 | 149.0 | 149.0 | 149.0 |
| 20°   | 950.8  | 946.6  | 940.3 | 694.7 | 379.9 | 176.3 | 146.9 | 142.7 | 138.5 | 136.4 | 136.4 |
| 22.5° | 1001.1 | 996.9  | 954.9 | 598.2 | 237.2 | 144.8 | 138.5 | 130.1 | 123.8 | 121.7 | 121.7 |
| 25°   | 1049.4 | 1049.4 | 927.7 | 474.3 | 161.6 | 136.4 | 125.9 | 117.5 | 111.2 | 104.9 | 104.9 |
| 27.5° | 1110.3 | 1114.5 | 883.6 | 331.6 | 136.4 | 125.9 | 113.3 | 100.7 | 92.3  | 88.1  | 88.1  |
| 30°   | 1179.5 | 1185.8 | 812.2 | 216.2 | 123.8 | 111.2 | 98.6  | 84.0  | 71.4  | 67.2  | 65.1  |
| 32.5° | 1261.4 | 1267.7 | 730.4 | 142.7 | 111.2 | 96.5  | 81.9  | 63.0  | 50.4  | 48.3  | 46.2  |
| 35°   | 1366.3 | 1351.6 | 631.7 | 113.3 | 96.5  | 81.9  | 63.0  | 44.1  | 35.7  | 33.6  | 33.6  |
| 37.5° | 1496.4 | 1465.0 | 518.4 | 98.6  | 81.9  | 65.1  | 46.2  | 29.4  | 23.1  | 23.1  | 21.0  |
| 40°   | 1645.5 | 1557.3 | 400.9 | 88.1  | 69.3  | 50.4  | 29.4  | 18.9  | 14.7  | 14.7  | 14.7  |
| 42.5° | 1809.2 | 1635.0 | 285.4 | 77.7  | 56.7  | 35.7  | 18.9  | 10.5  | 8.4   | 8.4   | 8.4   |
| 45°   | 1998.0 | 1706.3 | 195.2 | 67.2  | 48.3  | 25.2  | 10.5  | 4.2   | 4.2   | 4.2   | 4.2   |
| 47.5° | 2186.9 | 1752.5 | 130.1 | 58.8  | 35.7  | 14.7  | 6.3   | 2.1   | 2.1   | 2.1   | 2.1   |
| 50°   | 2377.9 | 1788.2 | 100.7 | 50.4  | 25.2  | 8.4   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 52.5° | 2547.9 | 1813.4 | 81.9  | 42.0  | 16.8  | 6.3   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 55°   | 2694.8 | 1815.5 | 71.4  | 33.6  | 12.6  | 4.2   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 57.5° | 2843.9 | 1798.7 | 60.9  | 25.2  | 8.4   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60°   | 2934.1 | 1754.6 | 48.3  | 18.9  | 6.3   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 62.5° | 2988.7 | 1681.1 | 37.8  | 12.6  | 4.2   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 65°   | 2957.2 | 1588.8 | 27.3  | 8.4   | 4.2   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 67.5° | 2810.3 | 1446.1 | 18.9  | 6.3   | 2.1   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 69°   | 2636.1 | 1315.9 | 16.8  | 4.2   | 2.1   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°   | 2482.9 | 1215.2 | 14.7  | 4.2   | 2.1   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 1849.0 | 782.8  | 12.6  | 4.2   | 2.1   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 1038.9 | 262.3  | 8.4   | 2.1   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 390.4  | 67.2   | 4.2   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 86.1   | 16.8   | 2.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 18.9   | 4.2    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 6.3    | 2.1    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 2.1    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 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)