

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: P193789

Luminaire Tested: **GLEON-AF-01-LED-E1-SL4-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P193789  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24294)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-01-LED-E1-SL4-8030  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4832 lumens  
Efficiency: N/A  
Efficacy: 81.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

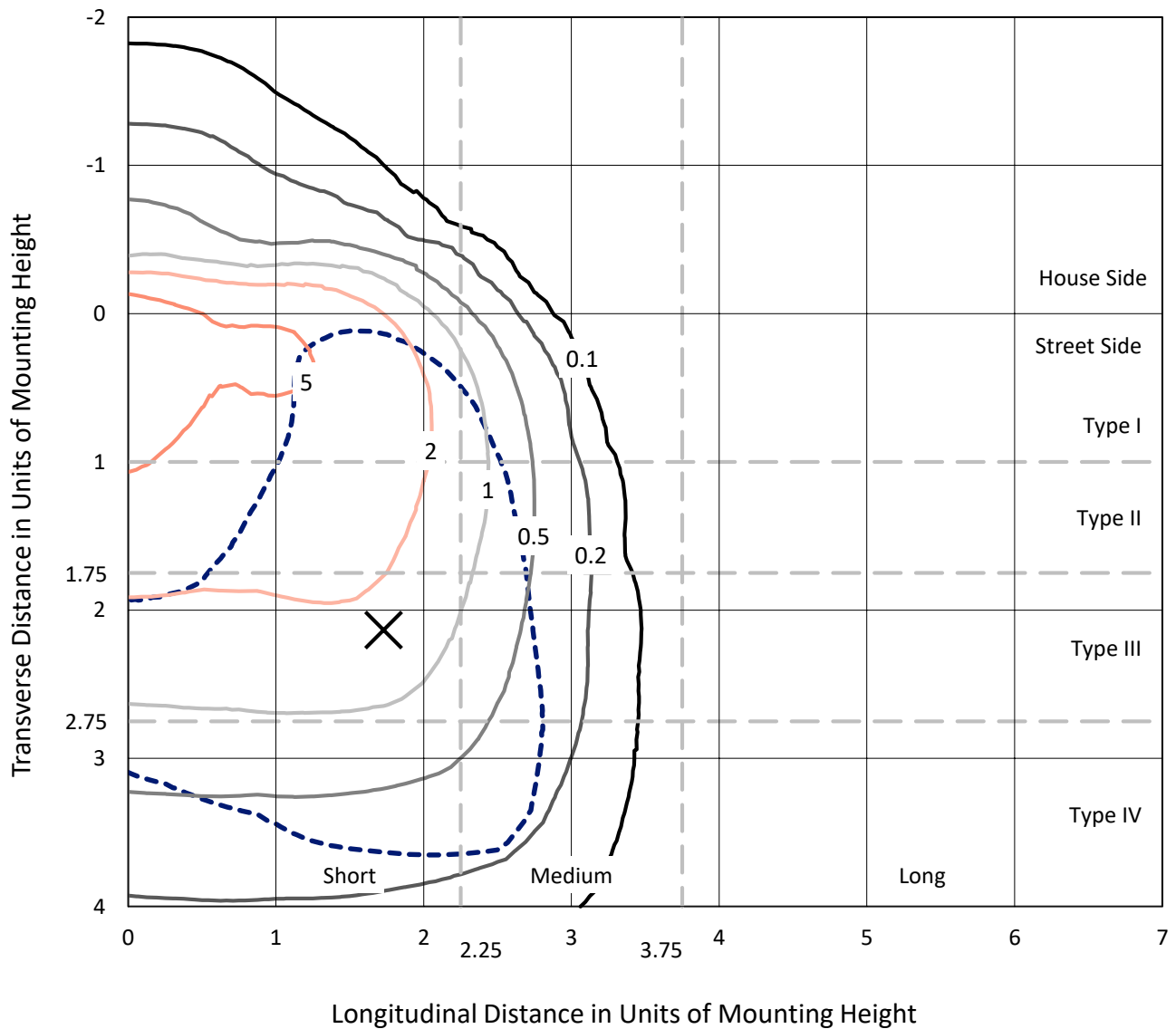
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

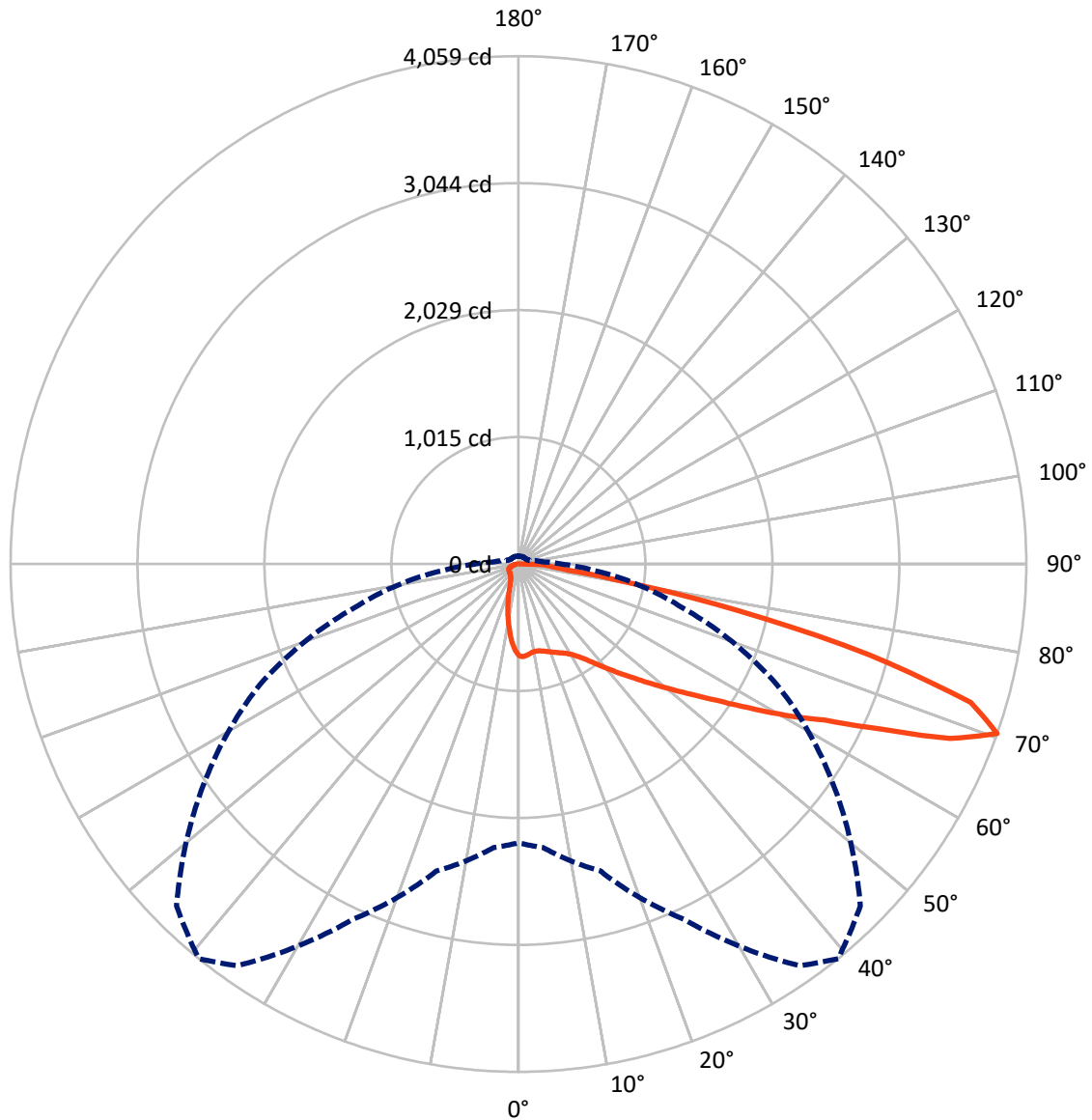
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.3 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 549.6    | 0.0    | 549.6  |
|                    | % Fixture | 11.4     | 0.0    | 11.4   |
| <b>Street Side</b> | Lumens    | 4282.4   | 0.0    | 4282.4 |
|                    | % Fixture | 88.6     | 0.0    | 88.6   |
| <b>Total</b>       | Lumens    | 4832.0   | 0.0    | 4832.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 63.0   | 1.3       |
| 10°-20°   | 157.4  | 3.3       |
| 20°-30°   | 245.0  | 5.1       |
| 30°-40°   | 381.7  | 7.9       |
| 40°-50°   | 640.8  | 13.3      |
| 50°-60°   | 1018.0 | 21.1      |
| 60°-70°   | 1357.8 | 28.1      |
| 70°-80°   | 820.0  | 17.0      |
| 80°-90°   | 148.4  | 3.1       |
| 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°    | 4832.0 | 100.0     |
| 0°-180°   | 4832.0 | 100.0     |



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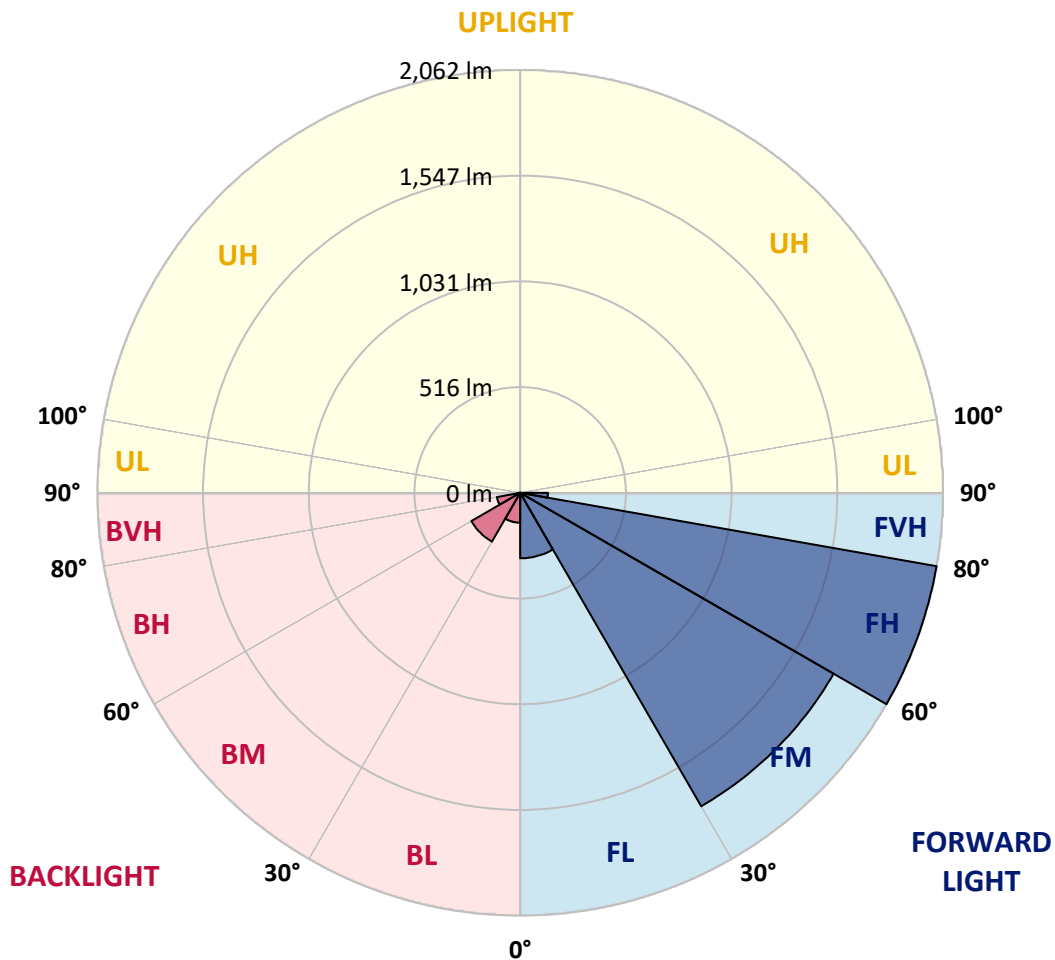
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 319.5  | 6.6       |                         |      |         |
| FM   | (30°-60°)   | 1765.4 | 36.5      |                         |      |         |
| FH   | (60°-80°)   | 2062.4 | 42.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 135.0  | 2.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 145.8  | 3.0       | B1/500                  |      |         |
| BM   | (30°-60°)   | 275.0  | 5.7       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 115.4  | 2.4       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 13.4   | 0.3       |                         |      | 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°    | 39°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 733.6  | 733.6  | 733.6  | 733.6  | 733.6  | 733.6  | 733.6  | 733.6  | 733.6  | 733.6  | 733.6  |
| 2.5°  | 747.8  | 747.6  | 745.6  | 744.1  | 742.9  | 742.4  | 743.4  | 739.7  | 736.5  | 732.6  | 728.4  |
| 5°    | 742.2  | 741.9  | 738.7  | 735.8  | 732.8  | 731.9  | 731.6  | 725.0  | 721.0  | 715.1  | 707.3  |
| 7.5°  | 736.0  | 734.8  | 730.6  | 725.7  | 720.6  | 718.1  | 715.6  | 707.0  | 702.6  | 696.7  | 687.6  |
| 10°   | 729.6  | 728.2  | 724.2  | 719.3  | 714.4  | 710.7  | 706.5  | 698.2  | 693.5  | 689.1  | 678.5  |
| 12.5° | 723.0  | 721.8  | 720.8  | 718.6  | 715.1  | 712.0  | 708.8  | 701.6  | 696.7  | 691.6  | 679.3  |
| 15°   | 722.0  | 721.5  | 723.7  | 725.2  | 723.3  | 721.3  | 717.8  | 711.7  | 706.5  | 701.4  | 685.4  |
| 17.5° | 729.9  | 729.6  | 735.3  | 739.2  | 738.2  | 734.8  | 730.1  | 723.3  | 719.1  | 714.7  | 694.8  |
| 20°   | 747.1  | 748.3  | 755.2  | 760.4  | 755.4  | 750.5  | 742.9  | 733.3  | 731.1  | 729.2  | 704.3  |
| 22.5° | 779.5  | 780.7  | 785.7  | 787.6  | 774.8  | 767.7  | 757.2  | 744.9  | 743.4  | 744.9  | 715.9  |
| 25°   | 830.1  | 828.9  | 828.2  | 820.8  | 797.4  | 786.4  | 772.9  | 760.1  | 760.8  | 767.5  | 732.1  |
| 27.5° | 897.2  | 890.6  | 880.2  | 858.1  | 821.0  | 808.7  | 792.3  | 780.5  | 785.2  | 797.9  | 756.4  |
| 30°   | 966.7  | 959.3  | 935.5  | 899.4  | 852.0  | 838.5  | 820.0  | 806.8  | 819.1  | 839.2  | 788.8  |
| 32.5° | 1031.1 | 1030.1 | 995.2  | 948.8  | 894.7  | 882.9  | 864.5  | 849.5  | 869.4  | 900.1  | 837.5  |
| 35°   | 1101.3 | 1103.6 | 1061.8 | 1006.0 | 952.5  | 940.2  | 926.9  | 915.6  | 942.1  | 984.4  | 908.0  |
| 37.5° | 1176.5 | 1180.9 | 1131.6 | 1068.7 | 1018.3 | 1013.1 | 1005.3 | 1000.4 | 1041.4 | 1099.9 | 1006.5 |
| 40°   | 1277.0 | 1272.6 | 1204.0 | 1139.4 | 1099.1 | 1098.9 | 1096.4 | 1102.3 | 1170.6 | 1250.7 | 1133.0 |
| 42.5° | 1384.6 | 1371.6 | 1280.9 | 1215.3 | 1187.8 | 1196.2 | 1201.1 | 1225.2 | 1326.1 | 1434.0 | 1287.3 |
| 45°   | 1500.6 | 1471.3 | 1360.8 | 1295.7 | 1286.3 | 1304.0 | 1320.7 | 1373.1 | 1509.2 | 1642.6 | 1456.3 |
| 47.5° | 1593.2 | 1564.9 | 1443.3 | 1379.9 | 1400.3 | 1427.1 | 1459.3 | 1542.1 | 1714.0 | 1858.0 | 1623.1 |
| 50°   | 1666.1 | 1647.7 | 1526.6 | 1478.2 | 1525.9 | 1567.1 | 1619.7 | 1733.5 | 1927.3 | 2067.8 | 1777.7 |
| 52.5° | 1736.9 | 1723.1 | 1610.6 | 1578.9 | 1673.3 | 1730.3 | 1801.7 | 1938.8 | 2145.9 | 2274.2 | 1907.6 |
| 55°   | 1800.8 | 1790.9 | 1701.0 | 1704.5 | 1846.7 | 1920.9 | 2010.8 | 2172.7 | 2384.2 | 2458.2 | 2017.7 |
| 57.5° | 1872.7 | 1860.2 | 1804.2 | 1861.9 | 2069.5 | 2165.8 | 2282.8 | 2435.6 | 2607.8 | 2621.8 | 2101.5 |
| 60°   | 1945.2 | 1934.4 | 1918.7 | 2043.7 | 2352.5 | 2453.8 | 2564.6 | 2690.3 | 2834.5 | 2748.8 | 2096.6 |
| 62.5° | 2008.1 | 2009.3 | 2037.1 | 2234.6 | 2629.7 | 2746.8 | 2882.0 | 3006.3 | 3039.7 | 2770.9 | 1941.5 |
| 65°   | 2114.7 | 2134.1 | 2216.9 | 2504.9 | 3019.8 | 3176.5 | 3342.3 | 3322.4 | 3096.4 | 2564.3 | 1609.1 |
| 67.5° | 2241.5 | 2275.6 | 2443.4 | 2865.0 | 3512.8 | 3720.9 | 3785.0 | 3393.9 | 2869.2 | 2084.5 | 1147.0 |
| 70°   | 2228.7 | 2275.6 | 2541.2 | 3133.5 | 3919.2 | 4058.7 | 3864.2 | 3071.6 | 2278.3 | 1361.8 | 609.3  |
| 72.5° | 1979.1 | 2046.2 | 2342.0 | 3010.4 | 3791.2 | 3778.9 | 3354.6 | 2289.9 | 1353.6 | 546.9  | 238.1  |
| 75°   | 1508.4 | 1576.2 | 1830.7 | 2378.3 | 2996.4 | 2893.3 | 2380.3 | 1265.0 | 513.7  | 217.2  | 150.1  |
| 77.5° | 867.7  | 920.3  | 1116.8 | 1458.5 | 1901.0 | 1795.1 | 1324.9 | 562.6  | 250.1  | 151.3  | 117.2  |
| 80°   | 484.5  | 513.7  | 633.1  | 740.0  | 931.6  | 854.0  | 592.8  | 349.6  | 186.7  | 109.8  | 90.4   |
| 82.5° | 383.0  | 409.0  | 512.0  | 466.8  | 425.5  | 392.6  | 340.5  | 311.3  | 149.1  | 69.3   | 54.0   |
| 85°   | 334.6  | 359.4  | 433.4  | 367.5  | 290.6  | 266.6  | 276.6  | 306.4  | 116.0  | 41.8   | 46.2   |
| 87.5° | 310.0  | 343.2  | 386.2  | 283.3  | 226.3  | 200.5  | 255.3  | 335.8  | 37.3   | 26.0   | 18.7   |
| 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°    | 733.6  | 733.6  | 733.6 | 733.6 | 733.6 | 733.6 | 733.6 | 733.6 | 733.6 | 733.6 | 733.6 |
| 2.5°  | 724.7  | 720.8  | 714.4 | 708.8 | 699.9 | 695.2 | 690.1 | 686.4 | 683.5 | 681.0 | 684.9 |
| 5°    | 702.4  | 695.0  | 681.5 | 667.0 | 649.8 | 636.3 | 625.0 | 614.4 | 607.1 | 602.1 | 605.6 |
| 7.5°  | 681.2  | 669.2  | 648.1 | 621.8 | 592.3 | 567.3 | 546.6 | 528.4 | 515.9 | 507.8 | 511.0 |
| 10°   | 669.2  | 654.2  | 621.5 | 580.3 | 536.8 | 497.7 | 465.3 | 437.3 | 417.9 | 406.8 | 408.6 |
| 12.5° | 666.3  | 646.9  | 601.6 | 544.9 | 485.4 | 431.2 | 385.5 | 346.6 | 319.4 | 305.1 | 305.6 |
| 15°   | 668.5  | 643.7  | 583.0 | 511.0 | 435.8 | 367.3 | 310.3 | 263.1 | 231.4 | 215.2 | 215.0 |
| 17.5° | 672.2  | 641.2  | 563.3 | 474.4 | 385.5 | 305.9 | 242.2 | 196.0 | 168.0 | 155.0 | 154.0 |
| 20°   | 676.1  | 637.3  | 541.2 | 434.8 | 333.1 | 248.9 | 189.7 | 153.5 | 135.9 | 128.7 | 128.2 |
| 22.5° | 681.7  | 633.8  | 518.4 | 393.1 | 281.8 | 202.7 | 156.0 | 131.7 | 122.3 | 118.7 | 118.2 |
| 25°   | 690.8  | 632.1  | 494.0 | 349.6 | 235.6 | 169.5 | 135.9 | 120.9 | 115.5 | 113.0 | 112.8 |
| 27.5° | 706.1  | 634.6  | 471.2 | 307.3 | 198.0 | 147.2 | 124.6 | 115.5 | 111.5 | 109.3 | 109.1 |
| 30°   | 725.7  | 642.2  | 447.1 | 267.3 | 168.8 | 131.9 | 117.7 | 111.8 | 108.6 | 106.4 | 106.4 |
| 32.5° | 758.4  | 655.0  | 421.8 | 232.7 | 147.9 | 121.4 | 112.5 | 108.6 | 105.9 | 104.2 | 103.9 |
| 35°   | 806.5  | 679.0  | 398.2 | 203.9 | 132.9 | 113.7 | 108.1 | 105.1 | 103.2 | 102.2 | 102.2 |
| 37.5° | 876.6  | 717.1  | 377.4 | 183.3 | 123.8 | 108.6 | 103.9 | 101.7 | 100.5 | 100.5 | 100.5 |
| 40°   | 970.6  | 769.7  | 360.4 | 169.5 | 118.7 | 104.9 | 100.7 | 99.0  | 98.3  | 98.5  | 98.5  |
| 42.5° | 1086.8 | 838.0  | 349.1 | 159.9 | 116.2 | 102.7 | 98.5  | 97.0  | 96.3  | 96.1  | 96.3  |
| 45°   | 1219.3 | 915.6  | 347.9 | 152.8 | 113.7 | 101.2 | 97.0  | 95.6  | 94.1  | 93.1  | 93.1  |
| 47.5° | 1348.0 | 994.5  | 357.9 | 150.4 | 111.0 | 99.5  | 95.8  | 94.3  | 92.1  | 89.9  | 89.9  |
| 50°   | 1461.7 | 1061.5 | 371.5 | 151.3 | 110.1 | 97.0  | 93.8  | 93.1  | 89.7  | 87.2  | 87.0  |
| 52.5° | 1552.1 | 1113.1 | 382.5 | 154.3 | 111.0 | 95.3  | 91.4  | 91.6  | 88.0  | 85.2  | 85.0  |
| 55°   | 1624.6 | 1147.0 | 379.6 | 157.2 | 113.3 | 94.3  | 89.2  | 89.7  | 86.7  | 84.0  | 84.0  |
| 57.5° | 1656.3 | 1134.5 | 346.9 | 154.8 | 115.0 | 94.6  | 87.5  | 89.4  | 87.0  | 84.5  | 84.5  |
| 60°   | 1588.3 | 1023.2 | 285.7 | 144.0 | 112.8 | 93.8  | 86.7  | 90.4  | 90.2  | 87.7  | 87.5  |
| 62.5° | 1382.4 | 824.0  | 221.6 | 128.0 | 105.1 | 90.2  | 84.8  | 90.2  | 92.9  | 92.1  | 91.9  |
| 65°   | 1065.5 | 586.9  | 169.3 | 110.8 | 94.8  | 84.0  | 79.6  | 84.5  | 88.2  | 89.2  | 88.9  |
| 67.5° | 691.6  | 359.7  | 130.5 | 94.6  | 83.3  | 76.9  | 73.0  | 75.2  | 75.9  | 75.9  | 75.4  |
| 70°   | 340.0  | 193.6  | 103.9 | 79.6  | 71.5  | 69.3  | 67.1  | 65.8  | 64.6  | 63.6  | 63.6  |
| 72.5° | 167.8  | 126.5  | 85.5  | 67.3  | 61.7  | 60.7  | 60.2  | 58.7  | 57.7  | 56.5  | 56.0  |
| 75°   | 124.1  | 102.9  | 72.7  | 56.7  | 53.1  | 52.1  | 53.1  | 51.8  | 51.6  | 50.6  | 50.1  |
| 77.5° | 102.0  | 87.7   | 62.6  | 48.6  | 45.4  | 43.7  | 45.2  | 45.4  | 45.7  | 44.2  | 43.7  |
| 80°   | 82.8   | 74.2   | 52.3  | 40.3  | 37.3  | 36.1  | 37.1  | 39.1  | 39.6  | 37.3  | 36.4  |
| 82.5° | 59.7   | 60.7   | 42.3  | 31.4  | 29.0  | 28.0  | 30.0  | 32.4  | 32.9  | 29.7  | 29.0  |
| 85°   | 50.1   | 50.6   | 32.4  | 22.4  | 19.9  | 18.4  | 21.6  | 24.1  | 25.8  | 22.6  | 21.9  |
| 87.5° | 20.9   | 29.7   | 18.7  | 12.5  | 11.1  | 9.6   | 11.5  | 12.8  | 15.5  | 14.2  | 14.0  |
| 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)