

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: P957474

Luminaire Tested: **GALN-SB9D-827-U-AFL-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P957474  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SB9D-827-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE  
(9) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

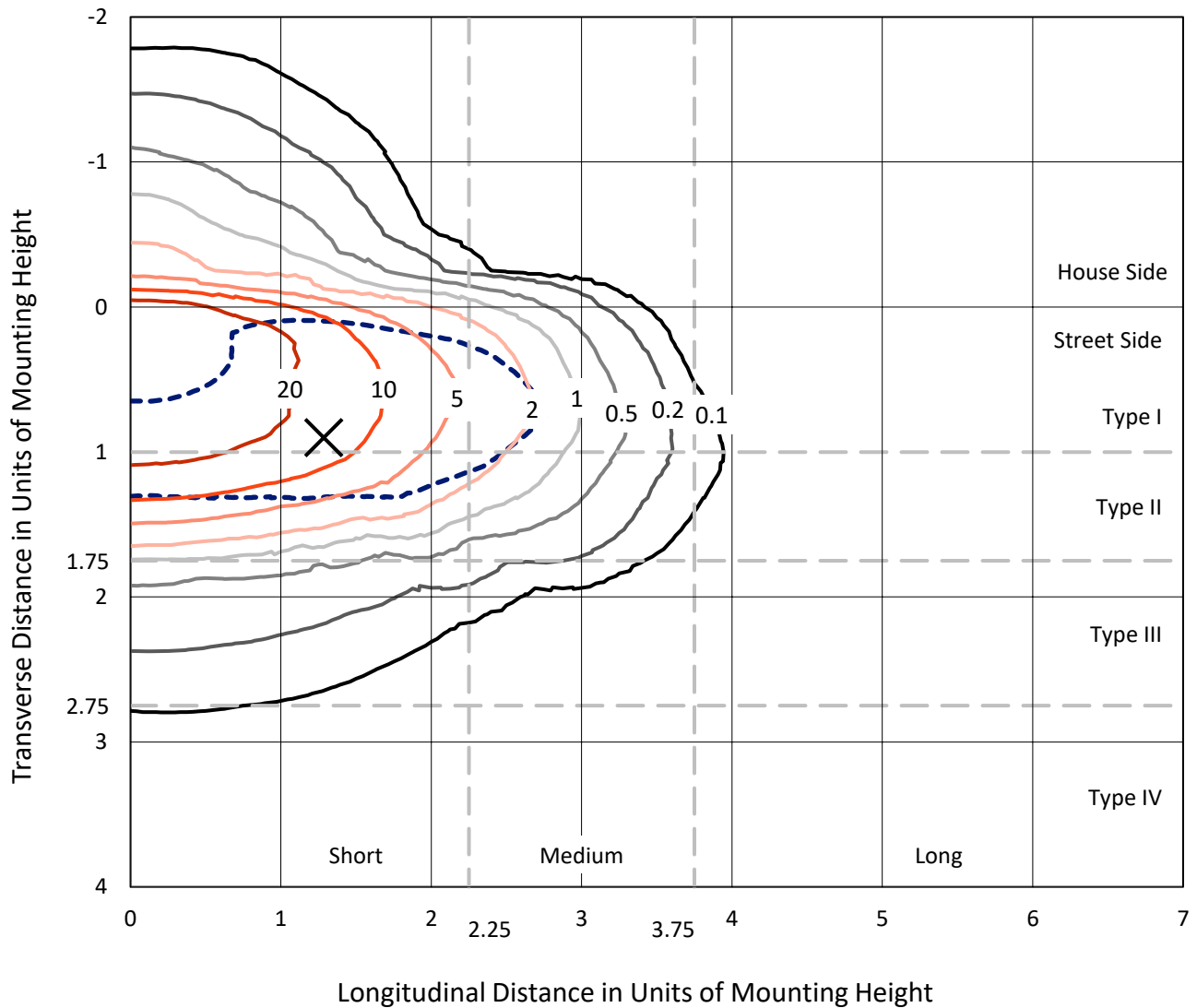
Lumens per Lamp: N/A  
Luminaire Lumens: 68719 lumens  
Efficiency: N/A  
Efficacy: 104.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 658  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

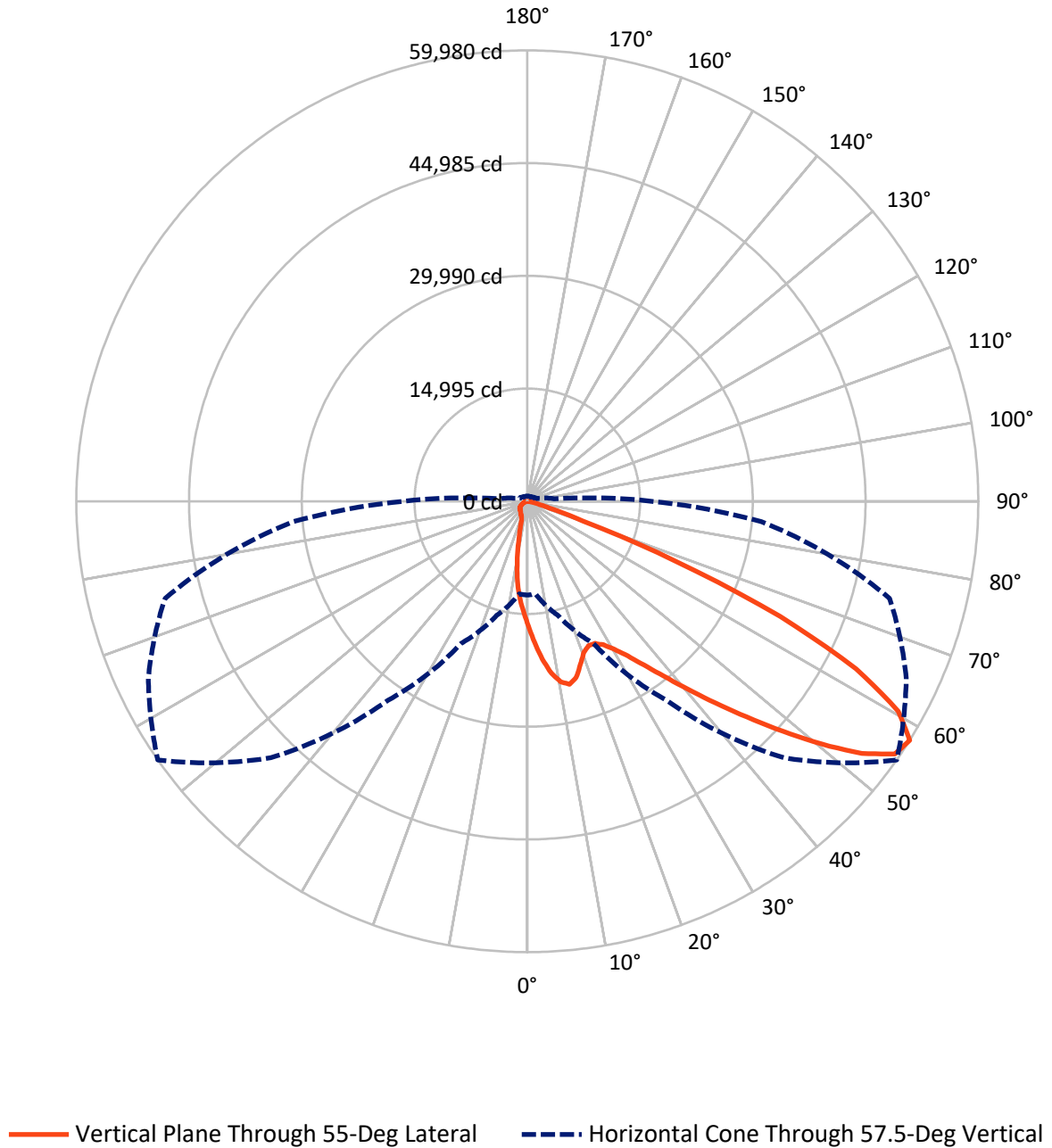
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 37.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5366.7   | 0.0    | 5366.7  |
|                    | % Fixture | 7.8      | 0.0    | 7.8     |
| <b>Street Side</b> | Lumens    | 63352.3  | 0.0    | 63352.3 |
|                    | % Fixture | 92.2     | 0.0    | 92.2    |
| <b>Total</b>       | Lumens    | 68719.0  | 0.0    | 68719.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1540.8  | 2.2       |
| 10°-20°   | 3721.8  | 5.4       |
| 20°-30°   | 5954.8  | 8.7       |
| 30°-40°   | 10078.8 | 14.7      |
| 40°-50°   | 16547.2 | 24.1      |
| 50°-60°   | 18186.6 | 26.5      |
| 60°-70°   | 10431.8 | 15.2      |
| 70°-80°   | 2131.5  | 3.1       |
| 80°-90°   | 125.7   | 0.2       |
| 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°    | 68719.0 | 100.0     |
| 0°-180°   | 68719.0 | 100.0     |

**Coefficient of Utilization**



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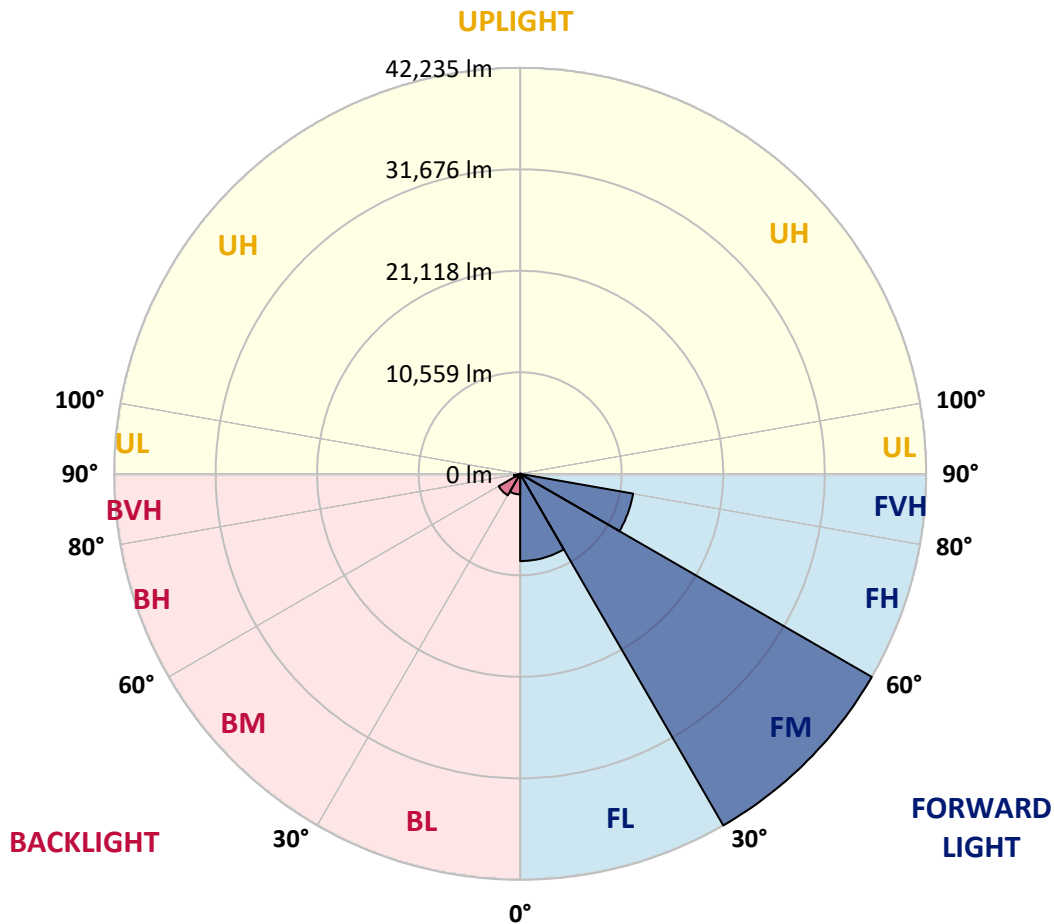
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 9074.8  | 13.2      |                         |      |          |
| FM (30°-60°)   | 42235.2 | 61.5      |                         |      |          |
| FH (60°-80°)   | 11925.1 | 17.4      |                         |      | G4/12000 |
| FVH (80°-90°)  | 117.3   | 0.2       |                         |      | G2/225   |
| BL (0°-30°)    | 2142.5  | 3.1       | B3/2500                 |      |          |
| BM (30°-60°)   | 2577.4  | 3.8       | B3/5000                 |      |          |
| BH (60°-80°)   | 638.3   | 0.9       | B2/1000                 |      | G2/1000  |
| BVH (80°-90°)  | 8.5     | 0.0       |                         |      | G0/10    |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 16559.6 | 16559.6 | 16559.6 | 16559.6 | 16559.6 | 16559.6 | 16559.6 | 16559.6 | 16559.6 | 16559.6 |
| 2.5°  | 20546.9 | 20288.5 | 20250.3 | 20199.5 | 19707.9 | 19339.3 | 18805.4 | 18220.6 | 17563.8 | 16894.3 |
| 5°    | 23737.7 | 23534.3 | 23496.1 | 23258.8 | 22699.5 | 22072.4 | 21123.2 | 19924.0 | 18699.4 | 17258.7 |
| 7.5°  | 24356.3 | 24318.2 | 24491.9 | 24483.4 | 24407.2 | 23911.4 | 23110.5 | 21682.5 | 19843.5 | 17707.9 |
| 10°   | 21597.8 | 21695.3 | 22212.2 | 22665.6 | 23890.2 | 24602.1 | 24428.4 | 23250.4 | 21021.5 | 18220.6 |
| 12.5° | 19085.0 | 18970.6 | 19339.3 | 19852.0 | 21275.8 | 23394.4 | 24975.0 | 24559.7 | 22369.0 | 18801.1 |
| 15°   | 17508.8 | 17462.1 | 17669.8 | 17907.1 | 18991.8 | 21127.5 | 24339.4 | 25623.3 | 23665.6 | 19487.6 |
| 17.5° | 17004.5 | 16966.4 | 17029.9 | 17089.3 | 17792.7 | 19445.2 | 22826.6 | 26275.8 | 24907.2 | 20271.5 |
| 20°   | 17415.5 | 17364.7 | 17356.2 | 17309.6 | 17602.0 | 18729.1 | 21458.0 | 26322.5 | 26021.6 | 20983.4 |
| 22.5° | 18614.7 | 18555.4 | 18347.7 | 18161.3 | 18186.7 | 18826.6 | 20847.8 | 25856.3 | 26860.6 | 21648.6 |
| 25°   | 20788.5 | 20691.0 | 20258.8 | 19631.7 | 19233.4 | 19504.5 | 20941.0 | 25241.9 | 27661.5 | 22169.8 |
| 27.5° | 23508.8 | 23381.7 | 22826.6 | 21894.4 | 20983.4 | 20652.9 | 21614.8 | 24818.2 | 28326.7 | 22568.2 |
| 30°   | 26174.1 | 26008.9 | 25462.3 | 24737.7 | 23407.2 | 22364.8 | 22830.9 | 25004.6 | 29119.1 | 22983.4 |
| 32.5° | 29051.3 | 28894.5 | 28169.9 | 27271.6 | 26169.9 | 24767.3 | 24496.2 | 25915.7 | 30089.5 | 23563.9 |
| 35°   | 32691.2 | 32445.4 | 31415.8 | 30191.2 | 29021.6 | 27602.1 | 26750.4 | 27487.7 | 31381.9 | 24449.5 |
| 37.5° | 36835.3 | 36504.8 | 35394.6 | 33703.9 | 32178.5 | 30589.5 | 29496.2 | 29648.8 | 33276.0 | 25636.0 |
| 40°   | 40742.2 | 40441.3 | 39415.9 | 37822.6 | 35907.4 | 33979.4 | 32814.1 | 32475.1 | 35890.4 | 27080.9 |
| 42.5° | 43085.4 | 42814.2 | 42382.0 | 41708.3 | 40093.9 | 38127.7 | 36657.4 | 35924.3 | 38983.7 | 28809.8 |
| 45°   | 43216.8 | 42979.5 | 43560.0 | 44343.9 | 44026.1 | 42716.8 | 40924.4 | 39581.1 | 42089.7 | 30432.7 |
| 47.5° | 41115.1 | 40954.0 | 42716.8 | 45454.1 | 46818.5 | 47369.4 | 45716.8 | 42932.9 | 44653.3 | 31598.0 |
| 50°   | 35386.2 | 35326.8 | 38954.0 | 43979.5 | 47882.1 | 51445.7 | 50772.0 | 46051.6 | 46640.6 | 32199.7 |
| 52.5° | 30682.7 | 30466.6 | 32581.0 | 39259.1 | 46335.5 | 53589.8 | 55712.8 | 49111.0 | 48030.4 | 32314.1 |
| 55°   | 23271.6 | 23080.9 | 25733.5 | 31360.7 | 41348.1 | 52827.1 | 59327.2 | 52267.8 | 49026.2 | 32021.7 |
| 57.5° | 12483.2 | 12364.6 | 15716.4 | 20873.2 | 32322.5 | 48250.8 | 59979.8 | 55606.8 | 49865.2 | 31246.3 |
| 60°   | 4860.2  | 4839.1  | 6093.3  | 10127.3 | 19644.4 | 39254.9 | 56687.3 | 57611.1 | 50390.6 | 30292.9 |
| 62.5° | 2940.7  | 3004.3  | 3207.7  | 4546.7  | 8678.1  | 24386.0 | 49098.2 | 55331.4 | 50742.3 | 29420.0 |
| 65°   | 2432.2  | 2436.5  | 2461.9  | 3122.9  | 4156.8  | 10203.6 | 36962.5 | 47831.3 | 49873.7 | 27864.8 |
| 67.5° | 2084.8  | 2122.9  | 2220.4  | 2478.9  | 2932.3  | 4474.6  | 21280.0 | 37051.4 | 44589.7 | 24246.1 |
| 70°   | 1644.1  | 1694.9  | 1817.8  | 2038.2  | 2262.7  | 2800.9  | 7864.5  | 24652.9 | 34064.1 | 18275.7 |
| 72.5° | 1385.6  | 1381.4  | 1444.9  | 1656.8  | 1796.6  | 1970.4  | 3025.5  | 13813.8 | 19796.9 | 8724.7  |
| 75°   | 1072.1  | 1114.4  | 1194.9  | 1385.6  | 1470.4  | 1428.0  | 1639.9  | 5046.7  | 7093.3  | 2644.1  |
| 77.5° | 839.0   | 872.9   | 944.9   | 1131.4  | 1216.1  | 1012.7  | 944.9   | 1805.1  | 2279.7  | 949.2   |
| 80°   | 377.1   | 406.8   | 644.1   | 834.8   | 991.5   | 699.2   | 512.7   | 923.7   | 1012.7  | 432.2   |
| 82.5° | 67.8    | 114.4   | 377.1   | 440.7   | 508.5   | 453.4   | 267.0   | 478.8   | 495.8   | 173.7   |
| 85°   | 4.2     | 8.5     | 131.4   | 161.0   | 203.4   | 148.3   | 80.5    | 190.7   | 165.3   | 59.3    |
| 87.5° | 0.0     | 0.0     | 0.0     | 4.2     | 4.2     | 21.2    | 25.4    | 33.9    | 25.4    | 21.2    |
| 90°   | 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°    |
|---------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 16559.6 | 0°    | 16559.6 | 16559.6 | 16559.6 | 16559.6 | 16559.6 | 16559.6 | 16559.6 | 16559.6 | 16559.6 | 16559.6 |
| 16597.7 | 2.5°  | 16292.6 | 15690.9 | 15106.2 | 14627.4 | 14347.7 | 13873.1 | 13559.5 | 13508.7 | 13377.3 | 13491.7 |
| 16640.1 | 5°    | 15979.1 | 14902.8 | 13813.8 | 12839.2 | 12038.3 | 11004.4 | 10233.2 | 9906.9  | 9623.0  | 9720.5  |
| 16750.3 | 7.5°  | 15830.8 | 14131.6 | 12436.6 | 10771.4 | 9059.5  | 7406.9  | 6178.1  | 5665.3  | 5275.5  | 5330.6  |
| 16873.1 | 10°   | 15631.6 | 13330.7 | 10673.9 | 8131.5  | 5839.1  | 4207.7  | 3360.2  | 3046.7  | 2872.9  | 2877.2  |
| 17055.4 | 12.5° | 15479.1 | 12373.1 | 8627.3  | 5512.8  | 3555.1  | 2686.5  | 2423.8  | 2347.5  | 2296.6  | 2300.9  |
| 17330.8 | 15°   | 15402.8 | 11245.9 | 6606.0  | 3673.8  | 2542.4  | 2275.5  | 2211.9  | 2178.0  | 2144.1  | 2139.9  |
| 17635.9 | 17.5° | 15275.7 | 9991.7  | 4834.8  | 2682.2  | 2224.6  | 2131.4  | 2076.3  | 2038.2  | 1995.8  | 1987.3  |
| 17898.6 | 20°   | 15085.0 | 8567.9  | 3534.0  | 2267.0  | 2084.8  | 2012.7  | 1936.5  | 1885.6  | 1834.8  | 1826.3  |
| 18063.8 | 22.5° | 14733.3 | 7063.7  | 2716.1  | 2097.5  | 1983.1  | 1902.6  | 1809.4  | 1750.0  | 1699.2  | 1690.7  |
| 17983.3 | 25°   | 14080.7 | 5652.6  | 2288.2  | 1991.6  | 1894.1  | 1796.6  | 1694.9  | 1614.4  | 1567.8  | 1559.3  |
| 17809.6 | 27.5° | 13254.4 | 4440.7  | 2076.3  | 1894.1  | 1779.7  | 1690.7  | 1576.3  | 1500.0  | 1457.7  | 1449.2  |
| 17580.8 | 30°   | 12279.9 | 3419.5  | 1953.4  | 1783.9  | 1644.1  | 1567.8  | 1466.1  | 1402.6  | 1377.1  | 1377.1  |
| 17419.8 | 32.5° | 11229.0 | 2733.1  | 1902.6  | 1673.8  | 1525.4  | 1440.7  | 1360.2  | 1334.8  | 1326.3  | 1322.1  |
| 17508.8 | 35°   | 10241.7 | 2372.9  | 1877.1  | 1584.8  | 1419.5  | 1339.0  | 1305.1  | 1309.3  | 1326.3  | 1326.3  |
| 17784.2 | 37.5° | 9364.6  | 2258.5  | 1864.4  | 1521.2  | 1326.3  | 1254.3  | 1275.4  | 1313.6  | 1296.6  | 1296.6  |
| 18267.2 | 40°   | 8572.2  | 2271.2  | 1856.0  | 1474.6  | 1250.0  | 1207.6  | 1250.0  | 1220.4  | 1178.0  | 1173.7  |
| 18856.2 | 42.5° | 7966.2  | 2377.2  | 1839.0  | 1436.5  | 1203.4  | 1173.7  | 1156.8  | 1110.2  | 1105.9  | 1114.4  |
| 19466.4 | 45°   | 7525.5  | 2470.4  | 1834.8  | 1419.5  | 1152.6  | 1097.5  | 1076.3  | 1029.7  | 1114.4  | 1135.6  |
| 19716.4 | 47.5° | 7004.3  | 2470.4  | 1834.8  | 1360.2  | 1067.8  | 1046.6  | 1012.7  | 961.9   | 1046.6  | 1067.8  |
| 19479.1 | 50°   | 6330.6  | 2313.6  | 1762.7  | 1292.4  | 1000.0  | 987.3   | 928.0   | 864.4   | 847.5   | 860.2   |
| 18924.0 | 52.5° | 5478.9  | 2029.7  | 1580.5  | 1199.2  | 932.2   | 906.8   | 834.8   | 788.1   | 775.4   | 775.4   |
| 17928.3 | 55°   | 4508.5  | 1699.2  | 1334.8  | 1063.6  | 860.2   | 813.6   | 762.7   | 741.5   | 728.8   | 720.4   |
| 16534.2 | 57.5° | 3665.3  | 1394.1  | 1072.1  | 944.9   | 792.4   | 733.1   | 716.1   | 690.7   | 669.5   | 656.8   |
| 15368.9 | 60°   | 3008.5  | 1097.5  | 885.6   | 839.0   | 724.6   | 669.5   | 665.3   | 631.4   | 576.3   | 567.8   |
| 14407.0 | 62.5° | 2322.1  | 805.1   | 745.8   | 728.8   | 656.8   | 610.2   | 601.7   | 533.9   | 449.2   | 432.2   |
| 13042.6 | 65°   | 1639.9  | 627.1   | 601.7   | 639.8   | 584.8   | 542.4   | 521.2   | 419.5   | 330.5   | 317.8   |
| 10915.4 | 67.5° | 1152.6  | 525.4   | 474.6   | 559.3   | 508.5   | 453.4   | 440.7   | 355.9   | 275.4   | 267.0   |
| 8254.4  | 70°   | 822.0   | 428.0   | 389.8   | 478.8   | 406.8   | 398.3   | 372.9   | 296.6   | 224.6   | 216.1   |
| 4084.8  | 72.5° | 580.5   | 326.3   | 300.9   | 415.3   | 279.7   | 343.2   | 305.1   | 228.8   | 169.5   | 161.0   |
| 1389.9  | 75°   | 428.0   | 233.1   | 211.9   | 241.5   | 203.4   | 258.5   | 216.1   | 152.5   | 105.9   | 101.7   |
| 627.1   | 77.5° | 313.6   | 148.3   | 127.1   | 118.6   | 118.6   | 161.0   | 118.6   | 63.6    | 46.6    | 42.4    |
| 317.8   | 80°   | 220.3   | 67.8    | 59.3    | 50.8    | 46.6    | 38.1    | 16.9    | 8.5     | 4.2     | 4.2     |
| 110.2   | 82.5° | 131.4   | 29.7    | 29.7    | 21.2    | 12.7    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 42.4    | 85°   | 29.7    | 12.7    | 12.7    | 4.2     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 16.9    | 87.5° | 4.2     | 4.2     | 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     |

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