

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: P957512

Luminaire Tested: **GALN-SB9D-830-U-T4W-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P957512  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SB9D-830-U-T4W-HSS  
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE  
(9) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

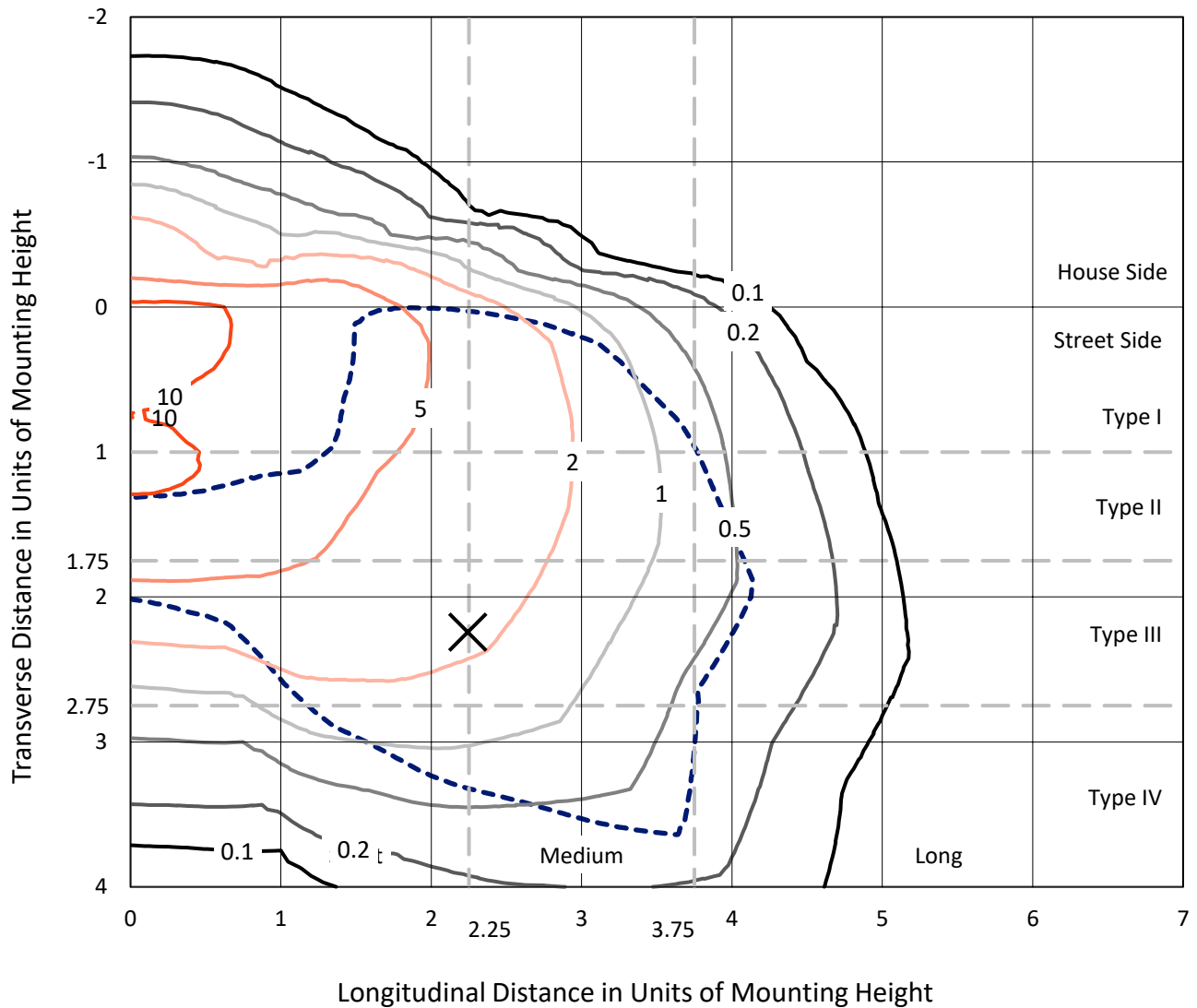
Lumens per Lamp: N/A  
Luminaire Lumens: 64153 lumens  
Efficiency: N/A  
Efficacy: 97.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 658  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

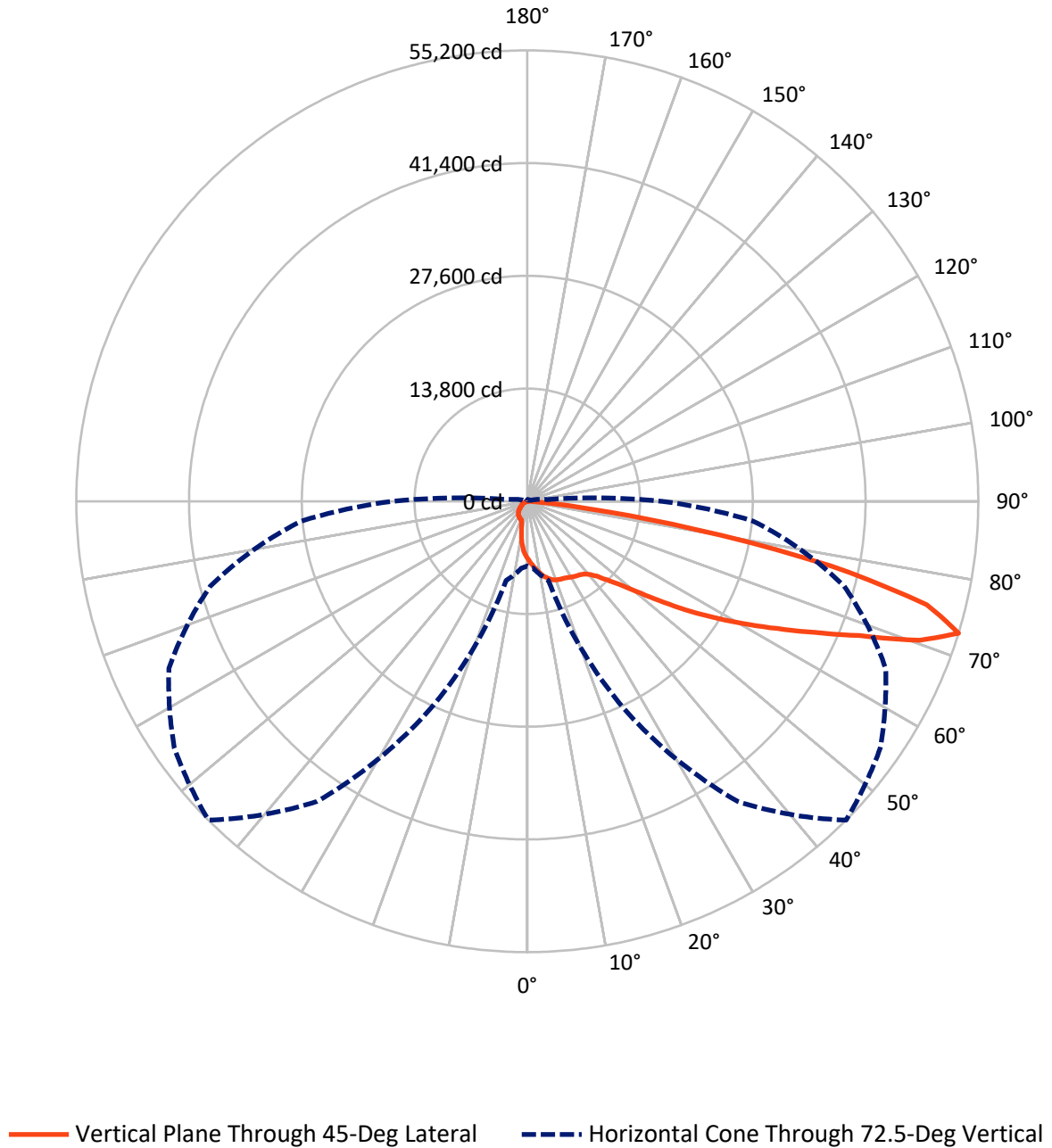
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.4 fc  
 Type IV - 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    | 6740.7   | 0.0    | 6740.7  |
|                    | % Fixture | 10.5     | 0.0    | 10.5    |
| <b>Street Side</b> | Lumens    | 57412.3  | 0.0    | 57412.3 |
|                    | % Fixture | 89.5     | 0.0    | 89.5    |
| <b>Total</b>       | Lumens    | 64153.0  | 0.0    | 64153.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 662.2   | 1.0       |
| 10°-20°   | 1935.3  | 3.0       |
| 20°-30°   | 3178.1  | 5.0       |
| 30°-40°   | 4507.2  | 7.0       |
| 40°-50°   | 7450.0  | 11.6      |
| 50°-60°   | 13383.1 | 20.9      |
| 60°-70°   | 18583.1 | 29.0      |
| 70°-80°   | 13479.6 | 21.0      |
| 80°-90°   | 974.5   | 1.5       |
| 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°    | 64153.0 | 100.0     |
| 0°-180°   | 64153.0 | 100.0     |

**Coefficient of Utilization**



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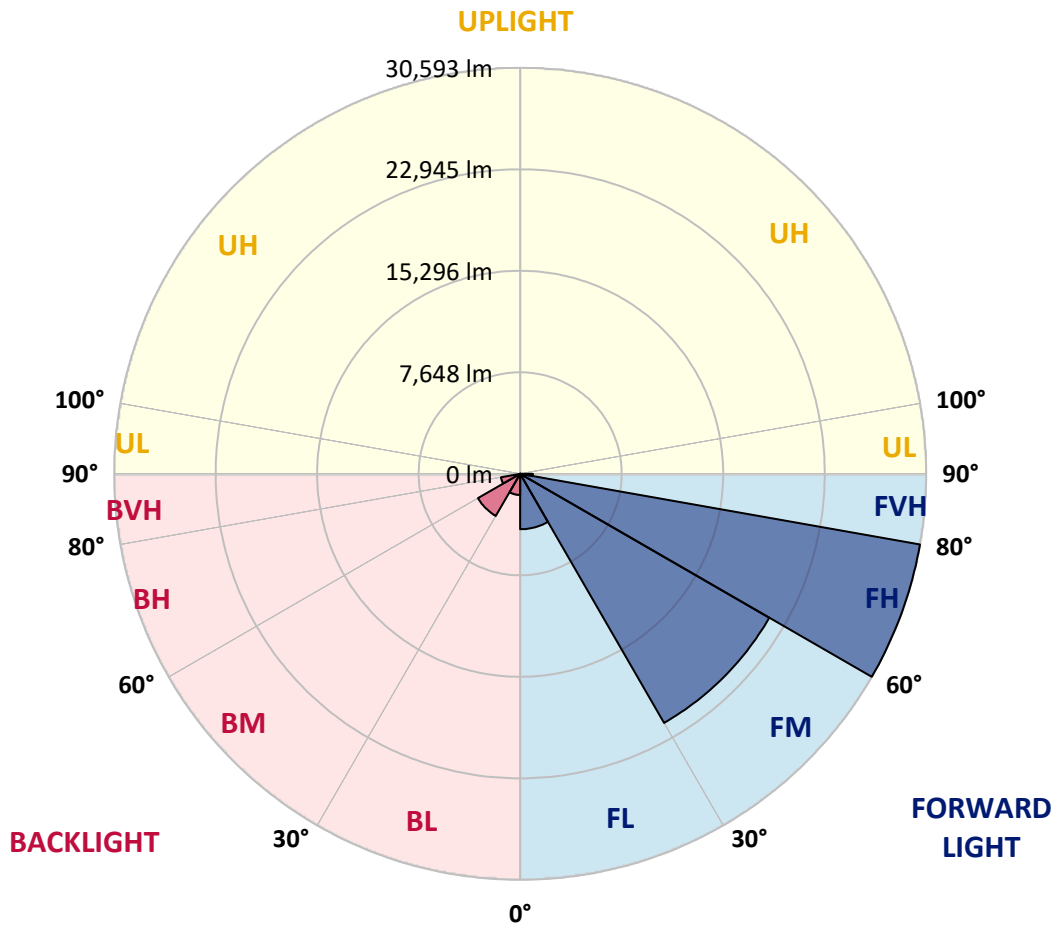
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 4178.9  | 6.5       |                         |      |         |
| FM (30°-60°)   | 21674.3 | 33.8      |                         |      |         |
| FH (60°-80°)   | 30592.7 | 47.7      |                         |      | G5      |
| FVH (80°-90°)  | 966.3   | 1.5       |                         |      | G5      |
| BL (0°-30°)    | 1596.6  | 2.5       | B3/2500                 |      |         |
| BM (30°-60°)   | 3666.0  | 5.7       | B3/5000                 |      |         |
| BH (60°-80°)   | 1469.9  | 2.3       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 8.2     | 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-G5**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 46°     | 55°     | 65°     | 75°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 7028.1  | 7028.1  | 7028.1  | 7028.1  | 7028.1  | 7028.1  | 7028.1  | 7028.1  | 7028.1  | 7028.1  |
| 2.5°  | 7676.2  | 7689.3  | 7680.6  | 7628.0  | 7540.4  | 7492.3  | 7466.0  | 7378.4  | 7321.5  | 7220.8  |
| 5°    | 8381.2  | 8433.7  | 8403.1  | 8298.0  | 8131.6  | 8013.3  | 7978.3  | 7798.8  | 7636.8  | 7448.5  |
| 7.5°  | 9130.0  | 9156.2  | 9099.3  | 8963.6  | 8740.2  | 8538.8  | 8508.2  | 8258.6  | 8000.2  | 7711.2  |
| 10°   | 9778.0  | 9808.7  | 9721.1  | 9524.1  | 9270.1  | 9020.5  | 8976.7  | 8700.8  | 8394.3  | 8039.6  |
| 12.5° | 10321.0 | 10351.7 | 10237.8 | 10001.4 | 9721.1  | 9462.8  | 9419.0  | 9130.0  | 8792.8  | 8398.7  |
| 15°   | 10732.6 | 10789.6 | 10636.3 | 10382.3 | 10080.2 | 9821.8  | 9799.9  | 9515.3  | 9186.9  | 8749.0  |
| 17.5° | 10973.5 | 11030.4 | 10885.9 | 10579.4 | 10321.0 | 10102.1 | 10075.8 | 9839.3  | 9532.8  | 9112.4  |
| 20°   | 11012.9 | 11065.4 | 10912.2 | 10645.1 | 10430.5 | 10255.3 | 10242.2 | 10071.4 | 9848.1  | 9445.2  |
| 22.5° | 10894.6 | 10960.3 | 10820.2 | 10605.6 | 10456.8 | 10364.8 | 10347.3 | 10251.0 | 10124.0 | 9782.4  |
| 25°   | 10772.0 | 10824.6 | 10719.5 | 10531.2 | 10452.4 | 10443.6 | 10456.8 | 10439.2 | 10413.0 | 10124.0 |
| 27.5° | 10763.3 | 10820.2 | 10702.0 | 10522.4 | 10478.7 | 10570.6 | 10583.7 | 10666.9 | 10688.8 | 10434.9 |
| 30°   | 10837.7 | 10877.1 | 10763.3 | 10575.0 | 10553.1 | 10763.3 | 10767.7 | 10916.5 | 10951.6 | 10697.6 |
| 32.5° | 10999.7 | 11043.5 | 10929.7 | 10653.8 | 10623.2 | 10916.5 | 10929.7 | 11126.7 | 11183.7 | 10977.8 |
| 35°   | 11380.7 | 11433.2 | 11301.9 | 10872.8 | 10763.3 | 11061.0 | 11100.5 | 11332.5 | 11446.4 | 11275.6 |
| 37.5° | 12330.9 | 12177.7 | 11998.1 | 11315.0 | 11082.9 | 11288.7 | 11354.4 | 11625.9 | 11827.3 | 11630.3 |
| 40°   | 14691.1 | 14209.5 | 13649.0 | 12068.2 | 11643.4 | 11774.8 | 11827.3 | 12098.8 | 12374.7 | 12182.0 |
| 42.5° | 18233.6 | 17664.4 | 16762.3 | 13802.2 | 12488.6 | 12554.2 | 12593.7 | 12830.1 | 13219.8 | 13066.6 |
| 45°   | 21390.8 | 21185.0 | 20265.4 | 16762.3 | 14069.3 | 13745.3 | 13793.5 | 13916.1 | 14489.7 | 14432.8 |
| 47.5° | 23816.7 | 23698.5 | 22989.1 | 20160.3 | 16740.4 | 15203.5 | 15339.2 | 15396.1 | 16223.7 | 16425.2 |
| 50°   | 25682.1 | 25638.3 | 25003.4 | 23181.8 | 20230.4 | 17353.5 | 17401.7 | 17279.0 | 18518.3 | 19017.5 |
| 52.5° | 27442.4 | 27591.3 | 27122.8 | 25988.6 | 23956.8 | 20169.1 | 20160.3 | 19582.3 | 21255.1 | 22008.2 |
| 55°   | 29032.0 | 29084.5 | 29132.7 | 28852.4 | 27705.2 | 23374.4 | 23291.2 | 22345.4 | 24429.8 | 25209.2 |
| 57.5° | 30525.2 | 30547.0 | 30976.2 | 31549.8 | 31606.7 | 26816.2 | 26663.0 | 25528.9 | 27897.8 | 28453.9 |
| 60°   | 31527.9 | 31628.6 | 32535.1 | 34129.0 | 34825.2 | 30367.5 | 30284.3 | 29128.3 | 31427.2 | 31685.6 |
| 62.5° | 30082.9 | 30695.9 | 32981.7 | 36143.3 | 37864.1 | 34304.1 | 34264.7 | 33178.8 | 35140.5 | 34930.3 |
| 65°   | 24350.9 | 25388.7 | 29408.5 | 37505.1 | 40846.2 | 38700.5 | 38757.4 | 37601.4 | 38954.5 | 38271.4 |
| 67.5° | 17033.8 | 18128.6 | 22884.0 | 37614.6 | 44178.5 | 43863.2 | 44191.6 | 42378.8 | 43005.0 | 41472.3 |
| 70°   | 11779.2 | 12344.1 | 15439.9 | 35258.7 | 46775.2 | 50974.5 | 50965.7 | 48246.5 | 47033.5 | 42930.5 |
| 72.5° | 7921.4  | 8214.8  | 10027.6 | 27972.3 | 44866.0 | 55200.1 | 54946.1 | 52730.4 | 48391.0 | 40149.9 |
| 75°   | 3341.1  | 3555.6  | 4641.6  | 15720.2 | 35495.2 | 50501.6 | 49814.1 | 46600.0 | 42996.2 | 31615.5 |
| 77.5° | 1059.7  | 1151.6  | 1830.4  | 5626.9  | 19551.7 | 37960.5 | 37233.6 | 29102.0 | 28817.4 | 15860.3 |
| 80°   | 503.6   | 586.8   | 1029.0  | 2259.5  | 7693.7  | 20646.4 | 20545.7 | 13202.3 | 12396.6 | 4282.5  |
| 82.5° | 218.9   | 258.4   | 569.3   | 1208.6  | 3441.8  | 7365.3  | 7514.2  | 4492.7  | 3717.7  | 1624.6  |
| 85°   | 70.1    | 92.0    | 262.7   | 556.1   | 1453.8  | 1830.4  | 1808.5  | 1068.4  | 1497.6  | 884.5   |
| 87.5° | 0.0     | 0.0     | 87.6    | 127.0   | 148.9   | 105.1   | 118.2   | 92.0    | 416.0   | 245.2   |
| 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):**

| 85°     |       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   |
|---------|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 7028.1  | 0°    | 7028.1  | 7028.1  | 7028.1 | 7028.1 | 7028.1 | 7028.1 | 7028.1 | 7028.1 | 7028.1 | 7028.1 |
| 7115.7  | 2.5°  | 7063.1  | 6993.1  | 6870.5 | 6756.6 | 6655.9 | 6555.2 | 6493.9 | 6406.3 | 6397.5 | 6397.5 |
| 7229.5  | 5°    | 7111.3  | 6997.4  | 6778.5 | 6546.4 | 6279.3 | 6025.3 | 5771.4 | 5526.1 | 5447.3 | 5390.4 |
| 7413.4  | 7.5°  | 7251.4  | 7071.9  | 6726.0 | 6283.7 | 5775.7 | 5219.6 | 4829.9 | 4409.5 | 4247.5 | 4159.9 |
| 7658.7  | 10°   | 7452.8  | 7207.6  | 6682.2 | 5907.1 | 5083.9 | 4326.3 | 3770.2 | 3314.8 | 3139.7 | 3065.2 |
| 7925.8  | 12.5° | 7676.2  | 7374.0  | 6603.3 | 5438.6 | 4326.3 | 3419.9 | 2876.9 | 2666.7 | 2640.5 | 2640.5 |
| 8245.4  | 15°   | 7943.3  | 7575.5  | 6467.6 | 4886.8 | 3533.8 | 2706.1 | 2513.5 | 2522.2 | 2548.5 | 2566.0 |
| 8556.3  | 17.5° | 8219.2  | 7790.0  | 6253.0 | 4269.4 | 2833.1 | 2434.7 | 2439.0 | 2452.2 | 2474.1 | 2491.6 |
| 8893.5  | 20°   | 8516.9  | 8004.6  | 5968.4 | 3612.6 | 2430.3 | 2355.8 | 2369.0 | 2382.1 | 2399.6 | 2408.4 |
| 9208.8  | 22.5° | 8836.6  | 8206.0  | 5631.2 | 2968.9 | 2294.5 | 2290.2 | 2294.5 | 2307.7 | 2329.6 | 2329.6 |
| 9576.6  | 25°   | 9178.1  | 8429.3  | 5245.9 | 2500.3 | 2224.5 | 2224.5 | 2233.2 | 2242.0 | 2259.5 | 2259.5 |
| 9931.3  | 27.5° | 9528.4  | 8635.1  | 4838.7 | 2255.1 | 2163.2 | 2158.8 | 2158.8 | 2171.9 | 2180.7 | 2185.1 |
| 10281.6 | 30°   | 9913.8  | 8876.0  | 4431.4 | 2202.6 | 2115.0 | 2093.1 | 2080.0 | 2088.7 | 2097.5 | 2101.9 |
| 10649.4 | 32.5° | 10307.9 | 9108.1  | 4068.0 | 2224.5 | 2066.8 | 2027.4 | 1983.6 | 1974.9 | 1974.9 | 1992.4 |
| 11030.4 | 35°   | 10745.8 | 9362.0  | 3787.7 | 2298.9 | 2040.6 | 1931.1 | 1861.0 | 1821.6 | 1826.0 | 1852.3 |
| 11485.8 | 37.5° | 11271.2 | 9668.6  | 3581.9 | 2364.6 | 2023.0 | 1821.6 | 1707.8 | 1659.6 | 1628.9 | 1659.6 |
| 12112.0 | 40°   | 11958.7 | 10119.6 | 3433.0 | 2417.1 | 2001.1 | 1694.6 | 1541.4 | 1462.5 | 1405.6 | 1423.1 |
| 13084.1 | 42.5° | 12970.2 | 10829.0 | 3376.1 | 2421.5 | 1953.0 | 1545.7 | 1370.6 | 1265.5 | 1182.3 | 1186.7 |
| 14546.6 | 45°   | 14389.0 | 11950.0 | 3669.5 | 2364.6 | 1847.9 | 1383.7 | 1191.1 | 1050.9 | 998.4  | 985.2  |
| 16731.7 | 47.5° | 16333.2 | 13583.3 | 4348.2 | 2246.4 | 1694.6 | 1226.1 | 1015.9 | 897.7  | 858.3  | 836.4  |
| 19599.9 | 50°   | 18938.6 | 15680.8 | 5101.4 | 2115.0 | 1541.4 | 1077.2 | 871.4  | 797.0  | 770.7  | 748.8  |
| 23002.2 | 52.5° | 21960.1 | 17808.9 | 5718.8 | 1983.6 | 1388.1 | 945.8  | 779.4  | 735.7  | 713.8  | 696.2  |
| 26286.4 | 55°   | 24731.9 | 19275.8 | 5683.8 | 1843.5 | 1239.2 | 840.7  | 713.8  | 687.5  | 661.2  | 643.7  |
| 29115.2 | 57.5° | 26457.2 | 19481.6 | 4685.4 | 1690.2 | 1068.4 | 757.5  | 652.5  | 634.9  | 604.3  | 582.4  |
| 31562.9 | 60°   | 27249.8 | 18308.1 | 3284.2 | 1488.8 | 897.7  | 678.7  | 586.8  | 578.0  | 538.6  | 507.9  |
| 33879.4 | 62.5° | 27394.3 | 16127.4 | 2189.4 | 1239.2 | 748.8  | 604.3  | 521.1  | 507.9  | 455.4  | 402.9  |
| 35762.3 | 65°   | 26807.5 | 13009.6 | 1515.1 | 967.7  | 639.3  | 525.5  | 446.6  | 420.4  | 363.4  | 310.9  |
| 36208.9 | 67.5° | 24950.8 | 9134.3  | 1055.3 | 696.2  | 543.0  | 416.0  | 354.7  | 345.9  | 302.1  | 258.4  |
| 33931.9 | 70°   | 21548.5 | 5206.5  | 705.0  | 521.1  | 429.1  | 284.6  | 280.2  | 289.0  | 245.2  | 210.2  |
| 27722.7 | 72.5° | 16521.5 | 2382.1  | 437.9  | 381.0  | 293.4  | 192.7  | 223.3  | 227.7  | 188.3  | 157.6  |
| 17296.6 | 75°   | 9725.5  | 1020.3  | 275.9  | 245.2  | 148.9  | 127.0  | 162.0  | 166.4  | 127.0  | 100.7  |
| 6323.1  | 77.5° | 3310.4  | 385.3   | 175.2  | 144.5  | 74.4   | 70.1   | 105.1  | 105.1  | 70.1   | 39.4   |
| 1269.9  | 80°   | 753.2   | 144.5   | 87.6   | 56.9   | 35.0   | 30.7   | 35.0   | 30.7   | 17.5   | 4.4    |
| 389.7   | 82.5° | 214.6   | 56.9    | 35.0   | 21.9   | 13.1   | 13.1   | 4.4    | 0.0    | 0.0    | 0.0    |
| 135.7   | 85°   | 61.3    | 26.3    | 8.8    | 8.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 48.2    | 87.5° | 26.3    | 4.4     | 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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|             |
|-------------|
| <u>180°</u> |
| 7028.1      |
| 6419.4      |
| 5416.7      |
| 4173.1      |
| 3065.2      |
| 2640.5      |
| 2566.0      |
| 2491.6      |
| 2412.8      |
| 2338.3      |
| 2263.9      |
| 2189.4      |
| 2110.6      |
| 2005.5      |
| 1865.4      |
| 1650.8      |
| 1414.4      |
| 1169.2      |
| 967.7       |
| 823.2       |
| 744.4       |
| 691.9       |
| 634.9       |
| 578.0       |
| 499.2       |
| 376.6       |
| 293.4       |
| 245.2       |
| 192.7       |
| 140.1       |
| 87.6        |
| 30.7        |
| 0.0         |
| 0.0         |
| 0.0         |
| 0.0         |
| 0.0         |

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