

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: P946859

Luminaire Tested: **GALN-SB2B-850-U-T2R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P946859  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SB2B-850-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 5000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

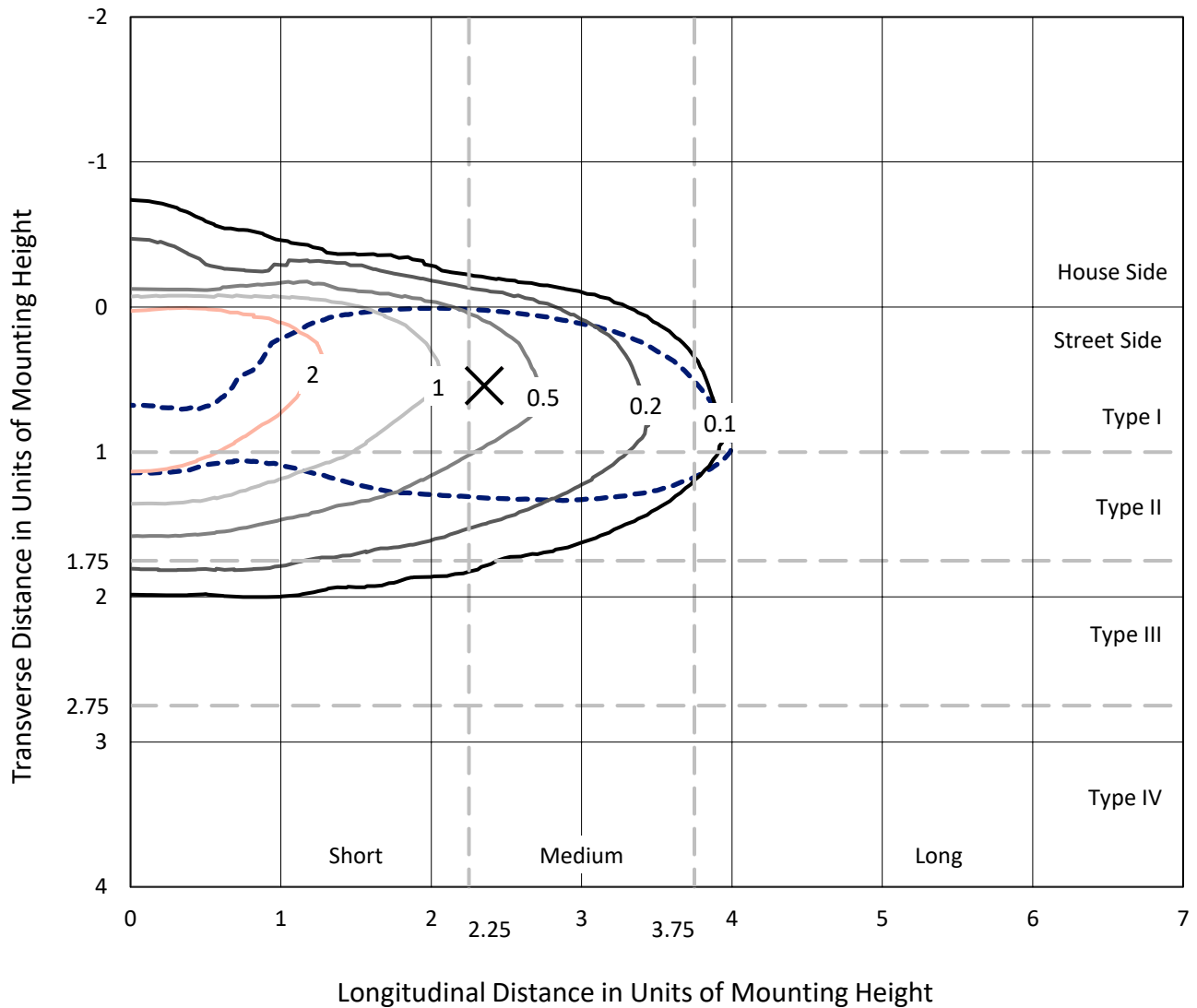
Lumens per Lamp: N/A  
Luminaire Lumens: 9120 lumens  
Efficiency: N/A  
Efficacy: 123.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 73.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

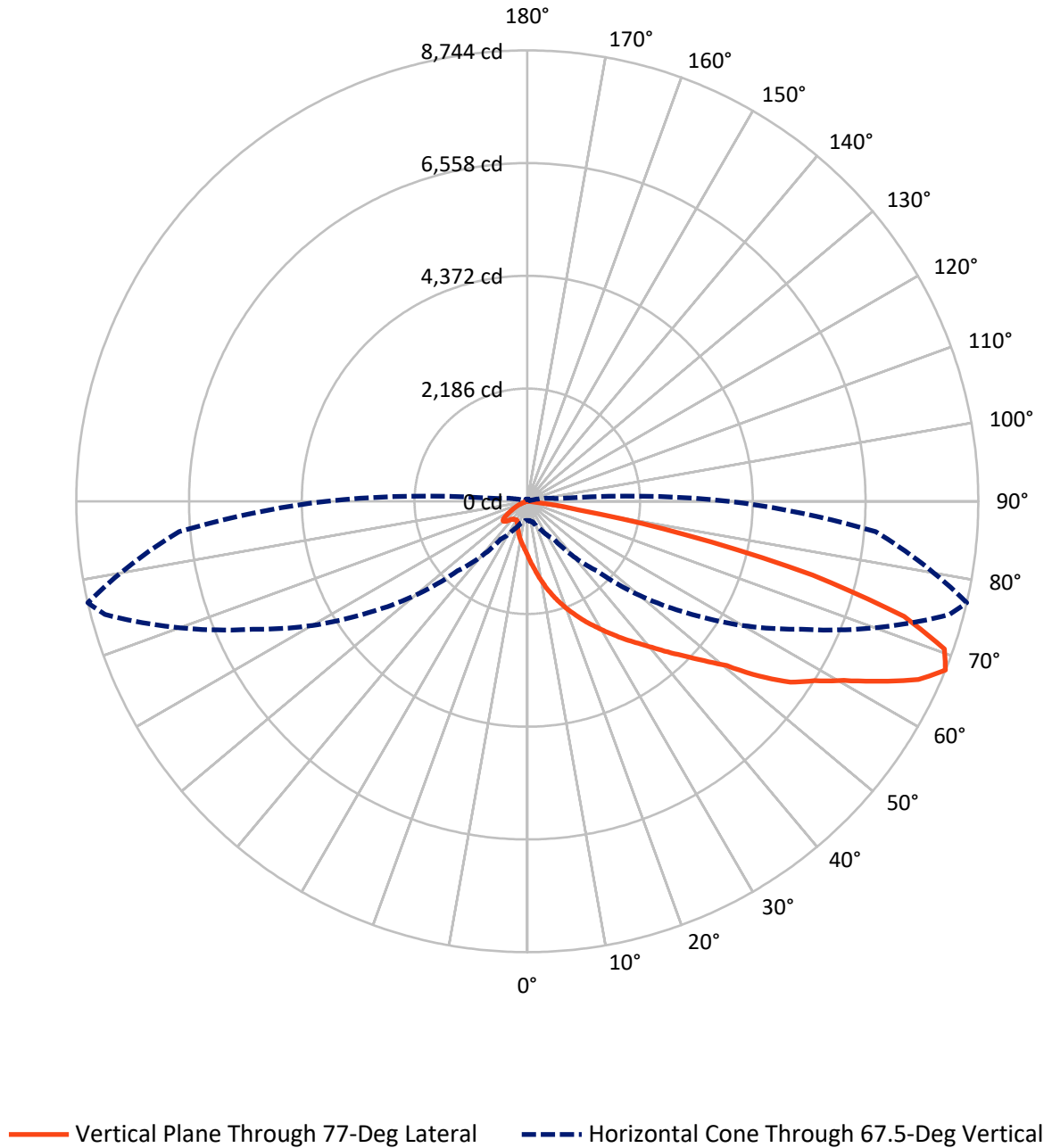
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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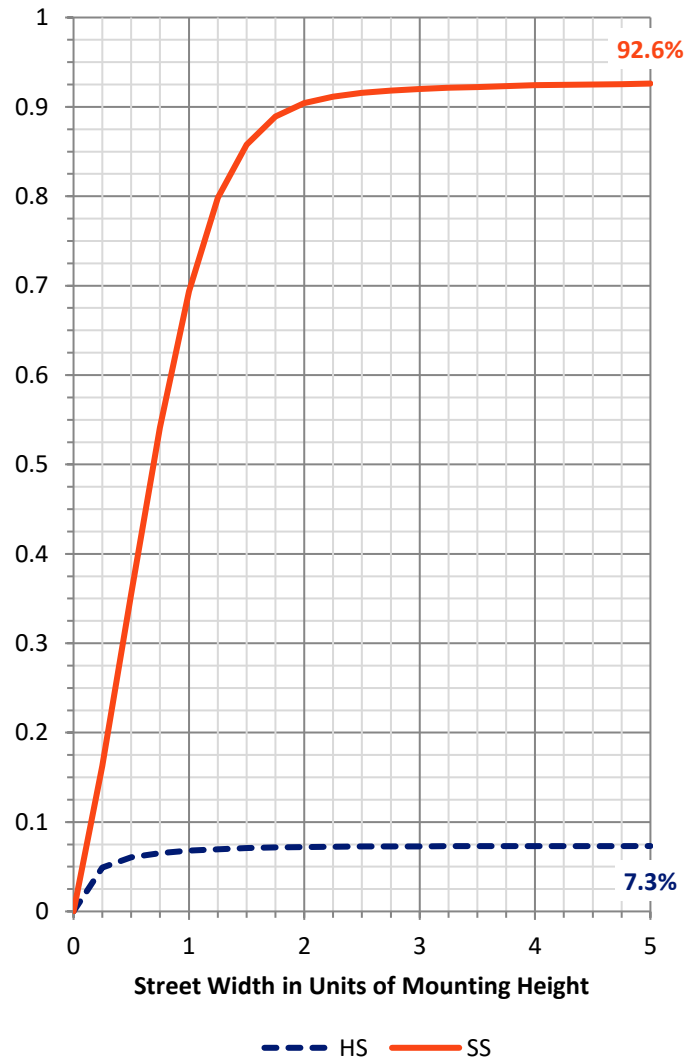
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 671.0    | 0.0    | 671.0  |
|                    | % Fixture | 7.4      | 0.0    | 7.4    |
| <b>Street Side</b> | Lumens    | 8449.0   | 0.0    | 8449.0 |
|                    | % Fixture | 92.6     | 0.0    | 92.6   |
| <b>Total</b>       | Lumens    | 9120.0   | 0.0    | 9120.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 107.3  | 1.2       |
| 10°-20°   | 375.9  | 4.1       |
| 20°-30°   | 725.4  | 8.0       |
| 30°-40°   | 1259.3 | 13.8      |
| 40°-50°   | 1828.4 | 20.0      |
| 50°-60°   | 2099.7 | 23.0      |
| 60°-70°   | 1822.9 | 20.0      |
| 70°-80°   | 858.6  | 9.4       |
| 80°-90°   | 42.5   | 0.5       |
| 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°    | 9120.0 | 100.0     |
| 0°-180°   | 9120.0 | 100.0     |

**Coefficient of Utilization**



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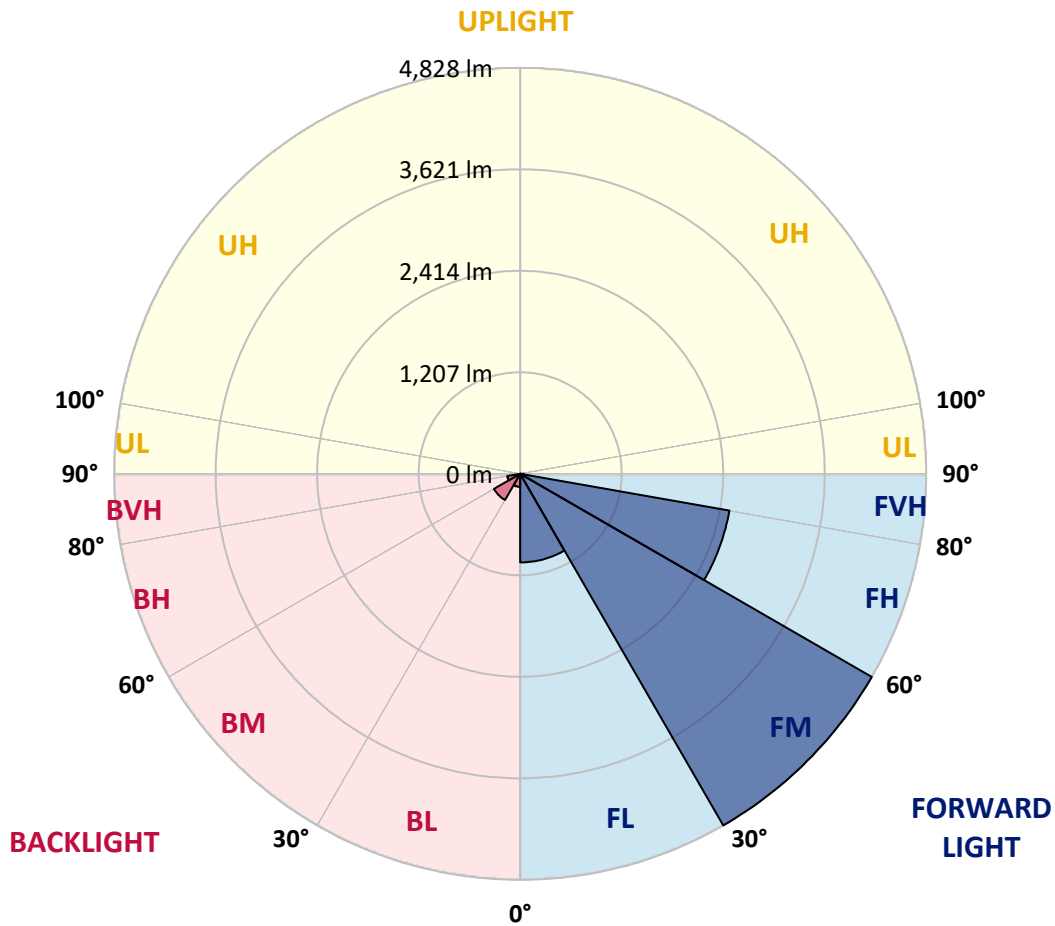
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1053.3 | 11.5      |                         |      |         |
| FM (30°-60°)   | 4827.9 | 52.9      |                         |      |         |
| FH (60°-80°)   | 2526.2 | 27.7      |                         |      | G2/5000 |
| FVH (80°-90°)  | 41.7   | 0.5       |                         |      | G1/100  |
| BL (0°-30°)    | 155.3  | 1.7       | B1/500                  |      |         |
| BM (30°-60°)   | 359.5  | 3.9       | B1/1000                 |      |         |
| BH (60°-80°)   | 155.3  | 1.7       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 0.8    | 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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 77°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1051.7 | 1051.7 | 1051.7 | 1051.7 | 1051.7 | 1051.7 | 1051.7 | 1051.7 | 1051.7 | 1051.7 |
| 2.5°  | 1456.0 | 1465.1 | 1452.1 | 1427.1 | 1389.8 | 1365.4 | 1306.0 | 1249.9 | 1187.6 | 1167.8 |
| 5°    | 1774.9 | 1782.8 | 1768.1 | 1740.9 | 1691.1 | 1643.5 | 1565.3 | 1448.1 | 1326.3 | 1287.3 |
| 7.5°  | 2011.0 | 2015.6 | 2009.9 | 1985.0 | 1937.4 | 1883.6 | 1796.4 | 1657.6 | 1477.0 | 1433.9 |
| 10°   | 2180.9 | 2195.7 | 2194.0 | 2184.3 | 2152.6 | 2109.0 | 2016.1 | 1858.1 | 1645.7 | 1590.2 |
| 12.5° | 2293.6 | 2310.0 | 2319.7 | 2341.2 | 2339.5 | 2311.7 | 2230.2 | 2063.1 | 1813.9 | 1748.8 |
| 15°   | 2326.5 | 2344.0 | 2380.8 | 2430.7 | 2474.9 | 2489.0 | 2431.8 | 2264.2 | 1999.1 | 1915.9 |
| 17.5° | 2307.8 | 2335.0 | 2379.1 | 2457.9 | 2554.7 | 2618.7 | 2612.5 | 2458.4 | 2167.3 | 2072.2 |
| 20°   | 2349.1 | 2375.2 | 2409.7 | 2476.0 | 2588.7 | 2704.8 | 2751.2 | 2644.2 | 2334.4 | 2234.7 |
| 22.5° | 2577.9 | 2573.4 | 2576.8 | 2587.6 | 2654.9 | 2769.9 | 2865.6 | 2812.9 | 2499.8 | 2397.8 |
| 25°   | 2940.4 | 2920.0 | 2885.4 | 2827.1 | 2810.1 | 2865.6 | 2965.3 | 2962.5 | 2674.2 | 2564.9 |
| 27.5° | 3356.1 | 3352.7 | 3271.7 | 3131.2 | 3051.9 | 3030.4 | 3078.0 | 3108.0 | 2846.9 | 2730.3 |
| 30°   | 3754.2 | 3763.2 | 3653.9 | 3497.6 | 3352.1 | 3267.7 | 3224.7 | 3246.2 | 3022.5 | 2908.7 |
| 32.5° | 4100.8 | 4110.4 | 3991.5 | 3808.6 | 3628.5 | 3526.5 | 3435.9 | 3382.7 | 3213.9 | 3089.9 |
| 35°   | 4393.6 | 4403.2 | 4266.7 | 4064.5 | 3872.5 | 3780.2 | 3677.7 | 3532.2 | 3406.5 | 3290.9 |
| 37.5° | 4655.2 | 4652.4 | 4469.5 | 4265.6 | 4077.0 | 4003.9 | 3950.1 | 3716.2 | 3604.7 | 3493.1 |
| 40°   | 4809.8 | 4821.7 | 4665.4 | 4440.6 | 4257.6 | 4204.4 | 4201.0 | 3944.5 | 3833.5 | 3725.3 |
| 42.5° | 4855.1 | 4876.1 | 4762.8 | 4578.2 | 4412.3 | 4354.5 | 4443.4 | 4191.4 | 4099.6 | 3994.3 |
| 45°   | 4773.6 | 4794.0 | 4742.4 | 4614.4 | 4517.6 | 4480.2 | 4651.8 | 4447.4 | 4383.9 | 4279.7 |
| 47.5° | 4535.7 | 4561.2 | 4573.7 | 4546.5 | 4545.3 | 4583.3 | 4838.7 | 4716.9 | 4721.5 | 4615.0 |
| 50°   | 4075.3 | 4118.3 | 4232.7 | 4329.0 | 4478.0 | 4664.8 | 5020.5 | 5009.2 | 5102.0 | 5010.3 |
| 52.5° | 3238.3 | 3299.4 | 3693.6 | 3956.9 | 4291.6 | 4649.5 | 5220.4 | 5478.1 | 5769.7 | 5635.5 |
| 55°   | 2602.3 | 2602.3 | 2922.8 | 3415.5 | 3928.0 | 4548.7 | 5307.6 | 5782.8 | 6224.5 | 6192.8 |
| 57.5° | 2121.5 | 2146.9 | 2351.4 | 2786.9 | 3401.9 | 4308.6 | 5361.4 | 5974.2 | 6590.9 | 6567.7 |
| 60°   | 1309.3 | 1364.3 | 1750.5 | 2180.4 | 2803.3 | 3881.0 | 5327.4 | 6167.9 | 7035.5 | 7054.2 |
| 62.5° | 737.4  | 757.7  | 929.9  | 1568.7 | 2179.8 | 3306.2 | 5067.5 | 6276.0 | 7604.1 | 7683.4 |
| 65°   | 509.1  | 519.3  | 585.6  | 976.3  | 1511.0 | 2632.3 | 4559.5 | 6208.6 | 8173.8 | 8334.1 |
| 67.5° | 369.8  | 374.9  | 416.3  | 596.3  | 896.5  | 1908.5 | 3763.2 | 5868.9 | 8475.7 | 8743.5 |
| 70°   | 284.3  | 287.7  | 317.7  | 391.9  | 529.5  | 1178.0 | 2733.1 | 5193.2 | 8257.1 | 8577.0 |
| 72.5° | 231.1  | 234.5  | 257.7  | 290.0  | 351.1  | 696.6  | 1656.5 | 4217.4 | 7292.0 | 7637.5 |
| 75°   | 194.8  | 199.3  | 220.3  | 241.3  | 275.2  | 447.4  | 777.0  | 2937.0 | 5483.7 | 5710.3 |
| 77.5° | 108.2  | 99.7   | 179.0  | 199.9  | 232.2  | 283.2  | 363.6  | 1728.4 | 3071.2 | 3134.1 |
| 80°   | 67.4   | 69.7   | 142.1  | 160.8  | 178.4  | 142.7  | 166.5  | 665.4  | 1064.7 | 1011.5 |
| 82.5° | 4.0    | 9.1    | 109.3  | 116.1  | 122.3  | 61.2   | 62.9   | 226.0  | 256.5  | 235.6  |
| 85°   | 0.0    | 0.0    | 49.8   | 40.2   | 42.5   | 17.6   | 18.1   | 52.7   | 34.5   | 37.4   |
| 87.5° | 0.0    | 0.0    | 0.0    | 1.1    | 0.0    | 1.7    | 3.4    | 4.5    | 1.7    | 2.3    |
| 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°        |
|---------------|--------------|---------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 1051.7        | 0°           | 1051.7        | 1051.7       | 1051.7      | 1051.7      | 1051.7      | 1051.7      | 1051.7      | 1051.7      | 1051.7      | 1051.7      |
| 1105.5        | 2.5°         | 1065.8        | 1026.2       | 945.8       | 867.0       | 803.1       | 743.6       | 701.1       | 660.9       | 640.5       | 639.4       |
| 1176.8        | 5°           | 1098.1        | 1014.9       | 854.0       | 711.9       | 597.5       | 505.7       | 446.3       | 403.8       | 382.3       | 374.9       |
| 1264.6        | 7.5°         | 1143.4        | 1018.3       | 773.6       | 576.0       | 441.2       | 362.4       | 328.5       | 314.9       | 310.3       | 305.3       |
| 1363.7        | 10°          | 1200.6        | 1026.2       | 701.7       | 463.8       | 347.7       | 308.1       | 294.5       | 288.8       | 285.4       | 282.0       |
| 1475.3        | 12.5°        | 1264.6        | 1033.5       | 630.3       | 385.1       | 305.8       | 285.4       | 275.8       | 269.0       | 264.5       | 260.5       |
| 1589.7        | 15°          | 1326.9        | 1038.1       | 556.1       | 330.2       | 284.3       | 267.9       | 257.7       | 250.3       | 244.1       | 239.6       |
| 1701.8        | 17.5°        | 1388.6        | 1044.3       | 486.5       | 297.3       | 266.7       | 250.3       | 240.1       | 231.1       | 226.0       | 220.9       |
| 1819.6        | 20°          | 1457.2        | 1043.2       | 420.8       | 274.1       | 249.2       | 232.8       | 222.0       | 213.5       | 208.4       | 202.7       |
| 1944.2        | 22.5°        | 1520.6        | 1037.5       | 363.0       | 254.3       | 231.1       | 215.2       | 203.3       | 194.8       | 189.7       | 185.2       |
| 2071.6        | 25°          | 1593.6        | 1033.0       | 314.9       | 236.2       | 214.1       | 198.2       | 185.2       | 177.3       | 171.6       | 167.6       |
| 2199.6        | 27.5°        | 1663.9        | 1026.2       | 279.8       | 219.7       | 197.6       | 182.4       | 169.9       | 160.8       | 155.7       | 152.9       |
| 2331.6        | 30°          | 1733.0        | 1024.5       | 266.7       | 203.9       | 182.9       | 167.6       | 155.2       | 146.7       | 142.7       | 141.6       |
| 2476.5        | 32.5°        | 1816.2        | 1029.0       | 272.4       | 198.2       | 169.3       | 154.0       | 142.1       | 135.9       | 132.0       | 132.0       |
| 2638.0        | 35°          | 1905.1        | 1027.9       | 280.9       | 203.3       | 160.3       | 140.4       | 131.4       | 127.4       | 123.5       | 123.5       |
| 2816.9        | 37.5°        | 2016.7        | 1029.6       | 287.7       | 211.8       | 156.9       | 129.1       | 124.0       | 118.9       | 116.7       | 116.7       |
| 3012.9        | 40°          | 2183.2        | 1085.6       | 284.3       | 219.2       | 155.7       | 121.2       | 111.0       | 109.3       | 107.6       | 107.6       |
| 3234.3        | 42.5°        | 2387.1        | 1207.4       | 288.8       | 219.7       | 155.2       | 115.5       | 101.9       | 105.3       | 101.4       | 100.8       |
| 3484.0        | 45°          | 2610.2        | 1340.5       | 317.7       | 207.8       | 154.6       | 112.7       | 97.4        | 101.4       | 95.1        | 95.1        |
| 3773.4        | 47.5°        | 2831.6        | 1472.5       | 347.2       | 190.9       | 152.9       | 112.1       | 93.4        | 91.2        | 89.5        | 90.0        |
| 4150.6        | 50°          | 3136.9        | 1580.1       | 358.5       | 167.6       | 148.9       | 111.0       | 86.1        | 86.6        | 85.5        | 86.6        |
| 4682.4        | 52.5°        | 3469.3        | 1602.7       | 344.9       | 141.6       | 137.6       | 107.6       | 81.0        | 83.3        | 82.7        | 83.8        |
| 5056.7        | 55°          | 3676.6        | 1578.4       | 284.9       | 117.8       | 120.1       | 94.0        | 75.9        | 80.4        | 80.4        | 80.4        |
| 5422.6        | 57.5°        | 3890.7        | 1474.7       | 202.2       | 95.7        | 99.7        | 77.0        | 71.4        | 77.6        | 77.0        | 76.5        |
| 5863.2        | 60°          | 4044.7        | 1307.1       | 133.1       | 78.7        | 79.3        | 63.4        | 66.3        | 73.1        | 72.5        | 69.7        |
| 6317.4        | 62.5°        | 4159.7        | 1121.9       | 85.5        | 66.8        | 60.6        | 57.2        | 60.6        | 66.3        | 64.0        | 57.8        |
| 6702.5        | 65°          | 4146.6        | 865.3        | 65.7        | 57.2        | 49.8        | 49.8        | 52.7        | 57.8        | 51.0        | 40.8        |
| <b>6776.1</b> | <b>67.5°</b> | <b>3904.8</b> | <b>585.6</b> | <b>54.4</b> | <b>48.1</b> | <b>41.9</b> | <b>41.3</b> | <b>43.6</b> | <b>48.1</b> | <b>43.6</b> | <b>34.5</b> |
| 6398.9        | 70°          | 3472.7        | 382.8        | 43.6        | 37.4        | 33.4        | 30.6        | 35.1        | 41.3        | 36.8        | 27.8        |
| 5447.5        | 72.5°        | 2818.6        | 233.3        | 32.8        | 27.2        | 24.4        | 19.8        | 27.8        | 34.0        | 29.4        | 20.4        |
| 3788.2        | 75°          | 1823.6        | 118.9        | 22.7        | 17.6        | 13.0        | 11.9        | 20.4        | 25.5        | 20.4        | 12.5        |
| 1680.9        | 77.5°        | 697.7         | 49.8         | 12.5        | 7.9         | 6.8         | 5.7         | 11.3        | 15.3        | 8.5         | 2.8         |
| 325.6         | 80°          | 134.2         | 21.0         | 6.2         | 4.0         | 3.4         | 2.3         | 1.7         | 1.1         | 0.0         | 0.0         |
| 57.8          | 82.5°        | 23.2          | 6.8          | 2.3         | 1.1         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 11.3          | 85°          | 7.9           | 1.1          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 4.0           | 87.5°        | 2.8           | 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         |

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|             |
|-------------|
| <u>180°</u> |
| 1051.7      |
| 638.3       |
| 373.8       |
| 304.1       |
| 280.9       |
| 259.4       |
| 239.0       |
| 220.3       |
| 202.2       |
| 184.6       |
| 167.1       |
| 152.9       |
| 141.0       |
| 132.0       |
| 123.5       |
| 116.7       |
| 107.6       |
| 100.2       |
| 95.1        |
| 90.0        |
| 86.6        |
| 83.8        |
| 80.4        |
| 76.5        |
| 69.7        |
| 56.6        |
| 39.6        |
| 33.4        |
| 26.6        |
| 19.3        |
| 10.8        |
| 2.3         |
| 0.0         |
| 0.0         |
| 0.0         |
| 0.0         |
| 0.0         |

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