

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: P451419

Luminaire Tested: **GALN-SA2B-740-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P451419  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA2B-740-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES 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: 11201 lumens  
Efficiency: N/A  
Efficacy: 136.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

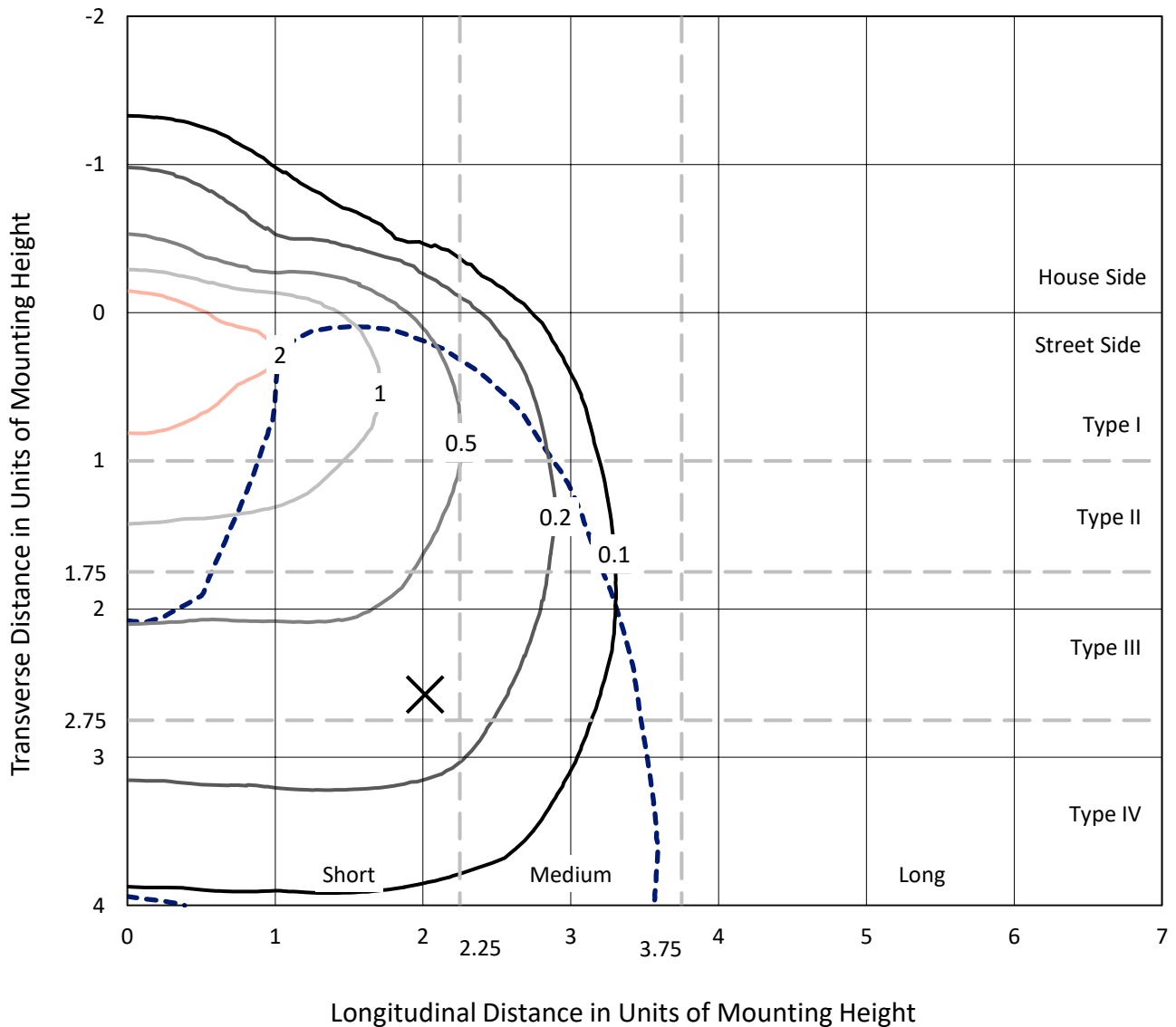
Input Watts (W): 82  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

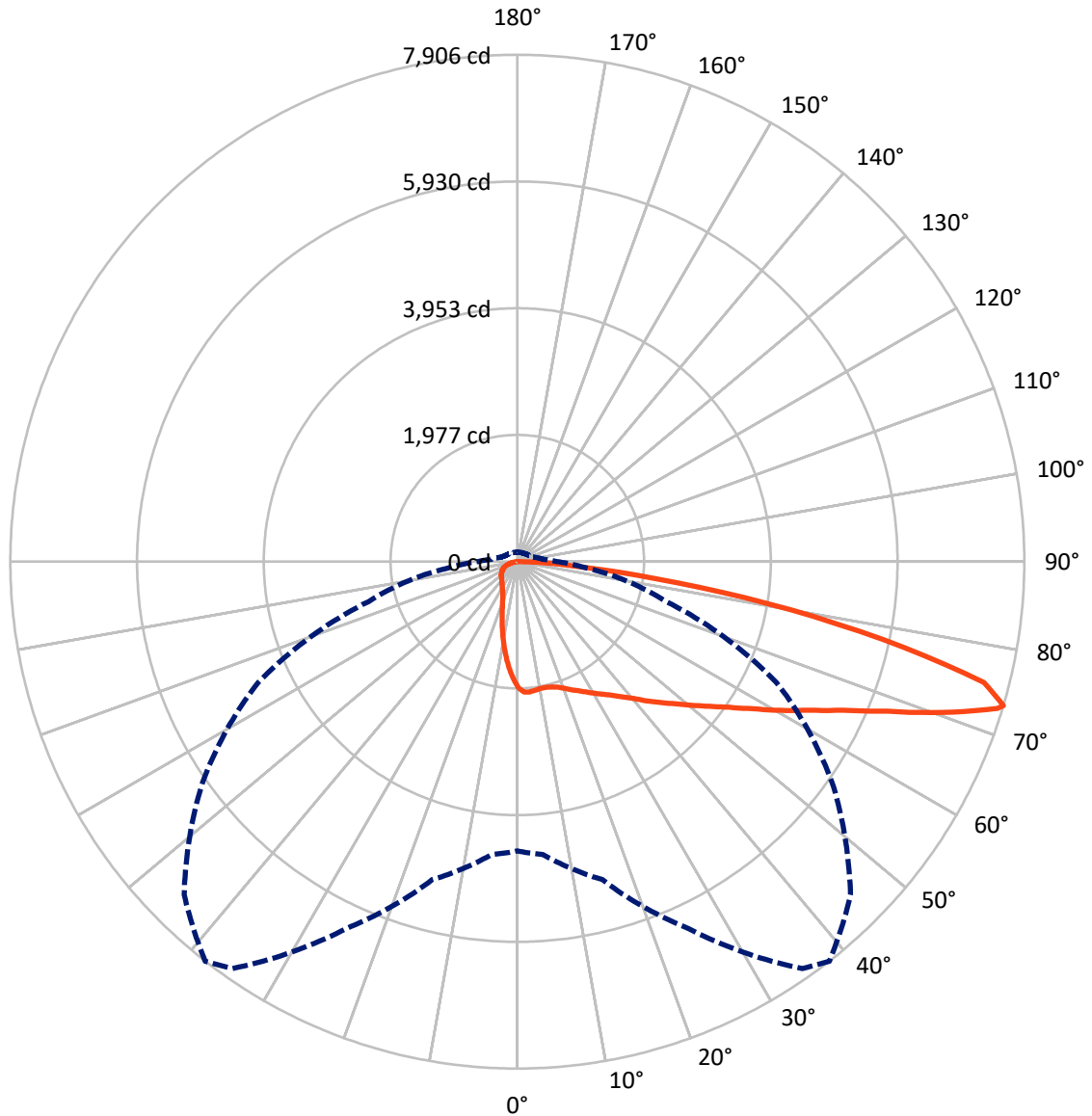
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical



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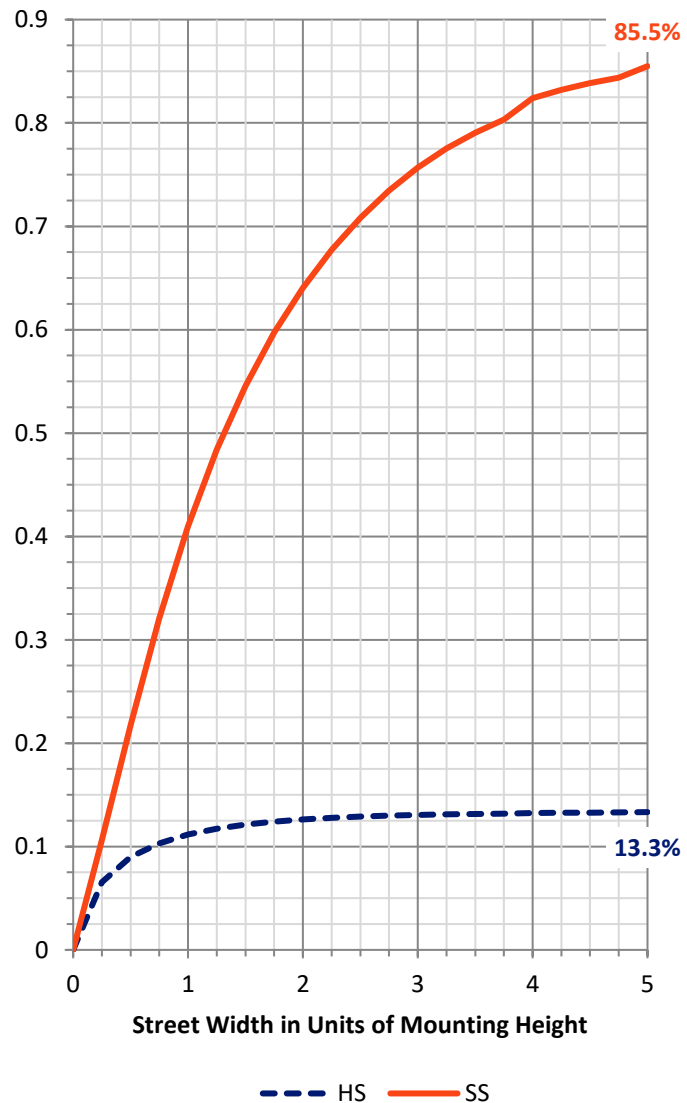
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1505.7   | 0.0    | 1505.7  |
|                    | % Fixture | 13.4     | 0.0    | 13.4    |
| <b>Street Side</b> | Lumens    | 9695.3   | 0.0    | 9695.3  |
|                    | % Fixture | 86.6     | 0.0    | 86.6    |
| <b>Total</b>       | Lumens    | 11201.0  | 0.0    | 11201.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 171.8   | 1.5       |
| 10°-20°   | 440.5   | 3.9       |
| 20°-30°   | 685.9   | 6.1       |
| 30°-40°   | 1006.1  | 9.0       |
| 40°-50°   | 1492.4  | 13.3      |
| 50°-60°   | 2114.4  | 18.9      |
| 60°-70°   | 2682.2  | 23.9      |
| 70°-80°   | 2232.7  | 19.9      |
| 80°-90°   | 375.1   | 3.3       |
| 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°    | 11201.0 | 100.0     |
| 0°-180°   | 11201.0 | 100.0     |



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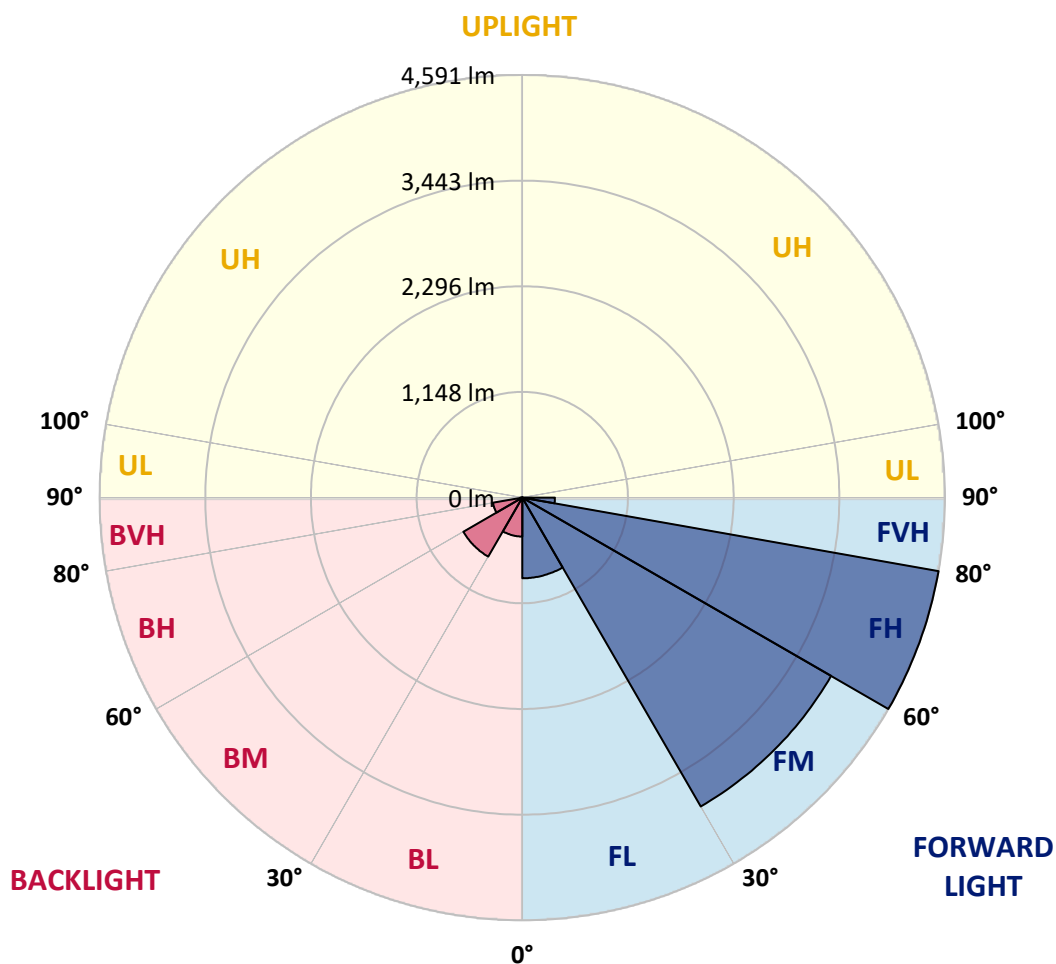
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 875.6  | 7.8       |                         |      |         |
| FM   | (30°-60°)   | 3873.6 | 34.6      |                         |      |         |
| FH   | (60°-80°)   | 4591.2 | 41.0      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 354.8  | 3.2       |                         |      | G3/500  |
| BL   | (0°-30°)    | 422.5  | 3.8       | B1/500                  |      |         |
| BM   | (30°-60°)   | 739.2  | 6.6       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 323.6  | 2.9       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 20.3   | 0.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 38°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 |
| 2.5°  | 2046.9 | 2057.0 | 2052.0 | 2045.0 | 2040.6 | 2036.1 | 2029.8 | 2011.5 | 1996.9 | 1981.1 | 1956.4 |
| 5°    | 2062.1 | 2068.4 | 2064.0 | 2055.1 | 2045.0 | 2040.6 | 2028.5 | 2004.5 | 1981.1 | 1954.5 | 1917.9 |
| 7.5°  | 2053.2 | 2055.7 | 2050.7 | 2039.9 | 2031.1 | 2022.9 | 2008.9 | 1982.4 | 1953.9 | 1921.7 | 1873.6 |
| 10°   | 2021.6 | 2031.1 | 2031.1 | 2022.2 | 2013.4 | 2008.9 | 1995.0 | 1969.7 | 1943.8 | 1907.1 | 1850.2 |
| 12.5° | 1995.7 | 2005.8 | 2014.0 | 2011.5 | 2010.8 | 2010.8 | 2000.1 | 1981.1 | 1950.7 | 1916.0 | 1848.3 |
| 15°   | 1977.9 | 1990.0 | 2007.7 | 2017.8 | 2024.1 | 2026.0 | 2021.6 | 2005.1 | 1974.2 | 1933.7 | 1855.9 |
| 17.5° | 1974.2 | 1988.7 | 2021.0 | 2043.1 | 2059.5 | 2058.9 | 2057.6 | 2034.9 | 2000.7 | 1959.0 | 1865.4 |
| 20°   | 1991.2 | 2010.2 | 2055.1 | 2089.9 | 2113.9 | 2109.5 | 2102.6 | 2072.8 | 2033.0 | 1986.2 | 1874.2 |
| 22.5° | 2042.5 | 2062.1 | 2111.4 | 2149.4 | 2172.8 | 2172.8 | 2151.9 | 2112.7 | 2070.3 | 2017.8 | 1886.2 |
| 25°   | 2115.8 | 2137.3 | 2189.8 | 2228.4 | 2239.2 | 2231.0 | 2210.1 | 2162.6 | 2113.9 | 2063.3 | 1911.5 |
| 27.5° | 2205.7 | 2231.6 | 2280.3 | 2312.6 | 2309.4 | 2303.1 | 2281.6 | 2220.8 | 2172.1 | 2126.0 | 1954.5 |
| 30°   | 2317.6 | 2336.6 | 2387.2 | 2394.8 | 2383.4 | 2382.1 | 2351.8 | 2291.1 | 2245.5 | 2210.1 | 2015.9 |
| 32.5° | 2423.3 | 2440.3 | 2480.8 | 2484.0 | 2463.7 | 2466.3 | 2437.8 | 2382.1 | 2356.2 | 2343.6 | 2119.0 |
| 35°   | 2535.2 | 2544.1 | 2578.9 | 2575.1 | 2561.8 | 2559.9 | 2548.5 | 2495.4 | 2503.6 | 2526.4 | 2265.1 |
| 37.5° | 2628.8 | 2646.5 | 2666.1 | 2669.3 | 2668.7 | 2675.0 | 2682.6 | 2657.3 | 2704.7 | 2776.2 | 2456.8 |
| 40°   | 2714.9 | 2730.0 | 2759.1 | 2769.3 | 2793.9 | 2806.6 | 2832.5 | 2833.1 | 2942.6 | 3060.2 | 2692.7 |
| 42.5° | 2773.0 | 2799.0 | 2853.4 | 2871.7 | 2931.8 | 2969.8 | 3008.4 | 3049.5 | 3208.2 | 3359.4 | 2971.0 |
| 45°   | 2823.6 | 2857.8 | 2948.3 | 3005.2 | 3086.8 | 3133.0 | 3214.6 | 3300.6 | 3528.9 | 3726.9 | 3253.8 |
| 47.5° | 2900.2 | 2930.5 | 3034.3 | 3134.9 | 3258.2 | 3311.3 | 3433.4 | 3561.8 | 3860.4 | 4077.3 | 3524.5 |
| 50°   | 3006.5 | 3024.8 | 3130.4 | 3294.3 | 3451.8 | 3520.1 | 3681.4 | 3866.7 | 4214.6 | 4423.3 | 3762.3 |
| 52.5° | 3142.4 | 3150.0 | 3234.2 | 3452.4 | 3659.9 | 3744.6 | 3958.4 | 4174.8 | 4524.5 | 4723.8 | 3950.8 |
| 55°   | 3303.1 | 3290.5 | 3356.2 | 3620.0 | 3897.7 | 4008.4 | 4238.0 | 4486.6 | 4873.1 | 4966.7 | 4088.1 |
| 57.5° | 3461.9 | 3442.3 | 3494.8 | 3823.7 | 4191.2 | 4324.7 | 4592.2 | 4807.9 | 5184.3 | 5193.8 | 4184.2 |
| 60°   | 3630.1 | 3615.6 | 3678.2 | 4062.8 | 4551.1 | 4709.2 | 4956.6 | 5141.3 | 5485.4 | 5351.9 | 4199.4 |
| 62.5° | 3802.8 | 3779.4 | 3868.6 | 4331.6 | 4956.6 | 5100.2 | 5339.9 | 5495.5 | 5780.8 | 5410.7 | 4053.3 |
| 65°   | 3970.4 | 3959.7 | 4097.6 | 4651.1 | 5418.3 | 5581.5 | 5814.3 | 5919.9 | 6017.3 | 5322.2 | 3690.9 |
| 67.5° | 4148.8 | 4170.3 | 4390.4 | 5077.4 | 6020.5 | 6225.4 | 6476.6 | 6377.2 | 6085.0 | 4902.8 | 3108.3 |
| 70°   | 4420.8 | 4434.7 | 4775.0 | 5635.9 | 6796.6 | 7043.9 | 7165.4 | 6539.8 | 5758.6 | 4106.4 | 2336.6 |
| 72.5° | 4537.8 | 4599.2 | 5118.5 | 6222.3 | 7678.4 | 7829.6 | 7396.9 | 6177.4 | 4797.2 | 2789.5 | 1227.8 |
| 73°   | 4511.9 | 4585.3 | 5134.3 | 6311.5 | 7747.3 | 7906.1 | 7347.6 | 5990.8 | 4459.4 | 2402.4 | 1052.5 |
| 75°   | 4188.7 | 4279.1 | 4928.7 | 6236.8 | 7613.2 | 7518.3 | 6554.4 | 5105.8 | 3013.4 | 1092.4 | 479.5  |
| 77.5° | 3305.0 | 3330.9 | 3905.3 | 5036.3 | 5995.2 | 5819.4 | 4905.3 | 3191.2 | 1230.9 | 406.1  | 272.0  |
| 80°   | 1657.9 | 1753.4 | 2201.2 | 2885.0 | 4009.0 | 3951.5 | 3096.3 | 1509.2 | 513.0  | 238.5  | 180.3  |
| 82.5° | 797.6  | 865.3  | 1072.2 | 1406.8 | 2215.1 | 2162.6 | 1533.3 | 824.8  | 325.8  | 139.2  | 106.3  |
| 85°   | 513.6  | 564.2  | 682.5  | 671.1  | 910.9  | 869.7  | 688.8  | 624.3  | 192.9  | 72.7   | 74.0   |
| 87.5° | 339.0  | 371.3  | 445.3  | 356.1  | 331.4  | 299.8  | 304.3  | 351.7  | 38.0   | 27.8   | 10.1   |
| 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°    | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 | 1967.8 |
| 2.5°  | 1946.3 | 1938.1 | 1910.9 | 1884.3 | 1859.0 | 1835.0 | 1819.2 | 1798.3 | 1784.4 | 1788.2 | 1793.9 |
| 5°    | 1897.6 | 1879.3 | 1831.2 | 1784.4 | 1740.1 | 1687.6 | 1645.2 | 1611.1 | 1585.1 | 1575.7 | 1573.8 |
| 7.5°  | 1846.4 | 1815.4 | 1746.4 | 1666.1 | 1590.8 | 1525.7 | 1450.4 | 1413.1 | 1369.4 | 1354.3 | 1349.2 |
| 10°   | 1815.4 | 1773.6 | 1676.9 | 1564.9 | 1451.7 | 1343.5 | 1261.9 | 1195.5 | 1135.4 | 1124.0 | 1118.3 |
| 12.5° | 1806.5 | 1751.5 | 1621.2 | 1477.0 | 1326.4 | 1193.6 | 1072.8 | 985.5  | 927.3  | 914.0  | 894.4  |
| 15°   | 1801.5 | 1733.2 | 1569.3 | 1388.4 | 1197.4 | 1035.5 | 908.3  | 806.5  | 753.4  | 717.9  | 718.6  |
| 17.5° | 1797.0 | 1712.3 | 1511.1 | 1291.6 | 1086.1 | 899.5  | 759.0  | 667.3  | 618.6  | 599.6  | 597.7  |
| 20°   | 1790.7 | 1687.6 | 1444.1 | 1189.8 | 958.9  | 775.5  | 648.4  | 580.0  | 547.1  | 531.3  | 530.7  |
| 22.5° | 1788.2 | 1663.6 | 1378.3 | 1086.1 | 846.3  | 680.0  | 575.0  | 526.9  | 506.0  | 495.3  | 495.3  |
| 25°   | 1794.5 | 1646.5 | 1309.4 | 987.4  | 746.4  | 598.4  | 524.4  | 491.5  | 479.5  | 473.8  | 471.9  |
| 27.5° | 1814.1 | 1638.9 | 1241.0 | 888.7  | 654.7  | 542.7  | 490.2  | 467.4  | 458.6  | 454.2  | 454.8  |
| 30°   | 1851.4 | 1638.3 | 1174.0 | 791.3  | 586.4  | 500.3  | 463.0  | 447.2  | 440.2  | 437.7  | 437.1  |
| 32.5° | 1911.5 | 1652.2 | 1108.2 | 711.0  | 528.8  | 464.9  | 437.7  | 426.3  | 423.2  | 421.3  | 420.6  |
| 35°   | 2013.4 | 1691.4 | 1043.1 | 637.6  | 484.5  | 433.3  | 413.7  | 408.0  | 403.6  | 405.5  | 406.1  |
| 37.5° | 2150.6 | 1759.1 | 981.1  | 580.0  | 451.0  | 409.9  | 393.4  | 388.4  | 385.8  | 387.7  | 389.6  |
| 40°   | 2334.7 | 1856.5 | 929.2  | 533.9  | 427.0  | 390.3  | 375.7  | 371.3  | 368.8  | 371.9  | 372.6  |
| 42.5° | 2537.7 | 1969.1 | 886.2  | 497.8  | 407.4  | 373.8  | 359.9  | 354.9  | 353.0  | 354.9  | 355.5  |
| 45°   | 2746.5 | 2100.0 | 864.0  | 471.9  | 390.9  | 361.8  | 347.3  | 341.6  | 337.1  | 335.9  | 337.8  |
| 47.5° | 2952.1 | 2213.9 | 863.4  | 456.1  | 377.6  | 351.1  | 335.2  | 328.9  | 323.2  | 320.1  | 319.4  |
| 50°   | 3119.7 | 2304.3 | 878.6  | 449.1  | 366.2  | 339.0  | 323.2  | 316.9  | 309.3  | 303.0  | 304.3  |
| 52.5° | 3246.2 | 2363.2 | 885.6  | 445.9  | 359.9  | 326.4  | 310.6  | 304.9  | 296.0  | 287.8  | 287.8  |
| 55°   | 3327.8 | 2377.1 | 868.5  | 442.8  | 354.9  | 313.1  | 296.0  | 291.0  | 282.1  | 273.9  | 273.9  |
| 57.5° | 3355.6 | 2334.1 | 807.1  | 435.2  | 349.8  | 301.7  | 281.5  | 277.1  | 270.1  | 261.9  | 260.6  |
| 60°   | 3291.1 | 2188.6 | 699.6  | 412.4  | 339.7  | 289.7  | 265.7  | 263.8  | 261.2  | 254.3  | 253.6  |
| 62.5° | 3042.5 | 1879.9 | 582.6  | 382.7  | 322.6  | 277.1  | 251.1  | 254.3  | 256.2  | 252.4  | 251.8  |
| 65°   | 2628.8 | 1526.3 | 497.8  | 341.6  | 299.8  | 259.3  | 235.3  | 243.5  | 248.6  | 248.6  | 247.3  |
| 67.5° | 2132.3 | 1172.1 | 419.4  | 306.1  | 271.4  | 235.3  | 217.6  | 223.9  | 227.7  | 226.4  | 229.6  |
| 70°   | 1515.6 | 793.8  | 341.6  | 265.7  | 235.3  | 208.1  | 194.8  | 194.8  | 192.3  | 191.0  | 191.0  |
| 72.5° | 735.0  | 453.5  | 277.1  | 222.0  | 200.5  | 177.7  | 167.0  | 162.6  | 157.5  | 156.9  | 153.7  |
| 73°   | 614.2  | 406.7  | 264.4  | 213.8  | 192.3  | 173.3  | 161.3  | 154.3  | 151.2  | 148.6  | 148.0  |
| 75°   | 373.8  | 308.7  | 220.8  | 180.3  | 163.8  | 149.3  | 138.5  | 132.2  | 129.0  | 127.1  | 126.5  |
| 77.5° | 246.1  | 230.2  | 171.4  | 137.9  | 125.2  | 116.4  | 112.0  | 105.6  | 103.7  | 101.2  | 101.2  |
| 80°   | 183.4  | 175.8  | 122.7  | 97.4   | 89.8   | 82.2   | 81.0   | 79.7   | 74.6   | 71.5   | 70.2   |
| 82.5° | 118.3  | 125.2  | 83.5   | 65.2   | 56.9   | 50.6   | 51.2   | 53.1   | 48.1   | 43.6   | 42.4   |
| 85°   | 84.1   | 90.5   | 50.6   | 29.7   | 24.0   | 20.9   | 23.4   | 20.9   | 21.5   | 17.1   | 13.9   |
| 87.5° | 13.9   | 24.0   | 8.9    | 3.8    | 1.9    | 1.3    | 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)