

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: P192950

Luminaire Tested: **GLEON-AF-02-LED-E1-SL4-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192950  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-AF-02-LED-E1-SL4-7030-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9559.1 lumens  
Efficiency: N/A  
Efficacy: 84.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 113  
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

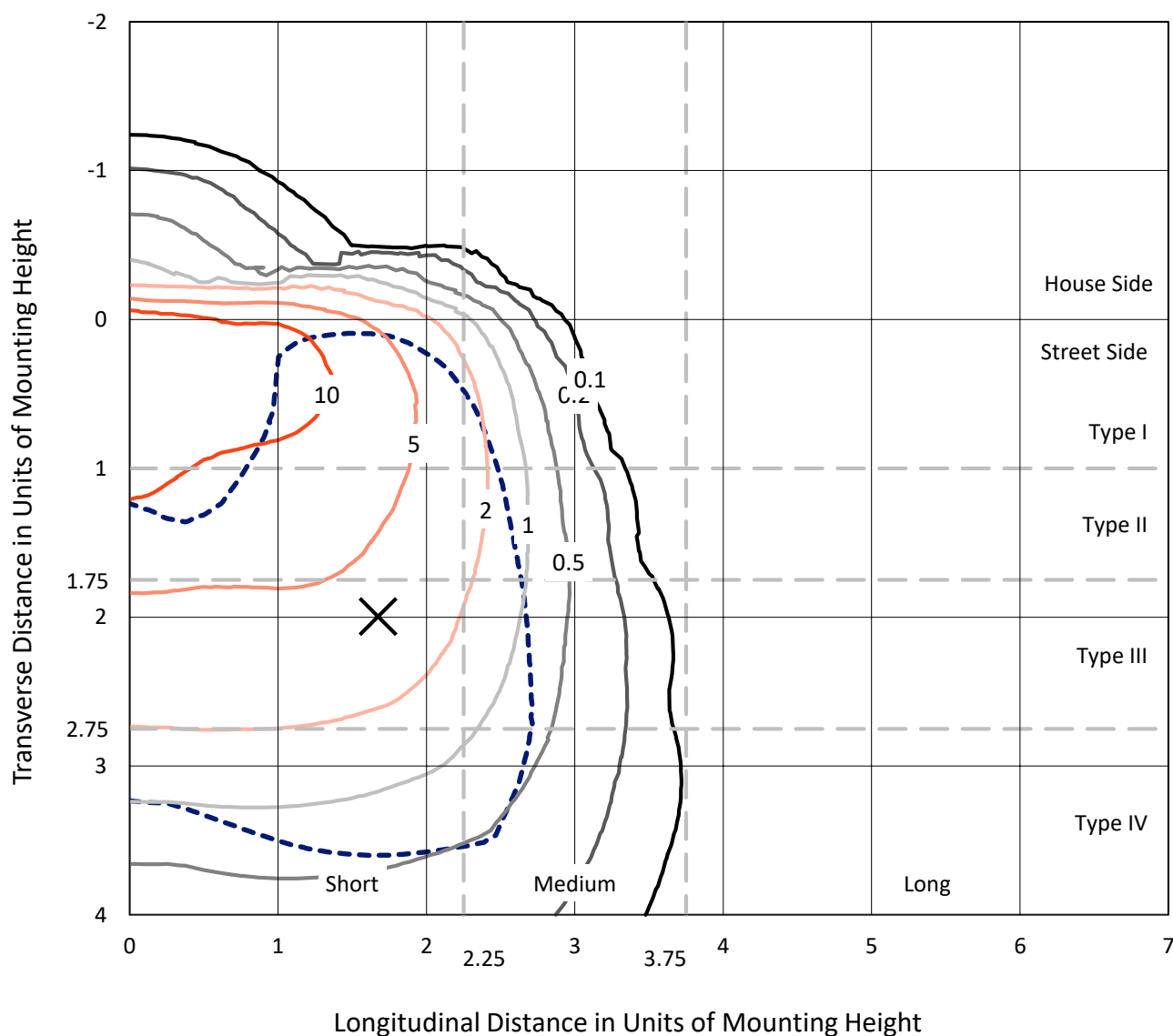


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

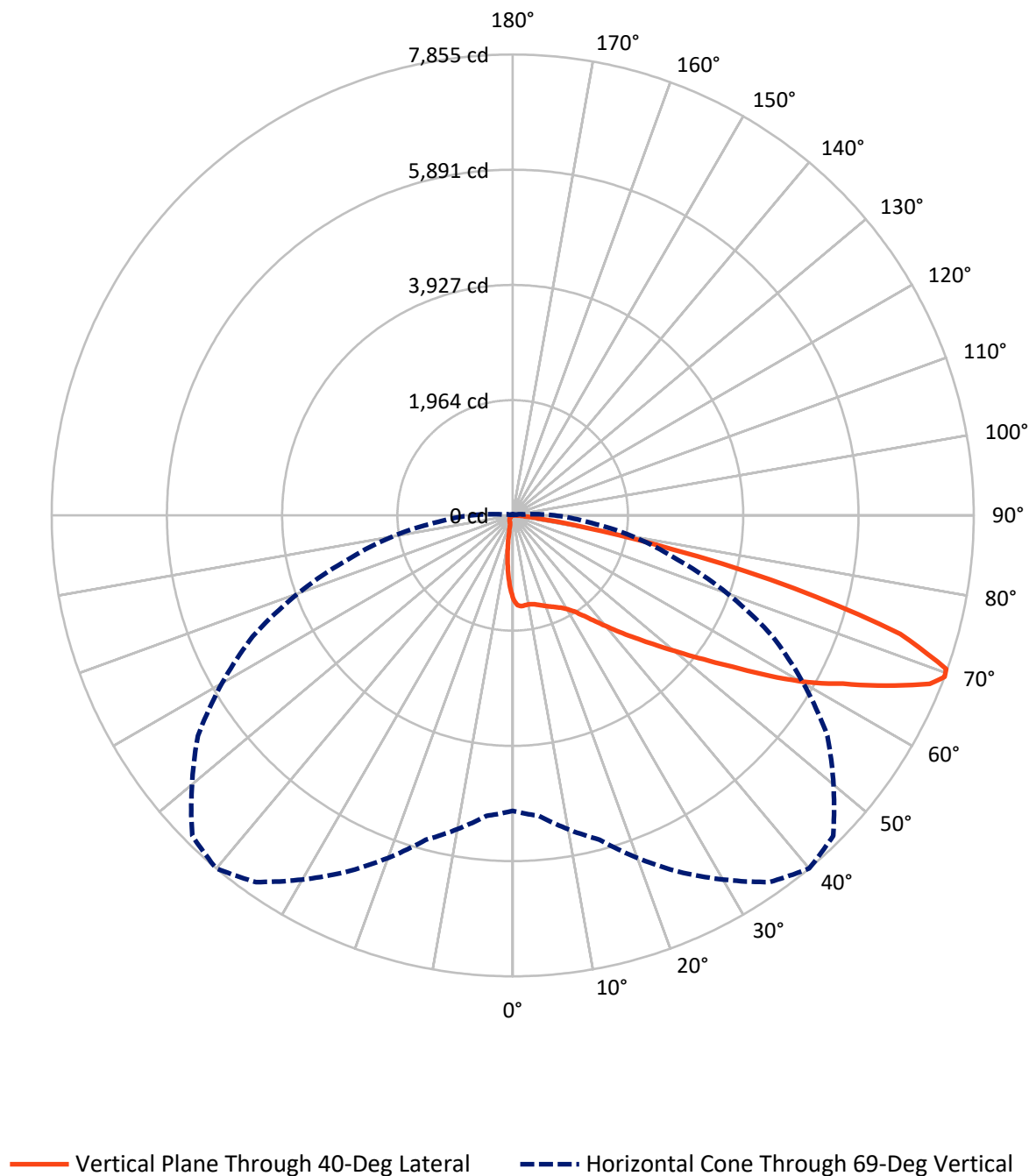


Based on 10 foot mounting height. Maximum calculated value = 15.6 fc  
 Type IV - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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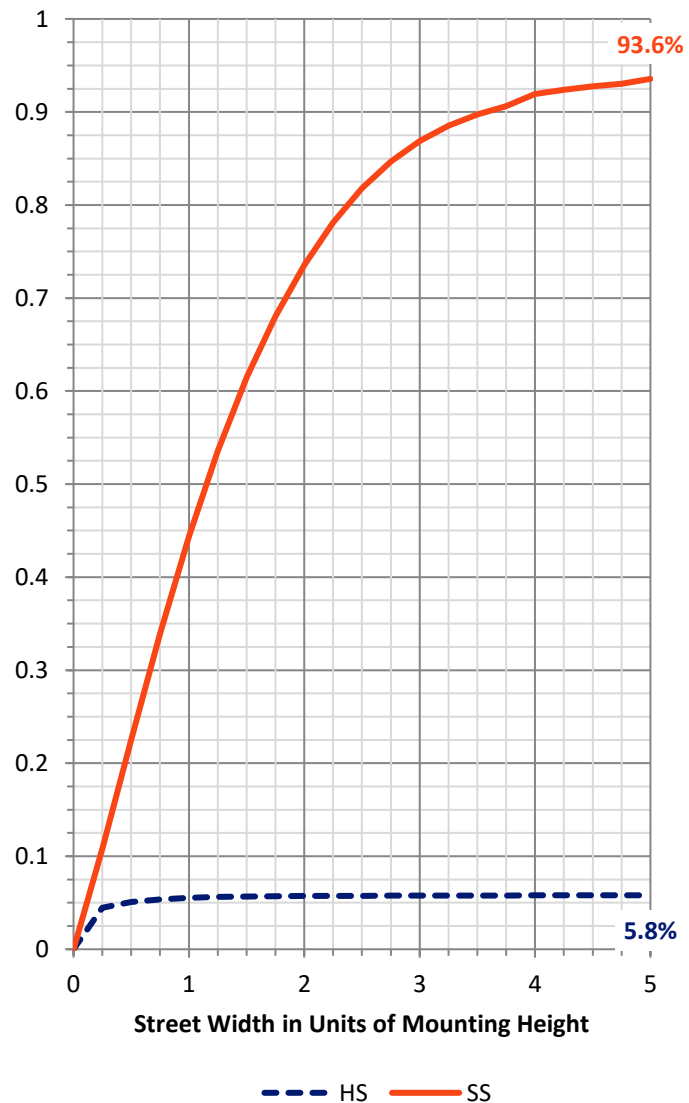
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 559.3    | 0.0    | 559.3  |
|                    | % Fixture | 5.9      | 0.0    | 5.9    |
| <b>Street Side</b> | Lumens    | 8999.8   | 0.0    | 8999.8 |
|                    | % Fixture | 94.1     | 0.0    | 94.1   |
| <b>Total</b>       | Lumens    | 9559.1   | 0.0    | 9559.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 115.8  | 1.2       |
| 10°-20°   | 284.8  | 3.0       |
| 20°-30°   | 479.6  | 5.0       |
| 30°-40°   | 785.2  | 8.2       |
| 40°-50°   | 1359.5 | 14.2      |
| 50°-60°   | 2141.4 | 22.4      |
| 60°-70°   | 2796.6 | 29.3      |
| 70°-80°   | 1440.4 | 15.1      |
| 80°-90°   | 155.8  | 1.6       |
| 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°    | 9559.1 | 100.0     |
| 0°-180°   | 9559.1 | 100.0     |

**Coefficient of Utilization**



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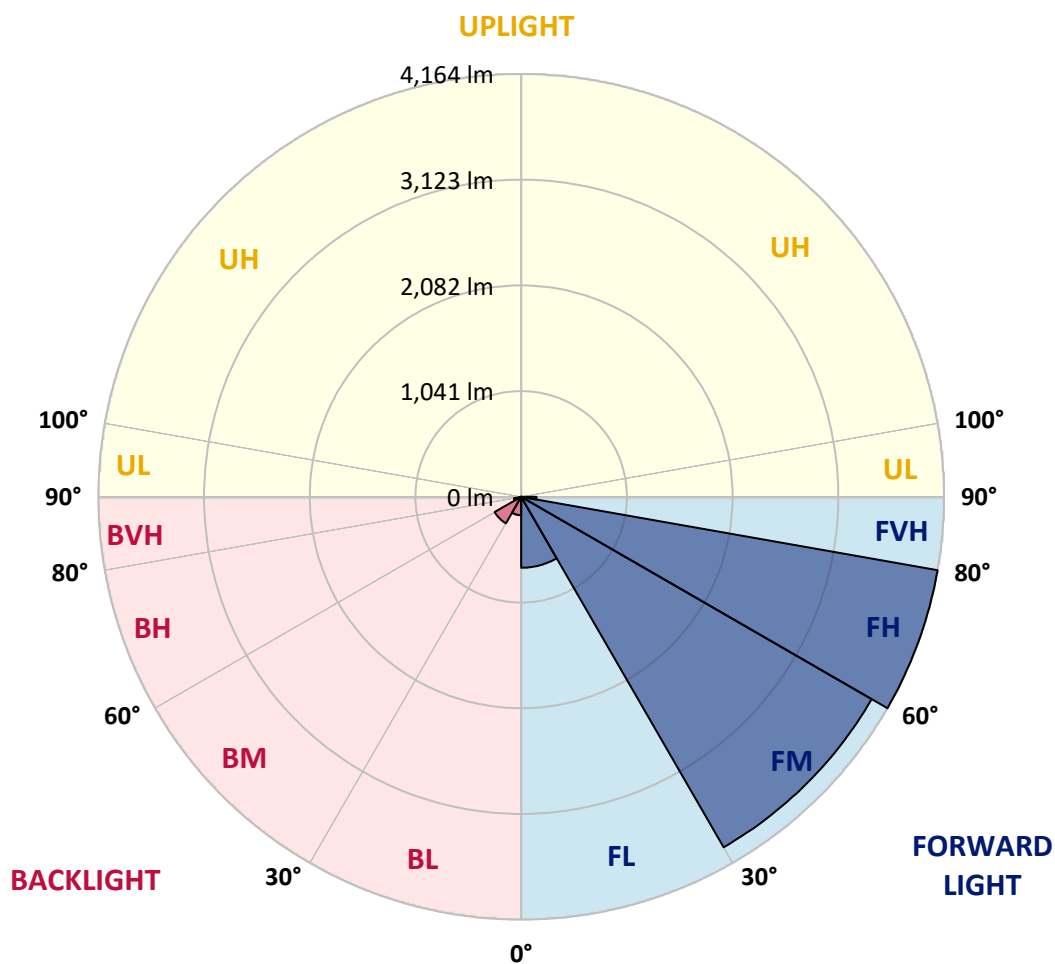
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 699.0  | 7.3       |                         |      |         |
| FM   | (30°-60°)   | 3985.5 | 41.7      |                         |      |         |
| FH   | (60°-80°)   | 4164.3 | 43.6      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 150.9  | 1.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 181.2  | 1.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 300.6  | 3.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 72.6   | 0.8       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 4.9    | 0.1       |                         |      | 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 IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 40°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 |
| 2.5°  | 1568.2 | 1559.5 | 1554.5 | 1547.6 | 1539.1 | 1531.7 | 1528.9 | 1507.9 | 1487.9 | 1460.6 | 1429.3 |
| 5°    | 1597.2 | 1594.3 | 1585.3 | 1576.1 | 1565.9 | 1554.5 | 1548.2 | 1523.2 | 1494.7 | 1454.9 | 1400.2 |
| 7.5°  | 1600.0 | 1596.6 | 1585.3 | 1572.7 | 1558.5 | 1544.8 | 1534.0 | 1509.0 | 1482.7 | 1442.4 | 1375.8 |
| 10°   | 1595.5 | 1591.5 | 1582.9 | 1569.3 | 1551.7 | 1538.6 | 1527.8 | 1503.9 | 1481.7 | 1445.3 | 1371.3 |
| 12.5° | 1590.4 | 1586.3 | 1582.4 | 1575.5 | 1560.2 | 1551.1 | 1541.9 | 1519.2 | 1499.2 | 1468.6 | 1387.8 |
| 15°   | 1595.5 | 1593.2 | 1597.7 | 1594.8 | 1586.3 | 1578.4 | 1569.3 | 1548.7 | 1530.6 | 1505.0 | 1417.9 |
| 17.5° | 1617.0 | 1617.0 | 1631.4 | 1633.0 | 1625.0 | 1613.6 | 1600.5 | 1580.1 | 1564.7 | 1543.1 | 1453.8 |
| 20°   | 1667.8 | 1665.9 | 1684.2 | 1687.6 | 1668.3 | 1650.7 | 1631.4 | 1606.2 | 1594.3 | 1580.7 | 1489.1 |
| 22.5° | 1754.8 | 1746.8 | 1757.7 | 1754.1 | 1716.1 | 1688.8 | 1664.9 | 1634.2 | 1627.9 | 1621.6 | 1528.3 |
| 25°   | 1868.0 | 1863.4 | 1870.8 | 1837.3 | 1770.1 | 1733.2 | 1704.7 | 1670.0 | 1670.0 | 1676.2 | 1572.7 |
| 27.5° | 2032.4 | 2015.4 | 1990.3 | 1931.1 | 1830.4 | 1783.2 | 1752.5 | 1715.5 | 1725.2 | 1748.4 | 1631.4 |
| 30°   | 2200.9 | 2182.1 | 2124.6 | 2033.7 | 1903.9 | 1854.3 | 1818.5 | 1779.9 | 1802.6 | 1845.3 | 1709.8 |
| 32.5° | 2367.0 | 2346.1 | 2264.6 | 2149.6 | 2009.2 | 1959.6 | 1924.9 | 1882.2 | 1920.3 | 1992.1 | 1824.7 |
| 35°   | 2528.0 | 2509.2 | 2415.4 | 2279.9 | 2149.1 | 2108.1 | 2076.3 | 2039.4 | 2088.2 | 2188.4 | 1986.9 |
| 37.5° | 2709.0 | 2688.6 | 2574.1 | 2427.3 | 2319.2 | 2289.6 | 2266.2 | 2229.3 | 2314.6 | 2461.5 | 2212.8 |
| 40°   | 2931.4 | 2896.8 | 2742.5 | 2596.3 | 2516.1 | 2501.8 | 2485.9 | 2480.8 | 2613.4 | 2816.4 | 2513.8 |
| 42.5° | 3186.3 | 3129.5 | 2919.0 | 2774.4 | 2732.3 | 2742.5 | 2738.6 | 2761.3 | 2987.2 | 3258.1 | 2880.3 |
| 45°   | 3441.2 | 3367.9 | 3115.2 | 2964.4 | 2970.1 | 3006.0 | 3028.2 | 3119.3 | 3455.6 | 3764.4 | 3274.6 |
| 47.5° | 3657.5 | 3585.3 | 3303.6 | 3169.8 | 3238.1 | 3308.7 | 3369.0 | 3541.4 | 3936.8 | 4262.9 | 3581.3 |
| 50°   | 3842.4 | 3774.2 | 3503.3 | 3395.8 | 3549.4 | 3663.3 | 3761.0 | 4016.6 | 4454.6 | 4642.4 | 3796.3 |
| 52.5° | 3993.8 | 3948.3 | 3710.5 | 3654.6 | 3905.0 | 4071.8 | 4215.1 | 4521.2 | 4913.3 | 4950.9 | 3963.6 |
| 55°   | 4141.2 | 4108.7 | 3932.9 | 3962.5 | 4322.7 | 4549.7 | 4731.2 | 5056.6 | 5308.2 | 5208.1 | 4124.1 |
| 57.5° | 4310.8 | 4281.1 | 4186.7 | 4352.8 | 4871.8 | 5157.4 | 5355.4 | 5531.2 | 5655.8 | 5470.9 | 4275.5 |
| 60°   | 4483.7 | 4466.6 | 4468.9 | 4786.4 | 5502.2 | 5776.4 | 5885.7 | 5931.2 | 5997.2 | 5718.4 | 4283.9 |
| 62.5° | 4648.7 | 4681.1 | 4791.4 | 5268.9 | 6105.9 | 6316.4 | 6371.6 | 6416.6 | 6339.2 | 5757.6 | 3957.9 |
| 65°   | 4928.0 | 4981.0 | 5244.5 | 5914.8 | 6769.9 | 6995.3 | 7052.1 | 6898.0 | 6393.2 | 5250.1 | 3219.4 |
| 67.5° | 5064.6 | 5161.4 | 5631.3 | 6516.7 | 7414.0 | 7664.3 | 7643.3 | 6929.2 | 5737.2 | 4003.5 | 2066.0 |
| 69°   | 5036.2 | 5139.1 | 5720.7 | 6701.1 | 7627.9 | 7854.9 | 7721.3 | 6546.3 | 4887.7 | 2900.2 | 1268.3 |
| 70°   | 4923.6 | 5027.7 | 5674.6 | 6694.2 | 7655.2 | 7835.1 | 7576.7 | 6073.5 | 4132.6 | 2120.6 | 793.2  |
| 72.5° | 4111.5 | 4201.4 | 5037.8 | 6050.7 | 7052.1 | 6905.8 | 6338.5 | 4207.7 | 2013.6 | 577.6  | 178.6  |
| 75°   | 2530.9 | 2580.9 | 3614.9 | 4558.2 | 5326.4 | 4950.9 | 4223.1 | 2093.3 | 600.3  | 163.4  | 99.0   |
| 77.5° | 1337.2 | 1360.0 | 1979.0 | 2686.8 | 3376.4 | 2793.8 | 2164.4 | 816.5  | 276.5  | 102.3  | 71.7   |
| 80°   | 790.4  | 807.4  | 1065.8 | 1228.5 | 1461.3 | 1220.5 | 865.5  | 501.3  | 198.0  | 64.3   | 63.7   |
| 82.5° | 452.4  | 463.2  | 772.7  | 682.8  | 575.8  | 491.5  | 430.7  | 475.1  | 118.9  | 43.2   | 66.0   |
| 85°   | 166.2  | 168.4  | 434.8  | 519.5  | 342.5  | 203.7  | 213.9  | 393.8  | 31.9   | 27.4   | 51.8   |
| 87.5° | 77.3   | 75.7   | 223.7  | 318.1  | 200.3  | 129.2  | 166.7  | 86.6   | 12.6   | 17.6   | 14.2   |
| 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°    | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 | 1428.1 |
| 2.5°  | 1411.1 | 1390.1 | 1352.0 | 1312.6 | 1272.9 | 1242.2 | 1212.0 | 1188.0 | 1180.1 | 1165.2 | 1166.5 |
| 5°    | 1367.8 | 1329.1 | 1249.5 | 1168.7 | 1084.5 | 1015.1 | 949.7  | 896.7  | 871.2  | 845.0  | 845.0  |
| 7.5°  | 1330.3 | 1274.0 | 1149.4 | 1018.0 | 881.9  | 767.5  | 664.7  | 587.2  | 544.5  | 510.4  | 509.8  |
| 10°   | 1316.1 | 1239.9 | 1065.8 | 877.4  | 687.9  | 532.0  | 409.7  | 331.2  | 290.7  | 264.6  | 263.5  |
| 12.5° | 1322.4 | 1227.8 | 1001.5 | 747.7  | 509.8  | 342.0  | 237.3  | 186.7  | 169.6  | 161.6  | 161.6  |
| 15°   | 1340.5 | 1224.5 | 937.1  | 620.8  | 360.2  | 213.9  | 157.7  | 144.0  | 142.8  | 142.8  | 142.8  |
| 17.5° | 1362.8 | 1225.6 | 871.2  | 497.3  | 245.3  | 153.1  | 136.0  | 134.3  | 135.4  | 135.4  | 135.4  |
| 20°   | 1385.5 | 1226.2 | 800.0  | 383.0  | 172.9  | 133.2  | 128.1  | 127.5  | 128.6  | 128.6  | 129.2  |
| 22.5° | 1413.4 | 1229.0 | 728.9  | 286.2  | 142.8  | 125.7  | 121.8  | 121.8  | 122.4  | 122.4  | 121.8  |
| 25°   | 1445.3 | 1234.7 | 654.9  | 212.2  | 130.3  | 120.6  | 117.2  | 116.7  | 117.2  | 116.7  | 116.1  |
| 27.5° | 1485.1 | 1242.8 | 572.4  | 166.2  | 124.5  | 115.5  | 112.6  | 112.6  | 112.1  | 111.6  | 111.0  |
| 30°   | 1535.2 | 1251.8 | 479.6  | 141.2  | 118.9  | 111.0  | 108.0  | 107.5  | 107.0  | 105.9  | 105.9  |
| 32.5° | 1611.3 | 1271.7 | 388.1  | 128.1  | 112.6  | 104.7  | 102.3  | 102.3  | 101.3  | 100.2  | 99.5   |
| 35°   | 1728.6 | 1311.0 | 306.2  | 120.0  | 105.9  | 97.9   | 95.0   | 95.0   | 93.9   | 93.3   | 92.8   |
| 37.5° | 1890.7 | 1370.6 | 237.8  | 112.6  | 99.0   | 90.4   | 87.6   | 87.1   | 85.9   | 84.7   | 84.2   |
| 40°   | 2106.4 | 1444.6 | 187.2  | 105.9  | 92.3   | 83.0   | 80.9   | 79.6   | 77.3   | 75.7   | 75.7   |
| 42.5° | 2377.3 | 1528.9 | 151.9  | 98.5   | 84.2   | 76.3   | 74.6   | 72.8   | 68.9   | 67.2   | 66.5   |
| 45°   | 2660.6 | 1604.6 | 128.6  | 89.9   | 76.3   | 69.4   | 68.3   | 65.4   | 60.3   | 58.6   | 58.6   |
| 47.5° | 2864.9 | 1622.2 | 113.2  | 82.0   | 68.9   | 62.1   | 61.4   | 56.4   | 51.8   | 50.6   | 50.0   |
| 50°   | 2992.4 | 1587.5 | 100.7  | 74.0   | 62.1   | 55.1   | 53.5   | 47.2   | 44.4   | 43.2   | 42.7   |
| 52.5° | 3078.3 | 1525.5 | 90.4   | 67.2   | 55.7   | 48.9   | 44.9   | 40.4   | 38.1   | 37.0   | 37.0   |
| 55°   | 3147.1 | 1437.9 | 80.2   | 60.8   | 50.6   | 43.8   | 38.1   | 34.8   | 32.4   | 31.2   | 31.2   |
| 57.5° | 3166.5 | 1319.0 | 70.0   | 55.7   | 45.6   | 38.7   | 32.4   | 30.1   | 27.4   | 26.8   | 26.8   |
| 60°   | 3025.9 | 1104.4 | 62.1   | 49.5   | 41.0   | 33.6   | 28.4   | 25.5   | 22.7   | 22.2   | 21.7   |
| 62.5° | 2655.5 | 854.6  | 54.6   | 43.8   | 35.8   | 29.1   | 24.5   | 21.1   | 18.8   | 18.8   | 18.8   |
| 65°   | 2025.6 | 572.9  | 47.7   | 38.1   | 31.2   | 24.5   | 21.1   | 17.1   | 16.0   | 16.0   | 16.5   |
| 67.5° | 1212.6 | 311.8  | 41.0   | 32.4   | 26.8   | 20.4   | 17.6   | 14.7   | 14.2   | 14.7   | 14.7   |
| 69°   | 710.6  | 183.2  | 37.0   | 29.1   | 23.4   | 18.2   | 15.4   | 13.1   | 14.2   | 14.7   | 14.7   |
| 70°   | 438.6  | 123.5  | 34.1   | 26.2   | 21.1   | 16.5   | 14.2   | 12.6   | 13.6   | 14.2   | 14.2   |
| 72.5° | 122.4  | 63.7   | 27.4   | 20.4   | 17.1   | 13.6   | 11.4   | 11.4   | 13.1   | 13.6   | 13.6   |
| 75°   | 79.6   | 47.2   | 21.1   | 15.4   | 13.1   | 10.8   | 9.8    | 10.8   | 12.6   | 13.1   | 13.1   |
| 77.5° | 66.0   | 38.7   | 17.1   | 12.6   | 10.8   | 10.3   | 9.1    | 9.8    | 11.4   | 11.9   | 11.9   |
| 80°   | 60.3   | 27.4   | 13.6   | 11.4   | 9.8    | 9.1    | 8.5    | 7.9    | 10.3   | 10.8   | 10.8   |
| 82.5° | 57.5   | 21.7   | 11.9   | 10.3   | 9.1    | 7.9    | 7.4    | 7.9    | 9.1    | 9.8    | 10.3   |
| 85°   | 35.8   | 14.2   | 10.8   | 9.8    | 7.9    | 7.4    | 7.4    | 7.4    | 8.5    | 9.1    | 9.1    |
| 87.5° | 13.1   | 11.4   | 9.8    | 7.9    | 6.8    | 6.8    | 6.8    | 6.8    | 7.4    | 8.5    | 8.5    |
| 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)