

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: P194892

Luminaire Tested: **GLEON-AF-04-LED-E1-T4W-7060-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P194892  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24147)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-04-LED-E1-T4W-7060-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 5700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15710 lumens  
Efficiency: N/A  
Efficacy: 121.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 129  
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



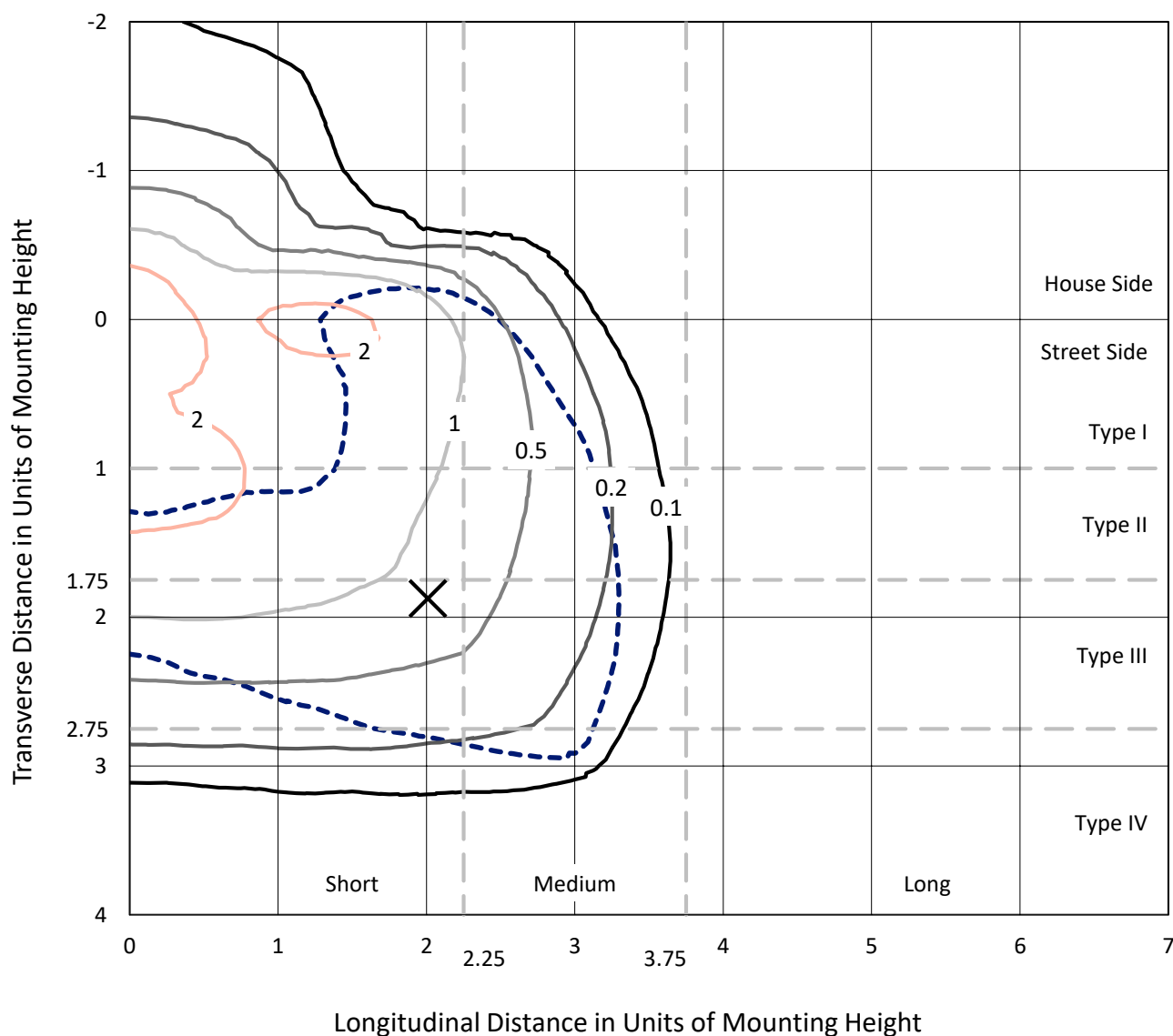
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

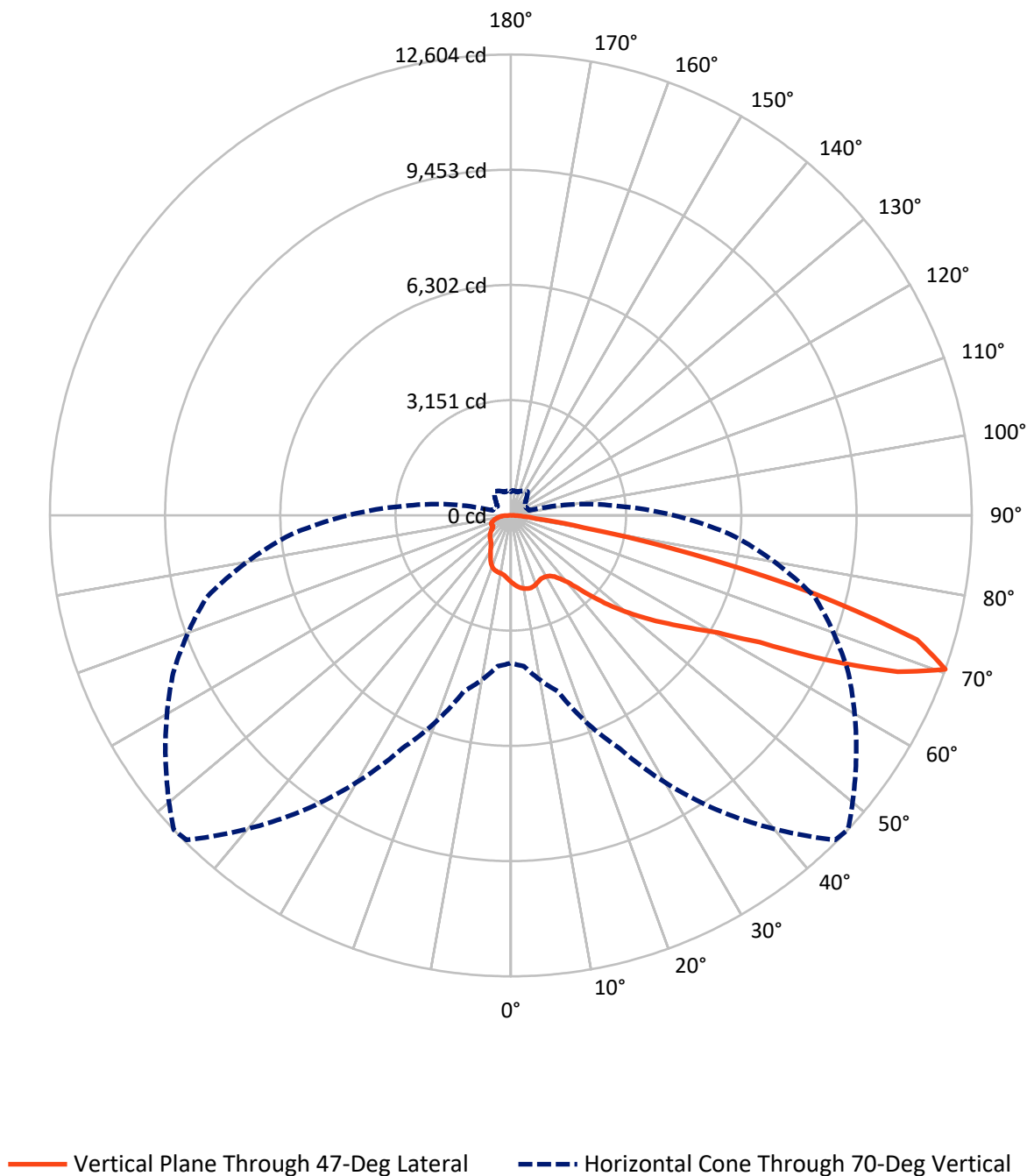


Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
Type IV - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3277.4   | 0.0    | 3277.4  |
|                    | % Fixture | 20.9     | 0.0    | 20.9    |
| <b>Street Side</b> | Lumens    | 12432.6  | 0.0    | 12432.6 |
|                    | % Fixture | 79.1     | 0.0    | 79.1    |
| <b>Total</b>       | Lumens    | 15710.0  | 0.0    | 15710.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 174.7   | 1.1       |
| 10°-20°   | 512.4   | 3.3       |
| 20°-30°   | 756.7   | 4.8       |
| 30°-40°   | 1099.8  | 7.0       |
| 40°-50°   | 1979.3  | 12.6      |
| 50°-60°   | 3428.9  | 21.8      |
| 60°-70°   | 4894.1  | 31.2      |
| 70°-80°   | 2512.4  | 16.0      |
| 80°-90°   | 351.7   | 2.2       |
| 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°    | 15710.0 | 100.0     |
| 0°-180°   | 15710.0 | 100.0     |

**Coefficient of Utilization**



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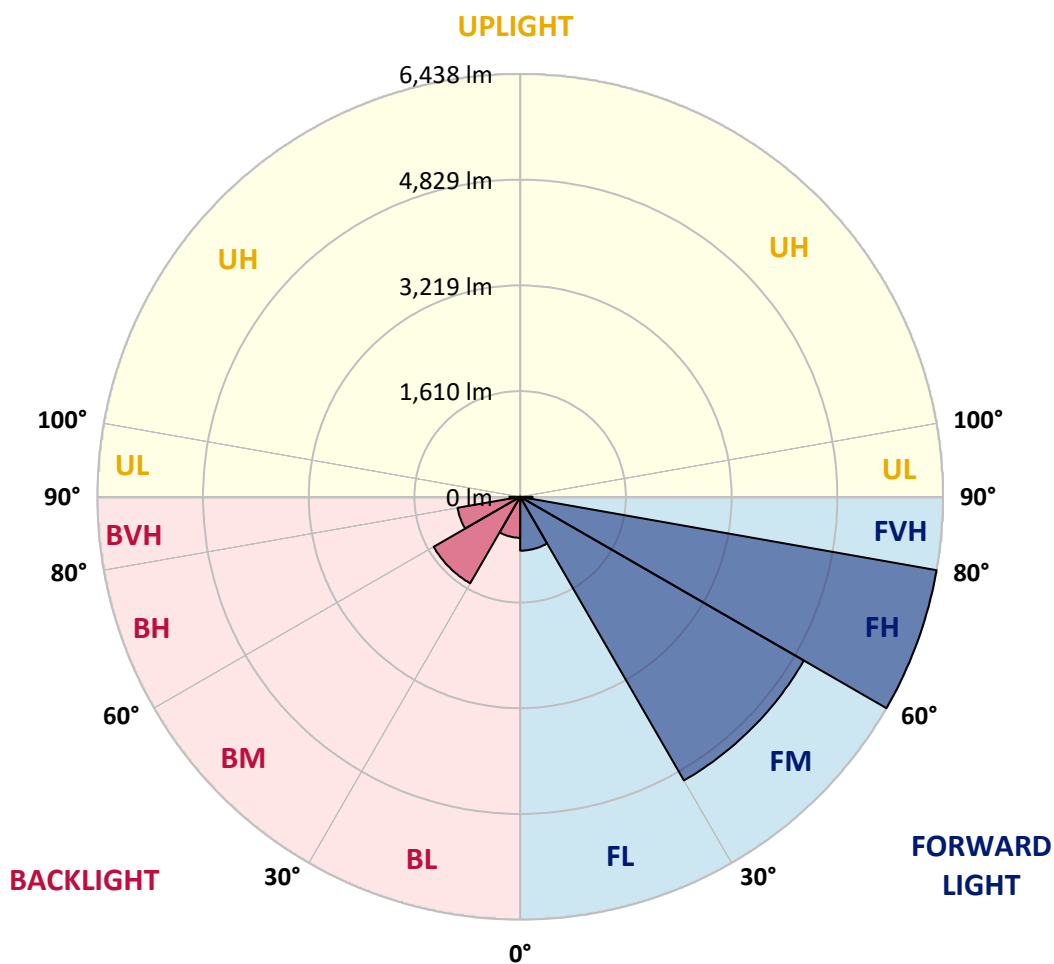
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 819.7  | 5.2       |                         |      |         |
| FM   | (30°-60°)   | 4986.8 | 31.7      |                         |      |         |
| FH   | (60°-80°)   | 6438.4 | 41.0      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 187.7  | 1.2       |                         |      | G2/225  |
| BL   | (0°-30°)    | 624.0  | 4.0       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1521.3 | 9.7       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 968.1  | 6.2       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 164.0  | 1.0       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G3**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 45°     | 47°     | 55°     | 65°     | 75°    | 85°     |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|--------|---------|
| 0°    | 1822.8 | 1822.8 | 1822.8 | 1822.8 | 1822.8  | 1822.8  | 1822.8  | 1822.8  | 1822.8  | 1822.8 | 1822.8  |
| 2.5°  | 1929.9 | 1926.0 | 1924.5 | 1921.4 | 1917.6  | 1898.5  | 1894.7  | 1880.9  | 1861.8  | 1842.0 | 1821.3  |
| 5°    | 2056.7 | 2056.0 | 2047.6 | 2032.3 | 2007.8  | 1965.8  | 1955.8  | 1922.2  | 1877.1  | 1833.5 | 1790.0  |
| 7.5°  | 2168.3 | 2161.4 | 2145.4 | 2114.8 | 2072.0  | 2014.7  | 2000.9  | 1954.3  | 1892.4  | 1832.8 | 1773.9  |
| 10°   | 2250.1 | 2246.3 | 2211.1 | 2169.1 | 2113.3  | 2049.8  | 2033.8  | 1981.8  | 1913.8  | 1838.1 | 1764.8  |
| 12.5° | 2296.7 | 2289.1 | 2248.6 | 2198.1 | 2131.6  | 2069.7  | 2053.7  | 2000.9  | 1924.5  | 1838.1 | 1751.8  |
| 15°   | 2293.7 | 2288.3 | 2247.8 | 2192.8 | 2125.5  | 2071.2  | 2056.7  | 2004.0  | 1922.2  | 1830.5 | 1735.0  |
| 17.5° | 2232.5 | 2234.8 | 2200.4 | 2146.1 | 2091.1  | 2049.8  | 2036.9  | 1987.9  | 1906.9  | 1815.2 | 1715.1  |
| 20°   | 2125.5 | 2136.2 | 2113.3 | 2065.1 | 2034.6  | 2006.3  | 1997.9  | 1956.6  | 1883.2  | 1793.0 | 1693.7  |
| 22.5° | 2018.5 | 2028.4 | 2019.3 | 1978.8 | 1974.2  | 1957.4  | 1952.8  | 1923.0  | 1862.6  | 1779.3 | 1680.7  |
| 25°   | 1939.8 | 1949.0 | 1947.4 | 1912.3 | 1926.0  | 1925.3  | 1921.4  | 1906.9  | 1858.0  | 1779.3 | 1683.0  |
| 27.5° | 1918.4 | 1921.4 | 1918.4 | 1886.3 | 1905.4  | 1920.7  | 1917.6  | 1915.3  | 1871.8  | 1801.4 | 1712.0  |
| 30°   | 1991.8 | 1987.2 | 1963.5 | 1898.5 | 1916.1  | 1937.5  | 1934.4  | 1936.0  | 1913.0  | 1859.5 | 1777.0  |
| 32.5° | 2284.5 | 2263.8 | 2188.9 | 2006.3 | 1959.7  | 1971.1  | 1972.7  | 1997.9  | 2001.7  | 1949.0 | 1877.9  |
| 35°   | 2722.4 | 2699.5 | 2602.4 | 2295.2 | 2094.9  | 2055.2  | 2055.2  | 2093.4  | 2116.3  | 2077.4 | 2034.6  |
| 37.5° | 3186.4 | 3161.1 | 3109.2 | 2695.7 | 2379.3  | 2201.2  | 2197.4  | 2224.1  | 2257.0  | 2266.1 | 2276.8  |
| 40°   | 3713.7 | 3687.0 | 3701.5 | 3145.1 | 2775.9  | 2454.2  | 2399.9  | 2380.8  | 2469.4  | 2528.3 | 2613.9  |
| 42.5° | 4290.8 | 4278.5 | 4283.9 | 3645.7 | 3227.6  | 2832.5  | 2755.3  | 2656.7  | 2763.7  | 2868.4 | 3048.0  |
| 45°   | 4825.0 | 4835.7 | 4830.4 | 4181.5 | 3730.5  | 3294.1  | 3212.3  | 3021.3  | 3126.0  | 3305.6 | 3598.3  |
| 47.5° | 5292.8 | 5248.4 | 5317.2 | 4766.9 | 4293.8  | 3810.8  | 3709.9  | 3453.9  | 3560.1  | 3781.7 | 4277.0  |
| 50°   | 5860.6 | 5854.5 | 5753.6 | 5548.0 | 4974.8  | 4329.7  | 4197.5  | 3901.0  | 4066.1  | 4374.1 | 5132.3  |
| 52.5° | 6457.5 | 6346.7 | 6254.2 | 6155.7 | 5697.1  | 4861.7  | 4699.7  | 4346.6  | 4660.7  | 5048.2 | 6174.8  |
| 55°   | 6579.8 | 6530.2 | 6644.8 | 6810.7 | 6393.3  | 5414.3  | 5225.5  | 4905.3  | 5330.2  | 5818.6 | 7377.0  |
| 57.5° | 6841.2 | 6840.5 | 7077.4 | 7373.2 | 7110.3  | 6000.5  | 5810.2  | 5580.1  | 6083.0  | 6701.4 | 8653.4  |
| 60°   | 7017.8 | 7067.5 | 7507.7 | 8081.7 | 7814.2  | 6677.7  | 6502.6  | 6359.0  | 6939.1  | 7688.1 | 9842.6  |
| 62.5° | 7110.3 | 7177.5 | 7778.3 | 8369.1 | 8809.3  | 7805.0  | 7630.0  | 7422.9  | 8071.7  | 8770.3 | 10538.1 |
| 65°   | 6725.8 | 6858.0 | 7736.2 | 8617.5 | 9680.6  | 9632.4  | 9553.7  | 9189.9  | 9488.0  | 9625.6 | 10286.7 |
| 67.5° | 5661.9 | 5797.2 | 6819.8 | 8385.9 | 10302.7 | 11394.9 | 11411.7 | 10790.3 | 10359.3 | 9698.9 | 8648.8  |
| 70°   | 4034.0 | 4140.2 | 4986.3 | 7030.8 | 9828.9  | 12546.7 | 12604.0 | 11527.9 | 10185.8 | 8601.4 | 6042.5  |
| 72.5° | 1915.3 | 1980.3 | 2781.3 | 4575.8 | 7799.7  | 11495.8 | 11606.6 | 10586.3 | 8661.0  | 6368.1 | 3296.4  |
| 75°   | 703.9  | 723.8  | 940.1  | 1946.7 | 4523.9  | 8477.6  | 8608.3  | 7588.7  | 5741.4  | 3170.3 | 1255.7  |
| 77.5° | 421.9  | 434.9  | 527.4  | 821.6  | 1779.3  | 4845.6  | 5039.0  | 4127.2  | 2509.2  | 1180.1 | 617.6   |
| 80°   | 295.0  | 304.2  | 378.3  | 511.3  | 840.7   | 1846.5  | 2018.5  | 1684.5  | 999.7   | 746.7  | 449.4   |
| 82.5° | 199.5  | 204.1  | 266.0  | 345.5  | 558.7   | 659.6   | 711.6   | 749.0   | 674.1   | 555.6  | 285.1   |
| 85°   | 130.7  | 135.3  | 180.4  | 227.8  | 355.4   | 340.9   | 348.5   | 441.0   | 492.2   | 377.6  | 158.2   |
| 87.5° | 74.9   | 78.0   | 108.5  | 121.5  | 174.3   | 144.5   | 146.0   | 232.3   | 314.9   | 254.5  | 96.3    |
| 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°    | 1822.8 | 1822.8 | 1822.8 | 1822.8 | 1822.8 | 1822.8 | 1822.8 | 1822.8 | 1822.8 | 1822.8 | 1822.8 |
| 2.5°  | 1816.0 | 1806.0 | 1783.9 | 1770.1 | 1757.1 | 1754.1 | 1748.7 | 1747.9 | 1747.2 | 1747.2 | 1744.9 |
| 5°    | 1775.5 | 1758.6 | 1724.3 | 1705.1 | 1689.1 | 1687.6 | 1686.8 | 1690.6 | 1692.2 | 1693.7 | 1691.4 |
| 7.5°  | 1749.5 | 1726.5 | 1683.7 | 1656.2 | 1637.1 | 1632.5 | 1640.2 | 1657.8 | 1669.2 | 1673.8 | 1671.5 |
| 10°   | 1733.4 | 1705.1 | 1655.5 | 1625.7 | 1609.6 | 1607.3 | 1617.3 | 1637.9 | 1661.6 | 1670.8 | 1670.0 |
| 12.5° | 1715.1 | 1683.0 | 1630.2 | 1598.9 | 1589.7 | 1594.3 | 1607.3 | 1626.4 | 1650.9 | 1665.4 | 1666.2 |
| 15°   | 1696.7 | 1659.3 | 1605.0 | 1577.5 | 1573.7 | 1579.8 | 1592.0 | 1606.6 | 1625.7 | 1640.2 | 1641.7 |
| 17.5° | 1674.6 | 1635.6 | 1581.3 | 1553.1 | 1550.0 | 1553.1 | 1553.8 | 1561.5 | 1573.7 | 1587.4 | 1591.3 |
| 20°   | 1650.9 | 1611.1 | 1554.6 | 1526.3 | 1512.5 | 1500.3 | 1486.6 | 1488.1 | 1491.9 | 1505.7 | 1508.7 |
| 22.5° | 1634.1 | 1594.3 | 1533.9 | 1495.0 | 1458.3 | 1421.6 | 1394.1 | 1390.3 | 1391.8 | 1403.2 | 1407.1 |
| 25°   | 1635.6 | 1593.6 | 1528.6 | 1461.3 | 1381.1 | 1322.2 | 1285.5 | 1279.4 | 1278.7 | 1287.1 | 1292.4 |
| 27.5° | 1665.4 | 1623.4 | 1548.5 | 1426.9 | 1297.0 | 1209.9 | 1170.9 | 1166.3 | 1160.2 | 1162.5 | 1168.6 |
| 30°   | 1731.9 | 1692.9 | 1596.6 | 1391.8 | 1206.1 | 1099.8 | 1059.3 | 1054.7 | 1046.3 | 1042.5 | 1047.1 |
| 32.5° | 1840.4 | 1808.3 | 1666.9 | 1358.2 | 1115.1 | 1005.8 | 964.5  | 954.6  | 949.3  | 944.7  | 948.5  |
| 35°   | 2020.8 | 2007.0 | 1760.9 | 1321.5 | 1034.9 | 933.2  | 895.8  | 880.5  | 872.8  | 881.2  | 887.3  |
| 37.5° | 2303.6 | 2311.2 | 1884.0 | 1264.1 | 973.0  | 885.1  | 853.7  | 836.1  | 824.7  | 831.6  | 838.4  |
| 40°   | 2704.1 | 2709.4 | 2020.0 | 1183.1 | 919.4  | 856.8  | 823.1  | 807.1  | 791.0  | 778.8  | 778.1  |
| 42.5° | 3229.9 | 3175.7 | 2153.8 | 1095.2 | 857.5  | 839.2  | 801.7  | 781.9  | 757.4  | 723.8  | 716.9  |
| 45°   | 3853.6 | 3663.3 | 2255.4 | 994.4  | 788.0  | 817.8  | 778.1  | 750.5  | 712.3  | 675.6  | 671.8  |
| 47.5° | 4572.0 | 4186.8 | 2305.1 | 889.6  | 723.0  | 786.5  | 749.0  | 705.4  | 657.3  | 639.0  | 636.7  |
| 50°   | 5449.4 | 4808.2 | 2328.8 | 788.0  | 666.5  | 745.2  | 707.0  | 655.8  | 615.3  | 611.4  | 609.1  |
| 52.5° | 6448.4 | 5555.7 | 2336.5 | 704.7  | 619.8  | 691.7  | 672.6  | 622.9  | 590.8  | 593.9  | 593.9  |
| 55°   | 7493.9 | 6327.6 | 2232.5 | 644.3  | 577.0  | 636.7  | 649.7  | 609.9  | 583.2  | 595.4  | 600.0  |
| 57.5° | 8453.9 | 7011.7 | 1905.4 | 597.7  | 536.5  | 594.6  | 641.2  | 622.1  | 603.8  | 653.5  | 656.5  |
| 60°   | 9190.7 | 7416.0 | 1423.1 | 555.6  | 506.7  | 580.1  | 663.4  | 668.8  | 673.3  | 791.8  | 807.9  |
| 62.5° | 9345.1 | 7281.5 | 978.3  | 522.8  | 493.0  | 592.3  | 703.9  | 704.7  | 699.3  | 781.9  | 791.8  |
| 65°   | 8636.6 | 6430.8 | 711.6  | 504.4  | 481.5  | 614.5  | 738.3  | 722.3  | 687.1  | 749.8  | 731.4  |
| 67.5° | 6858.8 | 4844.9 | 592.3  | 490.7  | 464.7  | 613.0  | 775.0  | 738.3  | 680.2  | 734.5  | 704.7  |
| 70°   | 4452.0 | 2929.6 | 527.4  | 479.2  | 444.8  | 583.9  | 796.4  | 736.8  | 660.4  | 683.3  | 648.1  |
| 72.5° | 2172.1 | 1310.0 | 483.8  | 462.4  | 424.2  | 543.4  | 795.6  | 723.0  | 639.7  | 638.2  | 619.1  |
| 75°   | 849.9  | 600.0  | 444.1  | 437.2  | 389.0  | 497.6  | 774.2  | 703.2  | 615.3  | 590.8  | 583.9  |
| 77.5° | 497.6  | 428.0  | 393.6  | 399.7  | 347.0  | 451.7  | 742.9  | 668.8  | 581.6  | 552.6  | 544.9  |
| 80°   | 362.3  | 320.2  | 335.5  | 345.5  | 296.5  | 405.8  | 700.9  | 626.7  | 544.2  | 558.7  | 548.0  |
| 82.5° | 232.3  | 206.4  | 272.1  | 282.0  | 246.9  | 359.2  | 655.0  | 582.4  | 491.4  | 446.3  | 435.6  |
| 85°   | 118.5  | 130.7  | 202.5  | 214.8  | 190.3  | 295.0  | 599.2  | 523.5  | 431.8  | 371.4  | 377.6  |
| 87.5° | 66.5   | 89.4   | 129.2  | 144.5  | 134.5  | 227.0  | 486.1  | 431.8  | 352.3  | 286.6  | 252.2  |
| 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)