

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: P194299

Luminaire Tested: **GLEON-AF-01-LED-E1-AFL-7060-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P194299  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-01-LED-E1-AFL-7060-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 5700K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5166 lumens  
Efficiency: N/A  
Efficacy: 117.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 44  
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



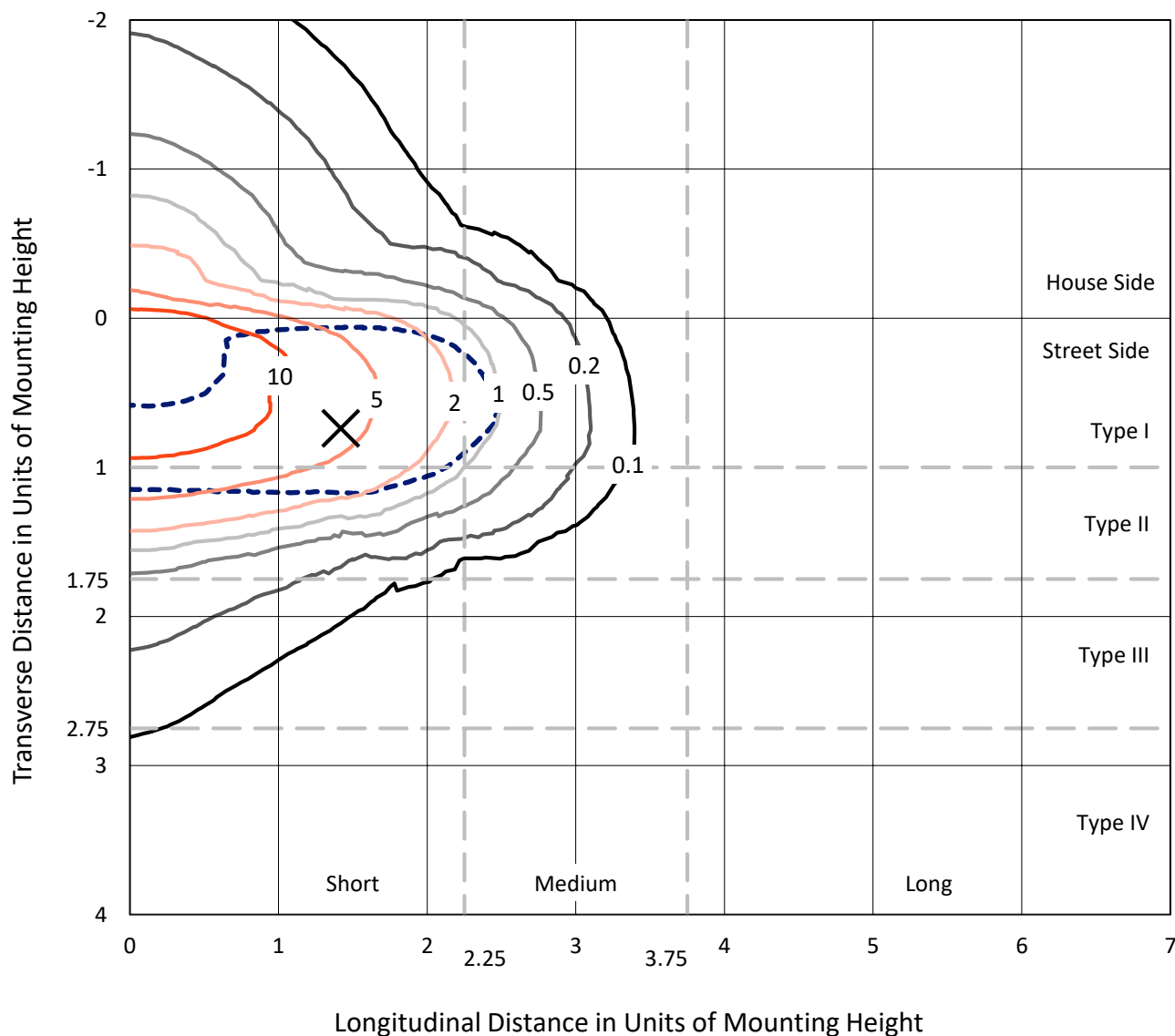
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

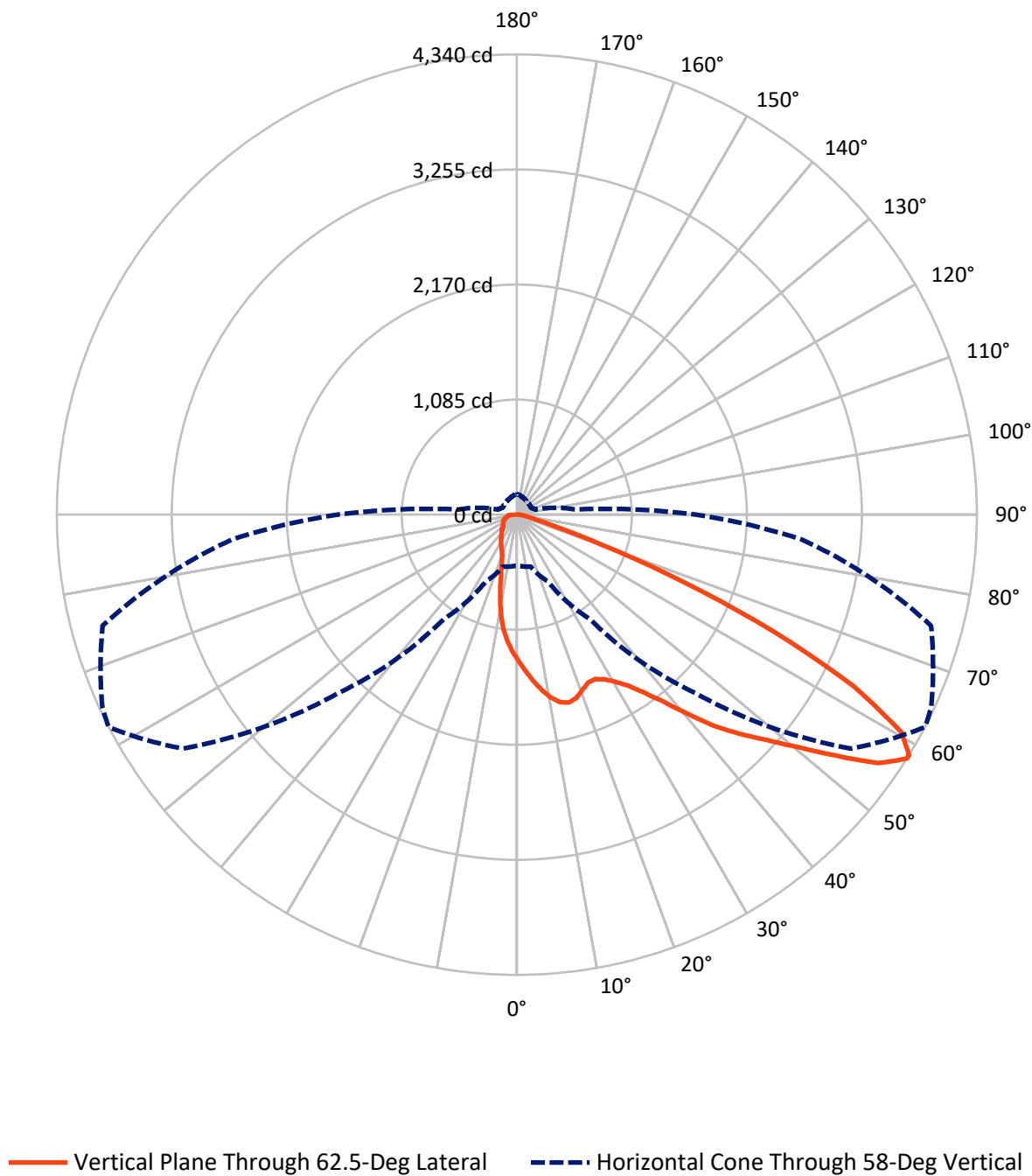


Based on 10 foot mounting height. Maximum calculated value = 16.7 fc  
Type II - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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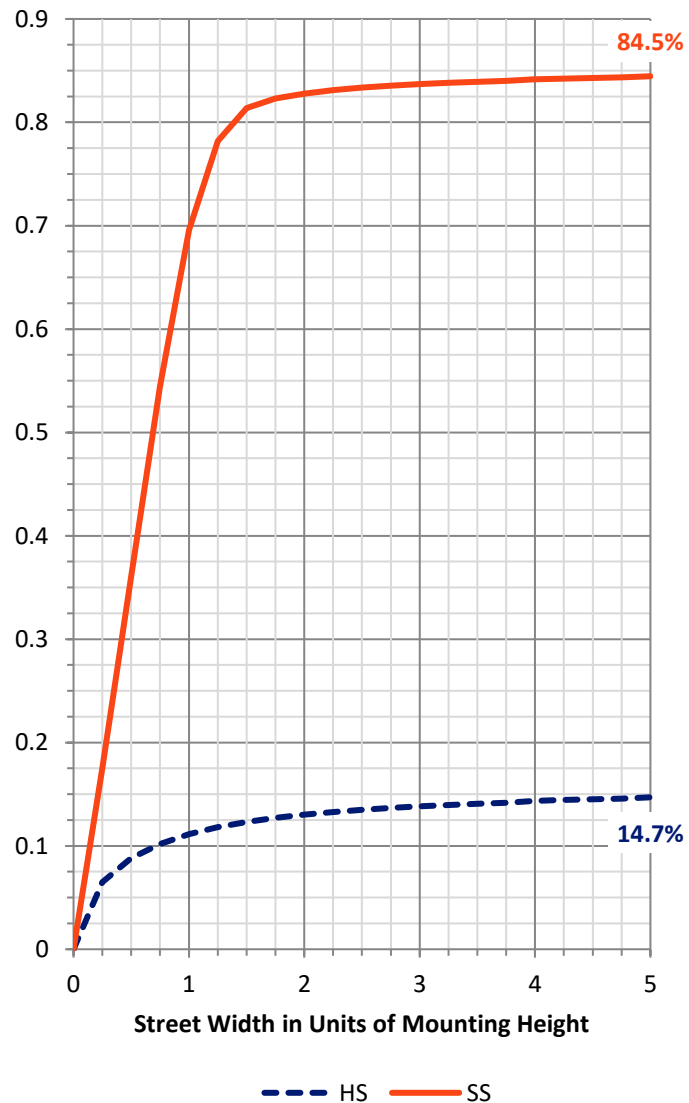
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 787.8    | 0.0    | 787.8  |
|                    | % Fixture | 15.3     | 0.0    | 15.3   |
| <b>Street Side</b> | Lumens    | 4378.2   | 0.0    | 4378.2 |
|                    | % Fixture | 84.7     | 0.0    | 84.7   |
| <b>Total</b>       | Lumens    | 5166.0   | 0.0    | 5166.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 122.7  | 2.4       |
| 10°-20°   | 313.7  | 6.1       |
| 20°-30°   | 507.1  | 9.8       |
| 30°-40°   | 805.1  | 15.6      |
| 40°-50°   | 1178.0 | 22.8      |
| 50°-60°   | 1232.0 | 23.8      |
| 60°-70°   | 727.9  | 14.1      |
| 70°-80°   | 205.1  | 4.0       |
| 80°-90°   | 74.4   | 1.4       |
| 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°    | 5166.0 | 100.0     |
| 0°-180°   | 5166.0 | 100.0     |

**Coefficient of Utilization**



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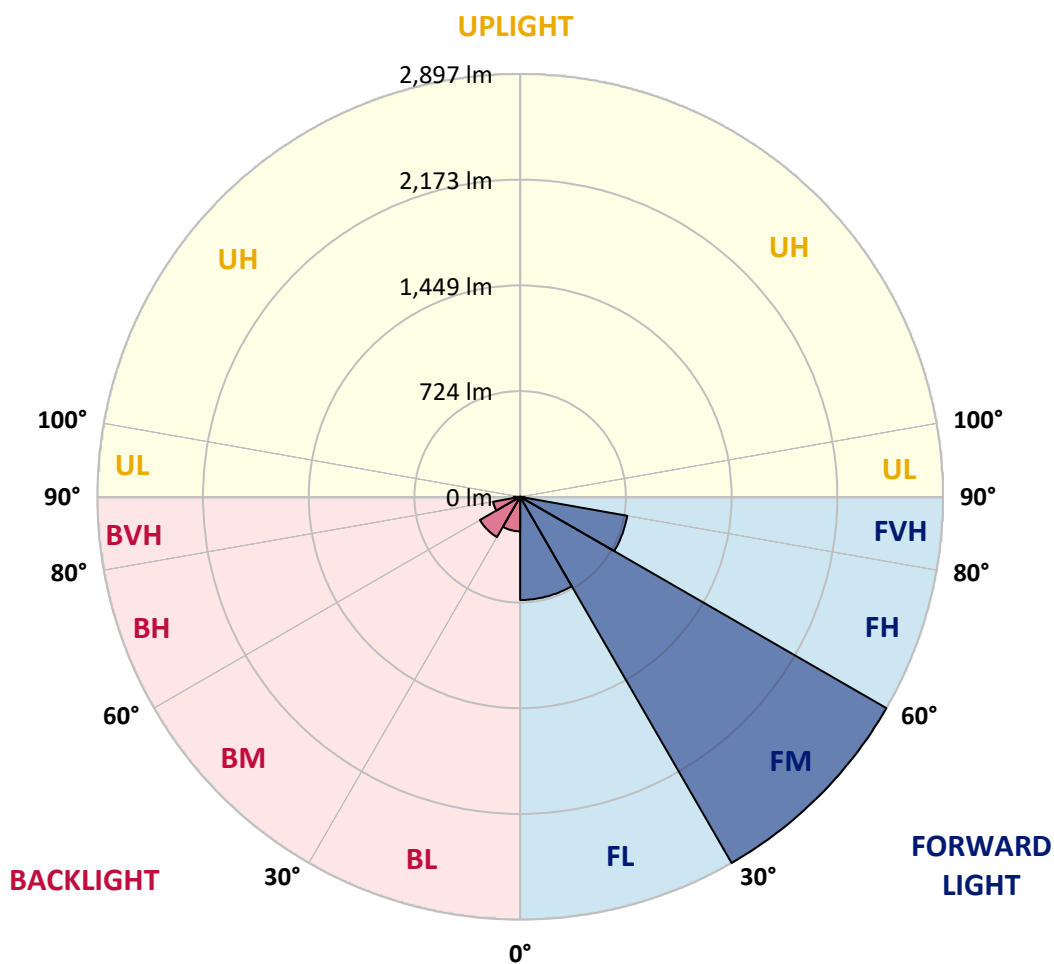
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 706.8  | 13.7      |                         |      |         |
| FM   | (30°-60°)   | 2897.1 | 56.1      |                         |      |         |
| FH   | (60°-80°)   | 745.0  | 14.4      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 29.4   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 236.8  | 4.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 318.0  | 6.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 188.0  | 3.6       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 45.1   | 0.9       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 62.5°  | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 |
| 2.5°  | 1568.1 | 1555.4 | 1547.4 | 1540.3 | 1531.1 | 1511.4 | 1484.9 | 1468.1 | 1459.6 | 1430.6 | 1396.3 |
| 5°    | 1721.8 | 1710.6 | 1702.3 | 1692.9 | 1676.3 | 1645.4 | 1602.6 | 1568.6 | 1551.8 | 1493.9 | 1425.3 |
| 7.5°  | 1685.8 | 1690.4 | 1704.8 | 1729.8 | 1751.2 | 1747.1 | 1708.9 | 1665.6 | 1643.5 | 1563.0 | 1458.8 |
| 10°   | 1468.8 | 1476.8 | 1501.7 | 1560.3 | 1655.2 | 1752.5 | 1782.1 | 1752.2 | 1729.8 | 1631.3 | 1493.4 |
| 12.5° | 1425.3 | 1425.0 | 1427.0 | 1442.5 | 1499.0 | 1635.9 | 1784.6 | 1814.7 | 1801.4 | 1696.5 | 1528.7 |
| 15°   | 1443.0 | 1443.5 | 1442.1 | 1448.6 | 1466.1 | 1520.4 | 1710.1 | 1838.8 | 1848.3 | 1762.2 | 1565.1 |
| 17.5° | 1489.7 | 1488.5 | 1482.9 | 1482.9 | 1489.3 | 1510.4 | 1622.6 | 1816.4 | 1860.2 | 1820.3 | 1597.3 |
| 20°   | 1568.1 | 1562.5 | 1547.6 | 1534.0 | 1527.2 | 1538.6 | 1586.6 | 1764.9 | 1839.5 | 1871.2 | 1623.8 |
| 22.5° | 1662.9 | 1658.6 | 1634.5 | 1605.3 | 1581.7 | 1581.4 | 1605.0 | 1719.9 | 1803.8 | 1919.1 | 1646.2 |
| 25°   | 1785.5 | 1778.5 | 1742.7 | 1696.0 | 1654.7 | 1638.9 | 1645.4 | 1717.7 | 1784.3 | 1971.2 | 1666.1 |
| 27.5° | 1929.6 | 1916.7 | 1874.3 | 1807.0 | 1746.1 | 1714.3 | 1704.8 | 1757.3 | 1802.1 | 2035.6 | 1693.8 |
| 30°   | 2104.2 | 2089.4 | 2035.1 | 1947.3 | 1861.4 | 1809.1 | 1789.0 | 1827.6 | 1861.0 | 2114.2 | 1738.4 |
| 32.5° | 2303.0 | 2281.6 | 2218.8 | 2122.0 | 2009.1 | 1929.3 | 1896.5 | 1920.6 | 1947.1 | 2208.8 | 1794.1 |
| 35°   | 2577.6 | 2552.1 | 2461.3 | 2327.8 | 2200.3 | 2090.6 | 2038.1 | 2055.6 | 2081.4 | 2349.9 | 1874.6 |
| 37.5° | 2764.9 | 2753.5 | 2693.2 | 2567.6 | 2429.0 | 2302.7 | 2221.5 | 2231.7 | 2246.3 | 2526.3 | 1977.7 |
| 40°   | 2763.2 | 2767.8 | 2769.1 | 2770.3 | 2675.9 | 2555.0 | 2467.7 | 2456.9 | 2454.0 | 2719.9 | 2095.0 |
| 42.5° | 2624.8 | 2643.8 | 2705.1 | 2829.4 | 2886.8 | 2831.3 | 2751.3 | 2720.4 | 2705.1 | 2948.1 | 2219.3 |
| 45°   | 2412.9 | 2423.1 | 2538.0 | 2780.7 | 2994.8 | 3105.0 | 3044.4 | 2947.1 | 2919.4 | 3157.8 | 2322.4 |
| 47.5° | 2303.7 | 2314.9 | 2387.1 | 2651.8 | 2993.6 | 3326.1 | 3361.2 | 3175.8 | 3126.2 | 3340.2 | 2411.5 |
| 50°   | 2043.6 | 2067.0 | 2158.0 | 2427.5 | 2884.4 | 3427.8 | 3692.2 | 3448.2 | 3345.6 | 3517.8 | 2500.7 |
| 52.5° | 1566.1 | 1602.1 | 1704.1 | 2058.7 | 2607.3 | 3377.5 | 3957.1 | 3778.6 | 3633.6 | 3701.7 | 2577.4 |
| 55°   | 987.9  | 1014.6 | 1100.3 | 1454.0 | 2085.7 | 3115.5 | 4057.6 | 4135.9 | 4007.0 | 3875.9 | 2643.8 |
| 57.5° | 537.1  | 549.0  | 581.2  | 802.8  | 1356.7 | 2536.3 | 3911.2 | 4339.3 | 4285.8 | 4023.8 | 2693.9 |
| 58°   | 480.7  | 488.7  | 508.7  | 695.7  | 1203.2 | 2377.9 | 3846.2 | 4340.0 | 4313.3 | 4045.5 | 2697.8 |
| 60°   | 356.6  | 352.5  | 334.7  | 397.0  | 669.7  | 1642.8 | 3453.6 | 4166.4 | 4244.9 | 4072.0 | 2678.8 |
| 62.5° | 313.3  | 303.3  | 267.1  | 263.0  | 325.7  | 756.8  | 2642.6 | 3568.9 | 3754.5 | 3920.7 | 2563.5 |
| 65°   | 294.3  | 283.6  | 236.9  | 221.9  | 235.0  | 320.1  | 1556.6 | 2676.6 | 2909.4 | 3461.9 | 2268.7 |
| 67.5° | 280.2  | 266.4  | 217.7  | 197.0  | 198.0  | 211.6  | 624.0  | 1685.8 | 1947.8 | 2628.4 | 1764.6 |
| 70°   | 266.6  | 251.5  | 201.4  | 177.6  | 172.0  | 167.4  | 248.1  | 843.9  | 1081.5 | 1660.3 | 1125.1 |
| 72.5° | 252.0  | 237.2  | 187.1  | 162.3  | 151.3  | 136.0  | 162.0  | 345.2  | 482.1  | 785.5  | 510.4  |
| 75°   | 230.9  | 217.5  | 172.7  | 148.6  | 133.1  | 112.6  | 122.4  | 180.3  | 216.3  | 312.8  | 245.9  |
| 77.5° | 204.8  | 193.9  | 156.7  | 137.4  | 118.0  | 91.5   | 94.1   | 125.0  | 138.7  | 179.0  | 146.2  |
| 80°   | 147.2  | 151.1  | 139.4  | 123.6  | 105.1  | 74.2   | 72.2   | 91.2   | 98.5   | 115.1  | 95.1   |
| 82.5° | 103.4  | 105.6  | 115.3  | 101.0  | 86.8   | 58.4   | 53.3   | 64.2   | 68.6   | 75.7   | 51.3   |
| 85°   | 71.3   | 68.8   | 79.1   | 70.3   | 62.8   | 38.9   | 36.5   | 43.5   | 46.2   | 46.9   | 26.5   |
| 87.5° | 42.8   | 42.8   | 45.7   | 37.7   | 33.8   | 20.2   | 19.7   | 24.8   | 26.5   | 25.3   | 14.6   |
| 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°    | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 | 1372.2 |
| 2.5°  | 1375.9 | 1358.6 | 1321.9 | 1292.5 | 1255.2 | 1216.6 | 1194.9 | 1171.8 | 1156.0 | 1144.5 | 1162.8 |
| 5°    | 1386.4 | 1351.1 | 1275.2 | 1203.2 | 1123.6 | 1040.9 | 978.2  | 919.8  | 879.1  | 853.9  | 877.7  |
| 7.5°  | 1402.9 | 1348.6 | 1227.7 | 1104.7 | 961.9  | 824.2  | 701.1  | 624.0  | 579.0  | 556.8  | 570.7  |
| 10°   | 1421.9 | 1344.8 | 1172.0 | 971.1  | 766.8  | 593.3  | 501.4  | 470.2  | 460.0  | 455.9  | 457.8  |
| 12.5° | 1437.7 | 1336.5 | 1103.7 | 809.6  | 575.8  | 468.5  | 442.0  | 441.3  | 443.5  | 444.0  | 444.7  |
| 15°   | 1448.9 | 1324.3 | 1002.2 | 641.2  | 460.5  | 426.9  | 425.5  | 429.8  | 434.0  | 435.7  | 436.7  |
| 17.5° | 1456.4 | 1299.3 | 887.7  | 507.0  | 412.6  | 406.7  | 410.1  | 415.7  | 420.1  | 421.3  | 422.3  |
| 20°   | 1455.7 | 1262.5 | 751.2  | 422.8  | 386.5  | 386.5  | 392.4  | 396.8  | 397.0  | 395.5  | 396.3  |
| 22.5° | 1448.1 | 1212.2 | 618.9  | 378.0  | 363.4  | 367.6  | 373.4  | 369.3  | 352.2  | 341.1  | 341.8  |
| 25°   | 1435.5 | 1152.1 | 505.5  | 349.6  | 342.0  | 349.3  | 347.6  | 316.5  | 292.2  | 281.2  | 281.2  |
| 27.5° | 1424.3 | 1081.1 | 418.4  | 324.8  | 320.6  | 329.6  | 299.5  | 271.2  | 261.0  | 255.9  | 254.2  |
| 30°   | 1416.3 | 1004.4 | 360.3  | 300.9  | 300.4  | 293.9  | 259.8  | 252.0  | 250.3  | 246.2  | 244.7  |
| 32.5° | 1418.2 | 926.8  | 323.1  | 280.0  | 281.7  | 251.5  | 240.8  | 242.5  | 241.1  | 236.7  | 234.7  |
| 35°   | 1434.3 | 853.1  | 298.7  | 261.0  | 255.9  | 227.2  | 229.6  | 232.8  | 232.3  | 226.2  | 224.3  |
| 37.5° | 1463.0 | 783.3  | 282.7  | 245.2  | 223.3  | 215.0  | 218.9  | 223.8  | 222.6  | 218.4  | 217.0  |
| 40°   | 1493.1 | 717.6  | 269.5  | 232.8  | 204.1  | 206.8  | 210.2  | 212.9  | 214.1  | 215.3  | 214.3  |
| 42.5° | 1522.6 | 649.0  | 253.5  | 220.2  | 196.1  | 199.0  | 200.4  | 203.1  | 209.7  | 214.3  | 214.1  |
| 45°   | 1540.1 | 584.6  | 236.9  | 202.2  | 189.7  | 191.4  | 190.5  | 195.8  | 203.9  | 211.4  | 211.6  |
| 47.5° | 1559.6 | 534.4  | 223.8  | 185.6  | 183.7  | 184.9  | 182.0  | 187.3  | 194.6  | 203.9  | 204.8  |
| 50°   | 1583.2 | 504.5  | 213.3  | 172.5  | 175.4  | 175.4  | 174.7  | 179.5  | 189.7  | 200.4  | 202.4  |
| 52.5° | 1609.9 | 498.7  | 204.6  | 163.0  | 167.1  | 166.9  | 167.6  | 174.9  | 186.1  | 196.6  | 198.3  |
| 55°   | 1642.5 | 514.5  | 195.1  | 155.9  | 159.1  | 160.1  | 162.5  | 170.8  | 180.3  | 192.2  | 192.9  |
| 57.5° | 1680.5 | 546.6  | 187.6  | 150.3  | 151.8  | 155.0  | 158.9  | 166.4  | 176.6  | 189.7  | 190.5  |
| 58°   | 1686.8 | 553.4  | 186.3  | 149.8  | 150.3  | 154.0  | 158.4  | 165.7  | 175.9  | 190.2  | 191.0  |
| 60°   | 1687.0 | 576.0  | 183.7  | 147.7  | 144.7  | 150.8  | 155.7  | 163.0  | 174.7  | 191.9  | 193.6  |
| 62.5° | 1627.2 | 575.8  | 181.7  | 144.5  | 138.9  | 146.4  | 152.0  | 160.6  | 173.4  | 196.1  | 199.5  |
| 65°   | 1432.8 | 523.3  | 172.5  | 139.6  | 134.3  | 142.6  | 148.9  | 158.9  | 176.9  | 214.1  | 216.3  |
| 67.5° | 1120.7 | 428.9  | 155.2  | 132.8  | 128.2  | 138.7  | 146.9  | 158.6  | 180.5  | 218.2  | 219.7  |
| 70°   | 741.0  | 320.9  | 136.2  | 125.0  | 121.9  | 134.0  | 147.9  | 166.9  | 176.4  | 209.4  | 205.6  |
| 72.5° | 384.6  | 225.3  | 120.9  | 115.3  | 114.6  | 129.9  | 162.0  | 165.9  | 172.2  | 197.0  | 192.2  |
| 75°   | 201.9  | 156.4  | 107.5  | 104.6  | 105.8  | 128.9  | 191.2  | 161.5  | 166.9  | 188.5  | 197.8  |
| 77.5° | 123.6  | 126.3  | 96.1   | 94.9   | 97.3   | 126.0  | 191.0  | 155.9  | 159.1  | 173.4  | 183.7  |
| 80°   | 82.7   | 102.4  | 87.3   | 87.6   | 89.3   | 115.3  | 171.5  | 147.2  | 149.6  | 164.0  | 174.4  |
| 82.5° | 52.3   | 60.6   | 79.3   | 83.4   | 81.2   | 95.1   | 145.7  | 134.0  | 137.4  | 187.6  | 198.3  |
| 85°   | 26.5   | 37.9   | 68.8   | 80.3   | 73.2   | 66.7   | 118.2  | 117.5  | 119.2  | 135.3  | 141.3  |
| 87.5° | 12.2   | 20.9   | 53.8   | 70.1   | 55.2   | 41.6   | 85.9   | 87.1   | 93.9   | 96.1   | 96.1   |
| 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)