

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P632029

Luminaire Tested: GWS-SA2B-830-U-AFL-W-HSS

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P632029  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-48)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA2B-830-U-AFL-W-HSS  
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND  
AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: (32) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

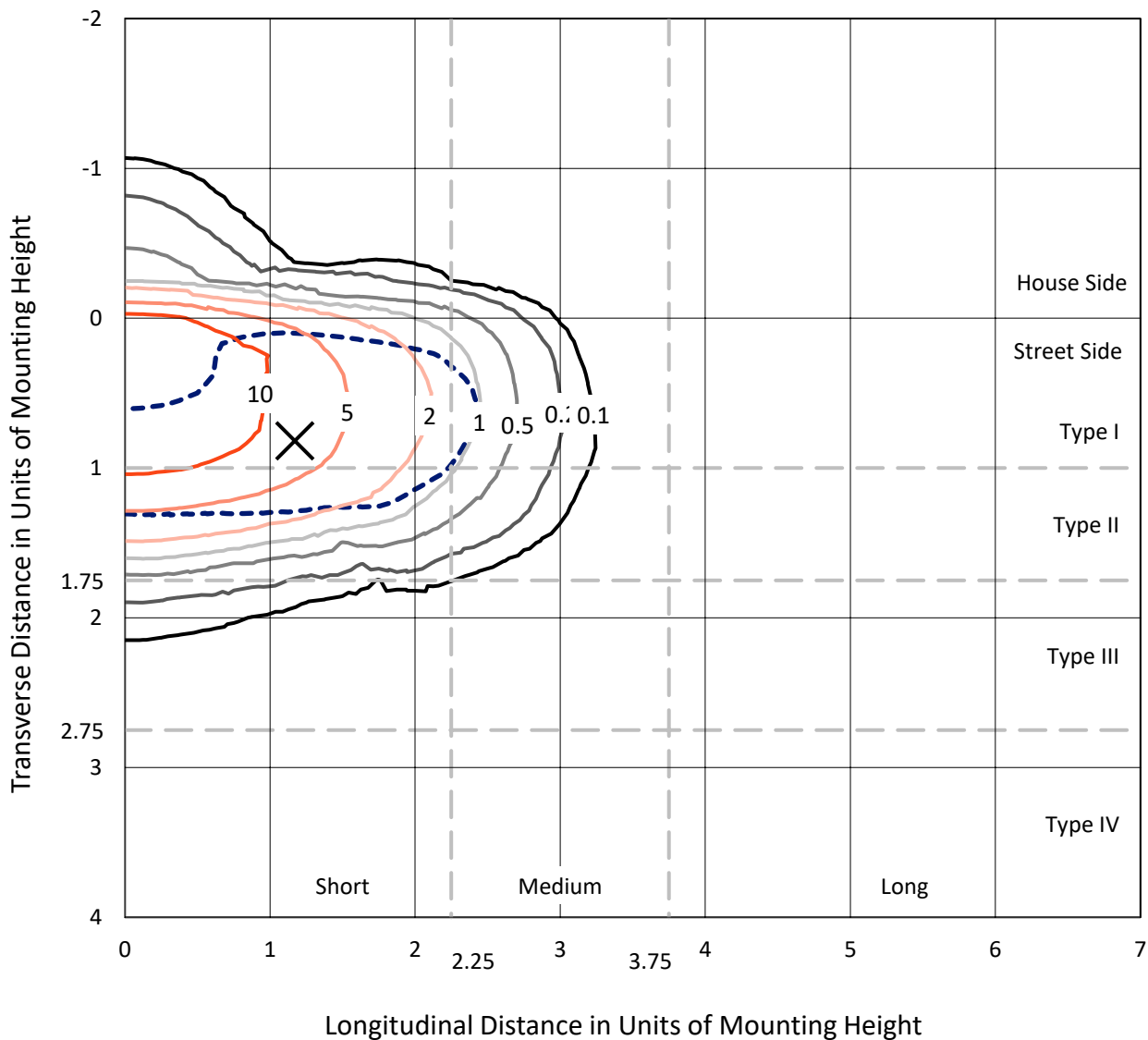
Lumens per Lamp: N/A  
Luminaire Lumens: 4597.4 lumens  
Efficiency: N/A  
Efficacy: 99.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 46.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 0  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

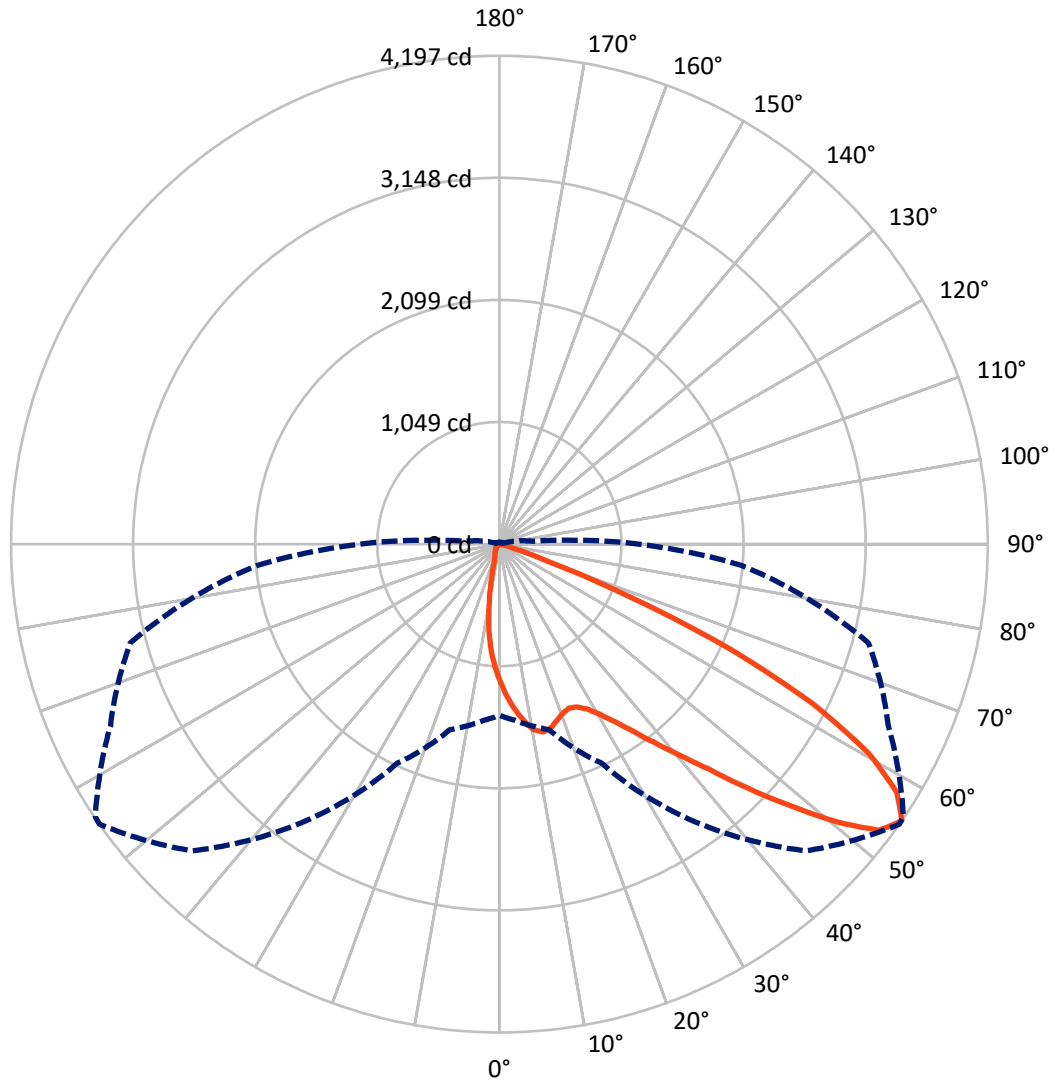
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral    - - - Horizontal Cone Through 55-Deg Vertical

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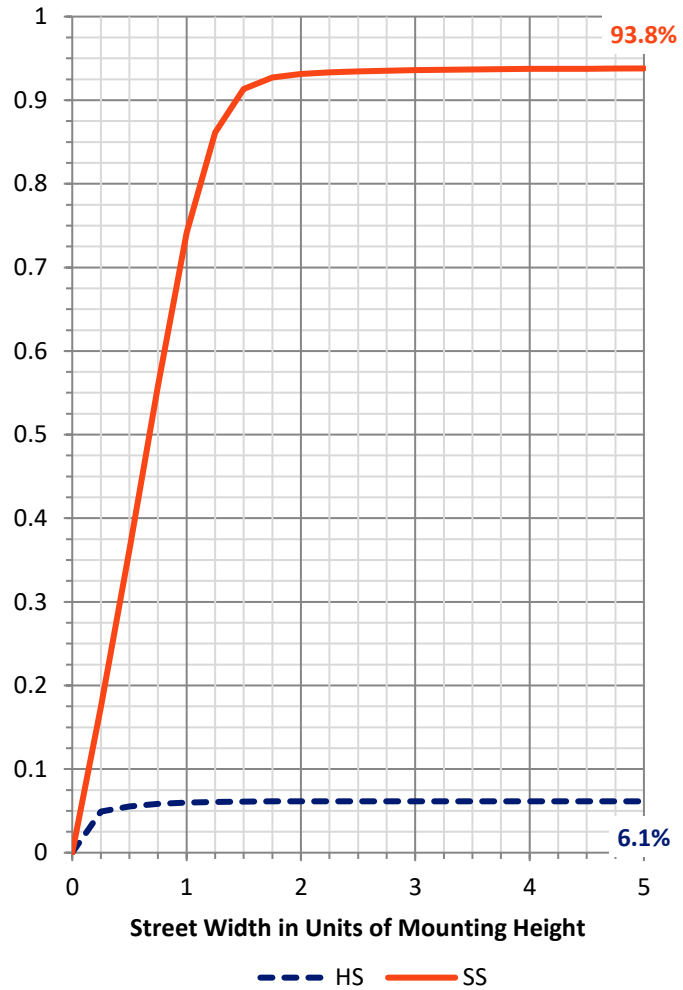
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 283.7    | 0.0    | 283.7  |
|                    | % Fixture | 6.2      | 0.0    | 6.2    |
| <b>Street Side</b> | Lumens    | 4313.7   | 0.0    | 4313.7 |
|                    | % Fixture | 93.8     | 0.0    | 93.8   |
| <b>Total</b>       | Lumens    | 4597.4   | 0.0    | 4597.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 105.0  | 2.3       |
| 10°-20°   | 253.1  | 5.5       |
| 20°-30°   | 421.4  | 9.2       |
| 30°-40°   | 718.2  | 15.6      |
| 40°-50°   | 1172.3 | 25.5      |
| 50°-60°   | 1227.3 | 26.7      |
| 60°-70°   | 619.0  | 13.5      |
| 70°-80°   | 78.2   | 1.7       |
| 80°-90°   | 3.0    | 0.1       |
| 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°    | 4597.4 | 100.0     |
| 0°-180°   | 4597.4 | 100.0     |

**Coefficient of Utilization**



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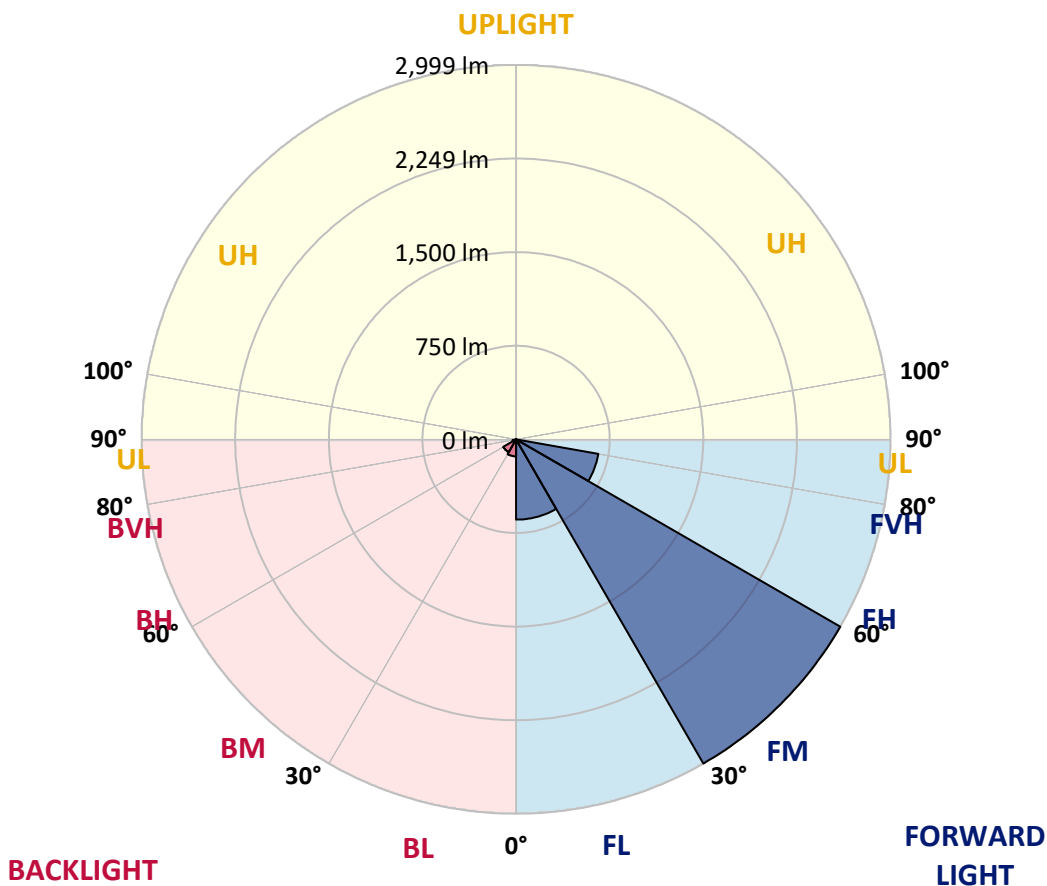
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 643.1  | 14.0      |                         |      |         |
| FM (30°-60°)   | 2999.1 | 65.2      |                         |      |         |
| FH (60°-80°)   | 668.8  | 14.5      |                         |      | G1/1800 |
| FVH (80°-90°)  | 2.7    | 0.1       |                         |      | G0/10   |
| BL (0°-30°)    | 136.3  | 3.0       | B1/500                  |      |         |
| BM (30°-60°)   | 118.6  | 2.6       | B0/220                  |      |         |
| BH (60°-80°)   | 28.5   | 0.6       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 0.3    | 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-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 56°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 |
| 2.5°  | 1384.6 | 1377.9 | 1388.1 | 1376.3 | 1356.3 | 1339.4 | 1317.4 | 1309.5 | 1274.2 | 1240.8 | 1208.5 |
| 5°    | 1552.8 | 1554.8 | 1551.6 | 1535.1 | 1506.8 | 1475.4 | 1431.0 | 1421.2 | 1359.4 | 1295.8 | 1227.0 |
| 7.5°  | 1594.5 | 1593.3 | 1600.0 | 1606.3 | 1601.5 | 1585.8 | 1537.5 | 1527.7 | 1451.0 | 1355.5 | 1255.3 |
| 10°   | 1466.0 | 1466.7 | 1480.5 | 1522.9 | 1575.6 | 1630.2 | 1622.8 | 1617.3 | 1542.2 | 1423.1 | 1286.7 |
| 12.5° | 1284.4 | 1291.5 | 1306.0 | 1366.5 | 1455.7 | 1579.9 | 1657.0 | 1662.5 | 1625.9 | 1497.4 | 1323.7 |
| 15°   | 1205.8 | 1207.3 | 1219.1 | 1255.7 | 1322.1 | 1475.4 | 1642.4 | 1657.7 | 1695.9 | 1572.1 | 1363.8 |
| 17.5° | 1203.8 | 1205.8 | 1210.9 | 1227.0 | 1270.2 | 1393.2 | 1595.7 | 1622.4 | 1748.5 | 1652.2 | 1411.7 |
| 20°   | 1277.7 | 1276.5 | 1273.0 | 1264.3 | 1283.2 | 1366.1 | 1552.4 | 1581.9 | 1777.2 | 1730.5 | 1460.1 |
| 22.5° | 1411.7 | 1410.1 | 1394.4 | 1358.7 | 1343.3 | 1390.9 | 1531.2 | 1557.9 | 1794.5 | 1800.0 | 1499.8 |
| 25°   | 1566.2 | 1577.2 | 1547.7 | 1493.5 | 1455.7 | 1454.2 | 1550.1 | 1568.9 | 1809.5 | 1861.7 | 1526.9 |
| 27.5° | 1735.6 | 1739.1 | 1713.9 | 1653.0 | 1598.4 | 1555.6 | 1604.7 | 1618.8 | 1826.0 | 1916.7 | 1542.2 |
| 30°   | 1921.5 | 1920.3 | 1891.6 | 1820.9 | 1754.4 | 1692.7 | 1696.7 | 1702.2 | 1864.5 | 1979.6 | 1559.1 |
| 32.5° | 2153.7 | 2158.8 | 2107.8 | 2011.5 | 1931.7 | 1846.4 | 1816.9 | 1817.7 | 1934.0 | 2060.6 | 1584.6 |
| 35°   | 2469.3 | 2456.8 | 2389.2 | 2252.0 | 2116.0 | 2024.0 | 1973.7 | 1969.4 | 2041.3 | 2169.5 | 1629.1 |
| 37.5° | 2770.0 | 2771.2 | 2700.4 | 2549.5 | 2377.8 | 2232.7 | 2161.6 | 2149.8 | 2192.3 | 2320.4 | 1702.9 |
| 40°   | 2978.7 | 2982.6 | 2953.1 | 2874.1 | 2692.2 | 2487.0 | 2382.5 | 2370.3 | 2388.0 | 2511.4 | 1799.6 |
| 42.5° | 3089.1 | 3100.1 | 3108.4 | 3126.8 | 2988.9 | 2804.6 | 2643.8 | 2642.6 | 2624.2 | 2729.1 | 1911.6 |
| 45°   | 3093.4 | 3109.9 | 3160.3 | 3286.4 | 3302.1 | 3166.9 | 2992.0 | 2965.7 | 2894.6 | 2962.2 | 2011.9 |
| 47.5° | 2922.5 | 2960.6 | 3067.5 | 3317.5 | 3482.5 | 3527.3 | 3354.0 | 3337.9 | 3138.2 | 3146.5 | 2086.9 |
| 50°   | 2524.0 | 2563.7 | 2760.6 | 3158.3 | 3528.1 | 3813.4 | 3751.4 | 3717.9 | 3341.8 | 3268.3 | 2123.1 |
| 52.5° | 2115.2 | 2151.4 | 2285.0 | 2779.4 | 3339.1 | 3903.4 | 4086.2 | 4046.5 | 3524.6 | 3310.8 | 2108.1 |
| 55°   | 1471.9 | 1520.2 | 1650.7 | 2077.5 | 2903.6 | 3728.2 | 4197.0 | 4188.8 | 3687.7 | 3284.1 | 2085.0 |
| 57.5° | 721.6  | 769.5  | 899.6  | 1280.8 | 2151.0 | 3255.0 | 4027.6 | 4071.3 | 3785.2 | 3255.4 | 2066.1 |
| 60°   | 301.4  | 321.1  | 365.9  | 562.0  | 1203.4 | 2459.9 | 3645.2 | 3705.8 | 3725.4 | 3216.5 | 2064.1 |
| 62.5° | 174.9  | 178.0  | 182.8  | 233.1  | 468.1  | 1410.1 | 3023.9 | 3109.9 | 3411.4 | 3165.0 | 2033.1 |
| 65°   | 132.1  | 133.2  | 131.3  | 143.1  | 193.4  | 534.9  | 2184.8 | 2301.9 | 2847.4 | 2963.7 | 1910.5 |
| 67.5° | 108.5  | 108.5  | 103.4  | 105.7  | 121.4  | 200.4  | 1206.2 | 1369.7 | 2107.0 | 2435.9 | 1577.6 |
| 70°   | 86.5   | 88.4   | 86.1   | 82.9   | 86.9   | 110.8  | 429.2  | 532.1  | 1227.0 | 1438.4 | 920.1  |
| 72.5° | 65.6   | 65.6   | 69.6   | 67.2   | 64.5   | 69.6   | 149.7  | 168.2  | 492.5  | 599.7  | 332.1  |
| 75°   | 50.7   | 52.3   | 55.0   | 52.7   | 48.7   | 41.3   | 71.9   | 76.2   | 148.6  | 139.5  | 74.3   |
| 77.5° | 25.9   | 26.3   | 35.0   | 38.5   | 36.2   | 25.2   | 31.4   | 34.6   | 48.3   | 43.2   | 27.5   |
| 80°   | 15.7   | 16.5   | 19.7   | 30.3   | 24.0   | 13.4   | 13.0   | 13.8   | 22.8   | 19.7   | 11.4   |
| 82.5° | 6.7    | 7.1    | 11.0   | 11.0   | 9.8    | 5.1    | 5.1    | 5.1    | 11.0   | 10.2   | 4.7    |
| 85°   | 0.0    | 0.0    | 2.0    | 1.6    | 1.6    | 2.0    | 2.0    | 2.0    | 2.8    | 3.9    | 2.4    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.4    | 1.2    | 1.2    |
| 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°    | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 | 1187.7 |
| 2.5°  | 1187.7 | 1162.5 | 1128.7 | 1098.1 | 1056.8 | 1033.6 | 1001.4 | 975.1  | 952.7  | 945.6  | 942.5  |
| 5°    | 1188.1 | 1144.9 | 1072.5 | 1000.2 | 911.4  | 841.5  | 769.5  | 712.5  | 665.8  | 650.8  | 646.9  |
| 7.5°  | 1196.0 | 1132.3 | 1015.2 | 883.9  | 735.3  | 612.7  | 503.1  | 404.8  | 359.2  | 343.9  | 340.7  |
| 10°   | 1206.6 | 1121.7 | 948.7  | 744.4  | 531.0  | 373.4  | 264.5  | 201.6  | 171.7  | 155.2  | 157.6  |
| 12.5° | 1220.3 | 1113.0 | 875.2  | 593.5  | 351.4  | 205.2  | 145.4  | 121.8  | 115.5  | 112.4  | 110.8  |
| 15°   | 1238.8 | 1102.8 | 784.1  | 443.7  | 215.4  | 132.1  | 112.0  | 105.7  | 103.4  | 101.8  | 101.4  |
| 17.5° | 1257.7 | 1091.0 | 691.3  | 312.1  | 143.1  | 109.7  | 100.6  | 97.5   | 95.9   | 94.7   | 94.3   |
| 20°   | 1277.7 | 1071.0 | 582.5  | 215.0  | 112.8  | 98.6   | 92.8   | 89.2   | 87.2   | 85.3   | 84.9   |
| 22.5° | 1286.3 | 1038.7 | 478.3  | 150.5  | 100.2  | 90.8   | 83.3   | 79.0   | 76.6   | 75.1   | 75.1   |
| 25°   | 1278.1 | 986.5  | 370.6  | 114.4  | 91.2   | 82.1   | 74.7   | 70.0   | 68.0   | 66.4   | 66.4   |
| 27.5° | 1256.1 | 919.3  | 270.4  | 94.7   | 81.4   | 73.1   | 66.0   | 61.7   | 60.1   | 59.3   | 59.3   |
| 30°   | 1231.7 | 834.4  | 190.6  | 81.4   | 70.4   | 63.7   | 57.8   | 55.0   | 54.6   | 53.8   | 53.8   |
| 32.5° | 1210.9 | 755.0  | 131.3  | 71.5   | 62.1   | 55.4   | 51.5   | 50.3   | 50.7   | 49.9   | 50.3   |
| 35°   | 1199.5 | 677.2  | 97.5   | 63.7   | 55.4   | 49.1   | 47.2   | 47.2   | 47.2   | 46.8   | 46.8   |
| 37.5° | 1204.2 | 600.5  | 79.4   | 58.2   | 49.5   | 44.8   | 42.8   | 43.6   | 44.4   | 44.4   | 44.4   |
| 40°   | 1227.8 | 532.5  | 70.4   | 53.1   | 44.4   | 40.9   | 39.3   | 40.5   | 41.7   | 42.4   | 42.4   |
| 42.5° | 1257.7 | 477.5  | 63.7   | 48.7   | 40.9   | 36.9   | 36.2   | 37.3   | 38.5   | 39.3   | 39.3   |
| 45°   | 1276.5 | 422.1  | 57.0   | 43.2   | 37.3   | 32.6   | 32.6   | 34.2   | 33.8   | 34.2   | 34.2   |
| 47.5° | 1285.2 | 378.1  | 50.3   | 37.3   | 31.8   | 28.3   | 28.7   | 29.5   | 28.7   | 29.5   | 29.5   |
| 50°   | 1263.9 | 333.7  | 44.4   | 31.0   | 26.3   | 24.8   | 25.5   | 25.2   | 25.2   | 26.7   | 26.7   |
| 52.5° | 1225.0 | 300.7  | 39.3   | 26.3   | 22.4   | 22.0   | 22.8   | 21.2   | 21.6   | 21.6   | 21.2   |
| 55°   | 1196.3 | 281.8  | 35.0   | 22.8   | 19.3   | 19.7   | 19.3   | 16.5   | 14.9   | 13.4   | 13.0   |
| 57.5° | 1182.2 | 274.3  | 31.8   | 20.4   | 17.3   | 17.3   | 15.7   | 11.4   | 8.6    | 6.7    | 5.9    |
| 60°   | 1179.1 | 265.3  | 28.7   | 17.7   | 15.3   | 14.5   | 11.4   | 6.7    | 4.3    | 3.1    | 2.8    |
| 62.5° | 1149.2 | 243.3  | 25.9   | 14.1   | 13.4   | 11.8   | 7.1    | 3.9    | 2.4    | 1.6    | 1.2    |
| 65°   | 1051.3 | 200.0  | 23.2   | 11.0   | 10.2   | 8.6    | 4.3    | 2.4    | 1.2    | 0.4    | 0.0    |
| 67.5° | 836.3  | 141.9  | 20.4   | 8.3    | 7.1    | 5.5    | 2.8    | 1.6    | 0.4    | 0.0    | 0.0    |
| 70°   | 482.2  | 76.6   | 16.9   | 5.9    | 4.7    | 3.5    | 2.0    | 0.8    | 0.0    | 0.0    | 0.0    |
| 72.5° | 161.1  | 35.8   | 13.0   | 3.9    | 3.5    | 2.8    | 1.2    | 0.4    | 0.0    | 0.0    | 0.0    |
| 75°   | 35.4   | 21.2   | 8.6    | 2.8    | 2.4    | 2.0    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 13.4   | 14.9   | 4.3    | 2.0    | 1.6    | 1.2    | 0.4    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 5.1    | 9.8    | 2.0    | 1.2    | 1.2    | 0.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 2.8    | 3.9    | 1.2    | 0.8    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 1.6    | 2.0    | 0.8    | 0.4    | 0.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.8    | 0.4    | 0.4    | 0.4    | 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    | 0.0    |

(END OF REPORT)