

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: LUMARK

Report Number: P961566

Luminaire Tested: **NAV-SB2A-830-U-T3-HSS**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P961566  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2A-830-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

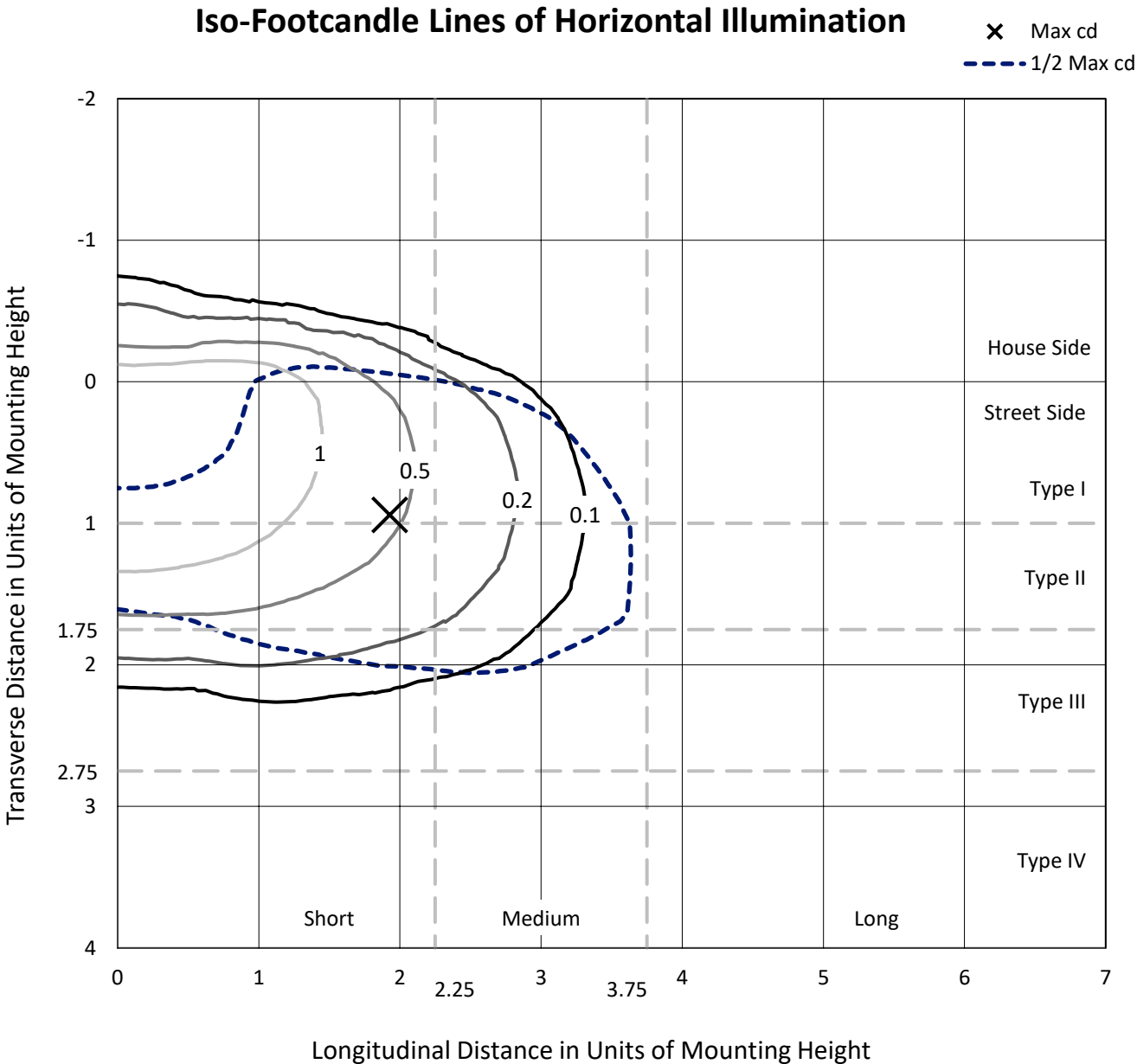
### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 6480 lumens  
Efficiency: N/A  
Efficacy: 113.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 57.3  
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: 24 FT



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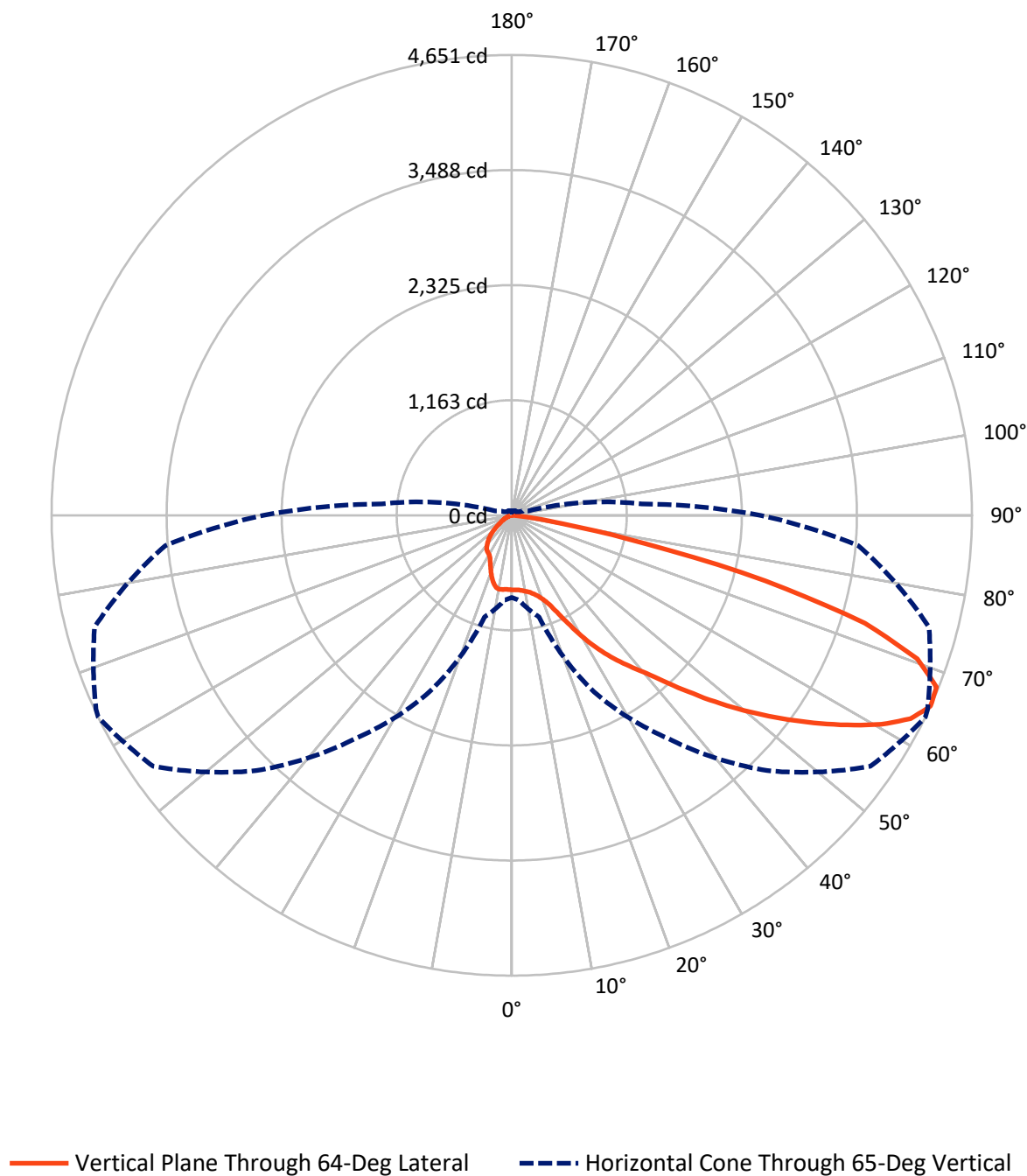


Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
Type III - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 866.6    | 0.0    | 866.6  |
|                    | % Fixture | 13.4     | 0.0    | 13.4   |
| <b>Street Side</b> | Lumens    | 5613.5   | 0.0    | 5613.5 |
|                    | % Fixture | 86.6     | 0.0    | 86.6   |
| <b>Total</b>       | Lumens    | 6480.0   | 0.0    | 6480.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 69.5   | 1.1       |
| 10°-20°   | 188.6  | 2.9       |
| 20°-30°   | 357.4  | 5.5       |
| 30°-40°   | 723.2  | 11.2      |
| 40°-50°   | 1231.9 | 19.0      |
| 50°-60°   | 1675.3 | 25.9      |
| 60°-70°   | 1573.2 | 24.3      |
| 70°-80°   | 630.3  | 9.7       |
| 80°-90°   | 30.5   | 0.5       |
| 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°    | 6480.0 | 100.0     |
| 0°-180°   | 6480.0 | 100.0     |

**Coefficient of Utilization**



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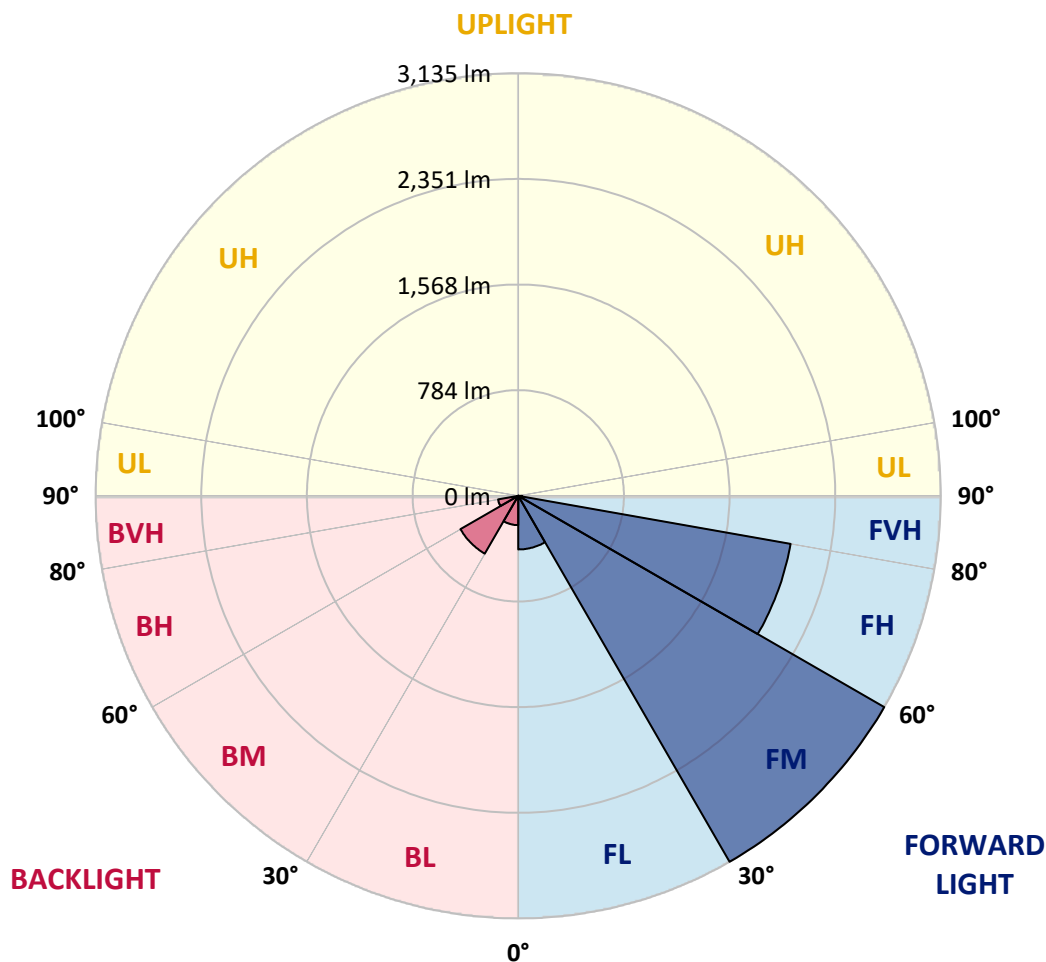
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 397.9  | 6.1       |                         |      |         |
| FM   | (30°-60°)   | 3135.0 | 48.4      |                         |      |         |
| FH   | (60°-80°)   | 2051.4 | 31.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 29.0   | 0.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 217.6  | 3.4       | B1/500                  |      |         |
| BM   | (30°-60°)   | 495.4  | 7.6       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 152.1  | 2.3       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 1.5    | 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-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 64°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 753.7  | 753.7  | 753.7  | 753.7  | 753.7  | 753.7  | 753.7  | 753.7  | 753.7  | 753.7  | 753.7  |
| 2.5°  | 751.1  | 756.3  | 755.0  | 753.7  | 753.3  | 754.1  | 754.6  | 754.1  | 754.1  | 754.1  | 754.6  |
| 5°    | 736.8  | 741.1  | 741.1  | 744.2  | 748.5  | 753.7  | 757.6  | 758.5  | 759.3  | 760.7  | 760.2  |
| 7.5°  | 709.4  | 712.9  | 715.4  | 725.5  | 736.4  | 750.2  | 762.0  | 768.0  | 768.9  | 773.7  | 775.4  |
| 10°   | 690.7  | 695.1  | 699.4  | 709.8  | 725.5  | 746.3  | 766.3  | 781.0  | 783.2  | 794.6  | 799.7  |
| 12.5° | 689.8  | 694.2  | 699.9  | 711.1  | 729.4  | 751.5  | 775.8  | 797.1  | 801.0  | 817.5  | 828.4  |
| 15°   | 698.9  | 704.2  | 709.4  | 723.2  | 742.8  | 769.8  | 795.8  | 822.4  | 826.3  | 849.7  | 861.4  |
| 17.5° | 717.6  | 724.6  | 728.5  | 742.4  | 763.2  | 793.2  | 827.6  | 857.9  | 861.4  | 888.8  | 903.5  |
| 20°   | 754.6  | 762.8  | 764.1  | 775.4  | 795.8  | 828.0  | 868.8  | 906.6  | 910.9  | 942.2  | 958.8  |
| 22.5° | 831.1  | 842.8  | 832.3  | 837.9  | 856.2  | 888.4  | 932.6  | 980.4  | 986.6  | 1022.1 | 1036.9 |
| 25°   | 965.7  | 982.2  | 955.3  | 945.7  | 953.6  | 987.0  | 1042.5 | 1103.0 | 1109.9 | 1138.6 | 1145.9 |
| 27.5° | 1230.2 | 1209.0 | 1168.1 | 1128.1 | 1104.7 | 1123.8 | 1186.3 | 1261.1 | 1269.8 | 1297.5 | 1288.9 |
| 30°   | 1520.9 | 1502.1 | 1447.0 | 1358.4 | 1302.8 | 1299.7 | 1357.5 | 1440.9 | 1450.9 | 1477.4 | 1450.9 |
| 32.5° | 1811.9 | 1794.1 | 1734.2 | 1625.1 | 1528.7 | 1480.9 | 1520.9 | 1613.4 | 1618.6 | 1635.6 | 1596.4 |
| 35°   | 2098.2 | 2079.9 | 2020.0 | 1908.3 | 1789.8 | 1681.2 | 1673.3 | 1777.6 | 1779.3 | 1797.1 | 1738.9 |
| 37.5° | 2386.2 | 2371.0 | 2307.2 | 2197.7 | 2080.9 | 1930.9 | 1858.4 | 1933.2 | 1935.3 | 1952.6 | 1892.3 |
| 40°   | 2591.7 | 2598.2 | 2554.3 | 2469.6 | 2369.3 | 2205.5 | 2066.1 | 2098.6 | 2085.6 | 2114.7 | 2078.6 |
| 42.5° | 2768.0 | 2781.0 | 2742.9 | 2700.3 | 2642.0 | 2497.8 | 2323.2 | 2317.5 | 2296.7 | 2312.4 | 2275.0 |
| 45°   | 2920.5 | 2931.4 | 2897.1 | 2887.1 | 2885.8 | 2784.5 | 2604.3 | 2570.4 | 2541.3 | 2538.2 | 2493.5 |
| 47.5° | 2976.6 | 2997.4 | 3012.2 | 3045.6 | 3110.8 | 3068.2 | 2894.9 | 2842.3 | 2809.7 | 2785.8 | 2715.0 |
| 50°   | 2997.8 | 3020.0 | 3070.4 | 3167.7 | 3321.9 | 3340.2 | 3184.2 | 3125.1 | 3085.1 | 3041.7 | 2937.4 |
| 52.5° | 2969.2 | 3008.7 | 3076.4 | 3240.2 | 3464.0 | 3558.2 | 3461.8 | 3410.1 | 3364.5 | 3293.6 | 3139.1 |
| 55°   | 2800.2 | 2839.8 | 2978.3 | 3239.4 | 3534.8 | 3711.1 | 3724.1 | 3701.2 | 3649.9 | 3538.3 | 3301.9 |
| 57.5° | 2444.0 | 2502.6 | 2722.0 | 3129.0 | 3533.5 | 3842.7 | 3981.3 | 3997.8 | 3940.5 | 3780.6 | 3430.1 |
| 60°   | 1950.5 | 2030.0 | 2297.5 | 2884.5 | 3424.4 | 3914.0 | 4206.8 | 4289.3 | 4228.5 | 4019.5 | 3533.9 |
| 62.5° | 1361.0 | 1453.1 | 1706.3 | 2501.3 | 3175.0 | 3862.7 | 4371.4 | 4523.9 | 4477.9 | 4233.4 | 3573.9 |
| 65°   | 830.1  | 859.7  | 1063.8 | 1968.3 | 2751.1 | 3648.2 | 4422.3 | 4650.7 | 4635.6 | 4364.0 | 3514.8 |
| 67.5° | 553.0  | 577.8  | 636.4  | 1349.7 | 2135.6 | 3219.4 | 4300.6 | 4628.6 | 4633.0 | 4342.8 | 3298.4 |
| 70°   | 333.2  | 354.4  | 392.7  | 784.9  | 1384.1 | 2548.3 | 3924.0 | 4346.2 | 4371.4 | 4058.3 | 2888.3 |
| 72.5° | 137.2  | 151.6  | 186.3  | 355.8  | 716.8  | 1617.3 | 3124.7 | 3731.5 | 3790.2 | 3412.2 | 2216.8 |
| 75°   | 77.8   | 85.2   | 109.5  | 178.6  | 311.0  | 753.7  | 1892.7 | 2649.0 | 2735.4 | 2351.9 | 1333.6 |
| 77.5° | 51.7   | 55.1   | 70.8   | 115.5  | 175.1  | 257.2  | 808.8  | 1380.2 | 1545.2 | 1284.5 | 577.3  |
| 80°   | 34.7   | 37.8   | 48.7   | 77.3   | 113.8  | 110.3  | 257.6  | 511.3  | 629.0  | 441.4  | 140.7  |
| 82.5° | 23.5   | 23.9   | 34.7   | 50.8   | 72.2   | 53.4   | 76.1   | 159.0  | 199.9  | 127.7  | 53.4   |
| 85°   | 13.4   | 13.0   | 25.6   | 29.5   | 32.2   | 22.1   | 23.1   | 47.8   | 62.5   | 53.9   | 30.4   |
| 87.5° | 1.7    | 2.6    | 9.9    | 7.8    | 4.3    | 4.8    | 4.8    | 8.3    | 12.2   | 13.0   | 6.6    |
| 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°    | 753.7  | 753.7  | 753.7 | 753.7 | 753.7 | 753.7 | 753.7 | 753.7 | 753.7 | 753.7 | 753.7 |
| 2.5°  | 754.6  | 754.1  | 752.9 | 751.5 | 748.5 | 746.7 | 747.6 | 746.7 | 746.3 | 746.7 | 748.5 |
| 5°    | 760.2  | 758.9  | 755.4 | 751.1 | 745.0 | 737.6 | 732.9 | 725.9 | 719.3 | 715.4 | 716.4 |
| 7.5°  | 775.4  | 774.1  | 769.4 | 757.2 | 737.6 | 706.7 | 678.6 | 653.7 | 635.1 | 624.2 | 624.6 |
| 10°   | 799.7  | 797.6  | 790.2 | 763.2 | 712.0 | 644.6 | 588.7 | 542.1 | 511.8 | 497.4 | 496.1 |
| 12.5° | 828.4  | 825.8  | 812.8 | 757.6 | 663.4 | 558.2 | 480.9 | 429.2 | 401.0 | 388.4 | 387.0 |
| 15°   | 862.3  | 858.8  | 833.2 | 730.7 | 592.6 | 462.7 | 391.9 | 353.2 | 335.0 | 323.6 | 324.1 |
| 17.5° | 904.5  | 898.3  | 848.4 | 690.2 | 515.7 | 389.7 | 337.1 | 308.0 | 291.9 | 281.1 | 280.2 |
| 20°   | 959.2  | 949.1  | 860.6 | 642.1 | 444.8 | 343.6 | 300.2 | 275.8 | 263.7 | 254.1 | 252.4 |
| 22.5° | 1035.7 | 1021.3 | 875.4 | 589.9 | 394.8 | 311.9 | 272.9 | 255.0 | 245.0 | 234.1 | 232.4 |
| 25°   | 1130.4 | 1113.4 | 893.6 | 541.7 | 360.6 | 284.5 | 252.9 | 238.0 | 226.3 | 213.7 | 212.4 |
| 27.5° | 1262.8 | 1232.5 | 915.3 | 502.1 | 331.0 | 261.1 | 234.6 | 218.1 | 204.6 | 194.1 | 192.0 |
| 30°   | 1410.5 | 1360.6 | 934.4 | 478.3 | 304.1 | 239.3 | 210.6 | 194.1 | 181.6 | 174.1 | 172.9 |
| 32.5° | 1550.4 | 1482.7 | 947.0 | 467.8 | 279.7 | 214.6 | 184.6 | 166.8 | 157.2 | 155.1 | 156.4 |
| 35°   | 1682.4 | 1593.0 | 945.7 | 457.9 | 258.0 | 189.8 | 159.0 | 140.7 | 133.4 | 134.7 | 134.7 |
| 37.5° | 1834.5 | 1710.7 | 936.5 | 442.2 | 240.3 | 167.3 | 136.8 | 120.7 | 114.3 | 114.7 | 116.4 |
| 40°   | 2011.4 | 1846.6 | 930.9 | 412.7 | 220.7 | 146.4 | 118.6 | 105.6 | 100.8 | 99.0  | 98.6  |
| 42.5° | 2199.9 | 1978.2 | 931.8 | 379.2 | 196.4 | 127.7 | 106.0 | 95.1  | 90.8  | 89.5  | 89.1  |
| 45°   | 2389.3 | 2103.8 | 933.1 | 344.5 | 170.8 | 113.4 | 96.9  | 87.7  | 85.2  | 83.4  | 83.4  |
| 47.5° | 2567.3 | 2210.7 | 908.8 | 307.1 | 145.5 | 102.5 | 89.5  | 83.4  | 81.3  | 79.0  | 79.0  |
| 50°   | 2733.3 | 2282.0 | 850.1 | 263.7 | 125.6 | 93.8  | 83.8  | 79.5  | 77.3  | 75.1  | 75.1  |
| 52.5° | 2862.3 | 2293.2 | 753.3 | 218.9 | 111.6 | 87.3  | 80.4  | 76.5  | 73.8  | 71.6  | 71.2  |
| 55°   | 2919.6 | 2222.4 | 615.5 | 177.2 | 100.8 | 81.7  | 76.9  | 73.0  | 69.9  | 67.8  | 67.3  |
| 57.5° | 2904.8 | 2073.5 | 480.0 | 142.5 | 90.4  | 76.1  | 72.6  | 69.9  | 66.4  | 63.0  | 62.5  |
| 60°   | 2832.4 | 1874.0 | 361.8 | 118.6 | 80.8  | 69.9  | 67.8  | 65.6  | 60.8  | 55.6  | 54.7  |
| 62.5° | 2706.8 | 1623.4 | 258.0 | 98.2  | 70.4  | 63.0  | 62.1  | 60.4  | 53.4  | 43.9  | 43.0  |
| 65°   | 2514.7 | 1318.9 | 173.7 | 81.7  | 60.4  | 55.1  | 55.6  | 52.6  | 43.5  | 32.6  | 31.7  |
| 67.5° | 2234.2 | 964.4  | 111.2 | 66.9  | 50.4  | 46.0  | 46.4  | 44.8  | 36.9  | 27.8  | 26.5  |
| 70°   | 1876.7 | 638.6  | 72.6  | 50.8  | 40.4  | 35.7  | 38.2  | 38.6  | 31.3  | 22.5  | 21.7  |
| 72.5° | 1375.8 | 377.1  | 50.8  | 37.8  | 29.5  | 24.8  | 31.3  | 32.2  | 25.2  | 16.9  | 16.1  |
| 75°   | 784.1  | 179.0  | 38.2  | 27.4  | 18.2  | 17.4  | 24.3  | 24.3  | 17.4  | 11.3  | 10.5  |
| 77.5° | 329.2  | 74.7   | 27.0  | 17.8  | 10.5  | 9.9   | 16.5  | 15.2  | 8.7   | 5.2   | 5.2   |
| 80°   | 95.1   | 33.4   | 14.3  | 8.7   | 4.3   | 3.9   | 6.6   | 4.8   | 2.2   | 0.8   | 0.8   |
| 82.5° | 37.3   | 14.8   | 5.6   | 3.5   | 1.7   | 1.7   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 22.1   | 6.0    | 2.6   | 1.3   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 5.6    | 1.3    | 0.8   | 0.0   | 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)