

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: P968944

Luminaire Tested: **NAV-SB5C-830-U-T3-HSS**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P968944  
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-SB5C-830-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3000K, 615mA 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: 27326.5 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G4

Input Watts (W): 249.5  
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



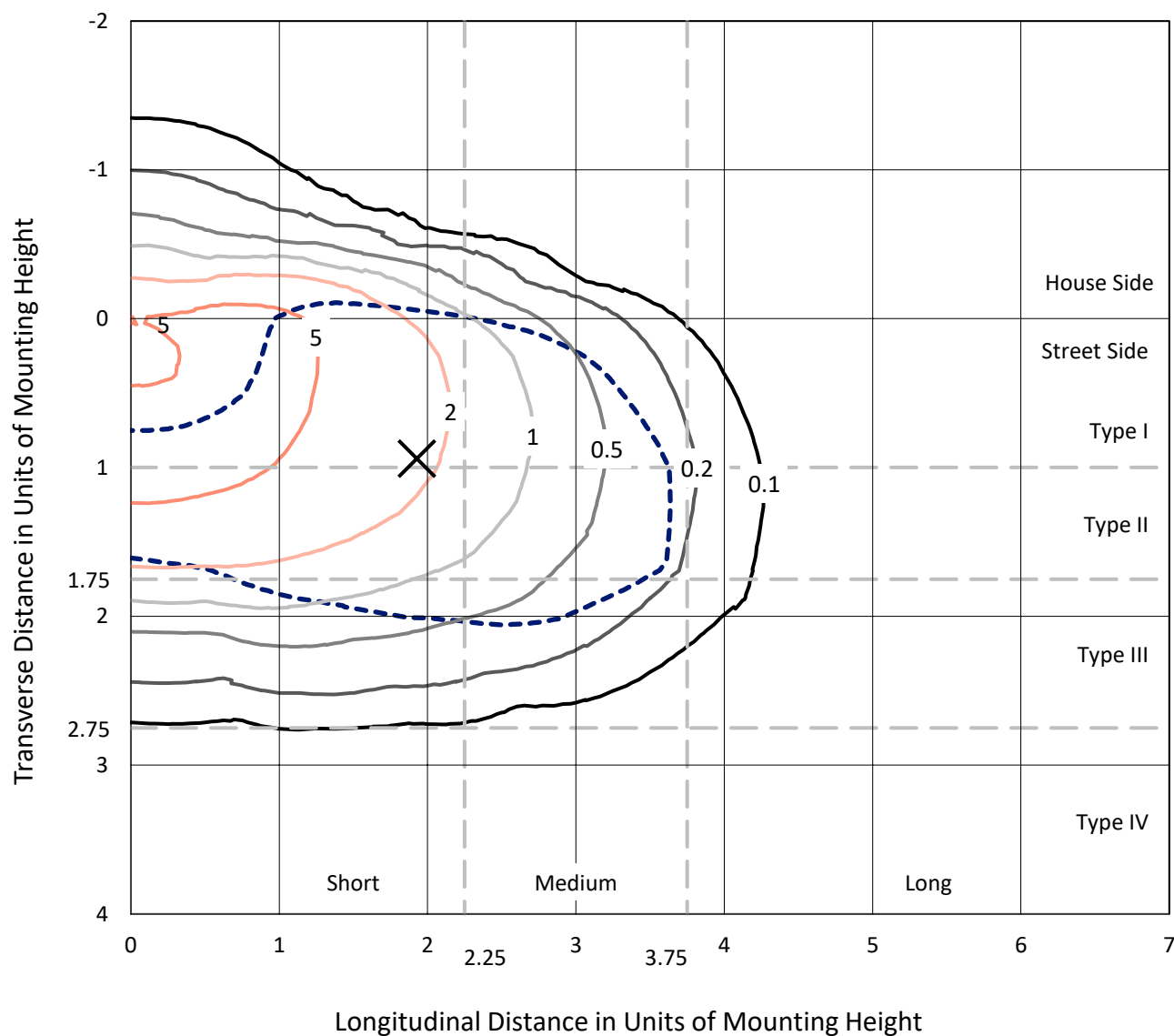
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

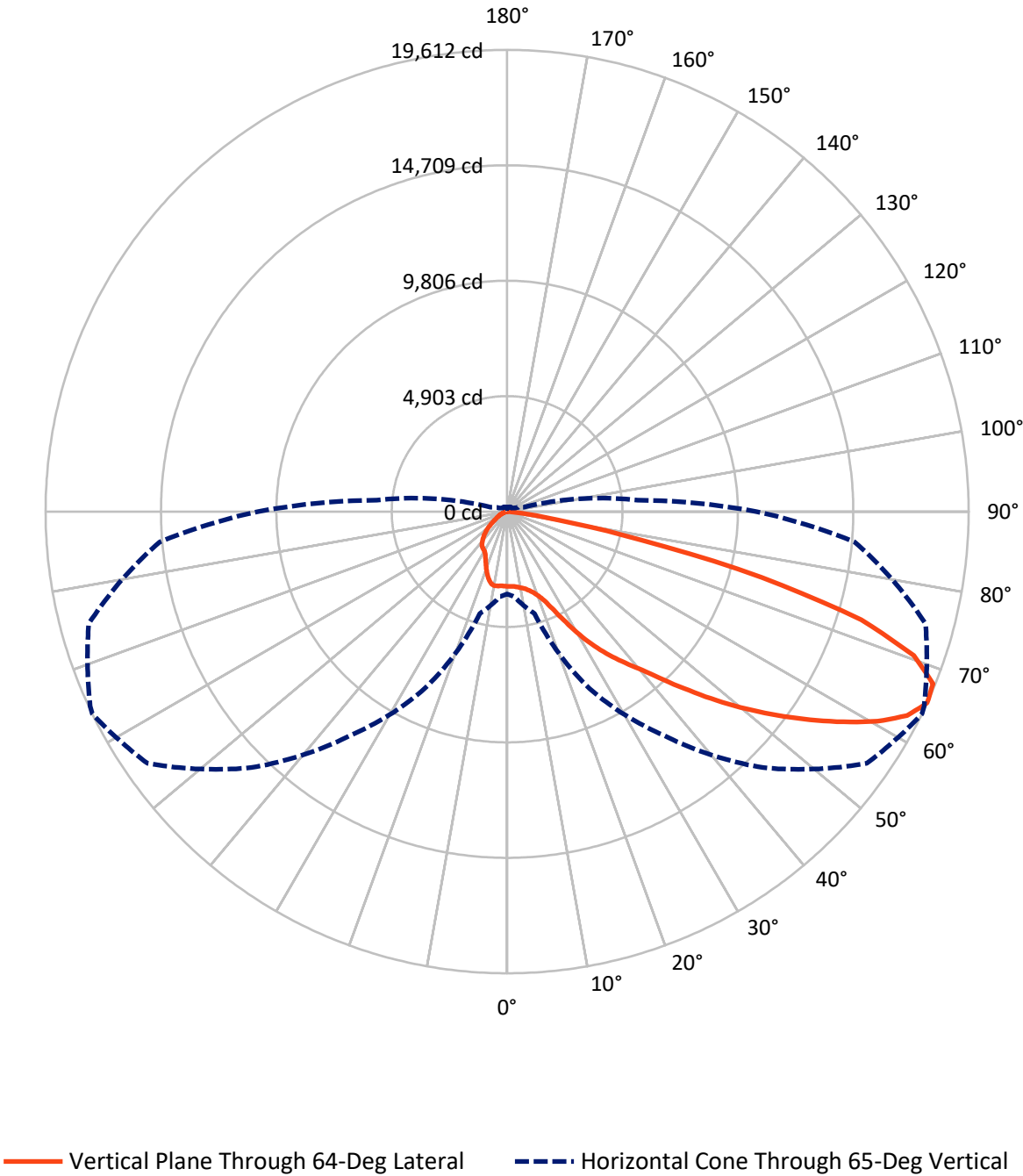


Based on 25 foot mounting height. Maximum calculated value = 8 fc

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    | 3654.4   | 0.0    | 3654.4  |
|                    | % Fixture | 13.4     | 0.0    | 13.4    |
| <b>Street Side</b> | Lumens    | 23672.1  | 0.0    | 23672.1 |
|                    | % Fixture | 86.6     | 0.0    | 86.6    |
| <b>Total</b>       | Lumens    | 27326.5  | 0.0    | 27326.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 293.2   | 1.1       |
| 10°-20°   | 795.3   | 2.9       |
| 20°-30°   | 1507.1  | 5.5       |
| 30°-40°   | 3049.7  | 11.2      |
| 40°-50°   | 5195.1  | 19.0      |
| 50°-60°   | 7065.0  | 25.9      |
| 60°-70°   | 6634.3  | 24.3      |
| 70°-80°   | 2658.0  | 9.7       |
| 80°-90°   | 128.8   | 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°    | 27326.5 | 100.0     |
| 0°-180°   | 27326.5 | 100.0     |

**Coefficient of Utilization**



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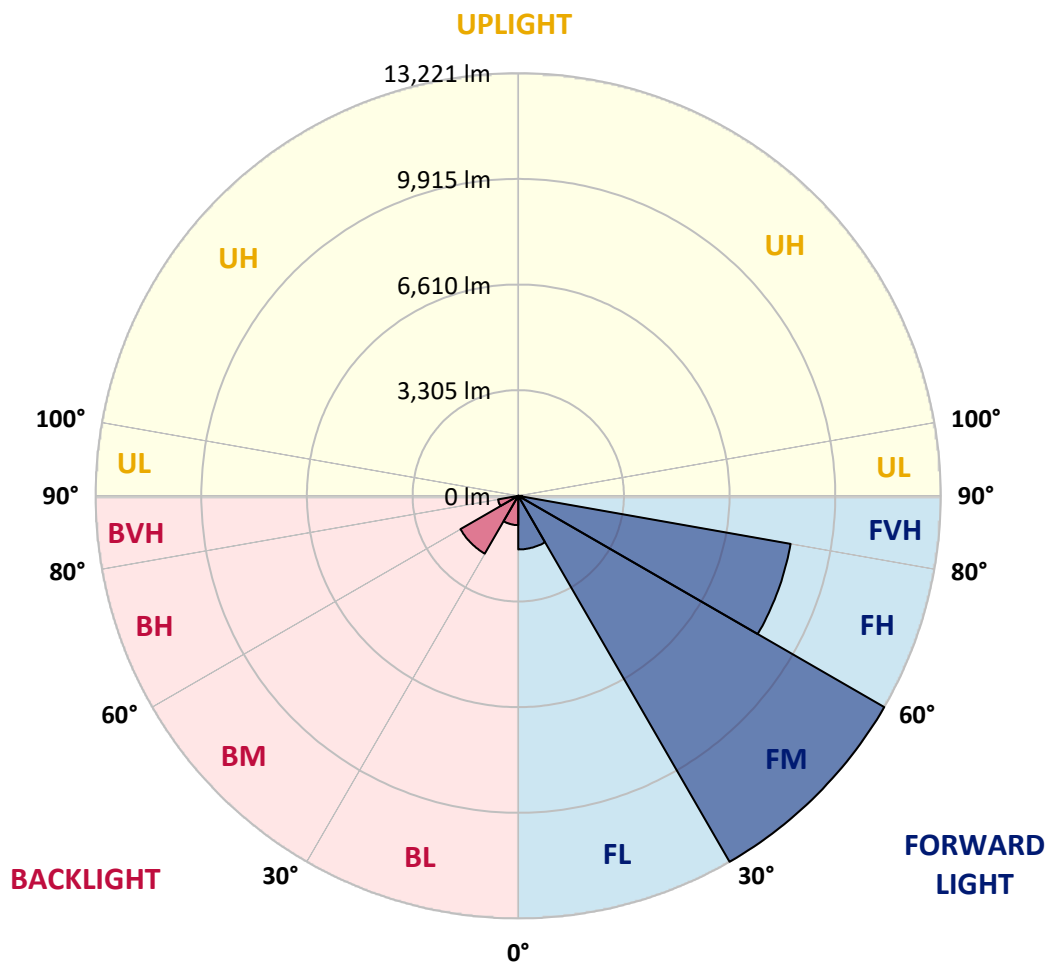
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1678.2  | 6.1       |                         |      |          |
| FM   | (30°-60°)   | 13220.5 | 48.4      |                         |      |          |
| FH   | (60°-80°)   | 8650.9  | 31.7      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 122.5   | 0.4       |                         |      | G2/225   |
| BL   | (0°-30°)    | 917.5   | 3.4       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 2089.2  | 7.6       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 641.4   | 2.3       | B2/1000                 |      | G2/1000  |
| BVH  | (80°-90°)   | 6.3     | 0.0       |                         |      | G0/10    |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B2-U0-G4**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 64°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3178.3  | 3178.3  | 3178.3  | 3178.3  | 3178.3  | 3178.3  | 3178.3  | 3178.3  | 3178.3  | 3178.3  | 3178.3  |
| 2.5°  | 3167.4  | 3189.4  | 3183.9  | 3178.3  | 3176.5  | 3180.2  | 3182.0  | 3180.2  | 3180.2  | 3180.2  | 3182.0  |
| 5°    | 3106.9  | 3125.2  | 3125.2  | 3138.0  | 3156.4  | 3178.3  | 3194.8  | 3198.5  | 3202.2  | 3207.6  | 3205.8  |
| 7.5°  | 2991.5  | 3006.1  | 3017.2  | 3059.3  | 3105.0  | 3163.7  | 3213.2  | 3238.8  | 3242.5  | 3262.6  | 3270.0  |
| 10°   | 2912.7  | 2931.1  | 2949.3  | 2993.3  | 3059.3  | 3147.3  | 3231.5  | 3293.7  | 3303.0  | 3350.5  | 3372.6  |
| 12.5° | 2909.1  | 2927.4  | 2951.2  | 2998.8  | 3075.8  | 3169.2  | 3271.8  | 3361.6  | 3378.0  | 3447.7  | 3493.4  |
| 15°   | 2947.5  | 2969.5  | 2991.5  | 3050.1  | 3132.6  | 3246.2  | 3356.1  | 3467.8  | 3484.3  | 3583.2  | 3632.7  |
| 17.5° | 3026.3  | 3055.6  | 3072.1  | 3130.8  | 3218.7  | 3345.1  | 3489.8  | 3618.0  | 3632.7  | 3748.1  | 3810.3  |
| 20°   | 3182.0  | 3216.9  | 3222.3  | 3270.0  | 3356.1  | 3491.7  | 3663.8  | 3823.1  | 3841.5  | 3973.4  | 4043.0  |
| 22.5° | 3504.5  | 3553.9  | 3509.9  | 3533.8  | 3610.7  | 3746.3  | 3933.1  | 4134.6  | 4160.3  | 4310.4  | 4372.8  |
| 25°   | 4072.3  | 4141.9  | 4028.4  | 3988.1  | 4021.1  | 4162.1  | 4396.5  | 4651.2  | 4680.6  | 4801.4  | 4832.6  |
| 27.5° | 5187.9  | 5098.1  | 4925.9  | 4757.4  | 4658.5  | 4739.2  | 5002.9  | 5318.0  | 5354.7  | 5471.9  | 5435.3  |
| 30°   | 6413.5  | 6334.7  | 6102.0  | 5728.4  | 5493.9  | 5481.1  | 5724.7  | 6076.4  | 6118.5  | 6230.4  | 6118.5  |
| 32.5° | 7640.9  | 7565.7  | 7313.0  | 6853.2  | 6446.4  | 6244.9  | 6413.5  | 6803.7  | 6825.7  | 6897.1  | 6732.3  |
| 35°   | 8848.1  | 8771.1  | 8518.4  | 8047.6  | 7547.5  | 7089.5  | 7056.5  | 7496.1  | 7503.5  | 7578.5  | 7333.2  |
| 37.5° | 10062.6 | 9998.6  | 9729.3  | 9267.6  | 8774.8  | 8142.8  | 7836.8  | 8151.9  | 8161.2  | 8234.4  | 7979.8  |
| 40°   | 10929.2 | 10956.6 | 10771.6 | 10414.4 | 9991.2  | 9300.5  | 8712.5  | 8850.0  | 8795.0  | 8917.7  | 8765.7  |
| 42.5° | 11672.9 | 11727.8 | 11566.6 | 11387.1 | 11141.6 | 10533.4 | 9797.1  | 9773.2  | 9685.3  | 9751.2  | 9593.7  |
| 45°   | 12315.9 | 12361.7 | 12217.0 | 12174.8 | 12169.3 | 11742.5 | 10982.3 | 10839.4 | 10716.7 | 10703.9 | 10515.2 |
| 47.5° | 12552.3 | 12640.2 | 12702.4 | 12843.5 | 13118.3 | 12938.8 | 12207.9 | 11986.1 | 11848.8 | 11748.0 | 11449.5 |
| 50°   | 12641.9 | 12735.4 | 12947.9 | 13358.2 | 14008.6 | 14085.6 | 13427.9 | 13178.7 | 13010.2 | 12827.0 | 12387.3 |
| 52.5° | 12521.1 | 12687.8 | 12973.5 | 13664.2 | 14607.6 | 15005.2 | 14598.5 | 14380.4 | 14188.2 | 13889.5 | 13237.4 |
| 55°   | 11808.5 | 11975.2 | 12559.5 | 13660.5 | 14906.2 | 15650.0 | 15704.9 | 15607.9 | 15391.7 | 14920.8 | 13924.3 |
| 57.5° | 10306.3 | 10553.6 | 11478.7 | 13195.2 | 14900.7 | 16205.0 | 16789.4 | 16859.0 | 16617.2 | 15943.1 | 14464.7 |
| 60°   | 8225.2  | 8560.5  | 9688.9  | 12163.9 | 14440.9 | 16505.5 | 17740.2 | 18088.3 | 17831.7 | 16950.6 | 14902.6 |
| 62.5° | 5739.4  | 6127.8  | 7195.7  | 10548.1 | 13389.4 | 16289.3 | 18434.4 | 19077.5 | 18883.3 | 17851.9 | 15071.1 |
| 65°   | 3500.8  | 3625.3  | 4486.3  | 8300.3  | 11601.5 | 15384.3 | 18648.7 | 19612.4 | 19548.3 | 18403.4 | 14821.9 |
| 67.5° | 2332.0  | 2436.4  | 2683.8  | 5691.7  | 9005.6  | 13576.2 | 18135.8 | 19519.0 | 19537.3 | 18313.6 | 13909.7 |
| 70°   | 1405.1  | 1494.9  | 1656.1  | 3310.2  | 5836.5  | 10746.0 | 16547.6 | 18328.2 | 18434.4 | 17113.7 | 12180.4 |
| 72.5° | 578.9   | 639.3   | 785.9   | 1500.3  | 3022.6  | 6820.1  | 13176.9 | 15736.1 | 15983.3 | 14389.6 | 9348.2  |
| 75°   | 327.9   | 359.1   | 461.7   | 752.9   | 1311.7  | 3178.3  | 7981.6  | 11171.0 | 11535.6 | 9917.9  | 5624.0  |
| 77.5° | 218.0   | 232.7   | 298.6   | 487.3   | 738.3   | 1084.4  | 3411.0  | 5820.0  | 6516.1  | 5416.9  | 2434.6  |
| 80°   | 146.6   | 159.4   | 205.2   | 326.1   | 480.0   | 465.4   | 1086.3  | 2156.2  | 2652.6  | 1861.2  | 593.6   |
| 82.5° | 98.9    | 100.8   | 146.6   | 214.3   | 304.1   | 225.3   | 320.6   | 670.5   | 842.7   | 538.5   | 225.3   |
| 85°   | 56.8    | 54.9    | 108.0   | 124.5   | 135.6   | 93.4    | 97.1    | 201.5   | 263.8   | 227.1   | 128.2   |
| 87.5° | 7.3     | 11.0    | 42.1    | 33.0    | 18.3    | 20.2    | 20.2    | 34.8    | 51.2    | 54.9    | 27.5    |
| 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°    | 3178.3  | 3178.3 | 3178.3 | 3178.3 | 3178.3 | 3178.3 | 3178.3 | 3178.3 | 3178.3 | 3178.3 | 3178.3 |
| 2.5°  | 3182.0  | 3180.2 | 3174.7 | 3169.2 | 3156.4 | 3149.0 | 3152.7 | 3149.0 | 3147.3 | 3149.0 | 3156.4 |
| 5°    | 3205.8  | 3200.4 | 3185.7 | 3167.4 | 3141.7 | 3110.6 | 3090.4 | 3061.2 | 3033.6 | 3017.2 | 3020.8 |
| 7.5°  | 3270.0  | 3264.4 | 3244.3 | 3193.0 | 3110.6 | 2980.5 | 2861.4 | 2757.0 | 2678.2 | 2632.4 | 2634.2 |
| 10°   | 3372.6  | 3363.3 | 3332.3 | 3218.7 | 3002.5 | 2718.5 | 2482.2 | 2286.3 | 2158.0 | 2097.6 | 2092.0 |
| 12.5° | 3493.4  | 3482.4 | 3427.5 | 3194.8 | 2797.3 | 2354.0 | 2028.0 | 1809.9 | 1690.8 | 1637.7 | 1632.2 |
| 15°   | 3636.3  | 3621.6 | 3513.6 | 3081.3 | 2498.7 | 1951.0 | 1652.4 | 1489.3 | 1412.4 | 1364.8 | 1366.6 |
| 17.5° | 3814.0  | 3788.4 | 3577.7 | 2910.9 | 2174.4 | 1643.2 | 1421.6 | 1298.8 | 1231.0 | 1185.2 | 1181.6 |
| 20°   | 4044.9  | 4002.7 | 3629.0 | 2707.5 | 1875.9 | 1449.0 | 1265.9 | 1163.3 | 1111.9 | 1071.6 | 1064.4 |
| 22.5° | 4367.2  | 4306.8 | 3691.3 | 2487.8 | 1665.2 | 1315.3 | 1150.5 | 1075.3 | 1033.2 | 987.4  | 980.1  |
| 25°   | 4766.7  | 4695.2 | 3768.2 | 2284.4 | 1520.5 | 1199.9 | 1066.2 | 1003.9 | 954.4  | 901.3  | 895.8  |
| 27.5° | 5325.4  | 5197.2 | 3859.8 | 2117.6 | 1395.9 | 1101.0 | 989.2  | 919.6  | 862.8  | 818.9  | 809.7  |
| 30°   | 5948.2  | 5737.5 | 3940.4 | 2016.9 | 1282.4 | 1009.4 | 888.5  | 818.9  | 765.8  | 734.6  | 729.1  |
| 32.5° | 6538.1  | 6252.3 | 3993.5 | 1972.9 | 1179.8 | 905.0  | 778.6  | 703.5  | 663.2  | 653.9  | 659.5  |
| 35°   | 7094.9  | 6717.6 | 3988.1 | 1930.8 | 1088.1 | 800.5  | 670.5  | 593.6  | 562.4  | 567.8  | 567.8  |
| 37.5° | 7736.1  | 7214.1 | 3949.6 | 1864.9 | 1013.0 | 705.3  | 577.1  | 509.2  | 481.7  | 483.6  | 491.0  |
| 40°   | 8481.8  | 7787.4 | 3925.7 | 1740.3 | 930.6  | 617.4  | 500.1  | 445.2  | 425.0  | 417.7  | 415.8  |
| 42.5° | 9276.8  | 8342.5 | 3929.4 | 1599.2 | 828.0  | 538.5  | 447.0  | 401.2  | 382.8  | 377.4  | 375.6  |
| 45°   | 10075.4 | 8871.9 | 3935.0 | 1452.7 | 720.0  | 478.2  | 408.6  | 370.0  | 359.1  | 351.7  | 351.7  |
| 47.5° | 10826.6 | 9322.6 | 3832.4 | 1295.2 | 613.7  | 432.3  | 377.4  | 351.7  | 342.6  | 333.4  | 333.4  |
| 50°   | 11526.3 | 9623.0 | 3585.0 | 1111.9 | 529.4  | 395.6  | 353.5  | 335.3  | 326.1  | 316.9  | 316.9  |
| 52.5° | 12070.4 | 9670.7 | 3176.5 | 923.3  | 470.8  | 368.2  | 338.9  | 322.5  | 311.4  | 302.3  | 300.4  |
| 55°   | 12312.2 | 9372.0 | 2595.8 | 747.4  | 425.0  | 344.4  | 324.2  | 307.8  | 294.9  | 285.8  | 283.9  |
| 57.5° | 12250.0 | 8743.7 | 2024.3 | 600.9  | 381.0  | 320.6  | 306.0  | 294.9  | 280.2  | 265.6  | 263.8  |
| 60°   | 11944.0 | 7902.9 | 1526.0 | 500.1  | 340.7  | 294.9  | 285.8  | 276.6  | 256.5  | 234.5  | 230.8  |
| 62.5° | 11414.6 | 6845.9 | 1088.1 | 414.0  | 296.7  | 265.6  | 262.0  | 254.6  | 225.3  | 185.0  | 181.3  |
| 65°   | 10604.9 | 5561.6 | 732.8  | 344.4  | 254.6  | 232.7  | 234.5  | 221.7  | 183.2  | 137.4  | 133.8  |
| 67.5° | 9421.5  | 4066.8 | 468.9  | 282.1  | 212.5  | 194.1  | 196.0  | 188.7  | 155.7  | 117.3  | 111.7  |
| 70°   | 7913.8  | 2692.9 | 306.0  | 214.3  | 170.4  | 150.3  | 161.2  | 163.1  | 131.9  | 95.2   | 91.6   |
| 72.5° | 5801.6  | 1590.1 | 214.3  | 159.4  | 124.5  | 104.4  | 131.9  | 135.6  | 106.3  | 71.4   | 67.8   |
| 75°   | 3306.5  | 754.7  | 161.2  | 115.4  | 77.0   | 73.3   | 102.6  | 102.6  | 73.3   | 47.7   | 44.0   |
| 77.5° | 1388.6  | 315.1  | 113.6  | 75.1   | 44.0   | 42.1   | 69.6   | 64.2   | 36.6   | 21.9   | 21.9   |
| 80°   | 401.2   | 141.0  | 60.5   | 36.6   | 18.3   | 16.5   | 27.5   | 20.2   | 9.1    | 3.7    | 3.7    |
| 82.5° | 157.5   | 62.3   | 23.8   | 14.7   | 7.3    | 7.3    | 3.7    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 93.4    | 25.6   | 11.0   | 5.5    | 1.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 23.8    | 5.5    | 3.7    | 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)