

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: P968225

Luminaire Tested: **NAV-SB5B-730-U-T2-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968225  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5B-730-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

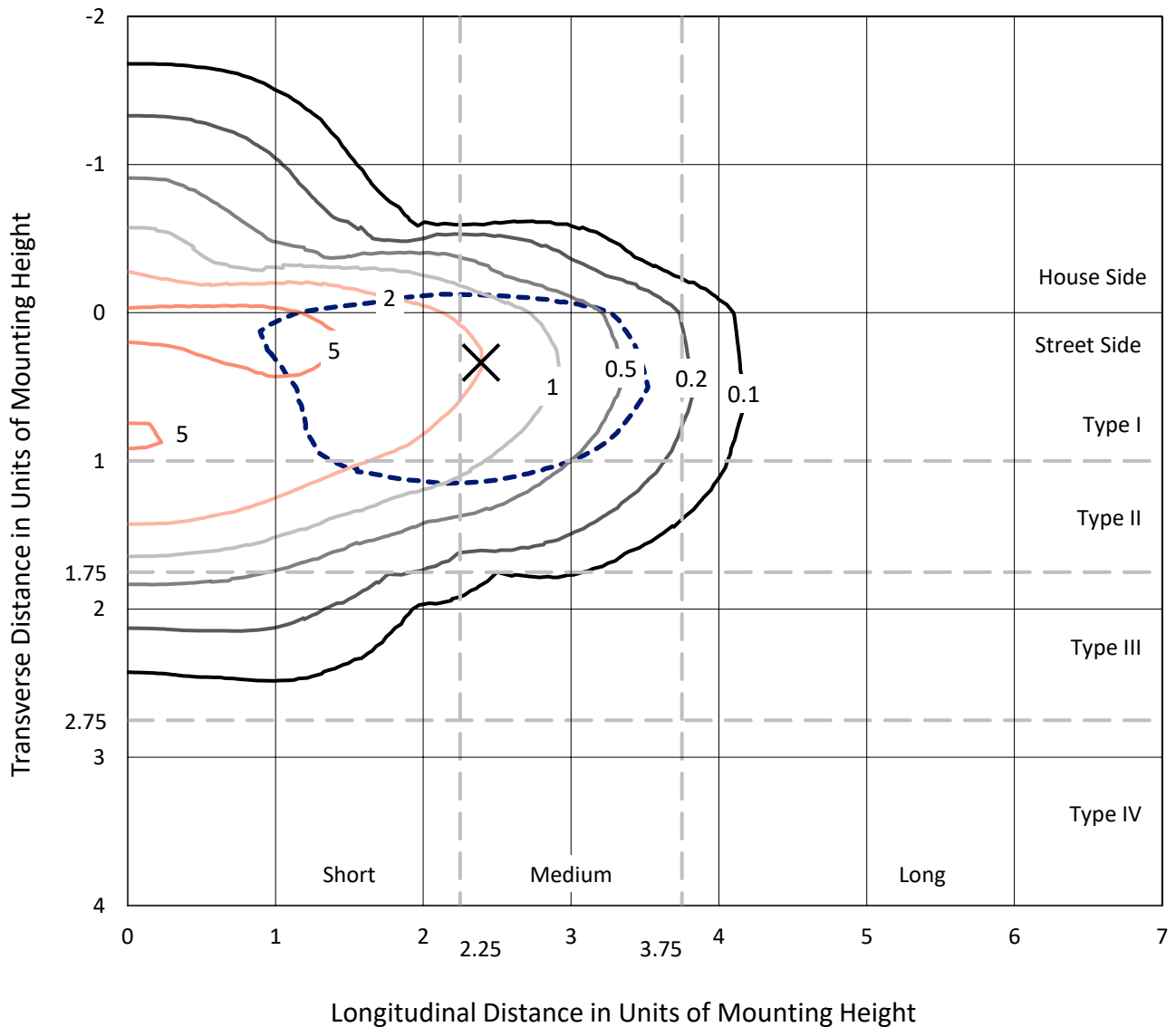
Lumens per Lamp: N/A  
Luminaire Lumens: 21290.3 lumens  
Efficiency: N/A  
Efficacy: 116.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 182.7  
Input Voltage (V): NR  
Input Current (Ain): 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

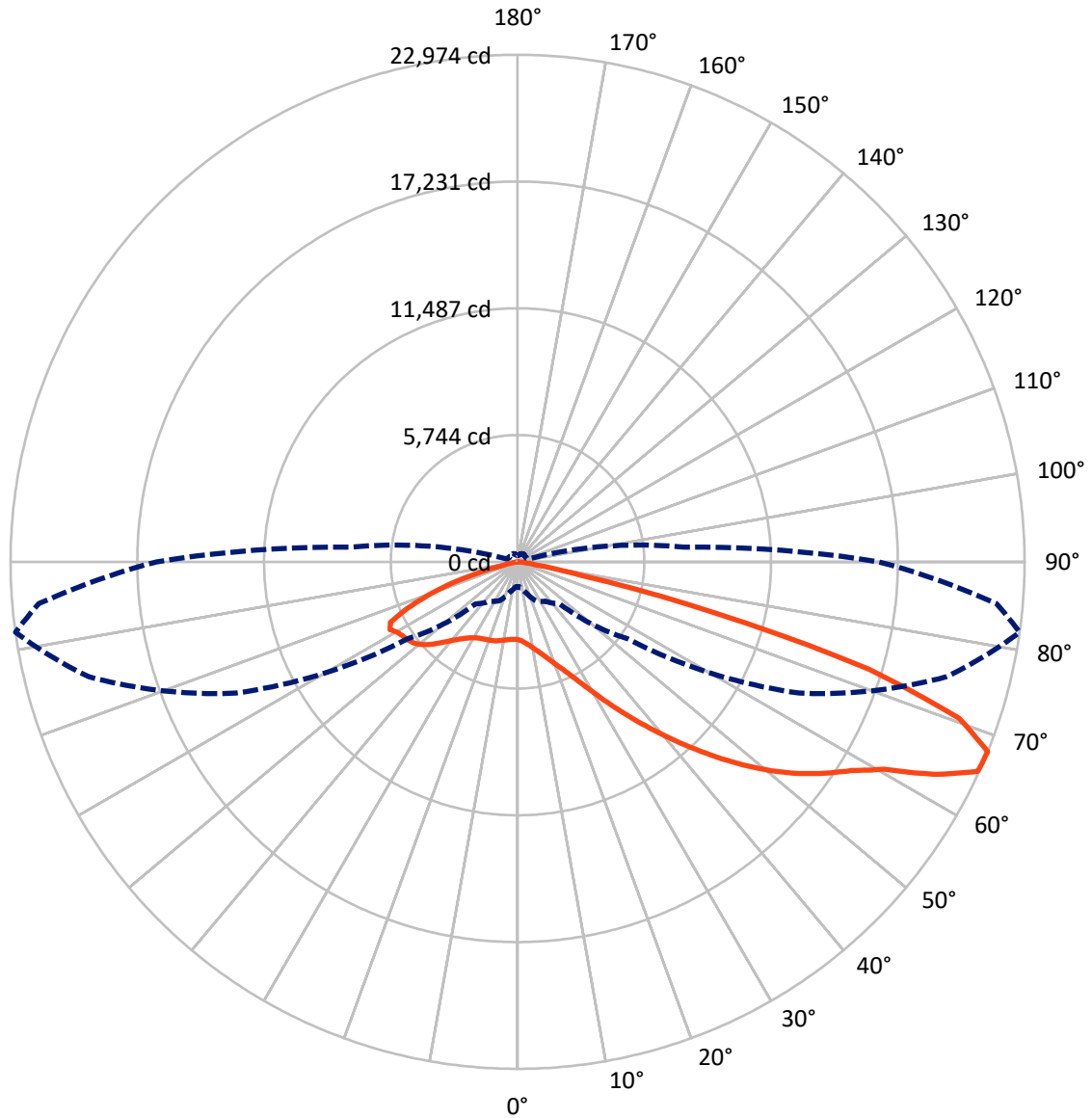
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3856.6   | 0.0    | 3856.6  |
|                    | % Fixture | 18.1     | 0.0    | 18.1    |
| <b>Street Side</b> | Lumens    | 17433.7  | 0.0    | 17433.7 |
|                    | % Fixture | 81.9     | 0.0    | 81.9    |
| <b>Total</b>       | Lumens    | 21290.3  | 0.0    | 21290.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 314.2   | 1.5       |
| 10°-20°   | 816.6   | 3.8       |
| 20°-30°   | 1307.9  | 6.1       |
| 30°-40°   | 2312.8  | 10.9      |
| 40°-50°   | 4052.2  | 19.0      |
| 50°-60°   | 5404.5  | 25.4      |
| 60°-70°   | 5031.3  | 23.6      |
| 70°-80°   | 1931.0  | 9.1       |
| 80°-90°   | 119.9   | 0.6       |
| 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°    | 21290.3 | 100.0     |
| 0°-180°   | 21290.3 | 100.0     |

**Coefficient of Utilization**



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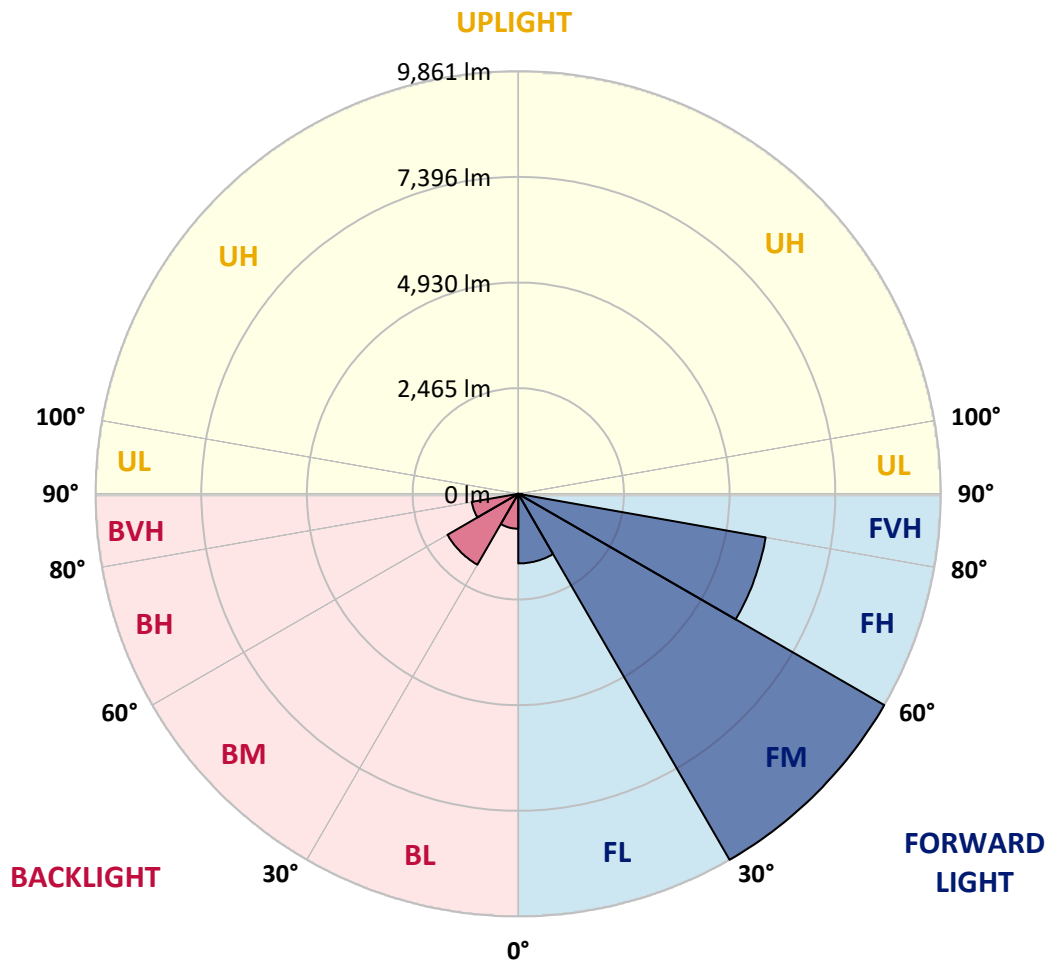
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1624.2 | 7.6       |                         |      |         |
| FM (30°-60°)   | 9860.8 | 46.3      |                         |      |         |
| FH (60°-80°)   | 5861.5 | 27.5      |                         |      | G3/7500 |
| FVH (80°-90°)  | 87.2   | 0.4       |                         |      | G1/100  |
| BL (0°-30°)    | 814.5  | 3.8       | B2/1000                 |      |         |
| BM (30°-60°)   | 1908.6 | 9.0       | B2/2500                 |      |         |
| BH (60°-80°)   | 1100.7 | 5.2       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 32.7   | 0.2       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°     | 75°     | 82°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| 0°    | 3527.1 | 3527.1 | 3527.1 | 3527.1 | 3527.1 | 3527.1 | 3527.1  | 3527.1  | 3527.1  | 3527.1  | 3527.1  |
| 2.5°  | 3727.9 | 3749.3 | 3737.0 | 3730.9 | 3720.2 | 3704.9 | 3692.7  | 3654.3  | 3614.5  | 3588.4  | 3579.2  |
| 5°    | 3803.0 | 3824.5 | 3822.9 | 3829.1 | 3836.7 | 3841.3 | 3838.2  | 3795.4  | 3738.6  | 3694.2  | 3668.1  |
| 7.5°  | 3738.6 | 3763.2 | 3783.1 | 3813.7 | 3867.3 | 3924.1 | 3951.7  | 3942.5  | 3884.2  | 3822.9  | 3790.8  |
| 10°   | 3556.2 | 3582.3 | 3629.7 | 3701.8 | 3815.3 | 3937.8 | 4040.6  | 4088.1  | 4051.3  | 3983.9  | 3939.4  |
| 12.5° | 3222.1 | 3248.1 | 3341.6 | 3497.9 | 3688.1 | 3901.0 | 4097.3  | 4224.5  | 4233.8  | 4166.3  | 4114.1  |
| 15°   | 2846.5 | 2872.6 | 2972.2 | 3168.4 | 3458.1 | 3799.9 | 4128.0  | 4368.7  | 4449.8  | 4391.6  | 4328.8  |
| 17.5° | 2613.5 | 2636.5 | 2711.6 | 2869.5 | 3171.5 | 3597.5 | 4117.2  | 4521.9  | 4707.4  | 4661.4  | 4586.3  |
| 20°   | 2543.0 | 2562.9 | 2598.2 | 2708.6 | 2959.9 | 3387.6 | 4046.7  | 4666.0  | 4984.8  | 4958.7  | 4874.5  |
| 22.5° | 2618.1 | 2636.5 | 2647.3 | 2696.3 | 2854.1 | 3249.7 | 3957.8  | 4813.1  | 5306.7  | 5309.8  | 5207.1  |
| 25°   | 2791.3 | 2809.7 | 2797.4 | 2828.1 | 2897.1 | 3206.7 | 3924.1  | 4986.3  | 5711.4  | 5745.1  | 5628.6  |
| 27.5° | 3076.4 | 3078.0 | 3048.9 | 3047.3 | 3058.0 | 3271.1 | 3959.4  | 5171.8  | 6221.9  | 6284.7  | 6140.6  |
| 30°   | 3648.2 | 3625.2 | 3513.3 | 3392.2 | 3337.0 | 3464.2 | 4057.5  | 5391.0  | 6824.2  | 6936.2  | 6755.3  |
| 32.5° | 4529.6 | 4495.9 | 4290.4 | 4000.7 | 3709.5 | 3775.4 | 4233.8  | 5640.9  | 7480.2  | 7682.6  | 7461.9  |
| 35°   | 5486.0 | 5476.9 | 5262.2 | 4831.5 | 4322.6 | 4218.4 | 4520.4  | 5968.9  | 8196.1  | 8518.1  | 8255.9  |
| 37.5° | 6375.1 | 6370.5 | 6247.9 | 5740.5 | 5121.2 | 4836.2 | 4980.2  | 6398.0  | 8962.6  | 9428.6  | 9118.9  |
| 40°   | 7187.5 | 7201.3 | 7078.6 | 6625.0 | 6001.1 | 5628.6 | 5605.6  | 6928.5  | 9814.8  | 10420.3 | 10052.4 |
| 42.5° | 7889.5 | 7904.9 | 7780.8 | 7445.0 | 6870.2 | 6505.4 | 6373.6  | 7578.4  | 10647.2 | 11485.6 | 11050.3 |
| 45°   | 8366.3 | 8461.3 | 8442.9 | 8174.7 | 7762.3 | 7383.7 | 7296.4  | 8393.8  | 11595.9 | 12615.3 | 12104.8 |
| 47.5° | 8501.1 | 8588.6 | 8726.4 | 8763.2 | 8511.9 | 8139.4 | 8243.7  | 9376.4  | 12555.5 | 13746.6 | 13165.6 |
| 50°   | 8168.5 | 8249.8 | 8536.4 | 8918.1 | 9092.9 | 8977.9 | 9164.9  | 10429.5 | 13538.1 | 14874.7 | 14206.4 |
| 52.5° | 7512.4 | 7595.2 | 7957.0 | 8560.9 | 9273.7 | 9635.5 | 10089.2 | 11467.2 | 14490.0 | 15943.2 | 15192.0 |
| 55°   | 6563.7 | 6651.0 | 7115.4 | 7799.1 | 8928.9 | 9906.8 | 10860.2 | 12503.5 | 15362.2 | 16904.2 | 16081.1 |
| 57.5° | 5273.0 | 5337.4 | 5820.3 | 6776.7 | 8061.2 | 9637.0 | 11428.9 | 13634.7 | 16183.8 | 17848.4 | 16962.5 |
| 60°   | 3436.6 | 3493.4 | 4054.4 | 5121.2 | 6623.4 | 8735.7 | 11542.3 | 14896.2 | 17275.1 | 19076.3 | 18150.4 |
| 62.5° | 2285.4 | 2323.8 | 2656.4 | 3439.7 | 4664.5 | 7005.1 | 10878.6 | 15903.3 | 18875.5 | 21213.1 | 20187.6 |
| 65°   | 1568.1 | 1606.4 | 1939.1 | 2484.7 | 3013.6 | 4633.8 | 8970.2  | 15769.9 | 20325.5 | 22909.9 | 21697.4 |
| 67.5° | 1119.0 | 1151.2 | 1433.3 | 1948.2 | 2181.2 | 2691.6 | 6080.8  | 14065.4 | 20117.1 | 22974.2 | 21778.7 |
| 70°   | 801.7  | 820.1  | 1053.1 | 1517.5 | 1733.7 | 1617.1 | 3381.5  | 10757.5 | 17613.9 | 21214.6 | 20120.1 |
| 72.5° | 561.0  | 567.1  | 731.1  | 1155.8 | 1396.5 | 1180.3 | 1609.5  | 7172.2  | 13321.9 | 16651.3 | 15598.2 |
| 75°   | 380.2  | 387.9  | 492.0  | 847.7  | 1120.5 | 901.3  | 852.3   | 3845.9  | 7820.5  | 9217.0  | 8262.0  |
| 77.5° | 233.0  | 236.1  | 317.3  | 579.4  | 838.4  | 686.7  | 548.8   | 1629.4  | 3025.8  | 2970.7  | 2532.3  |
| 80°   | 131.8  | 131.8  | 202.3  | 360.2  | 571.7  | 443.0  | 384.8   | 692.8   | 958.1   | 841.5   | 741.9   |
| 82.5° | 73.6   | 75.1   | 147.2  | 223.8  | 378.6  | 262.1  | 211.6   | 320.4   | 413.9   | 366.3   | 318.9   |
| 85°   | 30.6   | 33.7   | 90.4   | 105.8  | 180.9  | 130.3  | 85.8    | 134.9   | 153.2   | 136.4   | 99.6    |
| 87.5° | 3.1    | 4.6    | 27.6   | 19.9   | 21.4   | 26.0   | 12.3    | 26.0    | 21.4    | 21.4    | 15.4    |
| 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°    | 3527.1  | 3527.1 | 3527.1 | 3527.1 | 3527.1 | 3527.1 | 3527.1 | 3527.1 | 3527.1 | 3527.1 | 3527.1 |
| 2.5°  | 3550.1  | 3527.1 | 3468.8 | 3401.4 | 3312.5 | 3269.5 | 3211.3 | 3171.5 | 3137.7 | 3140.8 | 3110.2 |
| 5°    | 3619.1  | 3560.8 | 3430.5 | 3268.0 | 3065.7 | 2921.6 | 2768.3 | 2662.5 | 2576.7 | 2558.3 | 2516.9 |
| 7.5°  | 3714.1  | 3622.1 | 3393.7 | 3100.9 | 2759.1 | 2500.1 | 2268.6 | 2119.9 | 2014.1 | 1980.4 | 1946.7 |
| 10°   | 3836.7  | 3703.3 | 3346.2 | 2890.9 | 2398.9 | 2069.4 | 1821.0 | 1704.6 | 1632.5 | 1607.9 | 1589.6 |
| 12.5° | 3979.3  | 3796.9 | 3283.4 | 2635.0 | 2028.0 | 1710.6 | 1552.8 | 1494.6 | 1471.5 | 1463.9 | 1459.3 |
| 15°   | 4158.6  | 3913.3 | 3188.4 | 2331.5 | 1713.7 | 1491.5 | 1424.0 | 1416.3 | 1419.4 | 1416.3 | 1414.8 |
| 17.5° | 4371.6  | 4040.6 | 3033.5 | 2018.7 | 1502.2 | 1379.5 | 1355.0 | 1361.2 | 1368.8 | 1367.2 | 1364.3 |
| 20°   | 4604.7  | 4166.3 | 2835.8 | 1741.3 | 1358.1 | 1299.8 | 1286.1 | 1292.2 | 1298.4 | 1295.3 | 1293.8 |
| 22.5° | 4869.9  | 4301.2 | 2616.5 | 1525.2 | 1261.6 | 1226.3 | 1210.9 | 1212.5 | 1212.5 | 1206.3 | 1203.2 |
| 25°   | 5187.1  | 4449.8 | 2386.6 | 1371.9 | 1188.0 | 1160.4 | 1142.0 | 1135.8 | 1126.7 | 1108.2 | 1105.2 |
| 27.5° | 5565.7  | 4607.8 | 2165.9 | 1264.6 | 1129.8 | 1103.6 | 1082.2 | 1066.8 | 1043.9 | 1013.2 | 1010.1 |
| 30°   | 5991.9  | 4799.4 | 1978.9 | 1197.2 | 1083.7 | 1057.7 | 1033.1 | 1010.1 | 976.4  | 938.1  | 935.0  |
| 32.5° | 6493.2  | 5004.8 | 1842.4 | 1152.7 | 1042.3 | 1014.7 | 985.6  | 958.1  | 921.3  | 882.9  | 884.5  |
| 35°   | 7091.0  | 5253.0 | 1762.8 | 1122.1 | 1010.1 | 973.3  | 941.2  | 910.5  | 882.9  | 849.2  | 846.1  |
| 37.5° | 7739.4  | 5516.8 | 1738.3 | 1106.7 | 988.7  | 931.9  | 895.1  | 873.7  | 870.6  | 850.7  | 849.2  |
| 40°   | 8449.1  | 5829.4 | 1756.6 | 1097.5 | 965.7  | 892.2  | 852.3  | 847.7  | 855.4  | 820.1  | 821.6  |
| 42.5° | 9200.1  | 6200.3 | 1787.3 | 1086.8 | 933.5  | 852.3  | 814.0  | 814.0  | 807.8  | 758.8  | 758.8  |
| 45°   | 10012.5 | 6628.1 | 1817.9 | 1060.8 | 895.1  | 812.4  | 783.3  | 772.5  | 746.5  | 698.9  | 697.4  |
| 47.5° | 10831.1 | 7063.4 | 1840.9 | 1013.2 | 849.2  | 778.7  | 752.7  | 728.1  | 689.8  | 646.9  | 645.3  |
| 50°   | 11608.2 | 7454.2 | 1816.4 | 942.7  | 797.0  | 746.5  | 718.9  | 685.2  | 643.8  | 614.7  | 610.1  |
| 52.5° | 12302.7 | 7793.0 | 1712.2 | 860.0  | 741.9  | 712.8  | 688.3  | 653.0  | 619.3  | 588.7  | 585.6  |
| 55°   | 12906.6 | 8067.4 | 1528.3 | 781.8  | 692.8  | 683.7  | 659.1  | 614.7  | 568.7  | 542.6  | 539.6  |
| 57.5° | 13486.0 | 8275.8 | 1298.4 | 717.4  | 648.4  | 651.5  | 614.7  | 574.8  | 531.9  | 504.3  | 501.2  |
| 60°   | 14257.0 | 8554.9 | 1065.3 | 657.6  | 600.9  | 610.1  | 570.2  | 541.1  | 487.5  | 452.2  | 447.6  |
| 62.5° | 15489.4 | 8988.6 | 846.1  | 584.0  | 545.7  | 548.8  | 531.9  | 496.6  | 432.2  | 390.8  | 387.9  |
| 65°   | 16467.3 | 8829.1 | 666.8  | 504.3  | 482.9  | 487.5  | 487.5  | 449.2  | 380.2  | 332.6  | 328.0  |
| 67.5° | 16357.0 | 7560.0 | 531.9  | 426.1  | 423.0  | 426.1  | 436.9  | 404.7  | 337.2  | 298.9  | 292.7  |
| 70°   | 15067.9 | 6013.4 | 426.1  | 354.1  | 367.9  | 360.2  | 390.8  | 369.4  | 303.5  | 265.2  | 260.6  |
| 72.5° | 12295.0 | 4331.9 | 324.9  | 292.7  | 282.1  | 294.3  | 352.6  | 332.6  | 253.0  | 210.0  | 205.4  |
| 75°   | 7184.4  | 2311.6 | 242.2  | 231.4  | 203.9  | 245.3  | 312.7  | 283.6  | 193.1  | 154.8  | 150.3  |
| 77.5° | 2339.2  | 806.3  | 177.8  | 170.1  | 151.8  | 197.7  | 266.7  | 239.1  | 157.8  | 122.6  | 118.1  |
| 80°   | 626.9   | 243.7  | 121.1  | 111.9  | 98.1   | 147.2  | 211.6  | 190.0  | 113.5  | 79.7   | 78.2   |
| 82.5° | 251.4   | 102.7  | 70.5   | 62.8   | 53.6   | 101.2  | 167.1  | 153.2  | 84.4   | 50.6   | 50.6   |
| 85°   | 81.3    | 33.7   | 26.0   | 19.9   | 24.5   | 62.8   | 99.6   | 104.2  | 59.8   | 26.0   | 19.9   |
| 87.5° | 10.8    | 4.6    | 4.6    | 6.1    | 4.6    | 10.8   | 30.6   | 29.1   | 16.9   | 3.1    | 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)