

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: P971466

Luminaire Tested: **NAV-SB6D-750-U-AFL-HSS**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P971466  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6D-750-U-AFL-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 70 CRI, 5000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 57055.6 lumens  
Efficiency: N/A  
Efficacy: 129.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4

Input Watts (W): 440.1  
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

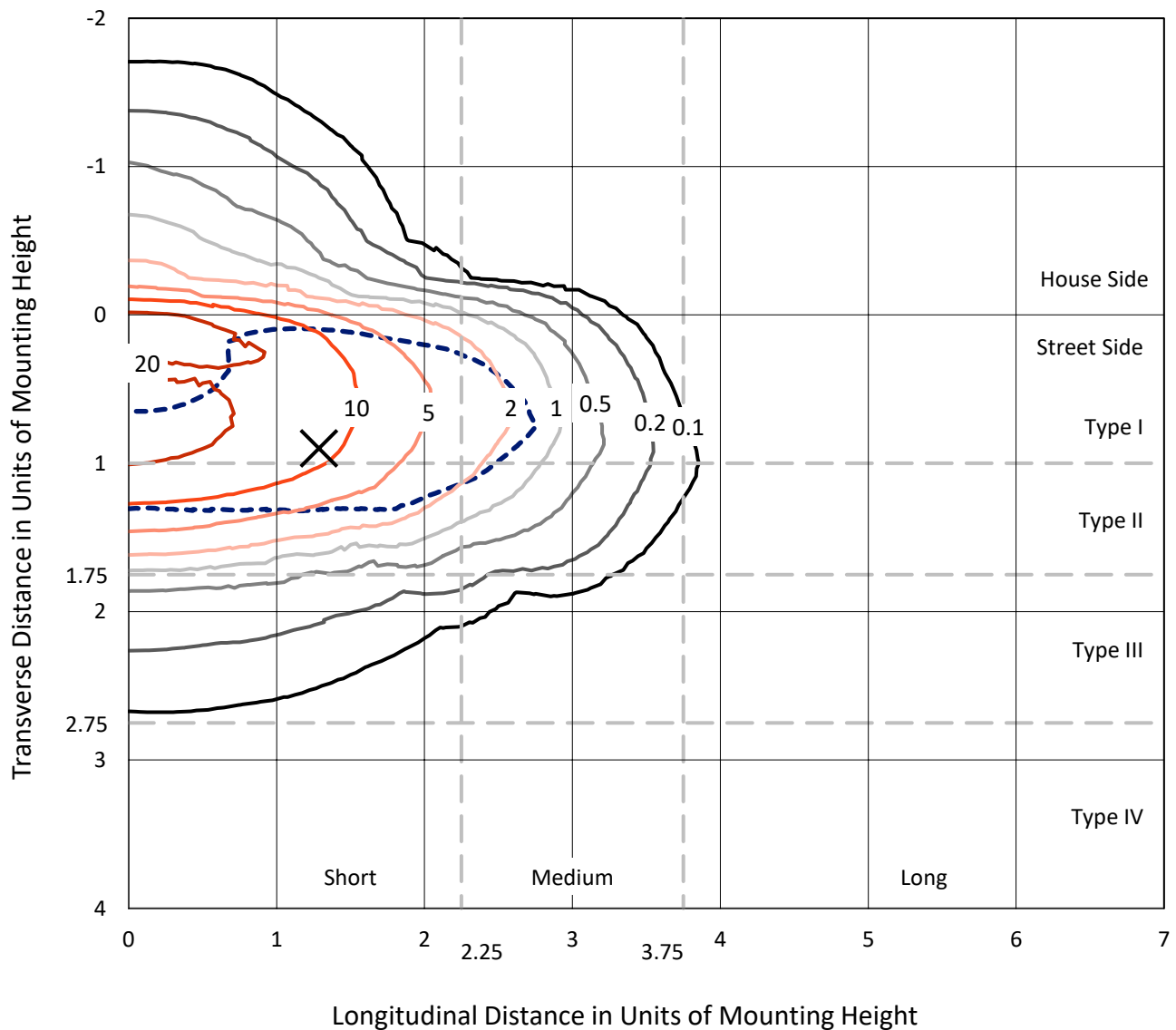


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## Iso-Footcandle Lines of Horizontal Illumination

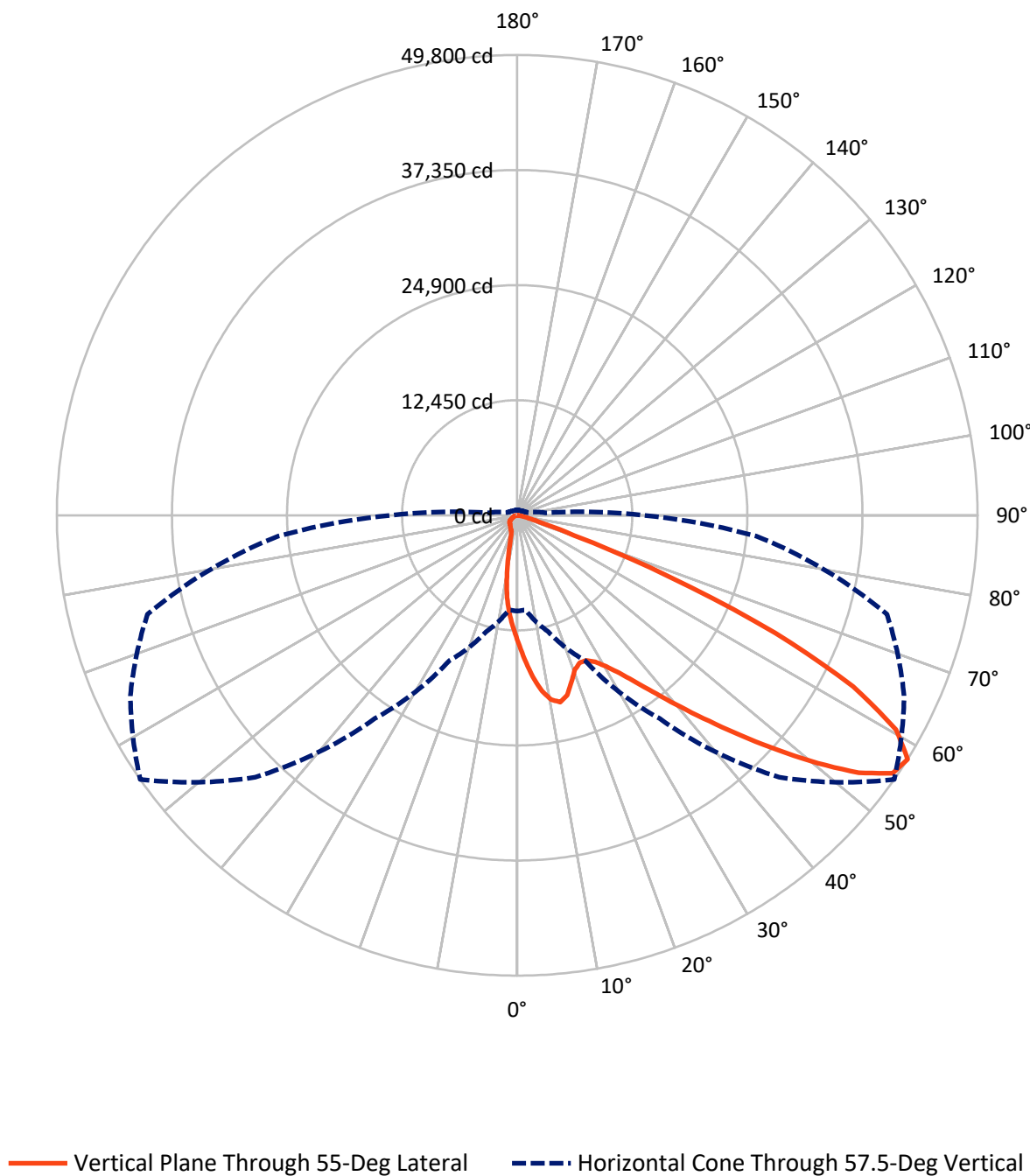
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 31.5 fc  
Type II - Short - N/A

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## Luminous Intensity Polar Plot



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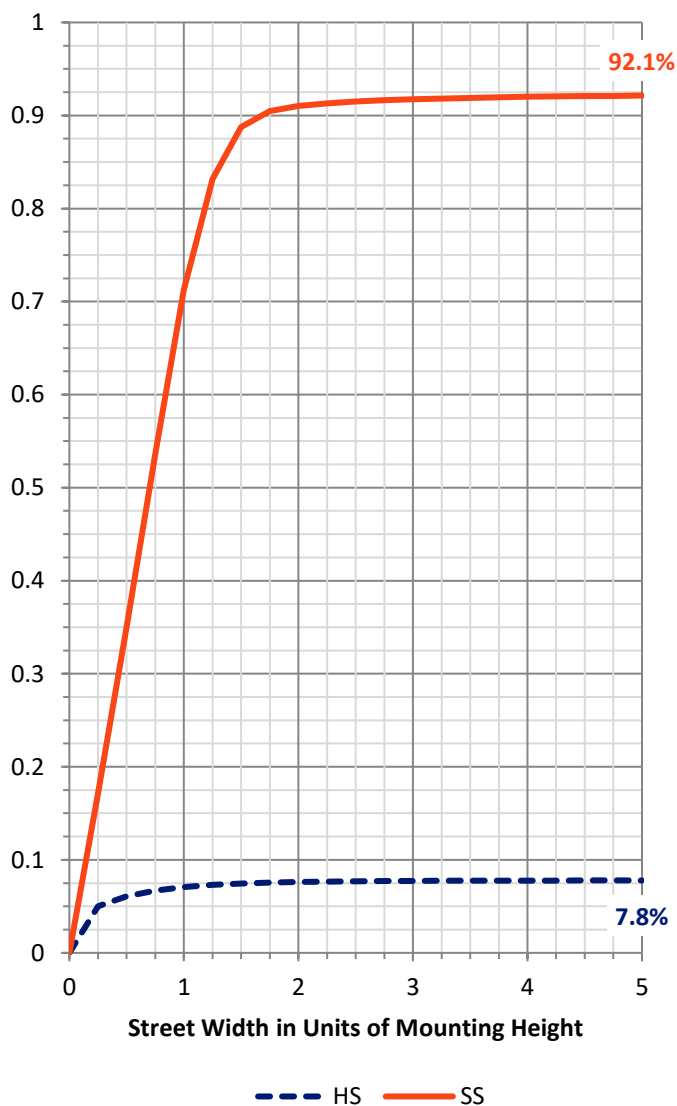
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4455.8   | 0.0    | 4455.8  |
|                    | % Fixture | 7.8      | 0.0    | 7.8     |
| <b>Street Side</b> | Lumens    | 52599.8  | 0.0    | 52599.8 |
|                    | % Fixture | 92.2     | 0.0    | 92.2    |
| <b>Total</b>       | Lumens    | 57055.6  | 0.0    | 57055.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1279.3  | 2.2       |
| 10°-20°   | 3090.1  | 5.4       |
| 20°-30°   | 4944.1  | 8.7       |
| 30°-40°   | 8368.2  | 14.7      |
| 40°-50°   | 13738.7 | 24.1      |
| 50°-60°   | 15099.8 | 26.5      |
| 60°-70°   | 8661.3  | 15.2      |
| 70°-80°   | 1769.8  | 3.1       |
| 80°-90°   | 104.4   | 0.2       |
| 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°    | 57055.6 | 100.0     |
| 0°-180°   | 57055.6 | 100.0     |

**Coefficient of Utilization**



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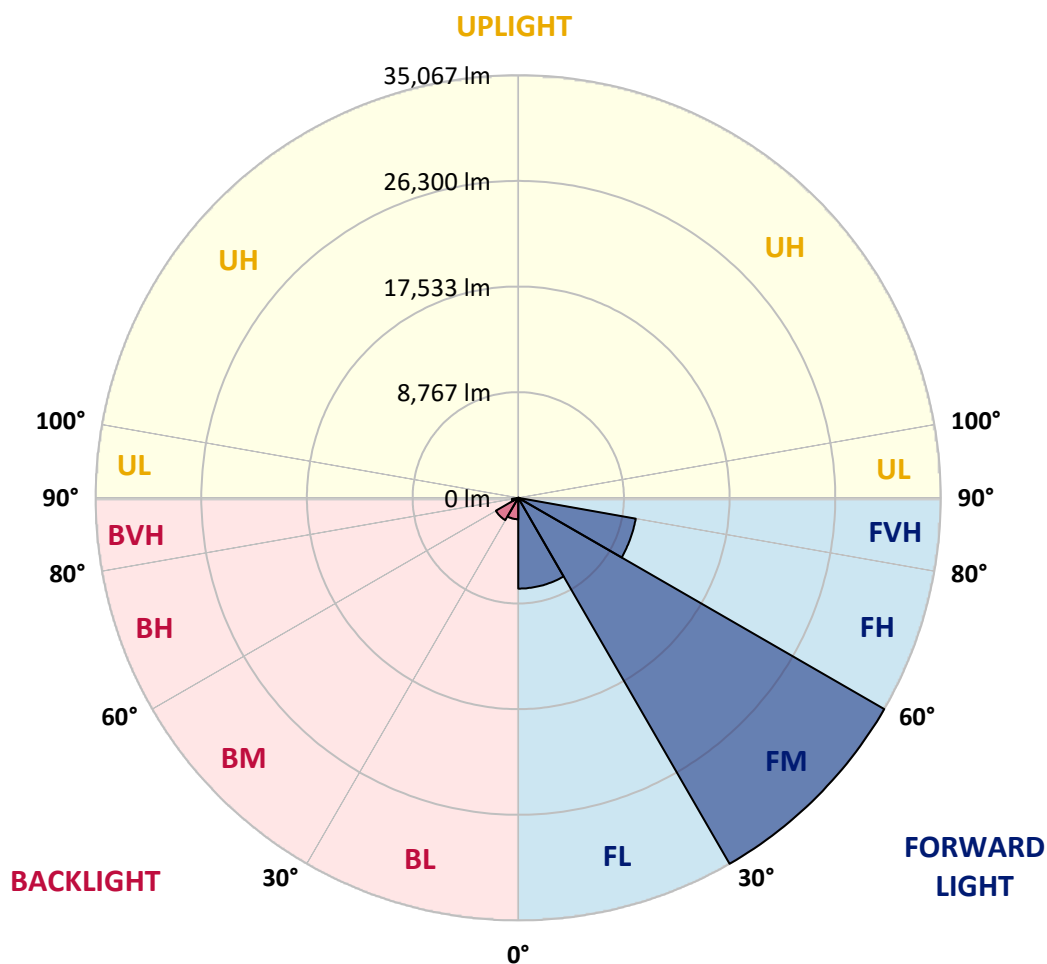
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 7534.5  | 13.2      |                         |      |          |
| FM   | (30°-60°)   | 35066.8 | 61.5      |                         |      |          |
| FH   | (60°-80°)   | 9901.1  | 17.4      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 97.4    | 0.2       |                         |      | G1/100   |
| BL   | (0°-30°)    | 1778.9  | 3.1       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 2140.0  | 3.8       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 529.9   | 0.9       | B2/1000                 |      | G2/1000  |
| BVH  | (80°-90°)   | 7.0     | 0.0       |                         |      | G0/10    |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 13749.0 | 13749.0 | 13749.0 | 13749.0 | 13749.0 | 13749.0 | 13749.0 | 13749.0 | 13749.0 | 13749.0 | 13749.0 |
| 2.5°  | 17059.6 | 16845.0 | 16813.3 | 16771.0 | 16363.0 | 16056.9 | 15613.6 | 15128.1 | 14582.8 | 14026.9 | 13780.6 |
| 5°    | 19708.8 | 19539.9 | 19508.2 | 19311.2 | 18846.8 | 18326.1 | 17538.1 | 16542.4 | 15525.7 | 14329.5 | 13815.9 |
| 7.5°  | 20222.4 | 20190.8 | 20335.0 | 20328.0 | 20264.7 | 19853.0 | 19188.1 | 18002.5 | 16475.5 | 14702.4 | 13907.3 |
| 10°   | 17932.1 | 18013.0 | 18442.2 | 18818.7 | 19835.4 | 20426.5 | 20282.2 | 19304.1 | 17453.6 | 15128.1 | 14009.3 |
| 12.5° | 15845.8 | 15750.9 | 16056.9 | 16482.6 | 17664.7 | 19423.8 | 20736.1 | 20391.2 | 18572.4 | 15610.1 | 14160.6 |
| 15°   | 14537.1 | 14498.3 | 14670.7 | 14867.7 | 15768.4 | 17541.5 | 20208.4 | 21274.4 | 19648.9 | 16180.0 | 14389.3 |
| 17.5° | 14118.4 | 14086.8 | 14139.5 | 14188.8 | 14772.8 | 16144.9 | 18952.4 | 21816.1 | 20679.8 | 16830.9 | 14642.6 |
| 20°   | 14459.7 | 14417.4 | 14410.4 | 14371.7 | 14614.4 | 15550.3 | 17816.0 | 21854.8 | 21605.1 | 17421.9 | 14860.8 |
| 22.5° | 15455.3 | 15406.1 | 15233.7 | 15078.9 | 15100.0 | 15631.2 | 17309.4 | 21467.8 | 22301.6 | 17974.3 | 14997.9 |
| 25°   | 17260.1 | 17179.2 | 16820.4 | 16299.7 | 15969.0 | 16194.1 | 17386.8 | 20957.8 | 22966.6 | 18407.1 | 14931.1 |
| 27.5° | 19518.8 | 19413.2 | 18952.4 | 18178.4 | 17421.9 | 17147.5 | 17946.2 | 20605.9 | 23518.9 | 18737.7 | 14786.9 |
| 30°   | 21731.7 | 21594.5 | 21140.6 | 20539.1 | 19434.3 | 18568.9 | 18955.8 | 20760.7 | 24176.9 | 19082.5 | 14596.9 |
| 32.5° | 24120.5 | 23990.3 | 23388.8 | 22643.0 | 21728.2 | 20563.7 | 20338.6 | 21517.1 | 24982.5 | 19564.5 | 14463.2 |
| 35°   | 27142.6 | 26938.6 | 26083.7 | 25066.9 | 24095.9 | 22917.4 | 22210.2 | 22822.3 | 26055.5 | 20299.8 | 14537.1 |
| 37.5° | 30583.4 | 30309.0 | 29387.3 | 27983.5 | 26716.9 | 25397.7 | 24489.9 | 24616.6 | 27628.2 | 21284.9 | 14765.7 |
| 40°   | 33827.2 | 33577.4 | 32726.0 | 31403.1 | 29812.9 | 28212.2 | 27244.7 | 26963.2 | 29798.9 | 22484.6 | 15166.8 |
| 42.5° | 35772.7 | 35547.5 | 35188.7 | 34629.3 | 33288.9 | 31656.5 | 30435.6 | 29827.0 | 32367.1 | 23920.0 | 15655.8 |
| 45°   | 35881.8 | 35684.8 | 36166.7 | 36817.6 | 36553.8 | 35466.6 | 33978.4 | 32863.1 | 34945.9 | 25267.5 | 16162.4 |
| 47.5° | 34136.8 | 34003.0 | 35466.6 | 37739.4 | 38872.2 | 39329.6 | 37957.5 | 35646.0 | 37074.5 | 26235.0 | 16370.1 |
| 50°   | 29380.2 | 29331.0 | 32342.5 | 36515.0 | 39755.2 | 42714.0 | 42154.7 | 38235.5 | 38724.5 | 26734.6 | 16173.0 |
| 52.5° | 25475.0 | 25295.6 | 27051.2 | 32595.8 | 38471.1 | 44494.2 | 46256.8 | 40775.5 | 39878.4 | 26829.6 | 15712.1 |
| 55°   | 19321.8 | 19163.4 | 21365.8 | 26038.0 | 34330.2 | 43861.0 | 49257.8 | 43396.6 | 40705.2 | 26586.8 | 14885.4 |
| 57.5° | 10364.5 | 10266.0 | 13048.9 | 17330.5 | 26836.6 | 40061.4 | 49799.6 | 46168.9 | 41401.8 | 25943.0 | 13727.9 |
| 60°   | 4035.3  | 4017.8  | 5059.1  | 8408.4  | 16310.2 | 32592.3 | 47066.1 | 47833.0 | 41838.0 | 25151.3 | 12760.4 |
| 62.5° | 2441.7  | 2494.3  | 2663.3  | 3775.0  | 7205.2  | 20247.0 | 40765.0 | 45940.2 | 42130.1 | 24426.7 | 11961.7 |
| 65°   | 2019.5  | 2022.9  | 2044.1  | 2592.8  | 3451.3  | 8471.7  | 30689.0 | 39713.0 | 41408.8 | 23135.5 | 10828.9 |
| 67.5° | 1730.9  | 1762.6  | 1843.6  | 2058.1  | 2434.6  | 3715.2  | 17668.2 | 30762.8 | 37021.7 | 20130.9 | 9062.8  |
| 70°   | 1365.1  | 1407.2  | 1509.3  | 1692.3  | 1878.7  | 2325.5  | 6529.8  | 20468.7 | 28282.5 | 15173.9 | 6853.4  |
| 72.5° | 1150.5  | 1146.9  | 1199.7  | 1375.7  | 1491.7  | 1635.9  | 2512.0  | 11469.2 | 16436.9 | 7243.9  | 3391.5  |
| 75°   | 890.1   | 925.3   | 992.1   | 1150.5  | 1220.8  | 1185.6  | 1361.5  | 4190.1  | 5889.4  | 2195.3  | 1153.9  |
| 77.5° | 696.6   | 724.8   | 784.5   | 939.3   | 1009.7  | 840.8   | 784.5   | 1498.8  | 1892.8  | 788.0   | 520.7   |
| 80°   | 313.1   | 337.7   | 534.7   | 693.1   | 823.3   | 580.5   | 425.7   | 767.0   | 840.8   | 358.9   | 263.8   |
| 82.5° | 56.3    | 95.0    | 313.1   | 365.9   | 422.2   | 376.5   | 221.6   | 397.6   | 411.6   | 144.2   | 91.4    |
| 85°   | 3.5     | 7.1     | 109.1   | 133.7   | 168.9   | 123.1   | 66.8    | 158.4   | 137.2   | 49.3    | 35.2    |
| 87.5° | 0.0     | 0.0     | 0.0     | 3.5     | 3.5     | 17.6    | 21.1    | 28.2    | 21.1    | 17.6    | 14.0    |
| 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):**

|       | 95°     | 105°    | 115°    | 125°    | 135°    | 145°    | 155°    | 165°    | 175°    | 180°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 13749.0 | 13749.0 | 13749.0 | 13749.0 | 13749.0 | 13749.0 | 13749.0 | 13749.0 | 13749.0 | 13749.0 |
| 2.5°  | 13527.3 | 13027.7 | 12542.3 | 12144.7 | 11912.6 | 11518.4 | 11258.1 | 11216.0 | 11106.9 | 11201.8 |
| 5°    | 13267.0 | 12373.4 | 11469.2 | 10660.0 | 9995.1  | 9136.6  | 8496.3  | 8225.5  | 7989.8  | 8070.6  |
| 7.5°  | 13143.9 | 11733.1 | 10325.8 | 8943.2  | 7521.9  | 6149.8  | 5129.5  | 4703.8  | 4380.1  | 4425.8  |
| 10°   | 12978.6 | 11068.2 | 8862.3  | 6751.4  | 4848.0  | 3493.5  | 2789.9  | 2529.6  | 2385.3  | 2388.9  |
| 12.5° | 12851.9 | 10273.1 | 7163.0  | 4577.1  | 2951.7  | 2230.5  | 2012.4  | 1949.0  | 1906.8  | 1910.4  |
| 15°   | 12788.5 | 9337.2  | 5484.8  | 3050.3  | 2110.9  | 1889.3  | 1836.5  | 1808.3  | 1780.2  | 1776.6  |
| 17.5° | 12682.9 | 8295.8  | 4014.2  | 2227.0  | 1847.0  | 1769.7  | 1723.9  | 1692.3  | 1657.0  | 1650.0  |
| 20°   | 12524.7 | 7113.7  | 2934.2  | 1882.2  | 1730.9  | 1671.2  | 1607.8  | 1565.6  | 1523.4  | 1516.3  |
| 22.5° | 12232.7 | 5864.7  | 2255.1  | 1741.5  | 1646.5  | 1579.6  | 1502.2  | 1453.0  | 1410.8  | 1403.7  |
| 25°   | 11690.8 | 4693.3  | 1899.8  | 1653.5  | 1572.7  | 1491.7  | 1407.2  | 1340.4  | 1301.8  | 1294.7  |
| 27.5° | 11004.8 | 3687.0  | 1723.9  | 1572.7  | 1477.6  | 1403.7  | 1308.7  | 1245.5  | 1210.2  | 1203.2  |
| 30°   | 10195.7 | 2839.1  | 1621.9  | 1481.1  | 1365.1  | 1301.8  | 1217.3  | 1164.5  | 1143.4  | 1143.4  |
| 32.5° | 9323.1  | 2269.2  | 1579.6  | 1389.7  | 1266.5  | 1196.2  | 1129.3  | 1108.2  | 1101.2  | 1097.7  |
| 35°   | 8503.4  | 1970.2  | 1558.5  | 1315.8  | 1178.5  | 1111.7  | 1083.6  | 1087.1  | 1101.2  | 1101.2  |
| 37.5° | 7775.1  | 1875.1  | 1548.0  | 1263.0  | 1101.2  | 1041.4  | 1058.9  | 1090.6  | 1076.6  | 1076.6  |
| 40°   | 7117.3  | 1885.7  | 1541.0  | 1224.4  | 1037.8  | 1002.7  | 1037.8  | 1013.2  | 978.1   | 974.6   |
| 42.5° | 6614.1  | 1973.7  | 1526.8  | 1192.7  | 999.2   | 974.6   | 960.4   | 921.8   | 918.2   | 925.3   |
| 45°   | 6248.3  | 2051.1  | 1523.4  | 1178.5  | 956.9   | 911.2   | 893.6   | 855.0   | 925.3   | 942.9   |
| 47.5° | 5815.5  | 2051.1  | 1523.4  | 1129.3  | 886.6   | 869.0   | 840.8   | 798.6   | 869.0   | 886.6   |
| 50°   | 5256.1  | 1921.0  | 1463.6  | 1073.1  | 830.2   | 819.7   | 770.5   | 717.7   | 703.7   | 714.2   |
| 52.5° | 4549.0  | 1685.2  | 1312.3  | 995.7   | 774.0   | 752.9   | 693.1   | 654.4   | 643.8   | 643.8   |
| 55°   | 3743.3  | 1410.8  | 1108.2  | 883.0   | 714.2   | 675.5   | 633.2   | 615.7   | 605.2   | 598.1   |
| 57.5° | 3043.2  | 1157.4  | 890.1   | 784.5   | 657.9   | 608.6   | 594.6   | 573.5   | 555.9   | 545.3   |
| 60°   | 2497.9  | 911.2   | 735.3   | 696.6   | 601.6   | 555.9   | 552.4   | 524.2   | 478.5   | 471.4   |
| 62.5° | 1927.9  | 668.4   | 619.2   | 605.2   | 545.3   | 506.7   | 499.6   | 443.3   | 372.9   | 358.9   |
| 65°   | 1361.5  | 520.7   | 499.6   | 531.3   | 485.5   | 450.3   | 432.8   | 348.3   | 274.4   | 263.8   |
| 67.5° | 956.9   | 436.2   | 394.0   | 464.4   | 422.2   | 376.5   | 365.9   | 295.5   | 228.7   | 221.6   |
| 70°   | 682.5   | 355.4   | 323.7   | 397.6   | 337.7   | 330.7   | 309.5   | 246.3   | 186.4   | 179.5   |
| 72.5° | 482.0   | 270.9   | 249.8   | 344.8   | 232.2   | 285.0   | 253.3   | 189.9   | 140.7   | 133.7   |
| 75°   | 355.4   | 193.5   | 175.9   | 200.5   | 168.9   | 214.6   | 179.5   | 126.7   | 87.9    | 84.5    |
| 77.5° | 260.3   | 123.1   | 105.6   | 98.5    | 98.5    | 133.7   | 98.5    | 52.8    | 38.7    | 35.2    |
| 80°   | 183.0   | 56.3    | 49.3    | 42.2    | 38.7    | 31.7    | 14.0    | 7.1     | 3.5     | 3.5     |
| 82.5° | 109.1   | 24.6    | 24.6    | 17.6    | 10.6    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 85°   | 24.6    | 10.6    | 10.6    | 3.5     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 87.5° | 3.5     | 3.5     | 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     |

(END OF REPORT)