

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: P960437

Luminaire Tested: **NAV-SB1C-760-U-SL4-HSS**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P960437  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1C-760-U-SL4-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 5700K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT  
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 5671.3 lumens  
Efficiency: N/A  
Efficacy: 104.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 54.4  
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



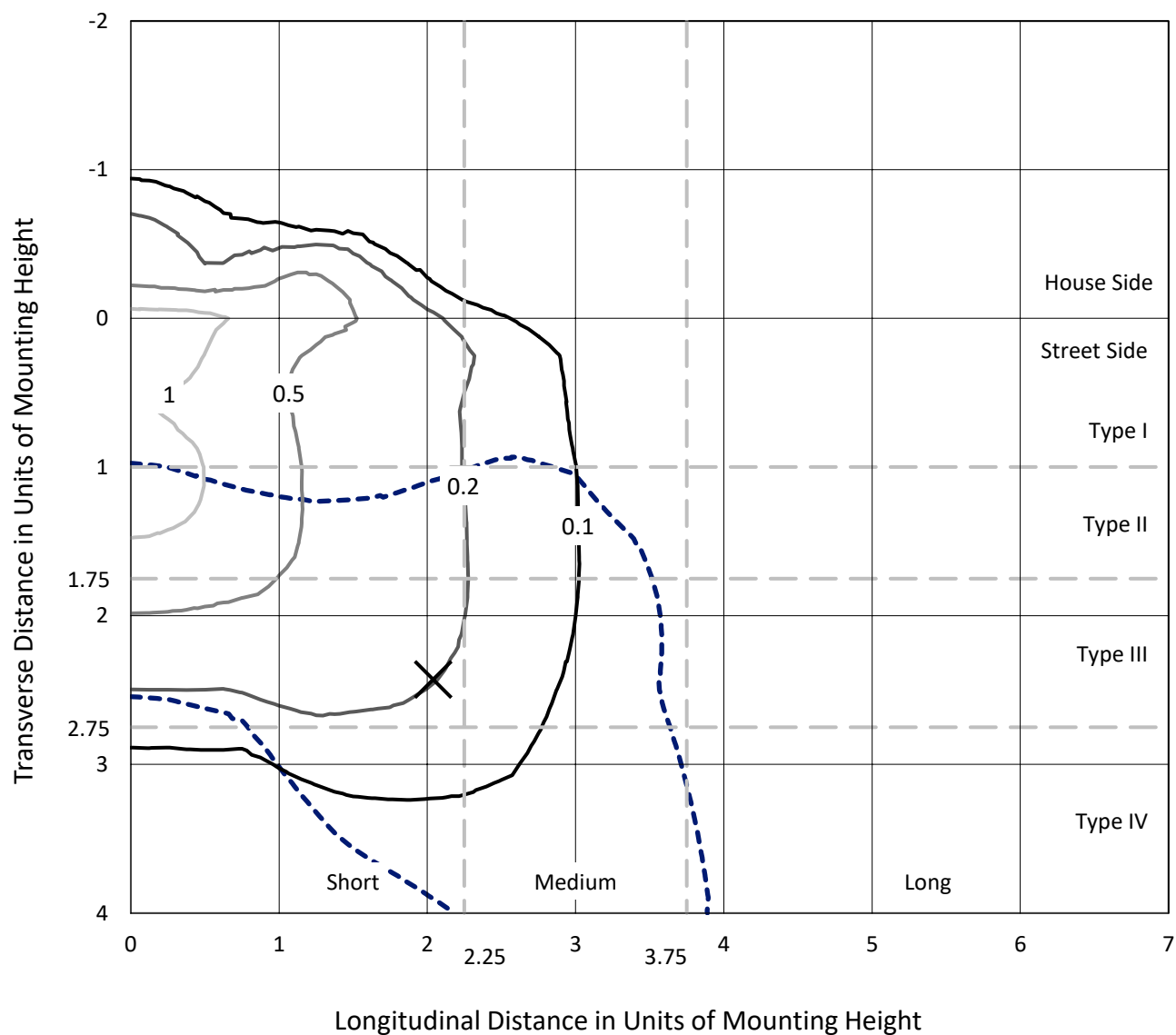
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

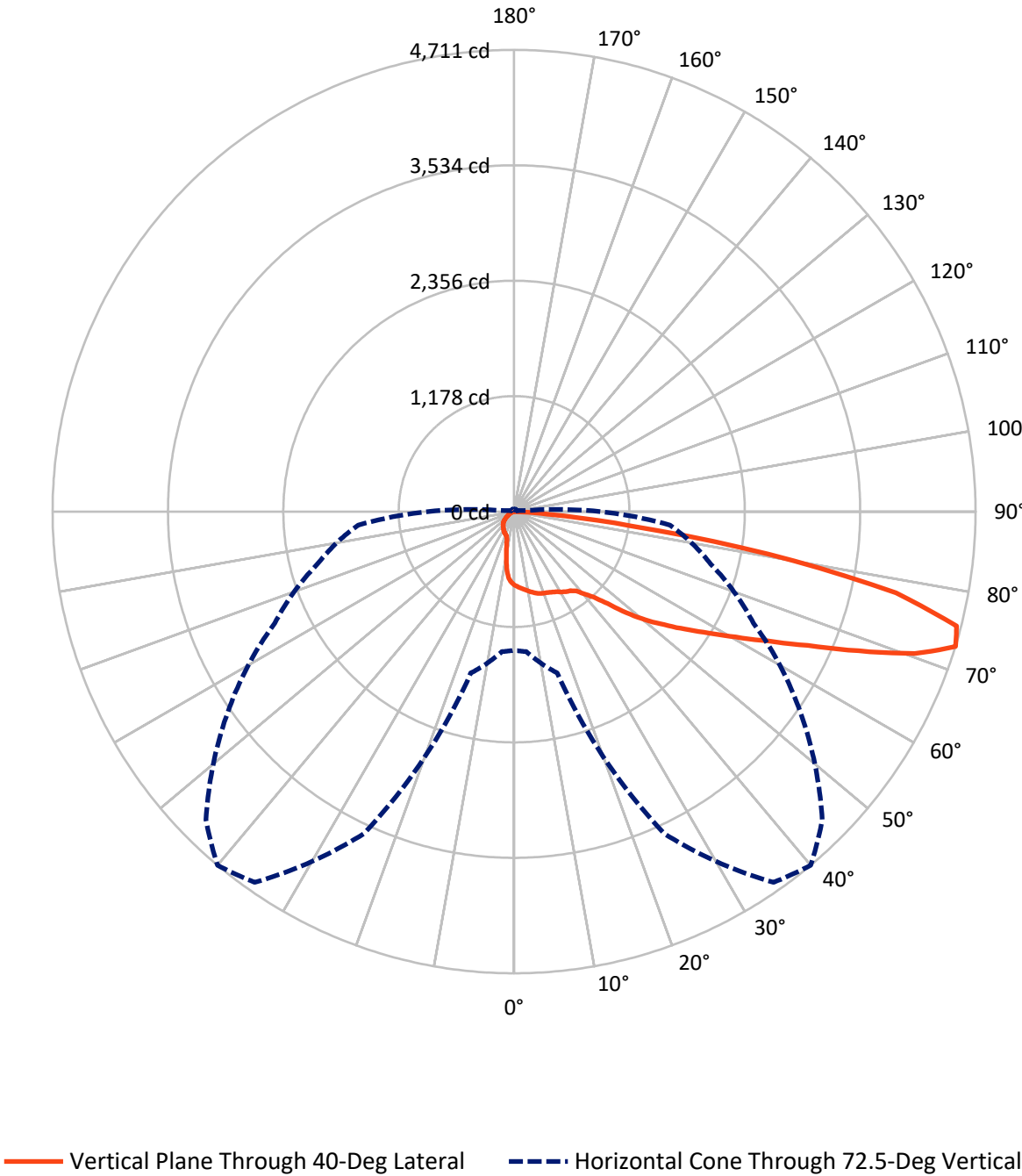


Based on 25 foot mounting height. Maximum calculated value = 1.4 fc

Type IV - 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    | 732.4    | 0.0    | 732.4  |
|                    | % Fixture | 12.9     | 0.0    | 12.9   |
| <b>Street Side</b> | Lumens    | 4938.9   | 0.0    | 4938.9 |
|                    | % Fixture | 87.1     | 0.0    | 87.1   |
| <b>Total</b>       | Lumens    | 5671.3   | 0.0    | 5671.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 68.6   | 1.2       |
| 10°-20°   | 186.2  | 3.3       |
| 20°-30°   | 301.4  | 5.3       |
| 30°-40°   | 444.9  | 7.8       |
| 40°-50°   | 748.8  | 13.2      |
| 50°-60°   | 1162.7 | 20.5      |
| 60°-70°   | 1454.8 | 25.7      |
| 70°-80°   | 1191.1 | 21.0      |
| 80°-90°   | 112.9  | 2.0       |
| 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°    | 5671.3 | 100.0     |
| 0°-180°   | 5671.3 | 100.0     |

**Coefficient of Utilization**



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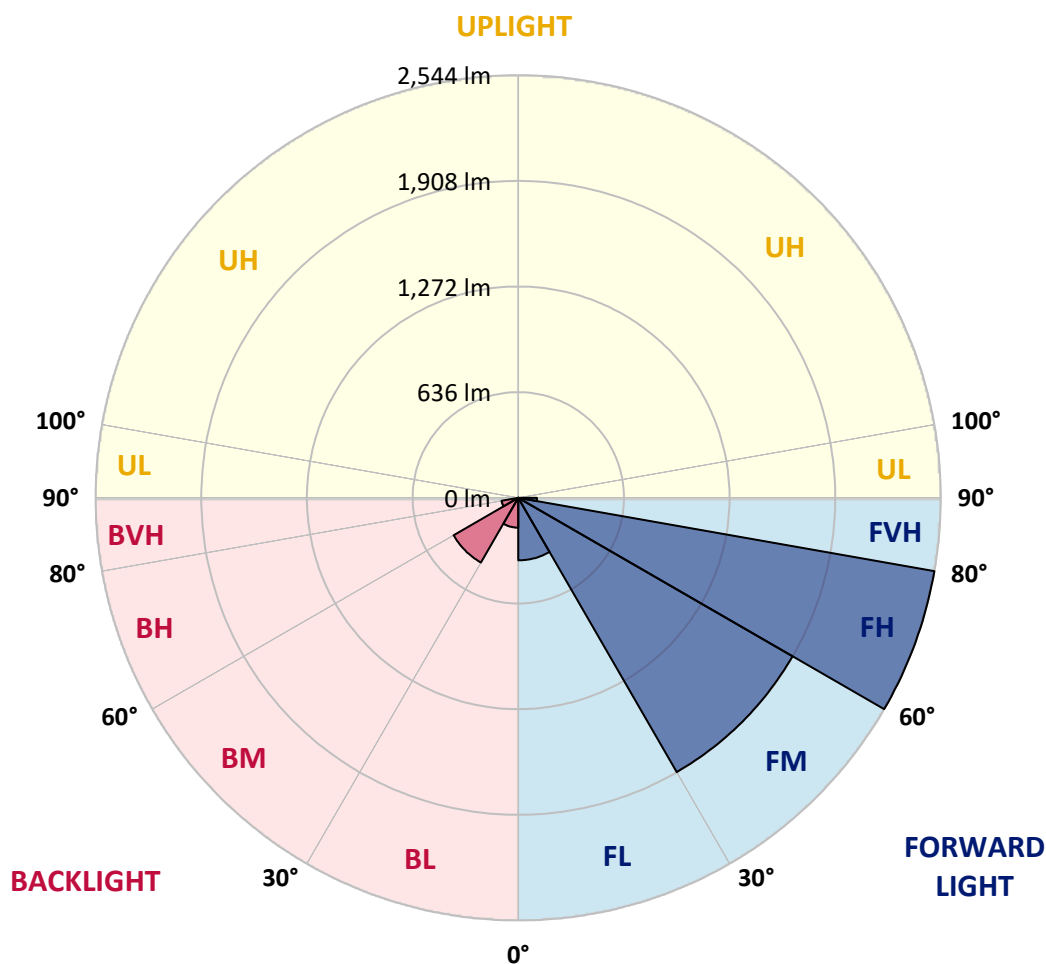
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 376.4  | 6.6       |                         |      |         |
| FM   | (30°-60°)   | 1906.6 | 33.6      |                         |      |         |
| FH   | (60°-80°)   | 2543.8 | 44.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 112.1  | 2.0       |                         |      | G2/225  |
| BL   | (0°-30°)    | 179.8  | 3.2       | B1/500                  |      |         |
| BM   | (30°-60°)   | 449.7  | 7.9       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 102.0  | 1.8       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.9    | 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 IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 40°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 750.9  | 750.9  | 750.9  | 750.9  | 750.9  | 750.9  | 750.9  | 750.9  | 750.9  | 750.9  | 750.9  |
| 2.5°  | 773.6  | 776.5  | 774.9  | 771.4  | 770.6  | 768.9  | 766.7  | 765.9  | 762.9  | 760.3  | 757.4  |
| 5°    | 795.4  | 798.4  | 796.2  | 791.5  | 789.4  | 787.2  | 784.2  | 781.7  | 775.7  | 770.2  | 763.3  |
| 7.5°  | 819.3  | 821.8  | 819.3  | 812.4  | 809.0  | 806.5  | 802.2  | 798.4  | 791.5  | 783.4  | 774.9  |
| 10°   | 845.7  | 847.9  | 844.1  | 835.1  | 829.5  | 825.6  | 821.8  | 817.5  | 811.2  | 802.2  | 791.9  |
| 12.5° | 870.5  | 873.1  | 867.2  | 856.4  | 850.0  | 846.1  | 841.9  | 838.4  | 832.1  | 823.6  | 812.8  |
| 15°   | 893.2  | 897.0  | 886.7  | 875.2  | 868.0  | 865.0  | 860.7  | 858.5  | 854.3  | 848.3  | 838.4  |
| 17.5° | 910.3  | 912.9  | 902.1  | 888.5  | 880.4  | 878.2  | 875.2  | 876.5  | 875.7  | 872.7  | 866.2  |
| 20°   | 924.8  | 926.5  | 912.4  | 895.7  | 886.7  | 887.2  | 886.3  | 890.6  | 892.4  | 892.4  | 891.9  |
| 22.5° | 942.7  | 943.1  | 925.2  | 904.3  | 893.6  | 896.6  | 897.9  | 902.6  | 906.0  | 909.4  | 917.1  |
| 25°   | 966.2  | 965.3  | 944.0  | 915.4  | 906.0  | 910.3  | 913.3  | 914.9  | 918.8  | 924.3  | 941.9  |
| 27.5° | 1001.2 | 998.7  | 971.3  | 933.4  | 922.2  | 926.1  | 931.6  | 930.8  | 929.1  | 933.4  | 962.8  |
| 30°   | 1045.7 | 1042.2 | 1005.9 | 958.5  | 948.2  | 951.7  | 953.4  | 945.7  | 933.4  | 937.2  | 981.1  |
| 32.5° | 1116.1 | 1110.2 | 1059.7 | 986.7  | 970.9  | 974.8  | 972.6  | 956.8  | 938.5  | 942.3  | 999.6  |
| 35°   | 1238.7 | 1224.3 | 1152.9 | 1045.7 | 996.5  | 992.3  | 987.2  | 971.8  | 949.1  | 945.3  | 1015.0 |
| 37.5° | 1499.3 | 1473.6 | 1352.0 | 1160.6 | 1054.6 | 1026.8 | 1011.1 | 995.7  | 960.6  | 945.3  | 1032.4 |
| 40°   | 1793.1 | 1767.1 | 1626.6 | 1352.8 | 1151.2 | 1104.2 | 1066.6 | 1023.9 | 972.6  | 950.8  | 1059.7 |
| 42.5° | 2099.9 | 2071.2 | 1926.9 | 1591.1 | 1289.1 | 1192.6 | 1122.6 | 1046.5 | 992.3  | 967.9  | 1096.0 |
| 45°   | 2442.5 | 2406.6 | 2217.8 | 1839.8 | 1489.4 | 1339.6 | 1212.7 | 1093.1 | 1026.4 | 998.2  | 1145.6 |
| 47.5° | 2803.8 | 2757.2 | 2507.8 | 2081.1 | 1705.2 | 1542.8 | 1377.6 | 1176.4 | 1076.9 | 1043.6 | 1212.7 |
| 50°   | 3124.2 | 3078.1 | 2807.3 | 2333.5 | 1906.8 | 1736.4 | 1565.5 | 1291.7 | 1152.4 | 1107.6 | 1302.8 |
| 52.5° | 3354.4 | 3319.4 | 3079.7 | 2594.1 | 2116.5 | 1917.9 | 1735.9 | 1425.8 | 1248.1 | 1189.6 | 1409.2 |
| 55°   | 3508.6 | 3476.6 | 3272.8 | 2841.0 | 2360.5 | 2117.9 | 1903.8 | 1571.5 | 1363.5 | 1287.8 | 1526.6 |
| 57.5° | 3602.2 | 3583.8 | 3412.5 | 3061.4 | 2602.2 | 2336.5 | 2096.0 | 1731.6 | 1499.3 | 1403.6 | 1657.7 |
| 60°   | 3635.5 | 3620.5 | 3499.2 | 3271.5 | 2894.4 | 2599.2 | 2322.0 | 1912.3 | 1664.2 | 1535.1 | 1792.3 |
| 62.5° | 3546.6 | 3549.6 | 3561.6 | 3520.6 | 3202.3 | 2906.8 | 2592.8 | 2129.3 | 1846.9 | 1684.3 | 1918.8 |
| 65°   | 3128.4 | 3153.2 | 3380.4 | 3796.5 | 3610.3 | 3292.1 | 2937.5 | 2394.2 | 2056.3 | 1853.8 | 2019.1 |
| 67.5° | 2590.3 | 2626.2 | 2908.8 | 3957.9 | 4045.1 | 3792.2 | 3417.7 | 2731.6 | 2305.7 | 2026.4 | 2057.2 |
| 70°   | 1982.9 | 2021.3 | 2363.9 | 3924.2 | 4452.2 | 4339.0 | 4011.3 | 3160.9 | 2564.1 | 2146.0 | 1960.2 |
| 72.5° | 1415.1 | 1434.8 | 1704.8 | 3624.0 | 4619.2 | 4711.4 | 4448.8 | 3567.5 | 2696.2 | 2079.8 | 1598.8 |
| 75°   | 994.5  | 991.0  | 1169.9 | 2918.3 | 4359.0 | 4666.2 | 4295.5 | 3347.5 | 2439.9 | 1652.2 | 985.8  |
| 77.5° | 433.2  | 434.0  | 584.4  | 1772.2 | 3479.2 | 3985.3 | 3570.6 | 2096.8 | 1700.9 | 875.7  | 416.0  |
| 80°   | 112.3  | 115.7  | 214.4  | 705.6  | 2094.8 | 2630.4 | 2177.6 | 921.8  | 786.0  | 213.6  | 79.4   |
| 82.5° | 39.8   | 42.3   | 98.7   | 221.7  | 772.7  | 1206.2 | 969.6  | 294.7  | 205.0  | 61.1   | 21.3   |
| 85°   | 11.6   | 13.6   | 53.0   | 68.0   | 159.8  | 340.9  | 235.3  | 57.2   | 50.4   | 31.6   | 5.5    |
| 87.5° | 0.0    | 1.7    | 10.7   | 9.4    | 9.4    | 6.5    | 12.0   | 6.5    | 8.1    | 3.9    | 1.7    |
| 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°    | 750.9  | 750.9  | 750.9  | 750.9 | 750.9 | 750.9 | 750.9 | 750.9 | 750.9 | 750.9 | 750.9 |
| 2.5°  | 754.8  | 751.7  | 745.4  | 738.5 | 732.2 | 726.1 | 724.5 | 718.0 | 715.0 | 715.4 | 715.0 |
| 5°    | 758.6  | 753.1  | 740.7  | 725.7 | 710.3 | 692.8 | 678.3 | 657.8 | 640.3 | 638.2 | 636.8 |
| 7.5°  | 768.9  | 759.9  | 739.8  | 710.7 | 672.3 | 624.0 | 579.2 | 534.7 | 509.6 | 495.9 | 495.1 |
| 10°   | 784.6  | 772.7  | 742.0  | 686.4 | 604.9 | 518.5 | 450.7 | 394.7 | 366.0 | 352.8 | 350.2 |
| 12.5° | 803.5  | 790.3  | 745.4  | 645.0 | 517.7 | 404.5 | 331.1 | 296.8 | 290.9 | 290.1 | 289.6 |
| 15°   | 829.9  | 815.4  | 749.2  | 589.1 | 423.3 | 308.0 | 274.2 | 274.7 | 279.3 | 281.9 | 281.5 |
| 17.5° | 859.5  | 844.9  | 743.6  | 520.7 | 330.2 | 263.1 | 262.3 | 266.1 | 273.0 | 275.5 | 275.1 |
| 20°   | 889.3  | 875.7  | 724.1  | 440.4 | 267.0 | 250.7 | 254.2 | 258.4 | 265.3 | 268.7 | 268.7 |
| 22.5° | 920.0  | 908.2  | 692.8  | 355.0 | 240.9 | 241.8 | 246.0 | 250.3 | 258.0 | 261.9 | 261.9 |
| 25°   | 952.9  | 942.7  | 651.4  | 284.4 | 229.8 | 232.4 | 237.9 | 243.0 | 251.1 | 255.8 | 255.8 |
| 27.5° | 986.3  | 978.6  | 604.4  | 237.5 | 219.6 | 222.5 | 229.0 | 235.7 | 244.0 | 249.5 | 249.9 |
| 30°   | 1022.6 | 1018.3 | 566.8  | 220.0 | 209.7 | 212.3 | 219.6 | 227.2 | 236.3 | 243.0 | 244.0 |
| 32.5° | 1059.7 | 1058.9 | 548.5  | 232.8 | 200.8 | 202.4 | 208.9 | 216.6 | 227.7 | 236.3 | 237.1 |
| 35°   | 1096.4 | 1098.2 | 537.8  | 269.1 | 197.7 | 193.1 | 197.3 | 204.2 | 217.4 | 228.1 | 229.8 |
| 37.5° | 1143.5 | 1147.8 | 537.3  | 308.4 | 205.0 | 183.7 | 186.7 | 191.4 | 202.8 | 215.2 | 217.4 |
| 40°   | 1213.5 | 1236.1 | 564.7  | 342.1 | 217.8 | 175.2 | 176.0 | 176.8 | 182.9 | 193.1 | 196.5 |
| 42.5° | 1306.7 | 1372.9 | 663.4  | 365.2 | 222.9 | 167.5 | 164.4 | 159.8 | 158.9 | 164.4 | 167.5 |
| 45°   | 1422.4 | 1538.2 | 836.8  | 378.0 | 217.8 | 158.9 | 150.8 | 138.4 | 133.7 | 137.6 | 137.6 |
| 47.5° | 1558.7 | 1719.2 | 1042.2 | 381.0 | 209.3 | 148.2 | 133.7 | 117.5 | 113.7 | 114.9 | 114.5 |
| 50°   | 1691.6 | 1855.1 | 1222.9 | 356.3 | 195.2 | 134.6 | 114.9 | 101.3 | 98.7  | 99.1  | 99.1  |
| 52.5° | 1809.0 | 1901.7 | 1274.2 | 297.8 | 176.4 | 117.9 | 98.7  | 89.3  | 87.5  | 87.5  | 87.1  |
| 55°   | 1886.7 | 1851.3 | 1136.2 | 227.7 | 152.9 | 100.8 | 84.6  | 79.8  | 79.0  | 78.6  | 77.7  |
| 57.5° | 1902.9 | 1687.3 | 858.1  | 164.4 | 119.6 | 85.0  | 75.1  | 72.6  | 70.9  | 69.2  | 68.4  |
| 60°   | 1844.9 | 1413.9 | 546.3  | 114.9 | 89.7  | 72.6  | 66.6  | 64.9  | 61.5  | 58.1  | 56.8  |
| 62.5° | 1719.2 | 1067.8 | 302.4  | 79.8  | 72.2  | 61.9  | 58.9  | 56.8  | 50.4  | 44.9  | 43.2  |
| 65°   | 1550.5 | 709.9  | 133.7  | 62.3  | 58.9  | 52.1  | 50.4  | 47.5  | 39.8  | 33.3  | 32.1  |
| 67.5° | 1381.0 | 408.8  | 60.3   | 50.0  | 47.5  | 42.7  | 41.4  | 39.3  | 33.7  | 27.8  | 27.0  |
| 70°   | 1187.5 | 207.2  | 41.4   | 39.8  | 36.7  | 32.5  | 33.7  | 33.3  | 27.8  | 22.7  | 21.8  |
| 72.5° | 884.2  | 102.9  | 31.2   | 29.9  | 26.4  | 23.1  | 27.8  | 27.4  | 21.8  | 17.1  | 16.2  |
| 75°   | 500.6  | 50.8   | 22.7   | 20.9  | 15.8  | 17.1  | 22.2  | 20.9  | 15.0  | 11.1  | 10.2  |
| 77.5° | 198.6  | 26.0   | 15.0   | 12.8  | 9.4   | 11.6  | 16.2  | 14.1  | 7.7   | 4.7   | 4.3   |
| 80°   | 45.7   | 12.8   | 7.7    | 5.5   | 4.3   | 6.9   | 8.5   | 5.1   | 2.2   | 0.4   | 0.0   |
| 82.5° | 12.8   | 5.5    | 2.6    | 2.2   | 2.2   | 2.6   | 2.2   | 0.8   | 0.0   | 0.0   | 0.0   |
| 85°   | 4.3    | 2.6    | 0.8    | 0.4   | 0.4   | 0.4   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 1.7    | 0.8    | 0.0    | 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)