

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: P962492

Luminaire Tested: **NAV-SB2C-740-U-T2R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P962492  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2C-740-U-T2R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16542.5 lumens  
Efficiency: N/A  
Efficacy: 163.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2

Input Watts (W): 100.9  
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

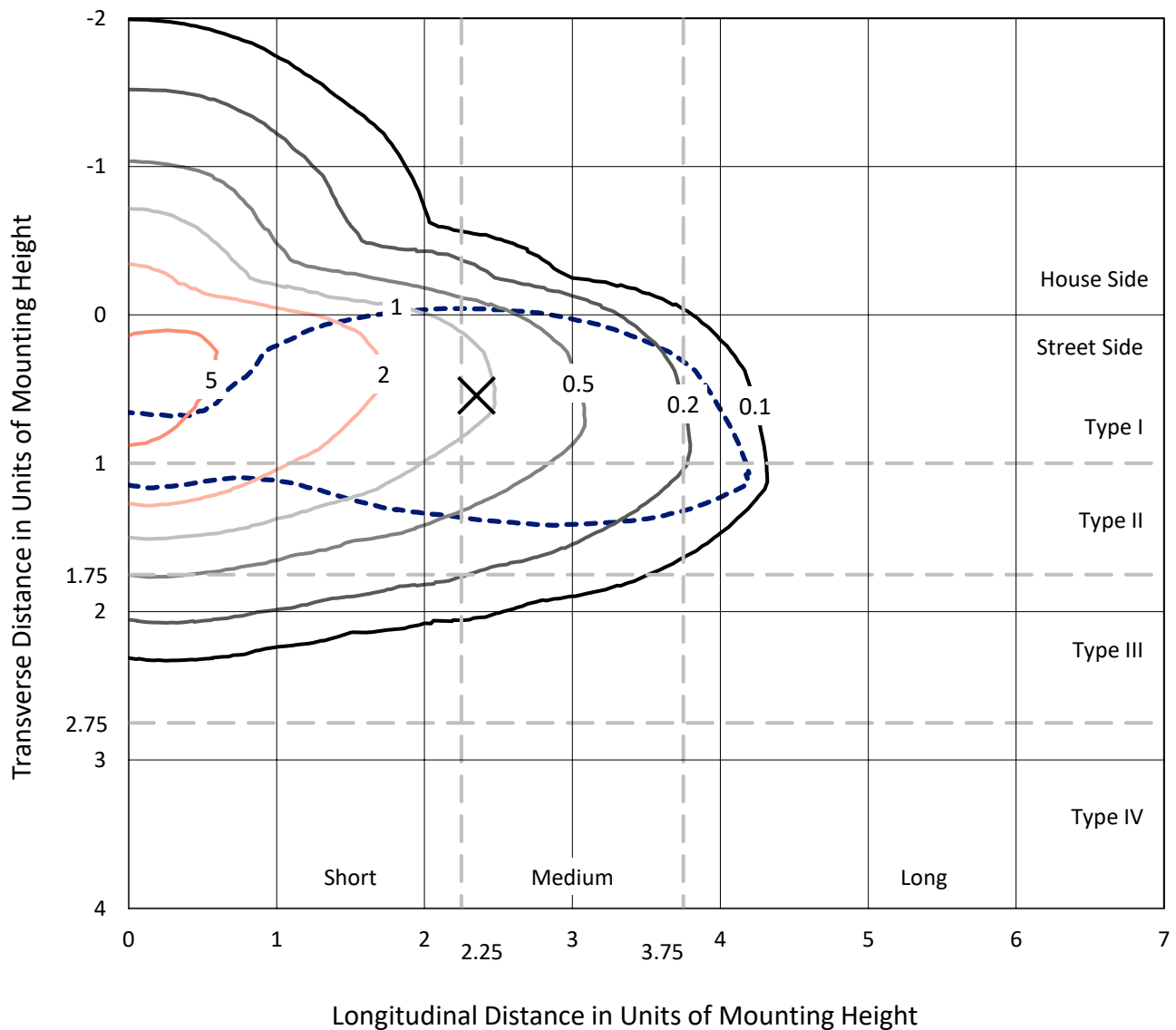


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## Iso-Footcandle Lines of Horizontal Illumination

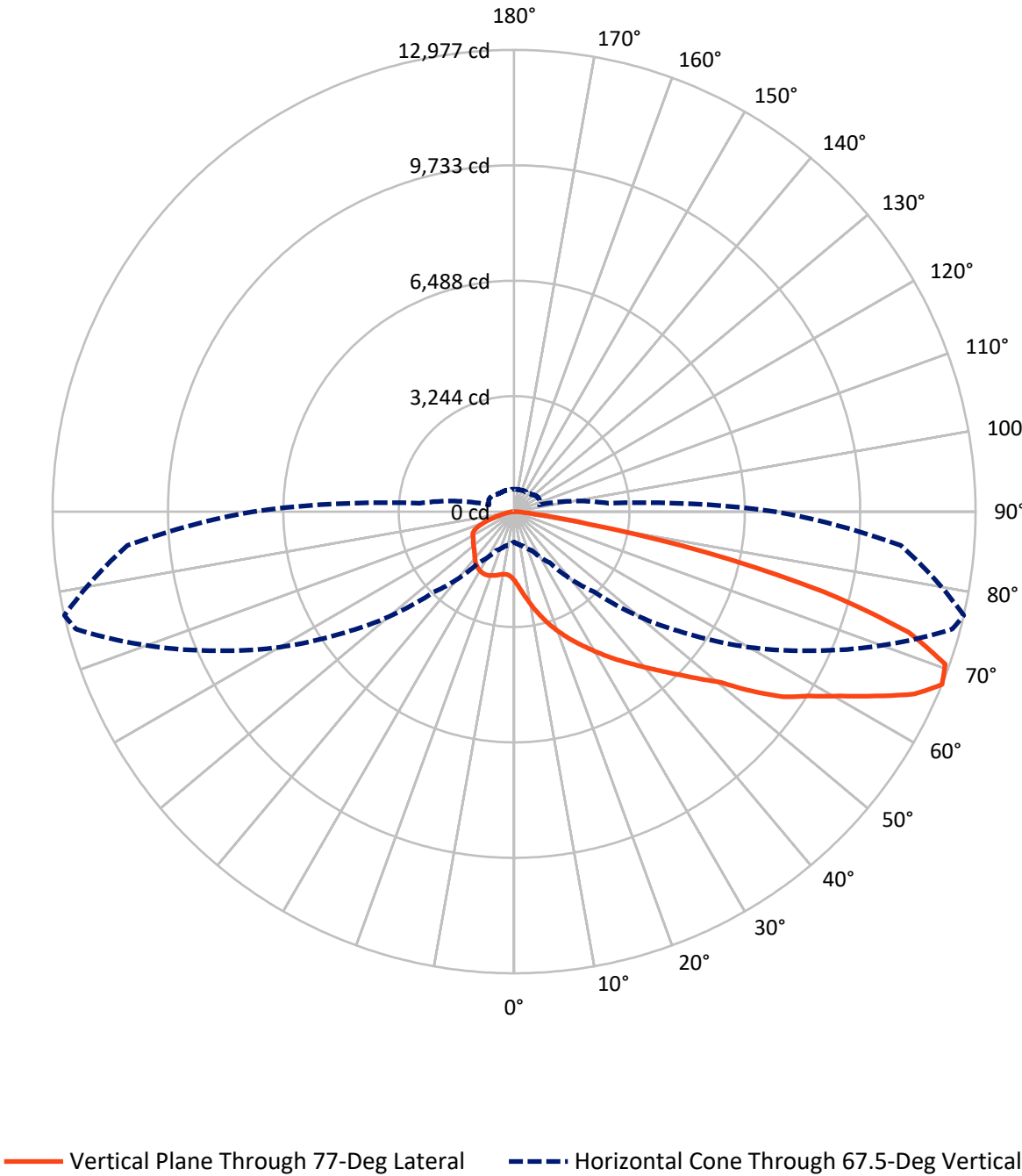
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc  
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3129.2   | 0.0    | 3129.2  |
|                    | % Fixture | 18.9     | 0.0    | 18.9    |
| <b>Street Side</b> | Lumens    | 13413.3  | 0.0    | 13413.3 |
|                    | % Fixture | 81.1     | 0.0    | 81.1    |
| <b>Total</b>       | Lumens    | 16542.5  | 0.0    | 16542.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 208.0   | 1.3       |
| 10°-20°   | 747.4   | 4.5       |
| 20°-30°   | 1411.2  | 8.5       |
| 30°-40°   | 2273.4  | 13.7      |
| 40°-50°   | 3109.6  | 18.8      |
| 50°-60°   | 3507.7  | 21.2      |
| 60°-70°   | 3274.0  | 19.8      |
| 70°-80°   | 1794.7  | 10.8      |
| 80°-90°   | 216.5   | 1.3       |
| 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°    | 16542.5 | 100.0     |
| 0°-180°   | 16542.5 | 100.0     |

**Coefficient of Utilization**



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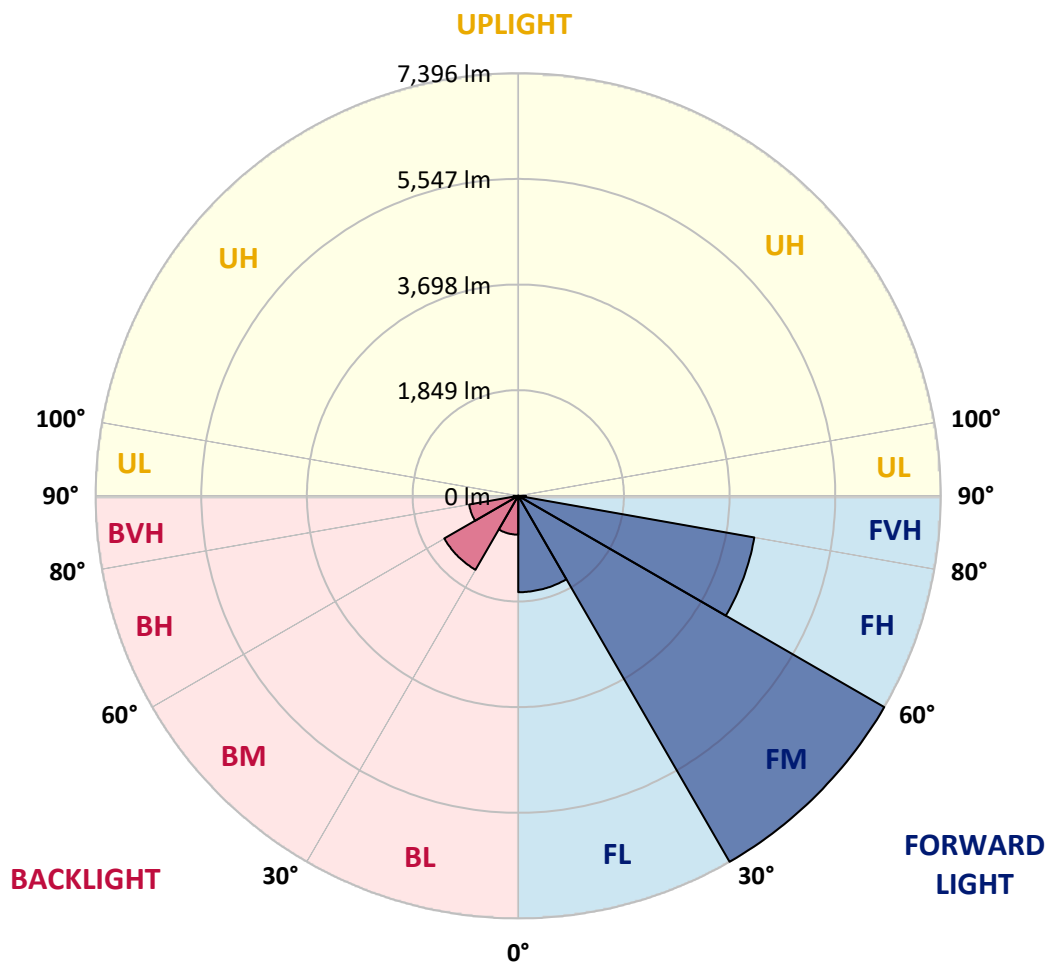
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1686.3 | 10.2      |                         |      |         |
| FM   | (30°-60°)   | 7396.0 | 44.7      |                         |      |         |
| FH   | (60°-80°)   | 4195.7 | 25.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 135.4  | 0.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 680.4  | 4.1       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1494.7 | 9.0       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 873.0  | 5.3       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 81.1   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°     | 77°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0°    | 1940.9 | 1940.9 | 1940.9 | 1940.9 | 1940.9 | 1940.9 | 1940.9 | 1940.9 | 1940.9  | 1940.9  | 1940.9  |
| 2.5°  | 2430.3 | 2447.3 | 2426.0 | 2426.0 | 2354.2 | 2316.7 | 2245.0 | 2190.3 | 2092.1  | 2075.0  | 2010.1  |
| 5°    | 2872.6 | 2893.9 | 2864.1 | 2851.2 | 2766.7 | 2689.0 | 2568.5 | 2449.9 | 2274.8  | 2256.8  | 2104.0  |
| 7.5°  | 3215.0 | 3242.3 | 3215.8 | 3202.2 | 3127.1 | 3039.9 | 2899.0 | 2733.4 | 2486.5  | 2451.6  | 2230.4  |
| 10°   | 3494.2 | 3498.5 | 3489.9 | 3495.0 | 3436.1 | 3364.5 | 3220.1 | 3027.1 | 2718.8  | 2671.0  | 2383.2  |
| 12.5° | 3652.2 | 3671.9 | 3688.9 | 3719.6 | 3709.4 | 3665.0 | 3535.2 | 3304.6 | 2964.8  | 2903.3  | 2549.8  |
| 15°   | 3726.5 | 3760.6 | 3799.1 | 3869.9 | 3927.2 | 3938.3 | 3839.2 | 3602.7 | 3215.0  | 3140.7  | 2718.0  |
| 17.5° | 3752.9 | 3785.4 | 3846.0 | 3948.5 | 4071.5 | 4154.3 | 4109.8 | 3892.1 | 3462.7  | 3377.3  | 2894.8  |
| 20°   | 3887.0 | 3896.4 | 3933.1 | 4030.5 | 4163.7 | 4301.2 | 4334.4 | 4170.5 | 3707.7  | 3611.2  | 3077.5  |
| 22.5° | 4173.9 | 4155.1 | 4165.4 | 4209.8 | 4305.4 | 4438.7 | 4514.6 | 4416.4 | 3959.6  | 3848.6  | 3262.0  |
| 25°   | 4647.9 | 4593.2 | 4538.6 | 4487.3 | 4536.0 | 4611.2 | 4697.4 | 4662.4 | 4223.4  | 4082.6  | 3448.1  |
| 27.5° | 5246.5 | 5179.8 | 5059.4 | 4891.2 | 4832.3 | 4858.8 | 4897.2 | 4890.4 | 4467.7  | 4325.1  | 3640.2  |
| 30°   | 5835.6 | 5757.9 | 5614.4 | 5371.1 | 5215.7 | 5145.7 | 5116.7 | 5097.0 | 4733.2  | 4581.2  | 3834.1  |
| 32.5° | 6306.1 | 6244.7 | 6103.8 | 5831.3 | 5605.9 | 5486.4 | 5389.9 | 5319.9 | 5010.8  | 4858.8  | 4039.0  |
| 35°   | 6717.7 | 6660.6 | 6499.1 | 6202.0 | 5956.9 | 5829.7 | 5703.3 | 5553.9 | 5299.4  | 5145.7  | 4259.3  |
| 37.5° | 7093.5 | 7036.2 | 6815.1 | 6506.0 | 6259.2 | 6171.2 | 6058.6 | 5804.9 | 5588.9  | 5443.7  | 4492.5  |
| 40°   | 7330.8 | 7318.1 | 7111.3 | 6761.3 | 6505.2 | 6461.6 | 6424.0 | 6096.1 | 5909.9  | 5775.1  | 4748.6  |
| 42.5° | 7391.5 | 7419.7 | 7255.7 | 6968.0 | 6723.7 | 6688.7 | 6776.7 | 6425.7 | 6270.3  | 6141.4  | 5038.9  |
| 45°   | 7245.4 | 7326.6 | 7219.0 | 7023.4 | 6879.1 | 6860.3 | 7089.2 | 6786.0 | 6669.1  | 6551.2  | 5389.0  |
| 47.5° | 6875.7 | 7013.2 | 6968.8 | 6941.5 | 6921.0 | 7002.1 | 7364.1 | 7168.6 | 7120.8  | 7018.3  | 5788.7  |
| 50°   | 6129.4 | 6389.8 | 6467.5 | 6640.1 | 6838.2 | 7112.3 | 7614.3 | 7586.1 | 7648.6  | 7545.2  | 6275.5  |
| 52.5° | 4839.1 | 5197.8 | 5648.7 | 6080.7 | 6583.7 | 7075.6 | 7889.3 | 8185.6 | 8448.7  | 8392.3  | 7049.0  |
| 55°   | 3994.6 | 4156.0 | 4502.7 | 5295.2 | 6090.1 | 6921.0 | 8013.1 | 8669.8 | 9242.7  | 9192.4  | 7635.7  |
| 57.5° | 3345.6 | 3489.9 | 3703.4 | 4365.2 | 5343.8 | 6570.0 | 8090.0 | 8965.3 | 9786.7  | 9781.6  | 8214.7  |
| 60°   | 2649.7 | 2802.6 | 3021.2 | 3489.9 | 4472.0 | 5963.8 | 8072.9 | 9301.7 | 10480.9 | 10523.7 | 8920.9  |
| 62.5° | 1864.1 | 2032.3 | 2274.8 | 2712.0 | 3581.4 | 5178.1 | 7724.5 | 9545.0 | 11298.2 | 11414.3 | 9770.5  |
| 65°   | 1225.4 | 1336.4 | 1519.2 | 1896.6 | 2668.5 | 4168.0 | 7059.3 | 9576.7 | 12172.6 | 12369.0 | 10568.1 |
| 67.5° | 859.1  | 901.7  | 1009.3 | 1214.2 | 1759.1 | 3196.2 | 5999.6 | 9249.6 | 12755.7 | 12976.9 | 10913.9 |
| 70°   | 670.3  | 691.7  | 746.3  | 828.3  | 1104.9 | 2149.3 | 4597.4 | 8399.1 | 12631.1 | 12861.7 | 10552.7 |
| 72.5° | 578.9  | 599.4  | 619.9  | 630.2  | 741.2  | 1327.0 | 3114.3 | 7022.6 | 11456.9 | 11613.2 | 9175.3  |
| 75°   | 525.1  | 530.2  | 547.3  | 544.0  | 565.3  | 860.8  | 1797.4 | 5116.7 | 9039.6  | 8985.8  | 6773.2  |
| 77.5° | 441.5  | 448.3  | 476.5  | 472.2  | 502.1  | 588.3  | 933.4  | 3302.0 | 5860.4  | 5494.9  | 3770.1  |
| 80°   | 374.0  | 377.4  | 408.2  | 403.0  | 436.3  | 426.1  | 476.5  | 1683.0 | 2485.7  | 2105.8  | 1087.0  |
| 82.5° | 129.8  | 160.5  | 311.7  | 321.0  | 333.0  | 257.9  | 275.0  | 686.5  | 759.1   | 581.5   | 228.0   |
| 85°   | 63.1   | 67.4   | 158.9  | 225.4  | 224.6  | 129.8  | 134.1  | 245.1  | 239.1   | 187.9   | 76.0    |
| 87.5° | 10.2   | 12.8   | 18.8   | 87.9   | 70.0   | 34.1   | 46.1   | 47.9   | 49.5    | 42.7    | 17.1    |
| 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°    | 1940.9 | 1940.9 | 1940.9 | 1940.9 | 1940.9 | 1940.9 | 1940.9 | 1940.9 | 1940.9 | 1940.9 | 1940.9 |
| 2.5°  | 1962.3 | 1919.6 | 1829.9 | 1747.1 | 1682.2 | 1619.9 | 1584.9 | 1555.0 | 1537.9 | 1534.5 | 1534.5 |
| 5°    | 2015.3 | 1927.3 | 1764.2 | 1626.7 | 1537.1 | 1470.5 | 1435.4 | 1413.3 | 1402.1 | 1395.3 | 1394.4 |
| 7.5°  | 2091.2 | 1962.3 | 1730.0 | 1573.8 | 1479.8 | 1432.0 | 1414.1 | 1410.7 | 1409.8 | 1410.7 | 1413.3 |
| 10°   | 2196.3 | 2019.6 | 1726.6 | 1561.0 | 1482.4 | 1455.9 | 1455.1 | 1455.9 | 1459.3 | 1460.2 | 1461.0 |
| 12.5° | 2309.8 | 2078.4 | 1740.2 | 1572.0 | 1514.8 | 1500.3 | 1497.7 | 1496.9 | 1499.5 | 1501.2 | 1502.0 |
| 15°   | 2433.7 | 2156.1 | 1763.3 | 1595.9 | 1550.7 | 1535.3 | 1532.8 | 1527.7 | 1526.8 | 1525.9 | 1525.1 |
| 17.5° | 2560.9 | 2233.0 | 1788.9 | 1621.6 | 1573.8 | 1552.5 | 1543.0 | 1531.0 | 1521.7 | 1519.2 | 1521.7 |
| 20°   | 2689.8 | 2309.0 | 1806.9 | 1634.4 | 1575.4 | 1545.6 | 1526.8 | 1506.3 | 1490.0 | 1480.7 | 1484.1 |
| 22.5° | 2827.4 | 2388.4 | 1817.9 | 1631.0 | 1560.0 | 1519.2 | 1484.9 | 1461.0 | 1436.3 | 1420.0 | 1421.0 |
| 25°   | 2961.3 | 2457.5 | 1817.1 | 1613.0 | 1530.2 | 1478.2 | 1434.6 | 1403.8 | 1369.7 | 1352.6 | 1352.6 |
| 27.5° | 3090.3 | 2519.9 | 1795.8 | 1581.5 | 1487.5 | 1429.5 | 1377.4 | 1340.6 | 1307.4 | 1291.1 | 1290.3 |
| 30°   | 3223.5 | 2572.0 | 1762.5 | 1535.3 | 1437.2 | 1373.1 | 1315.9 | 1284.3 | 1254.4 | 1239.0 | 1238.2 |
| 32.5° | 3355.8 | 2619.8 | 1715.5 | 1478.2 | 1379.0 | 1317.6 | 1261.3 | 1232.2 | 1214.2 | 1214.2 | 1215.1 |
| 35°   | 3496.0 | 2653.1 | 1653.2 | 1411.5 | 1317.6 | 1258.7 | 1214.2 | 1197.2 | 1195.5 | 1185.2 | 1182.6 |
| 37.5° | 3643.7 | 2674.4 | 1577.2 | 1343.2 | 1257.0 | 1201.5 | 1187.8 | 1167.3 | 1150.3 | 1128.0 | 1124.6 |
| 40°   | 3799.1 | 2695.9 | 1485.8 | 1272.3 | 1192.9 | 1162.1 | 1156.2 | 1128.8 | 1080.2 | 1025.5 | 1017.8 |
| 42.5° | 3987.8 | 2710.3 | 1391.0 | 1201.5 | 1125.4 | 1115.2 | 1123.7 | 1076.8 | 999.1  | 958.1  | 959.0  |
| 45°   | 4206.4 | 2734.2 | 1303.9 | 1131.4 | 1056.3 | 1056.3 | 1092.1 | 1030.6 | 966.7  | 941.1  | 945.3  |
| 47.5° | 4489.9 | 2789.7 | 1222.8 | 1054.6 | 992.2  | 1009.3 | 1022.1 | 975.2  | 939.3  | 907.7  | 906.8  |
| 50°   | 4899.8 | 2923.0 | 1139.1 | 976.9  | 943.6  | 977.7  | 959.8  | 932.4  | 890.6  | 865.0  | 862.4  |
| 52.5° | 5408.7 | 3001.5 | 1064.9 | 906.8  | 901.7  | 935.9  | 910.3  | 884.7  | 853.1  | 818.9  | 812.1  |
| 55°   | 5755.4 | 3016.1 | 1002.4 | 855.7  | 873.5  | 870.1  | 860.8  | 837.7  | 820.6  | 775.3  | 776.2  |
| 57.5° | 6143.0 | 3045.1 | 951.3  | 824.9  | 855.7  | 818.1  | 814.7  | 795.0  | 772.7  | 742.1  | 731.8  |
| 60°   | 6606.7 | 3090.3 | 906.8  | 812.9  | 840.3  | 783.9  | 766.8  | 759.1  | 737.0  | 721.6  | 725.8  |
| 62.5° | 7112.3 | 3131.3 | 861.6  | 814.7  | 822.4  | 750.6  | 725.0  | 722.4  | 708.8  | 703.7  | 703.7  |
| 65°   | 7457.2 | 3019.4 | 805.2  | 812.9  | 794.2  | 716.5  | 684.0  | 683.2  | 672.0  | 670.3  | 669.4  |
| 67.5° | 7336.8 | 2665.1 | 729.3  | 789.0  | 765.1  | 682.2  | 646.4  | 643.0  | 628.5  | 629.3  | 629.3  |
| 70°   | 6733.9 | 2159.6 | 624.2  | 730.1  | 729.3  | 651.5  | 607.1  | 596.0  | 576.4  | 579.8  | 583.2  |
| 72.5° | 5603.4 | 1600.2 | 483.3  | 631.9  | 672.0  | 623.4  | 561.9  | 544.0  | 519.2  | 522.5  | 521.7  |
| 75°   | 4046.7 | 1087.9 | 351.8  | 480.7  | 585.0  | 590.1  | 517.5  | 486.8  | 456.8  | 462.0  | 463.7  |
| 77.5° | 2070.7 | 616.5  | 258.7  | 331.3  | 459.4  | 536.3  | 477.3  | 436.3  | 429.5  | 477.3  | 470.5  |
| 80°   | 675.5  | 309.1  | 179.3  | 232.3  | 301.5  | 438.9  | 418.4  | 371.5  | 369.7  | 380.9  | 327.1  |
| 82.5° | 201.5  | 130.7  | 115.3  | 152.8  | 166.6  | 336.4  | 361.2  | 281.0  | 241.7  | 254.5  | 263.0  |
| 85°   | 69.2   | 63.1   | 65.7   | 76.0   | 79.4   | 197.2  | 252.8  | 186.1  | 175.9  | 193.8  | 191.3  |
| 87.5° | 16.2   | 22.2   | 18.8   | 17.1   | 17.1   | 47.9   | 98.2   | 77.7   | 107.6  | 71.8   | 69.2   |
| 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)