

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: P964030

Luminaire Tested: **NAV-SB3B-735-U-SL2**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P964030  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3B-735-U-SL2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 17212.8 lumens  
Efficiency: N/A  
Efficacy: 157.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

Input Watts (W): 109.2  
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



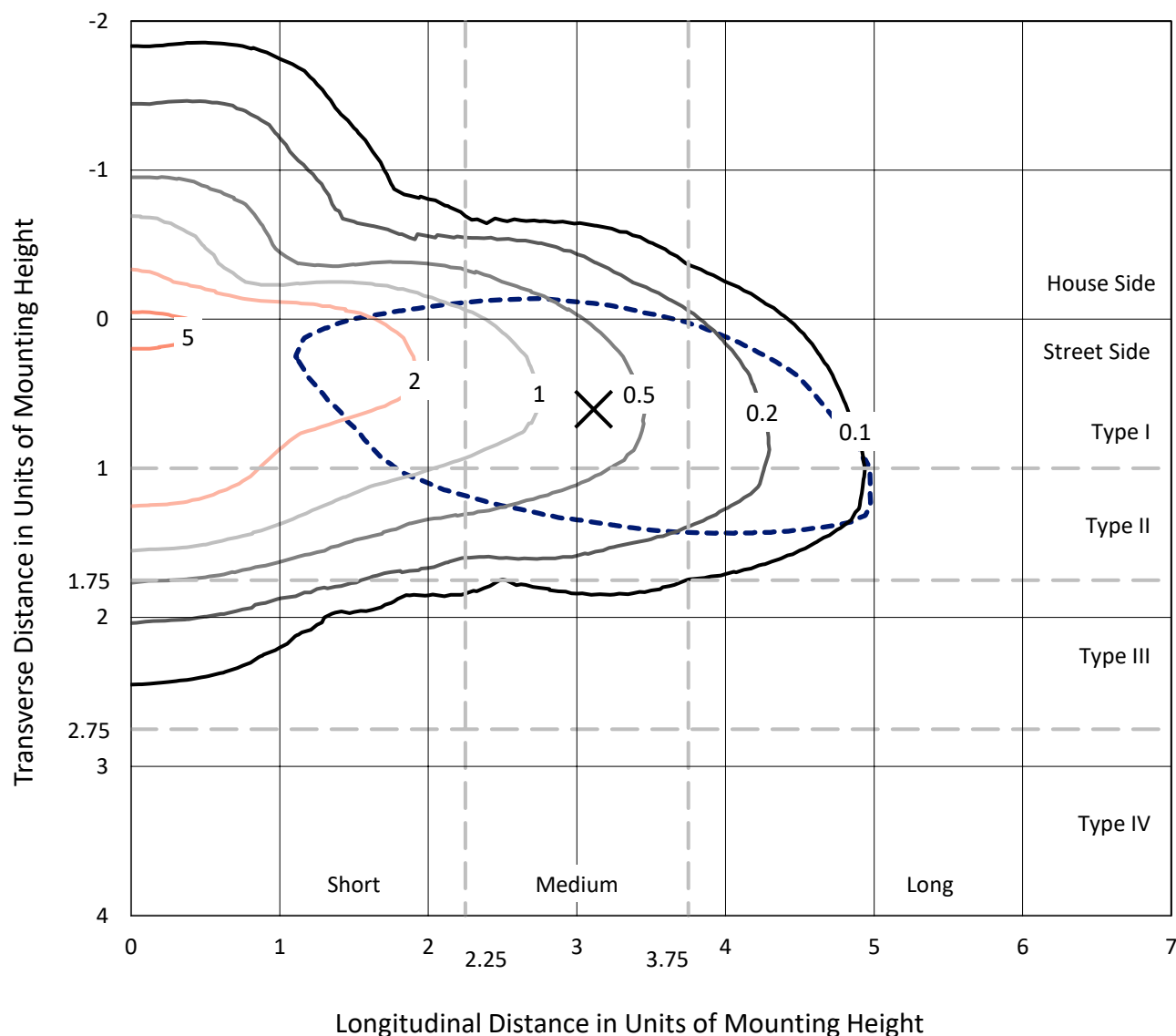
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

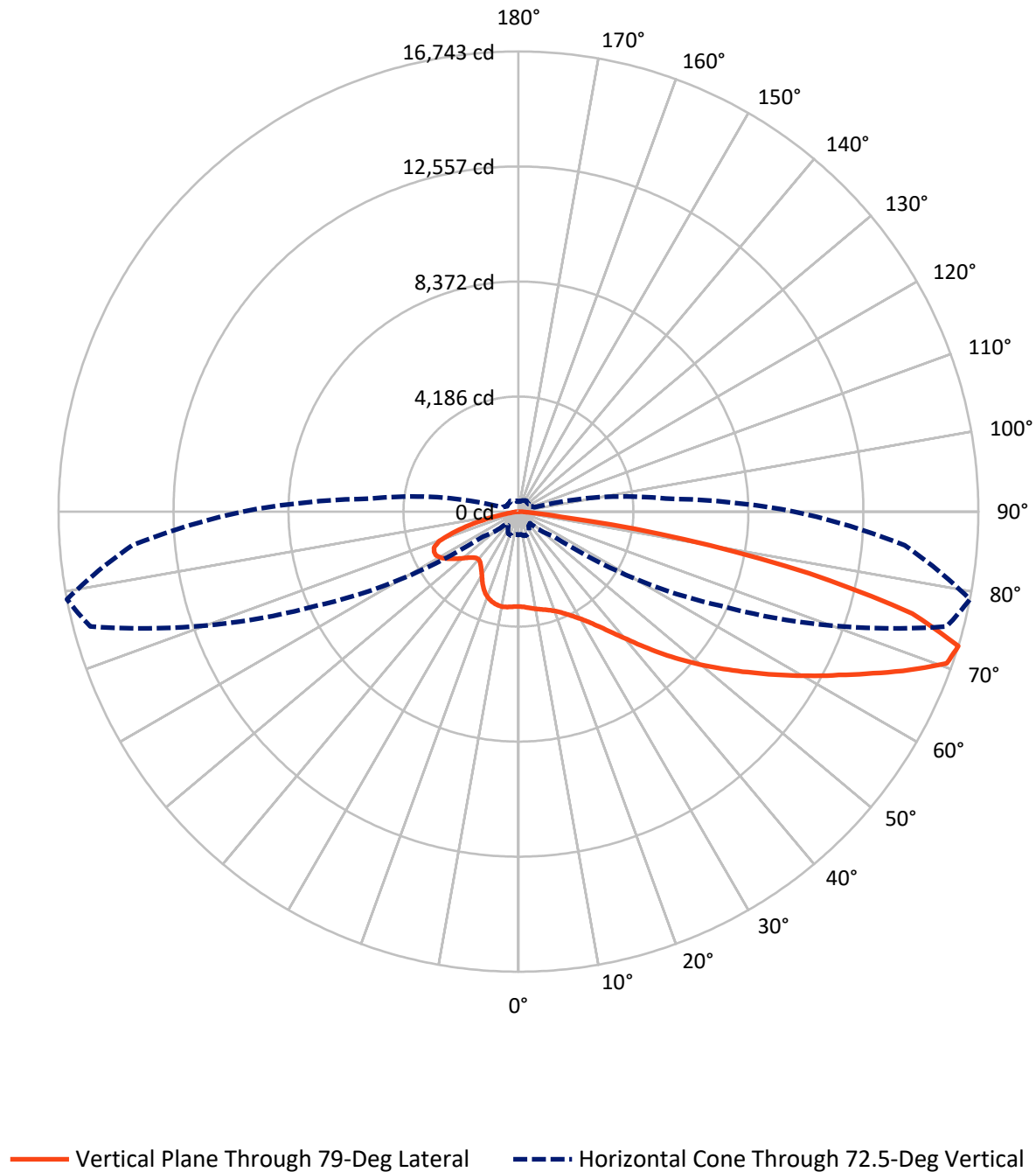
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 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    | 3787.8   | 0.0    | 3787.8  |
|                    | % Fixture | 22.0     | 0.0    | 22.0    |
| <b>Street Side</b> | Lumens    | 13425.0  | 0.0    | 13425.0 |
|                    | % Fixture | 78.0     | 0.0    | 78.0    |
| <b>Total</b>       | Lumens    | 17212.8  | 0.0    | 17212.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 313.6   | 1.8       |
| 10°-20°   | 820.0   | 4.8       |
| 20°-30°   | 1323.2  | 7.7       |
| 30°-40°   | 1985.9  | 11.5      |
| 40°-50°   | 2817.1  | 16.4      |
| 50°-60°   | 3557.6  | 20.7      |
| 60°-70°   | 3613.3  | 21.0      |
| 70°-80°   | 2462.6  | 14.3      |
| 80°-90°   | 319.5   | 1.9       |
| 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°    | 17212.8 | 100.0     |
| 0°-180°   | 17212.8 | 100.0     |

**Coefficient of Utilization**



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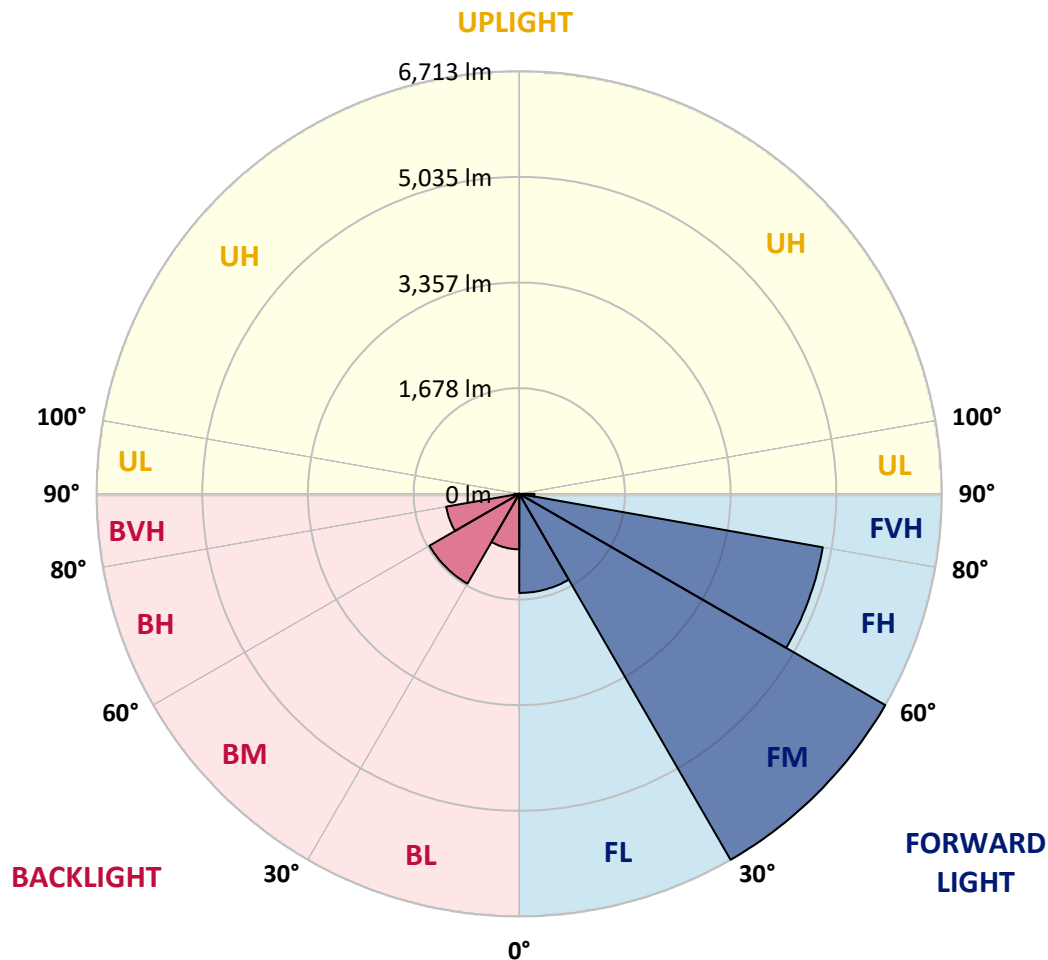
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1574.6 | 9.1       |                         |      |         |
| FM   | (30°-60°)   | 6713.3 | 39.0      |                         |      |         |
| FH   | (60°-80°)   | 4896.5 | 28.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 240.7  | 1.4       |                         |      | G3/500  |
| BL   | (0°-30°)    | 882.3  | 5.1       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1647.3 | 9.6       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1179.4 | 6.9       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 78.8   | 0.5       |                         |      | 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°     | 79°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| 0°    | 3455.3 | 3455.3 | 3455.3 | 3455.3 | 3455.3 | 3455.3 | 3455.3 | 3455.3  | 3455.3  | 3455.3  | 3455.3  |
| 2.5°  | 3457.1 | 3440.7 | 3450.8 | 3447.1 | 3451.7 | 3457.1 | 3459.0 | 3461.7  | 3470.8  | 3469.8  | 3469.0  |
| 5°    | 3449.8 | 3433.4 | 3447.1 | 3442.6 | 3454.4 | 3467.2 | 3478.0 | 3488.1  | 3502.6  | 3509.0  | 3500.0  |
| 7.5°  | 3434.4 | 3423.4 | 3437.1 | 3450.8 | 3472.6 | 3491.8 | 3507.2 | 3530.0  | 3550.9  | 3554.6  | 3561.0  |
| 10°   | 3344.3 | 3336.1 | 3367.9 | 3403.4 | 3463.5 | 3515.4 | 3549.1 | 3575.5  | 3598.3  | 3601.8  | 3611.0  |
| 12.5° | 3250.5 | 3240.4 | 3275.9 | 3324.2 | 3421.7 | 3515.4 | 3586.4 | 3621.0  | 3641.0  | 3652.9  | 3666.5  |
| 15°   | 3235.0 | 3226.8 | 3246.8 | 3288.7 | 3369.7 | 3490.8 | 3611.9 | 3675.6  | 3693.0  | 3706.6  | 3712.0  |
| 17.5° | 3309.6 | 3294.1 | 3302.3 | 3316.9 | 3364.3 | 3468.1 | 3632.0 | 3737.6  | 3764.0  | 3778.6  | 3778.6  |
| 20°   | 3482.6 | 3460.8 | 3448.0 | 3418.9 | 3410.7 | 3471.7 | 3630.1 | 3812.2  | 3846.8  | 3865.1  | 3869.6  |
| 22.5° | 3713.0 | 3698.4 | 3671.1 | 3597.3 | 3517.2 | 3516.4 | 3664.7 | 3907.8  | 3972.5  | 3989.8  | 3978.8  |
| 25°   | 3991.6 | 3969.7 | 3935.2 | 3834.9 | 3681.1 | 3604.6 | 3723.0 | 4029.8  | 4138.1  | 4142.7  | 4110.9  |
| 27.5° | 4312.1 | 4279.3 | 4231.9 | 4099.9 | 3892.3 | 3743.0 | 3812.2 | 4170.0  | 4328.5  | 4326.6  | 4261.1  |
| 30°   | 4649.9 | 4617.1 | 4567.0 | 4406.8 | 4145.5 | 3929.6 | 3936.0 | 4321.2  | 4554.3  | 4544.2  | 4432.3  |
| 32.5° | 4896.6 | 4872.0 | 4862.0 | 4738.2 | 4436.8 | 4150.0 | 4078.1 | 4488.7  | 4832.9  | 4823.8  | 4667.1  |
| 35°   | 5086.0 | 5054.2 | 5066.0 | 5003.1 | 4754.6 | 4396.7 | 4252.0 | 4688.1  | 5171.5  | 5170.7  | 4975.9  |
| 37.5° | 5273.5 | 5245.3 | 5255.4 | 5213.5 | 5048.6 | 4710.0 | 4464.2 | 4932.1  | 5591.3  | 5611.4  | 5349.2  |
| 40°   | 5444.7 | 5414.7 | 5454.7 | 5415.6 | 5277.2 | 5043.2 | 4705.4 | 5208.0  | 6077.5  | 6115.8  | 5800.8  |
| 42.5° | 5547.6 | 5523.9 | 5590.5 | 5591.3 | 5475.7 | 5324.6 | 4970.3 | 5512.1  | 6640.3  | 6725.7  | 6356.1  |
| 45°   | 5583.2 | 5575.0 | 5675.1 | 5696.0 | 5651.4 | 5487.5 | 5208.9 | 5843.5  | 7246.5  | 7399.6  | 6989.0  |
| 47.5° | 5544.8 | 5529.4 | 5667.8 | 5745.2 | 5780.7 | 5564.0 | 5406.5 | 6202.3  | 7865.7  | 8089.7  | 7679.1  |
| 50°   | 5351.8 | 5321.8 | 5527.6 | 5690.6 | 5817.1 | 5614.1 | 5605.9 | 6616.6  | 8569.5  | 8814.5  | 8372.9  |
| 52.5° | 5005.0 | 4982.2 | 5216.2 | 5499.3 | 5737.0 | 5638.6 | 5829.9 | 7069.0  | 9237.8  | 9554.6  | 9084.0  |
| 55°   | 4561.6 | 4531.5 | 4789.2 | 5158.8 | 5537.6 | 5630.4 | 6053.9 | 7575.3  | 10026.3 | 10347.7 | 9818.7  |
| 57.5° | 3858.6 | 3798.5 | 4124.5 | 4561.6 | 5212.5 | 5620.5 | 6286.9 | 8078.7  | 10827.6 | 11212.7 | 10602.7 |
| 60°   | 2833.4 | 2744.2 | 3143.9 | 3662.0 | 4577.0 | 5523.0 | 6575.6 | 8643.3  | 11789.0 | 12135.9 | 11458.5 |
| 62.5° | 1649.8 | 1597.9 | 1859.2 | 2342.7 | 3449.8 | 4949.4 | 6737.6 | 9299.7  | 12734.1 | 13098.3 | 12299.8 |
| 65°   | 1281.0 | 1266.5 | 1289.2 | 1326.6 | 1920.2 | 3705.7 | 6237.7 | 9939.8  | 13936.0 | 14190.9 | 13176.6 |
| 67.5° | 1171.8 | 1160.9 | 1170.9 | 1100.7 | 974.3  | 2064.0 | 4934.9 | 10101.9 | 15223.4 | 15378.2 | 13944.2 |
| 70°   | 1041.6 | 1028.9 | 1061.6 | 1001.5 | 766.6  | 938.7  | 3188.6 | 9513.7  | 16247.7 | 16538.2 | 14527.7 |
| 72.5° | 848.6  | 834.0  | 910.5  | 883.1  | 645.5  | 602.7  | 1601.6 | 8116.2  | 16140.3 | 16743.0 | 14109.8 |
| 75°   | 651.9  | 643.7  | 734.7  | 757.6  | 526.2  | 474.4  | 768.4  | 6032.9  | 14203.6 | 14810.9 | 12160.5 |
| 77.5° | 506.2  | 499.9  | 546.3  | 629.1  | 424.2  | 367.9  | 472.5  | 3826.8  | 10703.8 | 10810.3 | 8380.2  |
| 80°   | 379.7  | 361.4  | 404.3  | 487.1  | 330.5  | 268.5  | 320.5  | 2231.6  | 6765.8  | 6133.1  | 3647.5  |
| 82.5° | 237.6  | 228.6  | 264.0  | 325.0  | 233.1  | 184.8  | 208.5  | 1232.8  | 2711.4  | 1596.9  | 703.8   |
| 85°   | 135.7  | 132.0  | 143.8  | 185.7  | 126.6  | 106.5  | 119.3  | 544.5   | 495.3   | 340.5   | 212.2   |
| 87.5° | 54.6   | 52.8   | 65.6   | 82.8   | 46.4   | 39.2   | 41.9   | 131.1   | 109.3   | 101.1   | 70.1    |
| 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°    | 3455.3  | 3455.3 | 3455.3 | 3455.3 | 3455.3 | 3455.3 | 3455.3 | 3455.3 | 3455.3 | 3455.3 | 3455.3 |
| 2.5°  | 3465.3  | 3465.3 | 3452.6 | 3432.5 | 3409.8 | 3395.2 | 3371.5 | 3365.2 | 3340.6 | 3333.3 | 3345.2 |
| 5°    | 3507.2  | 3500.0 | 3460.8 | 3404.3 | 3326.9 | 3255.9 | 3177.6 | 3128.4 | 3059.2 | 3034.6 | 3052.9 |
| 7.5°  | 3560.0  | 3539.9 | 3472.6 | 3348.8 | 3186.7 | 3027.3 | 2861.7 | 2736.0 | 2615.8 | 2573.1 | 2578.5 |
| 10°   | 3608.3  | 3580.0 | 3465.3 | 3248.6 | 2968.2 | 2692.4 | 2428.3 | 2243.4 | 2103.2 | 2045.9 | 2058.6 |
| 12.5° | 3656.5  | 3604.6 | 3417.0 | 3082.0 | 2657.7 | 2283.5 | 2002.1 | 1858.3 | 1771.8 | 1702.6 | 1725.4 |
| 15°   | 3702.1  | 3629.2 | 3342.4 | 2858.9 | 2317.2 | 1937.6 | 1729.9 | 1615.2 | 1546.0 | 1500.5 | 1508.7 |
| 17.5° | 3754.9  | 3650.1 | 3230.4 | 2575.8 | 1993.1 | 1698.0 | 1528.7 | 1459.5 | 1445.9 | 1440.4 | 1444.0 |
| 20°   | 3828.6  | 3669.3 | 3082.9 | 2258.9 | 1754.5 | 1506.9 | 1419.4 | 1413.1 | 1412.1 | 1409.5 | 1418.5 |
| 22.5° | 3907.8  | 3692.0 | 2888.0 | 1971.2 | 1551.4 | 1387.5 | 1372.1 | 1359.4 | 1351.2 | 1350.2 | 1360.3 |
| 25°   | 4001.6  | 3699.3 | 2644.1 | 1735.4 | 1378.5 | 1331.2 | 1312.9 | 1293.9 | 1288.3 | 1288.3 | 1293.9 |
| 27.5° | 4092.6  | 3674.7 | 2360.0 | 1530.5 | 1281.0 | 1279.2 | 1255.5 | 1249.2 | 1248.2 | 1251.0 | 1258.3 |
| 30°   | 4183.7  | 3628.3 | 2077.8 | 1341.1 | 1224.6 | 1224.6 | 1216.4 | 1221.0 | 1224.6 | 1233.7 | 1240.0 |
| 32.5° | 4306.6  | 3579.1 | 1841.9 | 1200.9 | 1175.5 | 1166.3 | 1174.5 | 1183.7 | 1187.3 | 1199.1 | 1209.1 |
| 35°   | 4486.9  | 3544.6 | 1654.4 | 1124.4 | 1124.4 | 1112.6 | 1117.1 | 1115.3 | 1107.2 | 1101.7 | 1114.5 |
| 37.5° | 4725.5  | 3542.7 | 1499.6 | 1089.0 | 1081.7 | 1079.8 | 1080.8 | 1068.9 | 1037.1 | 998.8  | 999.7  |
| 40°   | 5012.2  | 3591.9 | 1380.3 | 1064.4 | 1058.9 | 1069.8 | 1064.4 | 1032.5 | 945.0  | 878.6  | 876.8  |
| 42.5° | 5397.3  | 3732.1 | 1303.8 | 1034.3 | 1050.7 | 1064.4 | 1042.5 | 932.3  | 873.2  | 828.5  | 826.8  |
| 45°   | 5850.8  | 3959.7 | 1264.6 | 1002.4 | 1035.2 | 1051.6 | 946.0  | 897.7  | 850.4  | 796.6  | 793.0  |
| 47.5° | 6364.3  | 4246.6 | 1255.5 | 972.4  | 1000.6 | 1010.6 | 905.1  | 883.1  | 829.4  | 771.2  | 766.6  |
| 50°   | 6923.4  | 4586.2 | 1280.1 | 936.8  | 950.6  | 915.9  | 891.3  | 871.4  | 815.8  | 758.4  | 752.0  |
| 52.5° | 7501.6  | 4960.4 | 1329.3 | 888.7  | 900.5  | 862.2  | 885.9  | 868.6  | 807.6  | 730.2  | 724.8  |
| 55°   | 8069.7  | 5337.3 | 1376.7 | 832.2  | 849.5  | 814.0  | 870.4  | 857.7  | 770.3  | 682.9  | 678.3  |
| 57.5° | 8646.9  | 5712.4 | 1423.1 | 782.1  | 800.3  | 767.5  | 845.8  | 828.5  | 728.4  | 639.2  | 637.3  |
| 60°   | 9246.9  | 6076.6 | 1444.9 | 733.9  | 746.6  | 724.8  | 808.5  | 778.5  | 681.0  | 594.5  | 591.8  |
| 62.5° | 9808.7  | 6379.8 | 1409.5 | 685.6  | 693.8  | 684.7  | 759.3  | 719.2  | 633.7  | 544.5  | 543.6  |
| 65°   | 10372.3 | 6560.1 | 1300.2 | 638.3  | 640.1  | 635.5  | 690.1  | 655.6  | 578.2  | 500.8  | 495.3  |
| 67.5° | 10883.1 | 6661.2 | 1126.3 | 587.2  | 582.7  | 580.9  | 625.6  | 586.4  | 524.5  | 457.0  | 451.6  |
| 70°   | 10991.5 | 6404.4 | 860.4  | 527.2  | 527.2  | 522.6  | 554.5  | 514.4  | 465.2  | 410.6  | 408.8  |
| 72.5° | 10039.1 | 5387.4 | 610.9  | 458.9  | 466.2  | 457.0  | 483.5  | 449.8  | 405.2  | 368.8  | 357.8  |
| 75°   | 8095.1  | 3950.7 | 444.3  | 388.8  | 401.5  | 386.0  | 410.6  | 386.9  | 348.7  | 347.8  | 313.2  |
| 77.5° | 5562.2  | 2442.9 | 322.4  | 320.5  | 329.6  | 309.5  | 337.8  | 325.0  | 290.5  | 275.0  | 257.7  |
| 80°   | 2373.7  | 974.3  | 234.9  | 247.6  | 247.6  | 229.4  | 262.2  | 265.9  | 235.9  | 228.6  | 228.6  |
| 82.5° | 472.5   | 276.8  | 164.8  | 170.3  | 160.2  | 154.8  | 185.7  | 205.8  | 284.0  | 315.9  | 316.8  |
| 85°   | 142.1   | 102.0  | 99.2   | 92.9   | 81.9   | 82.8   | 109.3  | 206.6  | 254.9  | 145.7  | 125.7  |
| 87.5° | 39.2    | 25.5   | 26.4   | 20.9   | 17.3   | 22.8   | 37.3   | 156.6  | 85.6   | 36.4   | 31.0   |
| 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)