

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: P970524

Luminaire Tested: **NAV-SB6B-830-U-T2**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P970524  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6B-830-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 31162.1 lumens  
Efficiency: N/A  
Efficacy: 141.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B4 - U0 - G4

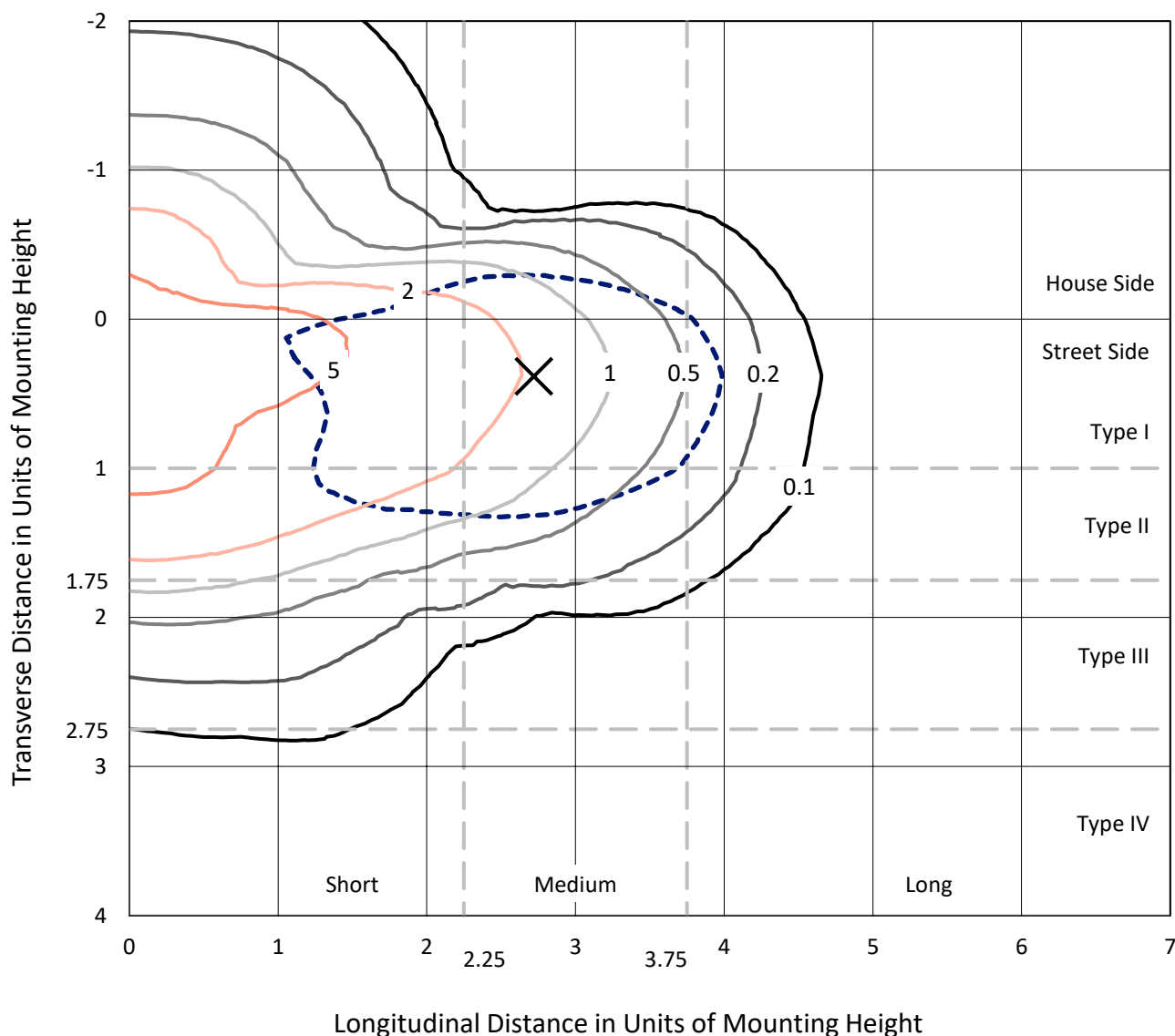
Input Watts (W): 220.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

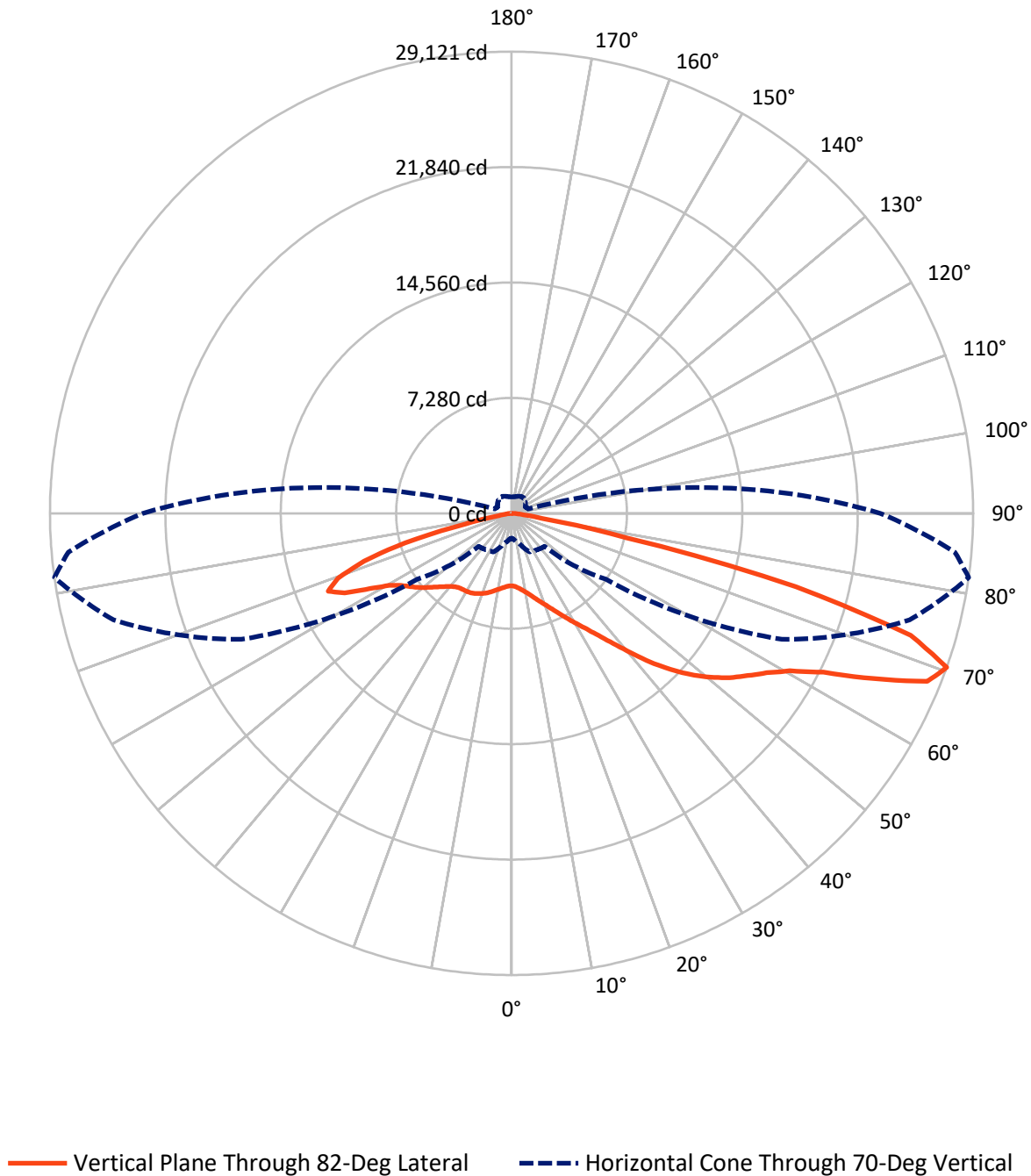
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 fc  
 Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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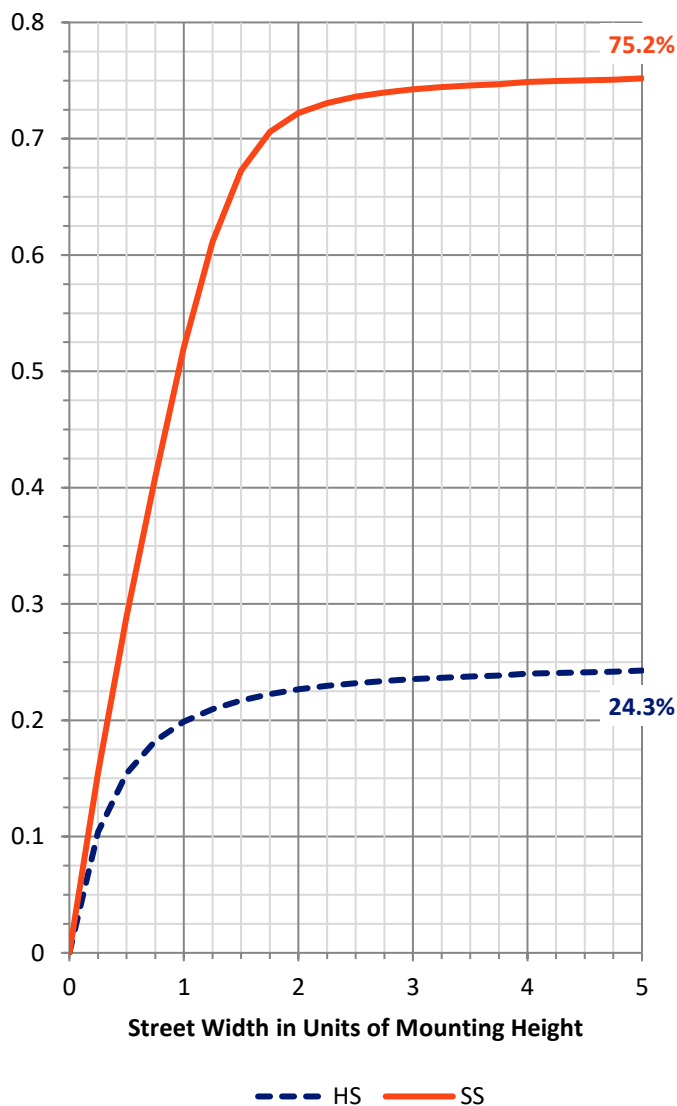
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7682.2   | 0.0    | 7682.2  |
|                    | % Fixture | 24.7     | 0.0    | 24.7    |
| <b>Street Side</b> | Lumens    | 23479.9  | 0.0    | 23479.9 |
|                    | % Fixture | 75.3     | 0.0    | 75.3    |
| <b>Total</b>       | Lumens    | 31162.1  | 0.0    | 31162.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 431.4   | 1.4       |
| 10°-20°   | 1239.3  | 4.0       |
| 20°-30°   | 2073.3  | 6.7       |
| 30°-40°   | 3239.0  | 10.4      |
| 40°-50°   | 5158.6  | 16.6      |
| 50°-60°   | 7178.8  | 23.0      |
| 60°-70°   | 7509.3  | 24.1      |
| 70°-80°   | 3924.8  | 12.6      |
| 80°-90°   | 407.5   | 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°    | 31162.1 | 100.0     |
| 0°-180°   | 31162.1 | 100.0     |

**Coefficient of Utilization**



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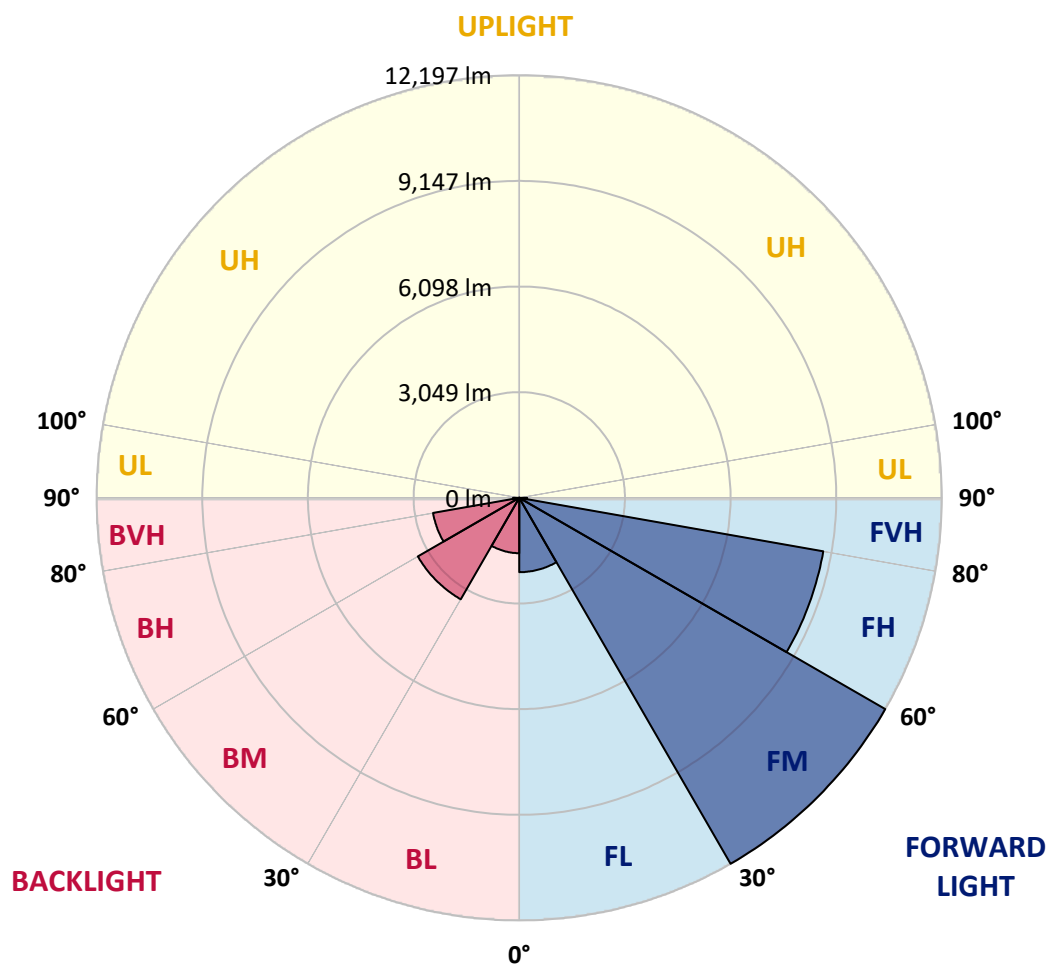
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2145.9  | 6.9       |                         |      |          |
| FM   | (30°-60°)   | 12196.5 | 39.1      |                         |      |          |
| FH   | (60°-80°)   | 8909.3  | 28.6      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 228.2   | 0.7       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1598.2  | 5.1       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 3379.9  | 10.8      | B3/5000                 |      |          |
| BH   | (60°-80°)   | 2524.8  | 8.1       | B4/5000                 |      | G4/5000  |
| BVH  | (80°-90°)   | 179.4   | 0.6       |                         |      | G2/225   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B4-U0-G4**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 82°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4568.7  | 4568.7  | 4568.7  | 4568.7  | 4568.7  | 4568.7  | 4568.7  | 4568.7  | 4568.7  | 4568.7  | 4568.7  |
| 2.5°  | 4677.9  | 4704.3  | 4696.0  | 4687.8  | 4687.8  | 4676.3  | 4674.6  | 4658.0  | 4644.8  | 4623.3  | 4618.3  |
| 5°    | 4737.4  | 4765.5  | 4762.3  | 4768.8  | 4790.3  | 4795.3  | 4800.3  | 4790.3  | 4763.9  | 4737.4  | 4725.9  |
| 7.5°  | 4684.5  | 4715.9  | 4725.9  | 4765.5  | 4831.6  | 4891.2  | 4935.8  | 4954.0  | 4929.2  | 4891.2  | 4873.0  |
| 10°   | 4505.9  | 4540.6  | 4575.4  | 4669.6  | 4787.1  | 4927.6  | 5046.6  | 5117.7  | 5112.8  | 5076.4  | 5044.9  |
| 12.5° | 4143.8  | 4180.2  | 4254.6  | 4438.1  | 4653.1  | 4901.1  | 5122.6  | 5271.5  | 5322.7  | 5296.3  | 5241.7  |
| 15°   | 3854.4  | 3885.9  | 3942.0  | 4130.5  | 4410.0  | 4787.1  | 5150.8  | 5440.2  | 5570.8  | 5555.9  | 5489.8  |
| 17.5° | 3846.1  | 3859.3  | 3894.1  | 3983.4  | 4198.4  | 4608.4  | 5121.0  | 5605.5  | 5855.2  | 5853.6  | 5770.9  |
| 20°   | 3991.7  | 3996.6  | 4016.5  | 4034.6  | 4157.0  | 4472.8  | 5044.9  | 5742.8  | 6174.3  | 6174.3  | 6085.0  |
| 22.5° | 4193.4  | 4190.1  | 4209.9  | 4193.4  | 4252.9  | 4461.3  | 4997.0  | 5863.5  | 6529.9  | 6556.3  | 6443.9  |
| 25°   | 4496.0  | 4479.5  | 4474.5  | 4436.5  | 4448.0  | 4568.7  | 5050.0  | 6000.8  | 6951.6  | 7006.1  | 6865.6  |
| 27.5° | 4899.5  | 4873.0  | 4854.8  | 4767.2  | 4737.4  | 4790.3  | 5212.0  | 6166.1  | 7421.1  | 7515.4  | 7336.7  |
| 30°   | 5425.3  | 5377.4  | 5350.9  | 5198.7  | 5091.3  | 5099.6  | 5456.7  | 6386.0  | 7912.2  | 8064.4  | 7837.8  |
| 32.5° | 6142.9  | 6068.5  | 5997.4  | 5747.7  | 5551.0  | 5486.4  | 5772.5  | 6690.3  | 8444.7  | 8687.7  | 8396.7  |
| 35°   | 6946.5  | 6887.0  | 6810.9  | 6425.7  | 6123.0  | 5974.2  | 6199.1  | 7115.2  | 9068.1  | 9453.4  | 9074.6  |
| 37.5° | 7720.4  | 7669.2  | 7705.5  | 7186.3  | 6796.1  | 6579.5  | 6758.0  | 7685.7  | 9836.9  | 10405.8 | 9924.6  |
| 40°   | 8520.7  | 8481.1  | 8486.0  | 7990.0  | 7535.2  | 7292.2  | 7436.0  | 8401.6  | 10718.3 | 11538.4 | 10946.5 |
| 42.5° | 9390.4  | 9360.7  | 9261.5  | 8821.7  | 8310.7  | 8084.2  | 8216.5  | 9228.5  | 11664.1 | 12828.2 | 12067.5 |
| 45°   | 10364.4 | 10346.2 | 10253.6 | 9749.3  | 9163.9  | 8909.3  | 9087.9  | 10141.1 | 12614.9 | 14041.9 | 13193.6 |
| 47.5° | 11206.1 | 11221.0 | 11209.4 | 10784.4 | 10177.5 | 9803.9  | 10017.2 | 11093.7 | 13499.6 | 15182.8 | 14273.4 |
| 50°   | 11611.2 | 11688.9 | 11803.0 | 11670.8 | 11293.8 | 10913.4 | 10954.8 | 12013.0 | 14342.8 | 16252.7 | 15308.5 |
| 52.5° | 11399.5 | 11546.7 | 11857.6 | 12069.3 | 12214.7 | 12135.4 | 12024.6 | 12925.8 | 15136.6 | 17218.4 | 16287.5 |
| 55°   | 10610.8 | 10817.5 | 11333.4 | 11844.4 | 12586.8 | 13163.9 | 13309.4 | 13937.7 | 15910.5 | 18068.3 | 17213.4 |
| 57.5° | 9173.9  | 9509.5  | 9972.5  | 11006.0 | 12256.1 | 13661.6 | 14807.5 | 15341.6 | 16730.6 | 18976.1 | 18182.4 |
| 60°   | 6710.1  | 7159.8  | 7735.3  | 9273.1  | 11098.6 | 13395.4 | 16082.4 | 17497.8 | 17896.3 | 20151.8 | 19444.0 |
| 62.5° | 4294.2  | 4572.0  | 5101.2  | 6549.6  | 8648.0  | 12031.2 | 16472.6 | 20193.1 | 19872.3 | 22079.8 | 21335.7 |
| 65°   | 2940.0  | 3118.6  | 3603.1  | 4416.6  | 5590.7  | 8955.6  | 15427.6 | 22213.7 | 23010.7 | 25135.6 | 24570.1 |
| 67.5° | 2136.4  | 2272.0  | 2685.4  | 3398.1  | 3642.7  | 5299.7  | 11971.7 | 22121.1 | 26061.5 | 28283.8 | 27404.2 |
| 70°   | 1557.6  | 1653.5  | 2000.8  | 2685.4  | 2802.8  | 2948.3  | 7252.5  | 18804.1 | 25995.4 | 29120.6 | 28067.3 |
| 72.5° | 1154.1  | 1220.4  | 1453.4  | 2083.5  | 2268.6  | 1990.9  | 3589.9  | 13666.5 | 22337.7 | 26339.3 | 25494.4 |
| 75°   | 835.1   | 884.7   | 1056.6  | 1594.0  | 1815.6  | 1516.3  | 1790.8  | 7986.6  | 15581.3 | 18528.0 | 18676.8 |
| 77.5° | 638.3   | 676.3   | 788.7   | 1167.4  | 1453.4  | 1137.6  | 1111.2  | 3674.2  | 7388.0  | 7424.4  | 7841.1  |
| 80°   | 512.6   | 537.4   | 598.6   | 821.8   | 1114.5  | 851.6   | 724.3   | 1483.3  | 2334.8  | 1976.0  | 2073.6  |
| 82.5° | 377.0   | 418.3   | 505.9   | 577.1   | 797.0   | 587.0   | 441.5   | 749.1   | 888.0   | 763.9   | 770.6   |
| 85°   | 214.9   | 243.0   | 305.9   | 413.4   | 509.3   | 358.9   | 253.0   | 332.4   | 413.4   | 339.0   | 302.6   |
| 87.5° | 76.1    | 99.2    | 107.5   | 162.1   | 221.6   | 148.8   | 97.6    | 95.9    | 135.6   | 100.9   | 84.4    |
| 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°    | 4568.7  | 4568.7  | 4568.7 | 4568.7 | 4568.7 | 4568.7 | 4568.7 | 4568.7 | 4568.7 | 4568.7 | 4568.7 |
| 2.5°  | 4601.8  | 4593.5  | 4560.4 | 4515.8 | 4469.5 | 4424.9 | 4410.0 | 4378.6 | 4357.1 | 4345.5 | 4358.7 |
| 5°    | 4694.4  | 4668.0  | 4590.3 | 4491.0 | 4386.9 | 4274.5 | 4195.0 | 4122.2 | 4069.4 | 4019.7 | 4039.6 |
| 7.5°  | 4826.7  | 4780.4  | 4646.4 | 4472.8 | 4287.7 | 4100.8 | 3961.9 | 3856.0 | 3784.9 | 3738.7 | 3748.6 |
| 10°   | 4980.5  | 4909.3  | 4704.3 | 4444.7 | 4158.6 | 3890.8 | 3727.1 | 3636.2 | 3591.5 | 3566.7 | 3573.4 |
| 12.5° | 5157.4  | 5056.5  | 4763.9 | 4380.2 | 3961.9 | 3656.0 | 3543.5 | 3517.1 | 3518.7 | 3520.4 | 3523.7 |
| 15°   | 5375.7  | 5235.1  | 4811.9 | 4239.7 | 3705.6 | 3475.8 | 3455.9 | 3498.9 | 3543.5 | 3565.1 | 3563.4 |
| 17.5° | 5622.0  | 5423.6  | 4820.1 | 4008.2 | 3454.2 | 3360.1 | 3422.9 | 3515.4 | 3583.2 | 3613.0 | 3619.6 |
| 20°   | 5886.6  | 5615.5  | 4760.5 | 3680.8 | 3247.6 | 3265.8 | 3378.2 | 3497.2 | 3571.6 | 3609.6 | 3619.6 |
| 22.5° | 6189.3  | 5820.5  | 4618.3 | 3336.9 | 3078.9 | 3163.3 | 3295.5 | 3411.3 | 3489.0 | 3527.0 | 3537.0 |
| 25°   | 6534.8  | 6050.4  | 4395.1 | 3047.5 | 2933.3 | 3047.5 | 3179.8 | 3275.7 | 3338.5 | 3373.3 | 3383.1 |
| 27.5° | 6918.4  | 6290.1  | 4097.4 | 2817.6 | 2806.0 | 2928.4 | 3037.6 | 3112.0 | 3145.0 | 3171.5 | 3181.4 |
| 30°   | 7303.7  | 6508.3  | 3737.0 | 2644.0 | 2695.2 | 2811.1 | 2888.8 | 2921.9 | 2931.7 | 2936.7 | 2948.3 |
| 32.5° | 7720.4  | 6696.8  | 3358.3 | 2500.2 | 2589.5 | 2697.0 | 2743.2 | 2758.1 | 2711.8 | 2680.4 | 2690.3 |
| 35°   | 8224.7  | 6898.6  | 2988.0 | 2386.1 | 2485.3 | 2577.9 | 2592.7 | 2579.5 | 2525.0 | 2460.5 | 2463.8 |
| 37.5° | 8848.1  | 7149.9  | 2692.0 | 2305.0 | 2387.7 | 2448.9 | 2430.7 | 2427.4 | 2432.3 | 2356.3 | 2361.3 |
| 40°   | 9612.0  | 7477.4  | 2475.4 | 2242.2 | 2308.3 | 2321.6 | 2270.3 | 2298.5 | 2323.3 | 2207.4 | 2210.8 |
| 42.5° | 10460.3 | 7872.5  | 2338.1 | 2199.2 | 2242.2 | 2210.8 | 2131.4 | 2162.9 | 2159.6 | 2007.4 | 2005.7 |
| 45°   | 11325.1 | 8302.5  | 2290.2 | 2167.8 | 2181.0 | 2118.2 | 2030.5 | 2038.8 | 1969.3 | 1832.1 | 1837.1 |
| 47.5° | 12185.0 | 8763.8  | 2319.9 | 2141.3 | 2104.9 | 2033.9 | 1966.1 | 1929.7 | 1827.2 | 1724.7 | 1724.7 |
| 50°   | 13028.3 | 9248.3  | 2429.0 | 2088.4 | 2000.8 | 1959.5 | 1909.9 | 1845.3 | 1736.2 | 1648.6 | 1641.9 |
| 52.5° | 13810.4 | 9736.1  | 2551.4 | 2000.8 | 1870.1 | 1894.9 | 1863.6 | 1789.1 | 1681.6 | 1592.3 | 1594.0 |
| 55°   | 14551.2 | 10223.9 | 2599.4 | 1880.1 | 1747.8 | 1838.7 | 1820.5 | 1683.4 | 1554.3 | 1481.5 | 1475.0 |
| 57.5° | 15358.1 | 10810.9 | 2546.5 | 1726.3 | 1648.6 | 1774.3 | 1704.8 | 1552.7 | 1478.3 | 1423.7 | 1418.7 |
| 60°   | 16476.0 | 11731.9 | 2432.3 | 1536.2 | 1554.3 | 1678.3 | 1559.3 | 1496.5 | 1415.4 | 1354.2 | 1350.9 |
| 62.5° | 18332.8 | 13449.9 | 2248.8 | 1347.7 | 1443.5 | 1536.2 | 1489.8 | 1427.0 | 1344.3 | 1284.8 | 1284.8 |
| 65°   | 21077.8 | 15837.7 | 1903.2 | 1200.5 | 1319.5 | 1397.3 | 1415.4 | 1352.6 | 1266.6 | 1203.8 | 1207.0 |
| 67.5° | 23392.8 | 17335.7 | 1440.2 | 1078.1 | 1192.2 | 1284.8 | 1336.1 | 1274.9 | 1184.0 | 1122.8 | 1124.4 |
| 70°   | 23265.3 | 16247.8 | 1099.6 | 957.5  | 1079.7 | 1174.0 | 1240.1 | 1192.2 | 1094.6 | 1036.8 | 1041.7 |
| 72.5° | 20664.3 | 13592.1 | 889.6  | 835.1  | 965.7  | 1058.3 | 1137.6 | 1101.3 | 1002.0 | 945.9  | 945.9  |
| 75°   | 15181.2 | 9648.4  | 711.0  | 711.0  | 823.5  | 937.6  | 1025.2 | 1002.0 | 911.1  | 871.5  | 859.9  |
| 77.5° | 6399.2  | 4047.9  | 557.3  | 590.3  | 684.6  | 805.2  | 914.4  | 922.7  | 843.3  | 892.9  | 810.3  |
| 80°   | 1701.5  | 1116.1  | 425.0  | 464.6  | 537.4  | 664.7  | 795.4  | 792.0  | 706.0  | 659.8  | 613.5  |
| 82.5° | 648.2   | 439.8   | 302.6  | 327.4  | 388.6  | 509.3  | 630.0  | 649.8  | 563.9  | 487.8  | 487.8  |
| 85°   | 249.7   | 188.5   | 186.9  | 196.8  | 226.5  | 337.3  | 476.2  | 492.7  | 425.0  | 360.5  | 372.1  |
| 87.5° | 64.5    | 56.2    | 69.5   | 66.1   | 104.1  | 180.2  | 272.9  | 282.8  | 259.6  | 150.5  | 214.9  |
| 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)