

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: P885174

Luminaire Tested: **NAV-SB6B-830-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P885174  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6B-830-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

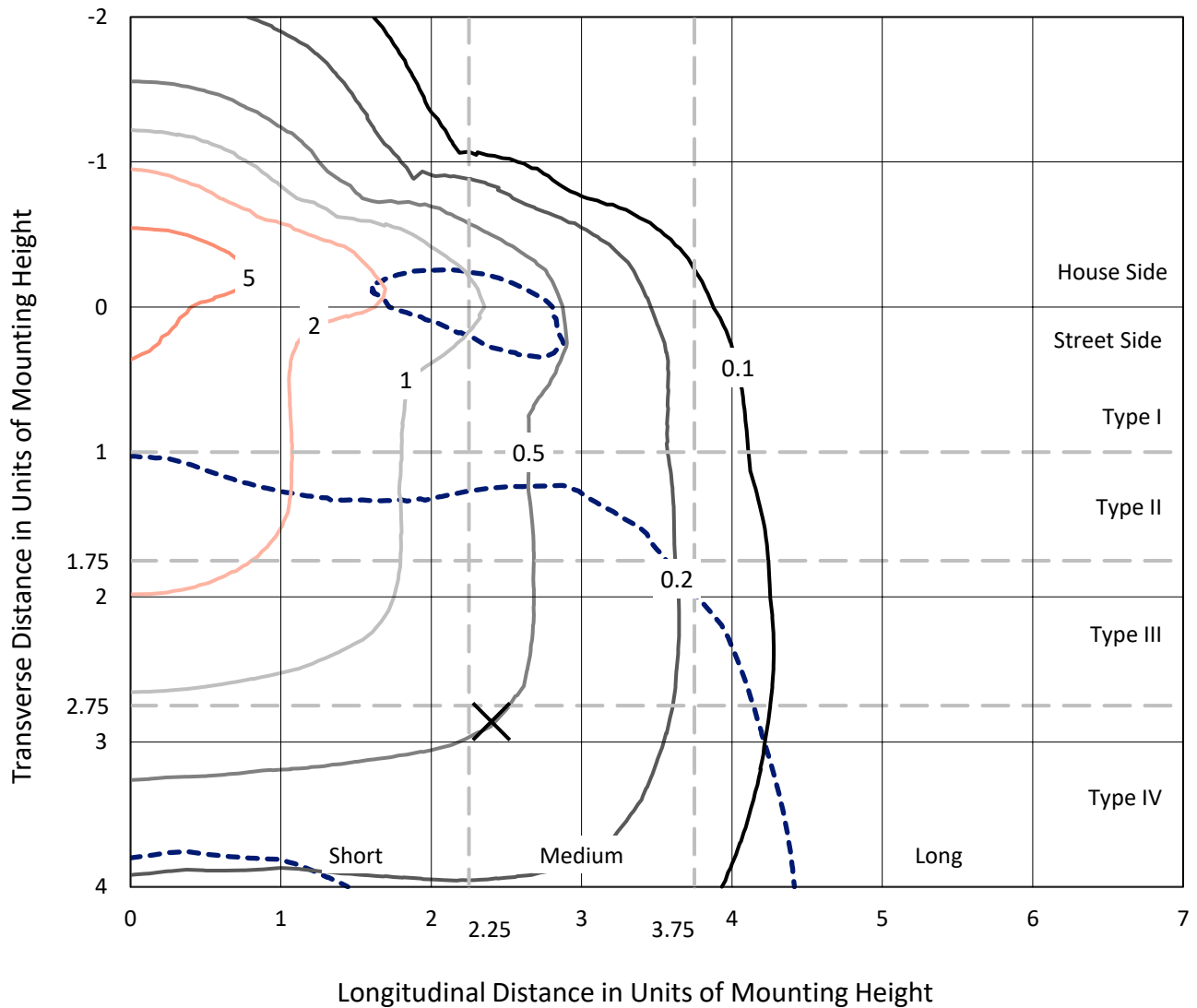
Lumens per Lamp: N/A  
Luminaire Lumens: 29645 lumens  
Efficiency: N/A  
Efficacy: 134.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 220.4  
Input Voltage (V): 120.0  
Input Current (Ain): 1.838  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.657  
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

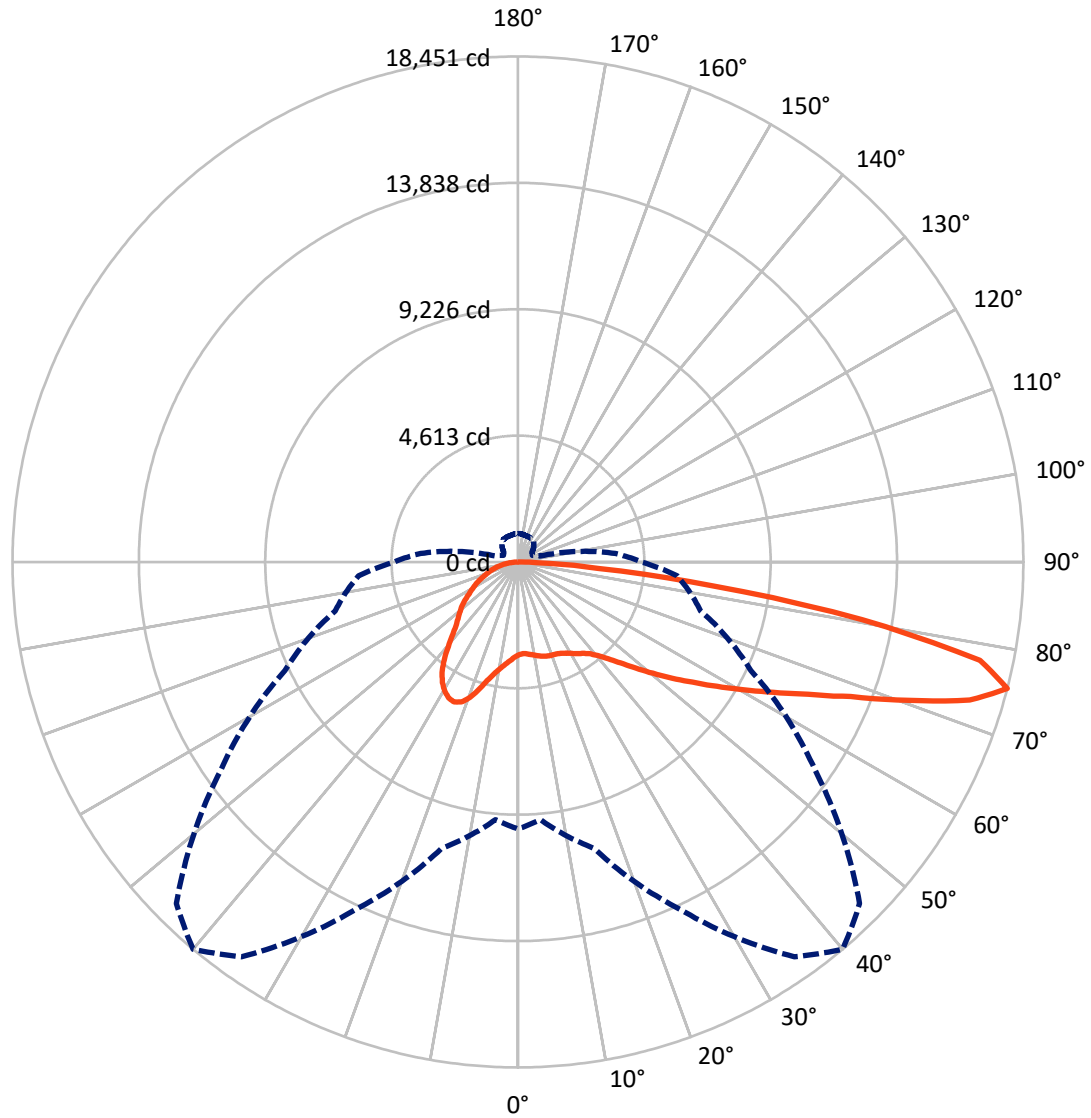
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9185.0   | 0.0    | 9185.0  |
|                    | % Fixture | 31.0     | 0.0    | 31.0    |
| <b>Street Side</b> | Lumens    | 20460.0  | 0.0    | 20460.0 |
|                    | % Fixture | 69.0     | 0.0    | 69.0    |
| <b>Total</b>       | Lumens    | 29645.0  | 0.0    | 29645.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 338.4   | 1.1       |
| 10°-20°   | 1136.1  | 3.8       |
| 20°-30°   | 2074.4  | 7.0       |
| 30°-40°   | 2942.1  | 9.9       |
| 40°-50°   | 3972.7  | 13.4      |
| 50°-60°   | 5344.4  | 18.0      |
| 60°-70°   | 6783.3  | 22.9      |
| 70°-80°   | 6156.2  | 20.8      |
| 80°-90°   | 897.4   | 3.0       |
| 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°    | 29645.0 | 100.0     |
| 0°-180°   | 29645.0 | 100.0     |

**Coefficient of Utilization**



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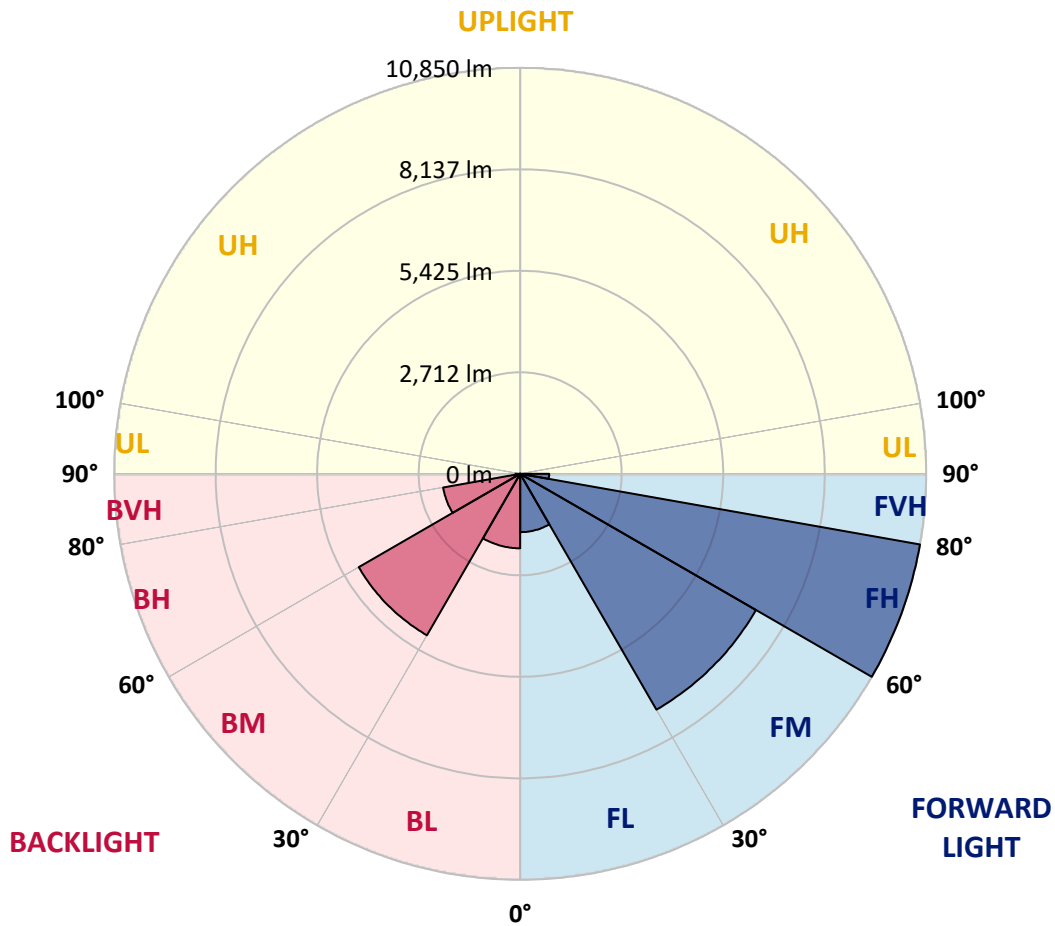
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 1559.4  | 5.3       |                         |      |          |
| FM (30°-60°)   | 7277.2  | 24.5      |                         |      |          |
| FH (60°-80°)   | 10849.6 | 36.6      |                         |      | G4/12000 |
| FVH (80°-90°)  | 773.8   | 2.6       |                         |      | G5       |
| BL (0°-30°)    | 1989.6  | 6.7       | B3/2500                 |      |          |
| BM (30°-60°)   | 4982.0  | 16.8      | B3/5000                 |      |          |
| BH (60°-80°)   | 2089.9  | 7.0       | B3/2500                 |      | G3/2500  |
| BVH (80°-90°)  | 123.5   | 0.4       |                         |      | G2/225   |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G5**

Type IV Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 40°     | 45°     | 55°     | 65°    | 75°    | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|
| 0°    | 3389.9  | 3389.9  | 3389.9  | 3389.9  | 3389.9  | 3389.9  | 3389.9  | 3389.9  | 3389.9 | 3389.9 | 3389.9 |
| 2.5°  | 3338.1  | 3356.9  | 3352.2  | 3345.9  | 3345.9  | 3347.5  | 3345.9  | 3356.9  | 3367.9 | 3378.9 | 3396.2 |
| 5°    | 3372.6  | 3391.5  | 3382.1  | 3374.2  | 3367.9  | 3366.4  | 3361.6  | 3360.1  | 3366.4 | 3380.5 | 3404.1 |
| 7.5°  | 3440.3  | 3459.1  | 3445.0  | 3430.8  | 3418.2  | 3412.0  | 3405.7  | 3396.2  | 3391.5 | 3399.4 | 3432.4 |
| 10°   | 3515.7  | 3534.6  | 3517.3  | 3492.1  | 3471.7  | 3463.8  | 3457.6  | 3448.1  | 3441.8 | 3446.5 | 3482.7 |
| 12.5° | 3591.2  | 3610.1  | 3586.5  | 3551.9  | 3525.2  | 3520.4  | 3512.6  | 3509.4  | 3507.9 | 3506.3 | 3542.5 |
| 15°   | 3662.0  | 3677.7  | 3647.8  | 3606.9  | 3578.6  | 3570.8  | 3562.9  | 3567.6  | 3575.5 | 3584.9 | 3625.8 |
| 17.5° | 3717.0  | 3732.7  | 3688.7  | 3635.2  | 3608.5  | 3605.4  | 3600.6  | 3616.4  | 3638.4 | 3662.0 | 3712.3 |
| 20°   | 3767.3  | 3783.0  | 3726.4  | 3654.1  | 3622.7  | 3622.7  | 3624.2  | 3657.2  | 3688.7 | 3723.3 | 3792.5 |
| 22.5° | 3838.1  | 3850.6  | 3781.5  | 3682.4  | 3636.8  | 3639.9  | 3652.5  | 3685.5  | 3724.9 | 3772.0 | 3867.9 |
| 25°   | 3943.4  | 3952.8  | 3867.9  | 3735.9  | 3684.0  | 3693.4  | 3704.4  | 3720.1  | 3757.9 | 3812.9 | 3941.8 |
| 27.5° | 4113.2  | 4121.1  | 4009.4  | 3830.2  | 3751.6  | 3767.3  | 3783.0  | 3772.0  | 3789.3 | 3836.5 | 4001.6 |
| 30°   | 4352.2  | 4356.9  | 4215.4  | 3978.0  | 3866.4  | 3874.2  | 3877.4  | 3831.8  | 3798.8 | 3836.5 | 4044.0 |
| 32.5° | 4635.2  | 4633.7  | 4465.4  | 4157.2  | 3996.9  | 3989.0  | 3962.3  | 3872.7  | 3795.6 | 3828.6 | 4081.8 |
| 35°   | 5073.9  | 5056.6  | 4839.6  | 4408.8  | 4144.7  | 4095.9  | 4033.0  | 3918.2  | 3811.3 | 3820.8 | 4114.8 |
| 37.5° | 5800.3  | 5746.9  | 5446.6  | 4820.8  | 4364.8  | 4240.6  | 4147.8  | 3992.1  | 3845.9 | 3817.6 | 4154.1 |
| 40°   | 6619.5  | 6551.9  | 6221.7  | 5385.2  | 4695.0  | 4495.3  | 4345.9  | 4097.5  | 3902.5 | 3831.8 | 4212.3 |
| 42.5° | 7591.2  | 7495.3  | 7140.0  | 6050.3  | 5113.2  | 4823.9  | 4599.1  | 4231.1  | 3985.9 | 3877.4 | 4290.9 |
| 45°   | 8784.6  | 8657.3  | 8154.1  | 6800.3  | 5640.0  | 5254.7  | 4954.4  | 4434.0  | 4113.2 | 3965.4 | 4408.8 |
| 47.5° | 9990.6  | 10022.0 | 9306.6  | 7658.8  | 6272.0  | 5786.2  | 5399.4  | 4739.0  | 4298.8 | 4106.9 | 4599.1 |
| 50°   | 11272.0 | 11294.1 | 10452.9 | 8610.1  | 6989.0  | 6386.8  | 5899.4  | 5080.2  | 4556.6 | 4308.2 | 4883.7 |
| 52.5° | 12272.0 | 12275.2 | 11493.7 | 9605.4  | 7735.9  | 7047.2  | 6438.7  | 5470.1  | 4855.4 | 4575.5 | 5262.6 |
| 55°   | 12897.8 | 12890.0 | 12223.3 | 10547.2 | 8594.4  | 7740.6  | 7036.2  | 5913.5  | 5220.1 | 4889.9 | 5739.0 |
| 57.5° | 13352.2 | 13328.6 | 12726.4 | 11356.9 | 9509.5  | 8559.8  | 7712.3  | 6416.7  | 5651.0 | 5264.2 | 6366.4 |
| 60°   | 13525.2 | 13511.0 | 13067.6 | 12056.6 | 10471.7 | 9465.4  | 8492.2  | 6979.6  | 6140.0 | 5706.0 | 7173.0 |
| 62.5° | 13591.2 | 13618.0 | 13402.5 | 12734.3 | 11501.6 | 10468.6 | 9349.1  | 7652.5  | 6690.3 | 6206.0 | 8023.6 |
| 65°   | 13823.9 | 13872.7 | 13828.6 | 13621.1 | 12665.1 | 11643.1 | 10485.9 | 8452.9  | 7290.9 | 6742.2 | 8912.0 |
| 67.5° | 14284.6 | 14333.4 | 14352.2 | 14682.4 | 14086.5 | 13106.9 | 11904.1 | 9449.7  | 7993.7 | 7298.8 | 9580.2 |
| 70°   | 14273.6 | 14259.5 | 14592.8 | 15526.8 | 15866.4 | 15133.7 | 13816.1 | 10676.1 | 8831.8 | 7761.0 | 9665.1 |
| 72.5° | 12992.2 | 12879.0 | 13666.7 | 15517.3 | 17347.5 | 17250.0 | 16151.0 | 12257.9 | 9555.1 | 7817.6 | 8386.8 |
| 75°   | 9746.9  | 9445.0  | 10836.5 | 13984.3 | 17594.4 | 18451.3 | 17635.3 | 13239.0 | 9383.7 | 6907.2 | 5836.5 |
| 77.5° | 4168.2  | 3864.8  | 5504.7  | 10352.2 | 15746.9 | 17248.5 | 16273.6 | 11550.3 | 7490.6 | 4567.6 | 2866.4 |
| 80°   | 1091.2  | 1089.6  | 1663.5  | 4693.4  | 10709.1 | 12737.5 | 11174.6 | 7459.1  | 4279.9 | 1632.1 | 790.9  |
| 82.5° | 451.3   | 440.3   | 611.6   | 1825.5  | 5232.7  | 7147.8  | 5833.3  | 3327.1  | 1545.6 | 441.8  | 262.6  |
| 85°   | 168.2   | 166.7   | 297.2   | 630.5   | 1845.9  | 2948.1  | 2133.7  | 850.6   | 385.2  | 215.4  | 117.9  |
| 87.5° | 47.2    | 45.6    | 64.5    | 218.6   | 449.7   | 682.4   | 364.8   | 139.9   | 108.5  | 84.9   | 34.6   |
| 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°    | 3389.9  | 3389.9  | 3389.9 | 3389.9 | 3389.9 | 3389.9 | 3389.9 | 3389.9 | 3389.9 | 3389.9 | 3389.9 |
| 2.5°  | 3401.0  | 3408.8  | 3423.0 | 3434.0 | 3448.1 | 3463.8 | 3485.9 | 3500.0 | 3514.2 | 3523.6 | 3517.3 |
| 5°    | 3415.1  | 3432.4  | 3468.6 | 3504.7 | 3547.2 | 3586.5 | 3632.1 | 3665.1 | 3691.8 | 3699.7 | 3702.8 |
| 7.5°  | 3446.5  | 3474.9  | 3536.2 | 3597.5 | 3665.1 | 3729.6 | 3795.6 | 3852.2 | 3897.8 | 3915.1 | 3916.7 |
| 10°   | 3501.6  | 3539.3  | 3625.8 | 3712.3 | 3801.9 | 3901.0 | 3985.9 | 4067.6 | 4132.1 | 4158.8 | 4160.4 |
| 12.5° | 3570.8  | 3617.9  | 3731.1 | 3850.6 | 3974.9 | 4111.6 | 4221.7 | 4322.3 | 4402.5 | 4438.7 | 4438.7 |
| 15°   | 3660.4  | 3721.7  | 3866.4 | 4026.7 | 4209.1 | 4399.4 | 4539.3 | 4651.0 | 4740.6 | 4784.6 | 4781.5 |
| 17.5° | 3757.9  | 3839.6  | 4022.0 | 4264.2 | 4525.2 | 4775.2 | 4938.7 | 5020.5 | 5113.2 | 5155.7 | 5154.1 |
| 20°   | 3852.2  | 3952.8  | 4213.8 | 4566.0 | 4913.5 | 5179.3 | 5311.3 | 5333.3 | 5339.6 | 5344.4 | 5356.9 |
| 22.5° | 3949.7  | 4084.9  | 4454.4 | 4946.6 | 5319.2 | 5503.2 | 5522.0 | 5427.7 | 5295.6 | 5234.3 | 5251.6 |
| 25°   | 4056.6  | 4235.9  | 4768.9 | 5366.4 | 5668.3 | 5690.3 | 5545.6 | 5316.1 | 5066.0 | 4951.3 | 4968.6 |
| 27.5° | 4160.4  | 4410.4  | 5146.2 | 5767.3 | 5919.8 | 5726.4 | 5415.1 | 5089.6 | 4787.7 | 4666.7 | 4680.8 |
| 30°   | 4264.2  | 4610.1  | 5562.9 | 6117.9 | 6034.6 | 5636.8 | 5209.1 | 4845.9 | 4542.5 | 4415.1 | 4429.3 |
| 32.5° | 4369.5  | 4842.8  | 6042.5 | 6371.1 | 6014.2 | 5446.6 | 4952.8 | 4572.3 | 4305.0 | 4171.4 | 4188.7 |
| 35°   | 4489.0  | 5128.9  | 6496.9 | 6509.4 | 5877.4 | 5166.7 | 4614.8 | 4245.3 | 4012.6 | 3905.7 | 3929.3 |
| 37.5° | 4644.7  | 5492.2  | 6897.8 | 6544.0 | 5638.4 | 4756.3 | 4195.0 | 3858.5 | 3666.7 | 3617.9 | 3652.5 |
| 40°   | 4838.1  | 5929.3  | 7204.4 | 6489.0 | 5284.6 | 4257.9 | 3735.9 | 3467.0 | 3358.5 | 3369.5 | 3407.2 |
| 42.5° | 5089.6  | 6418.3  | 7419.8 | 6347.5 | 4792.5 | 3743.7 | 3333.3 | 3213.8 | 3265.7 | 3309.8 | 3350.6 |
| 45°   | 5416.7  | 6926.1  | 7553.5 | 6106.9 | 4235.9 | 3308.2 | 3095.9 | 3124.2 | 3163.5 | 3168.2 | 3199.7 |
| 47.5° | 5834.9  | 7440.3  | 7641.5 | 5743.7 | 3668.2 | 3001.6 | 2945.0 | 2951.3 | 2943.4 | 2910.4 | 2935.5 |
| 50°   | 6356.9  | 7940.3  | 7720.1 | 5262.6 | 3185.5 | 2809.8 | 2734.3 | 2712.3 | 2603.8 | 2496.9 | 2511.0 |
| 52.5° | 6951.3  | 8399.4  | 7753.2 | 4665.1 | 2809.8 | 2649.4 | 2526.7 | 2388.4 | 2185.5 | 2152.5 | 2163.5 |
| 55°   | 7611.7  | 8823.9  | 7668.3 | 3930.8 | 2493.7 | 2443.4 | 2257.9 | 2091.2 | 2069.2 | 2040.9 | 2045.6 |
| 57.5° | 8401.0  | 9281.5  | 7495.3 | 3111.6 | 2169.8 | 2202.8 | 2022.0 | 2040.9 | 2001.6 | 1957.6 | 1949.7 |
| 60°   | 9264.2  | 9754.7  | 7191.8 | 2364.8 | 1834.9 | 1902.5 | 1960.7 | 1959.1 | 1948.1 | 1912.0 | 1899.4 |
| 62.5° | 10040.9 | 10066.1 | 6594.4 | 1811.3 | 1540.9 | 1669.8 | 1828.6 | 1827.0 | 1817.6 | 1797.2 | 1789.3 |
| 65°   | 10503.2 | 10018.9 | 5597.5 | 1426.1 | 1298.7 | 1478.0 | 1649.4 | 1662.0 | 1663.5 | 1662.0 | 1662.0 |
| 67.5° | 10421.4 | 9467.0  | 4229.6 | 1135.2 | 1099.1 | 1283.0 | 1471.7 | 1489.0 | 1501.6 | 1504.7 | 1507.9 |
| 70°   | 9496.9  | 8254.7  | 2757.9 | 905.7  | 921.4  | 1111.6 | 1303.5 | 1320.8 | 1331.8 | 1344.3 | 1350.6 |
| 72.5° | 7402.5  | 6069.2  | 1578.6 | 732.7  | 765.7  | 963.8  | 1136.8 | 1157.2 | 1163.5 | 1187.1 | 1196.5 |
| 75°   | 4511.0  | 3569.2  | 852.2  | 577.0  | 628.9  | 823.9  | 971.7  | 995.3  | 1006.3 | 1034.6 | 1037.7 |
| 77.5° | 2144.7  | 1545.6  | 485.9  | 449.7  | 506.3  | 673.0  | 820.8  | 847.5  | 817.6  | 833.3  | 820.8  |
| 80°   | 724.8   | 573.9   | 306.6  | 342.8  | 386.8  | 525.2  | 657.2  | 684.0  | 621.1  | 617.9  | 611.6  |
| 82.5° | 253.1   | 232.7   | 195.0  | 228.0  | 250.0  | 375.8  | 496.9  | 531.4  | 462.3  | 460.7  | 438.7  |
| 85°   | 99.1    | 94.3    | 108.5  | 124.2  | 149.4  | 231.1  | 327.0  | 344.3  | 284.6  | 229.6  | 226.4  |
| 87.5° | 20.4    | 22.0    | 26.7   | 28.3   | 45.6   | 80.2   | 117.9  | 144.7  | 114.8  | 97.5   | 89.6   |
| 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)