

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: P968232

Luminaire Tested: **NAV-SB5B-730-U-T3R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968232  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5B-730-U-T3R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24273 lumens  
Efficiency: N/A  
Efficacy: 132.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G4

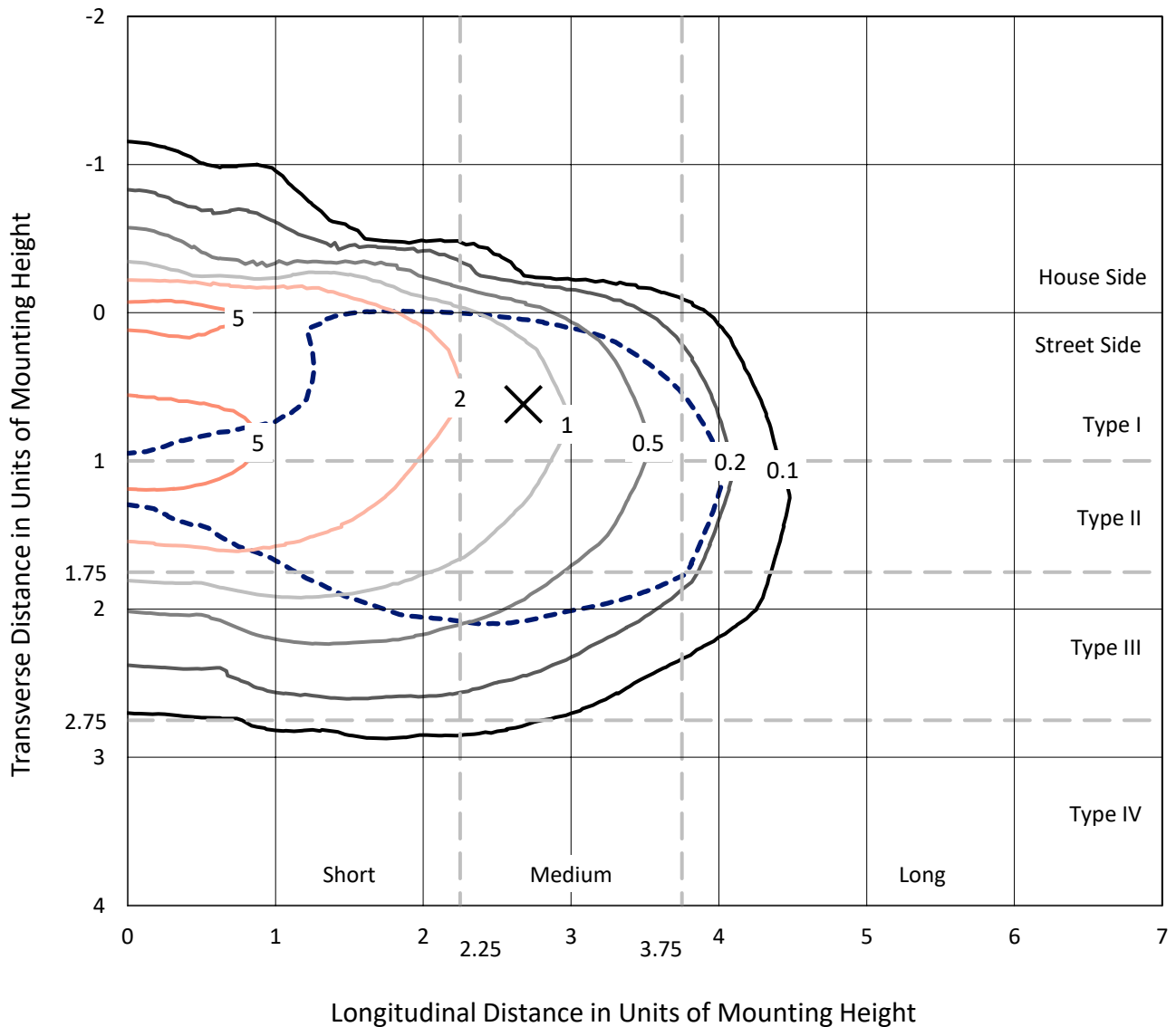
Input Watts (W): 182.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

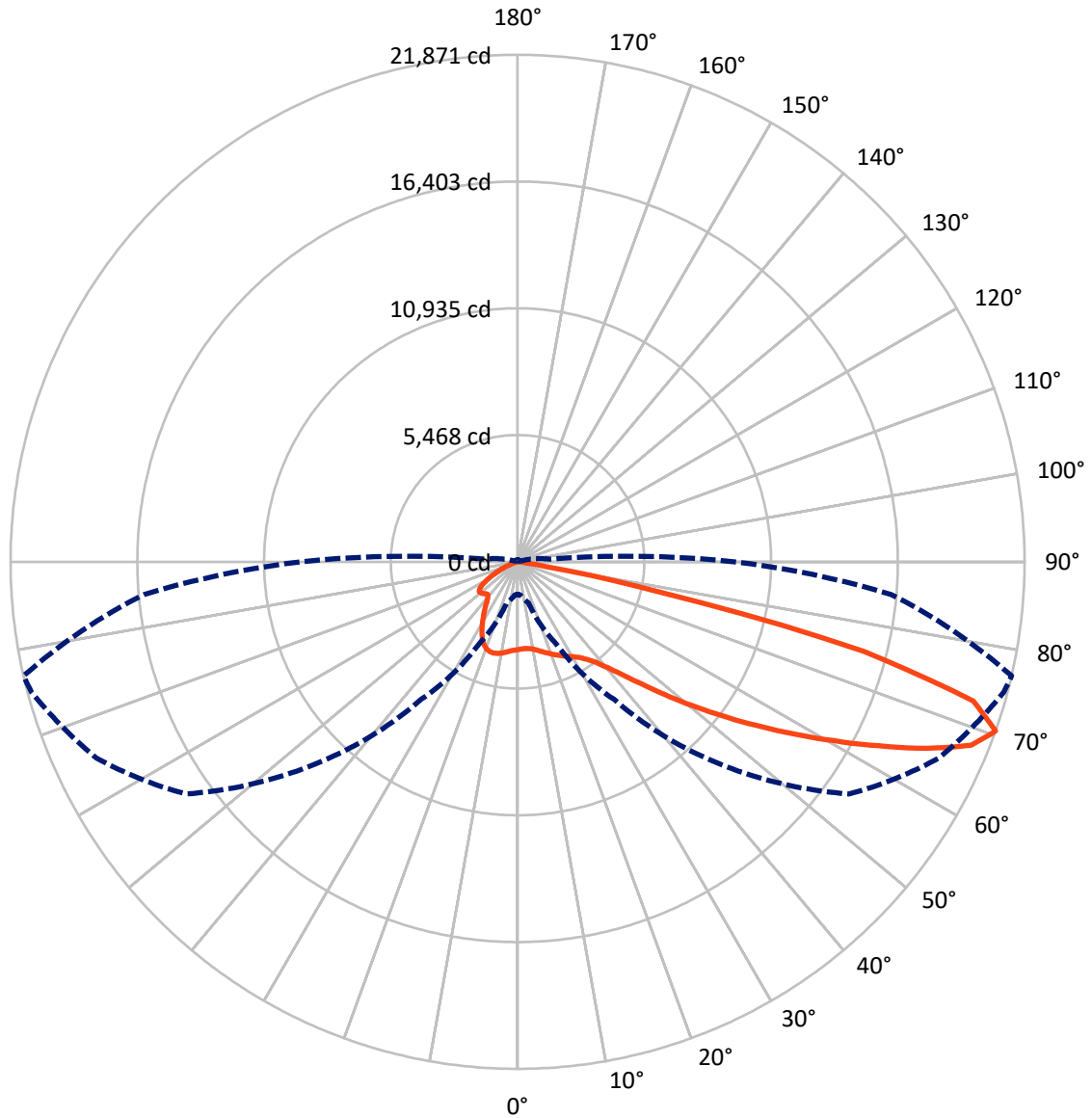
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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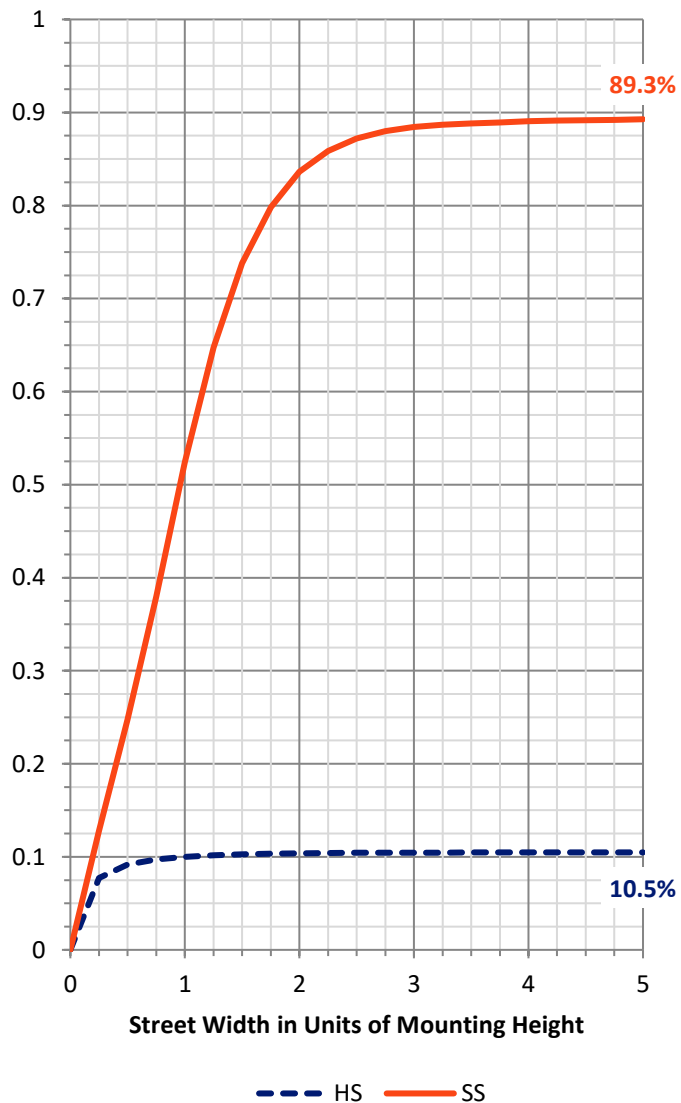
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2558.7   | 0.0    | 2558.7  |
|                    | % Fixture | 10.5     | 0.0    | 10.5    |
| <b>Street Side</b> | Lumens    | 21714.3  | 0.0    | 21714.3 |
|                    | % Fixture | 89.5     | 0.0    | 89.5    |
| <b>Total</b>       | Lumens    | 24273.0  | 0.0    | 24273.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 326.3   | 1.3       |
| 10°-20°   | 774.6   | 3.2       |
| 20°-30°   | 1198.1  | 4.9       |
| 30°-40°   | 2174.0  | 9.0       |
| 40°-50°   | 4103.8  | 16.9      |
| 50°-60°   | 5929.6  | 24.4      |
| 60°-70°   | 6311.9  | 26.0      |
| 70°-80°   | 3344.9  | 13.8      |
| 80°-90°   | 109.8   | 0.5       |
| 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°    | 24273.0 | 100.0     |
| 0°-180°   | 24273.0 | 100.0     |

**Coefficient of Utilization**

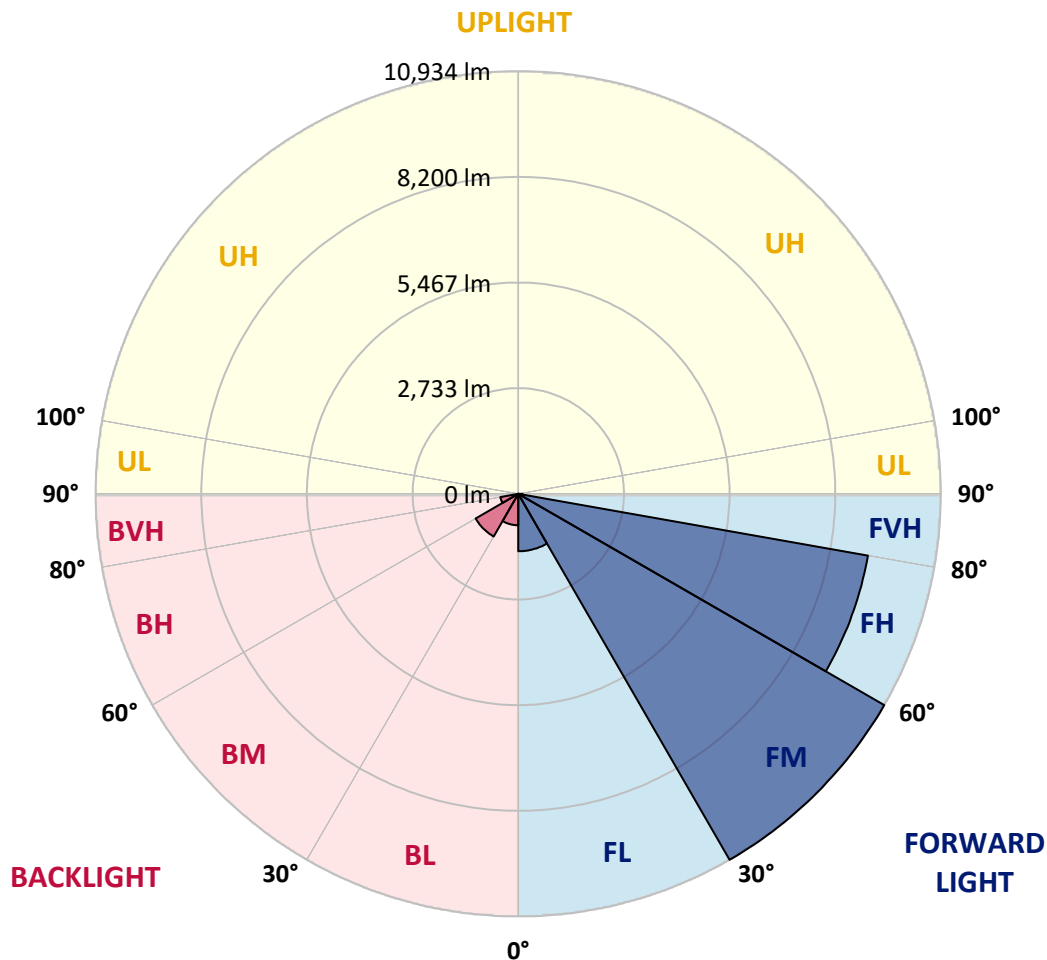


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 1486.1  | 6.1       |                         |      |          |
| FM (30°-60°)   | 10933.7 | 45.0      |                         |      |          |
| FH (60°-80°)   | 9187.7  | 37.9      |                         |      | G4/12000 |
| FVH (80°-90°)  | 106.9   | 0.4       |                         |      | G2/225   |
| BL (0°-30°)    | 813.0   | 3.3       | B2/1000                 |      |          |
| BM (30°-60°)   | 1273.7  | 5.2       | B2/2500                 |      |          |
| BH (60°-80°)   | 469.1   | 1.9       | B1/500                  |      | G1/500   |
| BVH (80°-90°)  | 3.0     | 0.0       |                         |      | G0/10    |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B2-U0-G4**  
 Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 77°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3786.1  | 3786.1  | 3786.1  | 3786.1  | 3786.1  | 3786.1  | 3786.1  | 3786.1  | 3786.1  | 3786.1  | 3786.1  |
| 2.5°  | 3554.7  | 3586.9  | 3582.3  | 3603.7  | 3611.4  | 3642.0  | 3672.7  | 3714.1  | 3760.1  | 3758.6  | 3789.2  |
| 5°    | 3353.9  | 3386.1  | 3393.8  | 3422.9  | 3459.7  | 3507.1  | 3570.0  | 3652.8  | 3738.6  | 3752.4  | 3813.7  |
| 7.5°  | 3116.3  | 3150.0  | 3169.9  | 3228.2  | 3295.7  | 3393.8  | 3496.5  | 3617.5  | 3760.1  | 3780.0  | 3898.1  |
| 10°   | 2878.7  | 2909.4  | 2935.4  | 3018.2  | 3125.5  | 3271.1  | 3438.2  | 3612.9  | 3804.6  | 3833.7  | 4000.8  |
| 12.5° | 2731.5  | 2760.6  | 2789.8  | 2861.8  | 2995.2  | 3173.0  | 3399.9  | 3634.4  | 3878.1  | 3919.5  | 4140.3  |
| 15°   | 2679.5  | 2705.5  | 2728.4  | 2792.8  | 2917.0  | 3119.4  | 3392.2  | 3678.8  | 3971.7  | 4026.8  | 4308.9  |
| 17.5° | 2687.1  | 2700.9  | 2716.2  | 2765.2  | 2886.4  | 3094.9  | 3406.0  | 3755.5  | 4082.0  | 4131.1  | 4477.5  |
| 20°   | 2731.5  | 2739.2  | 2740.7  | 2774.5  | 2881.8  | 3091.8  | 3433.6  | 3829.1  | 4186.2  | 4252.1  | 4644.6  |
| 22.5° | 2788.3  | 2791.3  | 2788.3  | 2811.3  | 2910.9  | 3114.8  | 3470.3  | 3918.0  | 4302.7  | 4364.0  | 4813.2  |
| 25°   | 3053.5  | 2995.2  | 2921.7  | 2877.2  | 2960.0  | 3159.3  | 3525.6  | 4037.6  | 4429.9  | 4489.7  | 4977.2  |
| 27.5° | 3876.6  | 3709.5  | 3445.8  | 3150.0  | 3061.2  | 3223.6  | 3602.3  | 4158.6  | 4558.7  | 4612.4  | 5153.5  |
| 30°   | 5213.3  | 4994.0  | 4546.5  | 3879.6  | 3386.1  | 3358.5  | 3701.9  | 4279.7  | 4695.1  | 4753.3  | 5342.0  |
| 32.5° | 6552.9  | 6499.3  | 5982.7  | 5059.9  | 4117.2  | 3658.9  | 3867.4  | 4443.8  | 4876.0  | 4922.0  | 5596.5  |
| 35°   | 7908.0  | 7799.1  | 7376.1  | 6464.1  | 5243.9  | 4270.6  | 4143.4  | 4658.3  | 5113.6  | 5165.7  | 5967.4  |
| 37.5° | 8945.8  | 8879.9  | 8617.7  | 7866.6  | 6580.5  | 5214.8  | 4615.5  | 4990.9  | 5458.5  | 5516.8  | 6442.6  |
| 40°   | 9862.3  | 9831.7  | 9742.8  | 9247.8  | 8075.1  | 6450.2  | 5349.7  | 5506.0  | 5936.8  | 6005.7  | 7025.0  |
| 42.5° | 10582.8 | 10654.9 | 10705.5 | 10567.5 | 9615.6  | 7860.5  | 6336.9  | 6229.5  | 6603.6  | 6674.1  | 7766.9  |
| 45°   | 11320.1 | 11344.7 | 11548.6 | 11747.8 | 11145.4 | 9335.1  | 7449.7  | 7077.2  | 7432.8  | 7520.2  | 8656.0  |
| 47.5° | 11793.8 | 11891.8 | 12250.6 | 12601.7 | 12431.5 | 10797.5 | 8645.3  | 8078.1  | 8393.9  | 8557.9  | 9652.4  |
| 50°   | 11829.0 | 12014.5 | 12508.1 | 13119.7 | 13368.0 | 12189.3 | 9945.2  | 9218.6  | 9554.3  | 9735.1  | 10716.2 |
| 52.5° | 11242.0 | 11530.1 | 12295.1 | 13190.2 | 13873.9 | 13368.0 | 11289.5 | 10359.1 | 10789.8 | 11025.8 | 11819.9 |
| 55°   | 8619.2  | 8996.3  | 11493.3 | 12807.0 | 13893.8 | 14261.6 | 12598.6 | 11547.0 | 12166.2 | 12432.9 | 13012.4 |
| 57.5° | 7509.5  | 7699.5  | 9036.2  | 12141.7 | 13524.4 | 14621.9 | 13781.9 | 12678.2 | 13663.9 | 13994.9 | 14139.1 |
| 60°   | 6247.9  | 6497.8  | 7578.4  | 11053.4 | 13023.1 | 14657.2 | 14827.3 | 14137.5 | 15287.2 | 15659.6 | 15172.3 |
| 62.5° | 4246.0  | 4517.3  | 5591.9  | 9183.4  | 12337.9 | 14640.3 | 15684.1 | 15639.8 | 17091.4 | 17491.4 | 16047.5 |
| 65°   | 2630.4  | 2800.5  | 3508.7  | 7498.7  | 11380.0 | 14658.7 | 16580.9 | 17463.8 | 18995.2 | 19401.4 | 16725.0 |
| 67.5° | 2078.6  | 2156.7  | 2526.1  | 5757.4  | 9729.0  | 14244.8 | 17476.0 | 19179.1 | 20787.1 | 21109.0 | 16932.0 |
| 70°   | 1396.5  | 1443.9  | 1837.9  | 3859.7  | 7238.1  | 12334.8 | 17459.2 | 20040.6 | 21709.8 | 21870.8 | 16177.8 |
| 72.5° | 735.7   | 772.5   | 1074.5  | 1787.3  | 4371.7  | 8768.0  | 14717.0 | 19010.5 | 20791.6 | 20549.5 | 13827.9 |
| 75°   | 367.9   | 429.2   | 723.5   | 907.4   | 1867.0  | 4889.8  | 9138.9  | 14988.3 | 16364.7 | 15426.7 | 8872.2  |
| 77.5° | 279.0   | 337.2   | 597.8   | 597.8   | 650.0   | 1646.3  | 3870.5  | 8174.7  | 7540.1  | 6278.5  | 2604.3  |
| 80°   | 177.8   | 229.9   | 522.8   | 452.2   | 271.3   | 418.5   | 1008.6  | 2290.1  | 1601.9  | 1218.6  | 473.7   |
| 82.5° | 104.2   | 150.3   | 435.3   | 298.9   | 151.8   | 154.8   | 285.2   | 487.5   | 415.4   | 323.4   | 145.7   |
| 85°   | 41.4    | 98.1    | 298.9   | 118.1   | 59.8    | 38.3    | 85.8    | 104.2   | 85.8    | 64.4    | 36.8    |
| 87.5° | 0.0     | 23.0    | 52.1    | 0.0     | 4.6     | 3.1     | 6.1     | 7.7     | 7.7     | 6.1     | 12.3    |
| 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°    | 3786.1  | 3786.1 | 3786.1 | 3786.1 | 3786.1 | 3786.1 | 3786.1 | 3786.1 | 3786.1 | 3786.1 | 3786.1 |
| 2.5°  | 3803.1  | 3806.0 | 3815.3 | 3816.8 | 3795.4 | 3767.8 | 3757.0 | 3752.4 | 3734.1 | 3732.5 | 3735.6 |
| 5°    | 3849.0  | 3862.8 | 3849.0 | 3809.1 | 3714.1 | 3580.7 | 3479.6 | 3396.8 | 3321.7 | 3298.7 | 3284.9 |
| 7.5°  | 3941.0  | 3954.8 | 3913.3 | 3757.0 | 3517.9 | 3252.7 | 3013.6 | 2845.0 | 2693.2 | 2636.5 | 2613.5 |
| 10°   | 4072.8  | 4091.2 | 3960.9 | 3645.1 | 3222.1 | 2795.9 | 2391.2 | 2106.2 | 1883.8 | 1793.4 | 1755.1 |
| 12.5° | 4238.4  | 4246.0 | 3986.9 | 3475.0 | 2837.3 | 2228.8 | 1655.5 | 1350.4 | 1152.7 | 1079.1 | 1056.2 |
| 15°   | 4420.7  | 4410.1 | 3990.0 | 3243.5 | 2313.1 | 1575.7 | 1080.7 | 887.5  | 807.8  | 783.3  | 783.3  |
| 17.5° | 4612.4  | 4567.9 | 3928.7 | 2909.4 | 1738.3 | 1077.6 | 801.7  | 755.7  | 741.9  | 735.7  | 734.2  |
| 20°   | 4800.9  | 4701.3 | 3816.8 | 2472.5 | 1247.7 | 804.7  | 728.1  | 714.3  | 706.6  | 703.6  | 700.5  |
| 22.5° | 4972.6  | 4802.4 | 3625.2 | 1965.1 | 905.9  | 711.2  | 688.3  | 676.0  | 662.2  | 656.1  | 654.6  |
| 25°   | 5139.7  | 4860.7 | 3355.4 | 1491.5 | 725.1  | 665.2  | 646.9  | 623.9  | 605.5  | 597.8  | 594.7  |
| 27.5° | 5302.1  | 4897.4 | 3018.2 | 1103.6 | 646.9  | 622.4  | 588.7  | 556.5  | 542.6  | 539.6  | 536.5  |
| 30°   | 5475.3  | 4909.8 | 2635.0 | 823.2  | 599.3  | 568.7  | 519.7  | 482.9  | 475.2  | 476.7  | 476.7  |
| 32.5° | 5686.9  | 4928.1 | 2248.7 | 674.4  | 559.4  | 504.3  | 446.1  | 407.7  | 401.6  | 407.7  | 406.2  |
| 35°   | 5939.8  | 4964.9 | 1876.3 | 620.8  | 524.3  | 438.4  | 375.6  | 343.4  | 337.2  | 341.8  | 340.3  |
| 37.5° | 6283.1  | 5024.7 | 1528.3 | 610.1  | 495.1  | 383.2  | 315.8  | 289.7  | 289.7  | 291.2  | 289.7  |
| 40°   | 6740.0  | 5184.1 | 1217.1 | 602.4  | 479.8  | 341.8  | 266.7  | 255.9  | 260.6  | 263.6  | 263.6  |
| 42.5° | 7296.4  | 5522.9 | 1007.1 | 593.2  | 462.9  | 323.4  | 242.2  | 237.6  | 245.3  | 248.4  | 248.4  |
| 45°   | 7920.3  | 5952.1 | 933.5  | 577.9  | 447.6  | 335.7  | 231.4  | 225.3  | 234.5  | 236.1  | 237.6  |
| 47.5° | 8565.6  | 6372.1 | 924.3  | 561.0  | 432.2  | 354.1  | 228.4  | 214.6  | 225.3  | 226.8  | 228.4  |
| 50°   | 9218.6  | 6646.5 | 933.5  | 534.9  | 407.7  | 354.1  | 229.9  | 203.9  | 213.1  | 217.7  | 219.2  |
| 52.5° | 9876.2  | 6772.2 | 927.4  | 478.3  | 364.8  | 332.6  | 229.9  | 194.6  | 203.9  | 206.9  | 206.9  |
| 55°   | 10513.8 | 6747.7 | 833.8  | 393.9  | 309.7  | 294.3  | 223.8  | 187.0  | 193.1  | 194.6  | 194.6  |
| 57.5° | 11018.1 | 6405.8 | 660.6  | 306.6  | 251.4  | 245.3  | 203.9  | 177.8  | 182.4  | 180.9  | 180.9  |
| 60°   | 11281.9 | 5654.7 | 472.1  | 236.1  | 197.7  | 193.1  | 179.4  | 165.5  | 168.6  | 160.9  | 159.4  |
| 62.5° | 11284.8 | 4661.4 | 315.8  | 187.0  | 157.8  | 153.2  | 153.2  | 148.7  | 145.7  | 130.3  | 125.7  |
| 65°   | 11044.3 | 3559.3 | 210.0  | 148.7  | 127.2  | 119.5  | 128.7  | 127.2  | 116.5  | 95.0   | 91.9   |
| 67.5° | 10498.6 | 2333.0 | 159.4  | 116.5  | 98.1   | 93.5   | 102.7  | 107.3  | 99.6   | 79.7   | 78.2   |
| 70°   | 9376.5  | 1358.1 | 131.8  | 90.4   | 73.6   | 69.0   | 82.8   | 91.9   | 82.8   | 64.4   | 61.3   |
| 72.5° | 7788.5  | 732.7  | 107.3  | 67.4   | 50.6   | 46.0   | 65.9   | 75.1   | 65.9   | 47.6   | 46.0   |
| 75°   | 5053.9  | 392.4  | 82.8   | 44.5   | 26.0   | 29.1   | 49.1   | 55.1   | 46.0   | 30.6   | 27.6   |
| 77.5° | 1696.9  | 173.2  | 52.1   | 21.4   | 12.3   | 12.3   | 29.1   | 33.7   | 21.4   | 10.8   | 9.2    |
| 80°   | 378.6   | 72.1   | 21.4   | 9.2    | 4.6    | 4.6    | 6.1    | 6.1    | 3.1    | 0.0    | 0.0    |
| 82.5° | 124.1   | 29.1   | 9.2    | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 47.6    | 10.8   | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 18.3    | 1.5    | 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)