

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: P966741

Luminaire Tested: **NAV-SB4C-750-U-T2U**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P966741  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4C-750-U-T2U  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 32984.5 lumens  
Efficiency: N/A  
Efficacy: 164.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G4

Input Watts (W): 200.7  
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



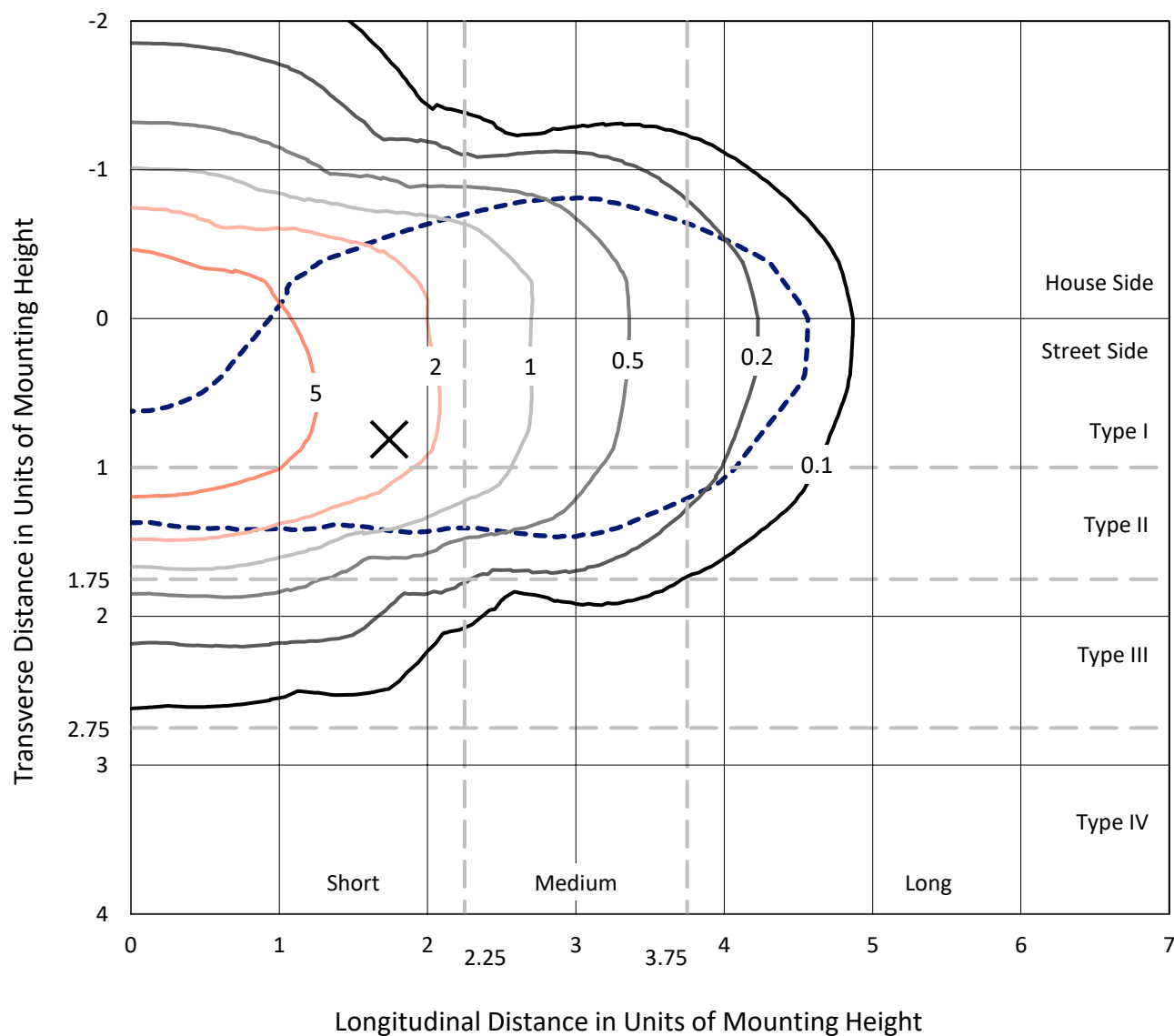
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

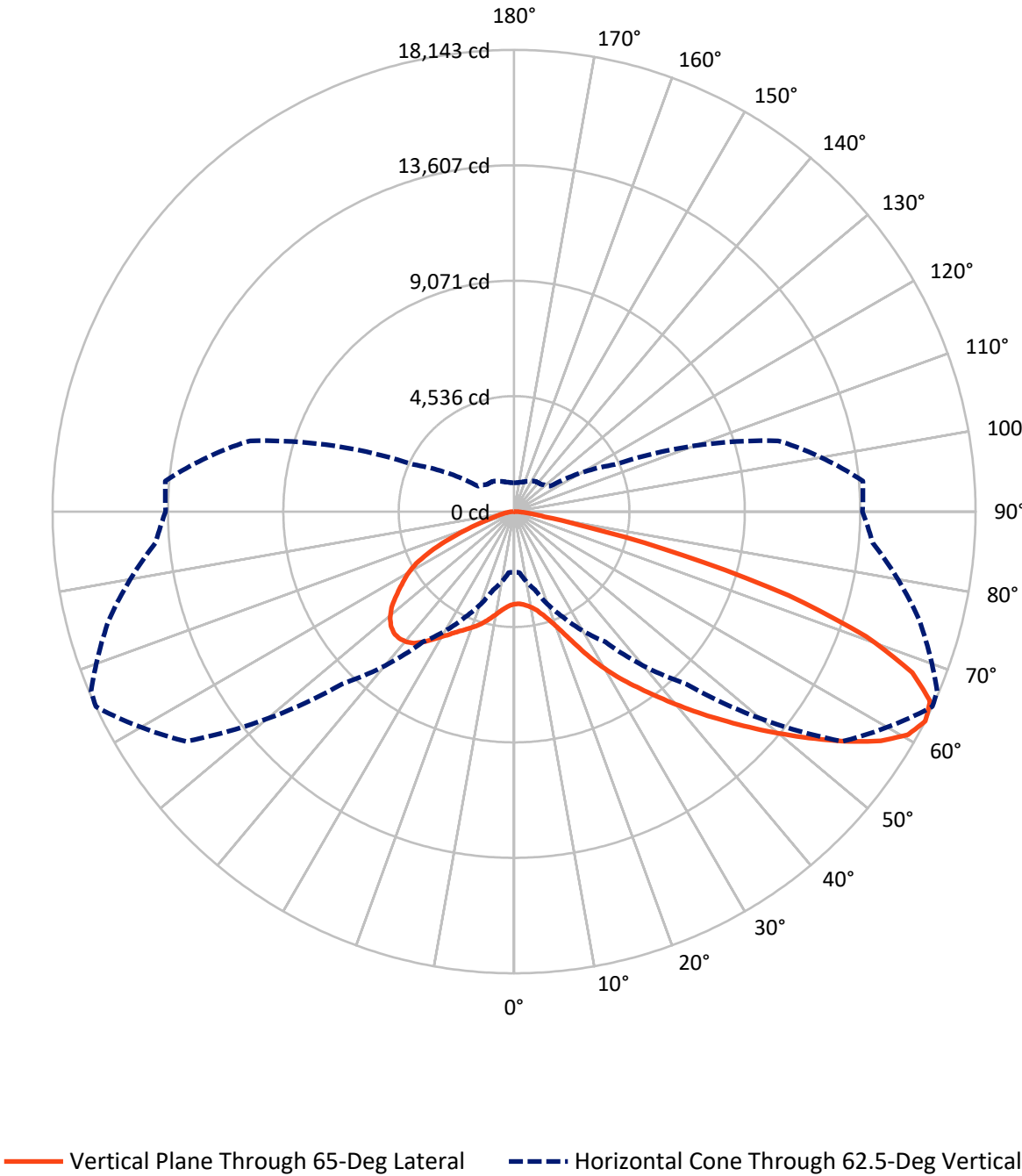


Based on 25 foot mounting height. Maximum calculated value = 9.2 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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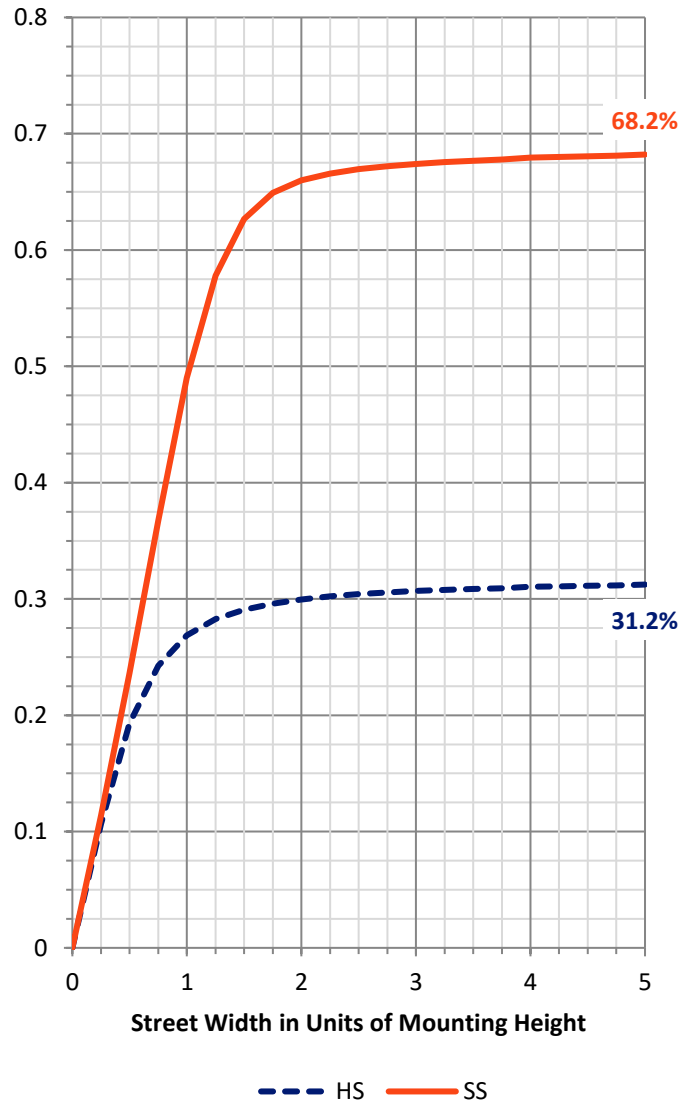
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 10408.5  | 0.0    | 10408.5 |
|                    | % Fixture | 31.6     | 0.0    | 31.6    |
| <b>Street Side</b> | Lumens    | 22576.0  | 0.0    | 22576.0 |
|                    | % Fixture | 68.4     | 0.0    | 68.4    |
| <b>Total</b>       | Lumens    | 32984.5  | 0.0    | 32984.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 362.4   | 1.1       |
| 10°-20°   | 1228.9  | 3.7       |
| 20°-30°   | 2491.7  | 7.6       |
| 30°-40°   | 4311.8  | 13.1      |
| 40°-50°   | 6525.0  | 19.8      |
| 50°-60°   | 7650.2  | 23.2      |
| 60°-70°   | 6413.8  | 19.4      |
| 70°-80°   | 3540.9  | 10.7      |
| 80°-90°   | 459.9   | 1.4       |
| 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°    | 32984.5 | 100.0     |
| 0°-180°   | 32984.5 | 100.0     |

**Coefficient of Utilization**



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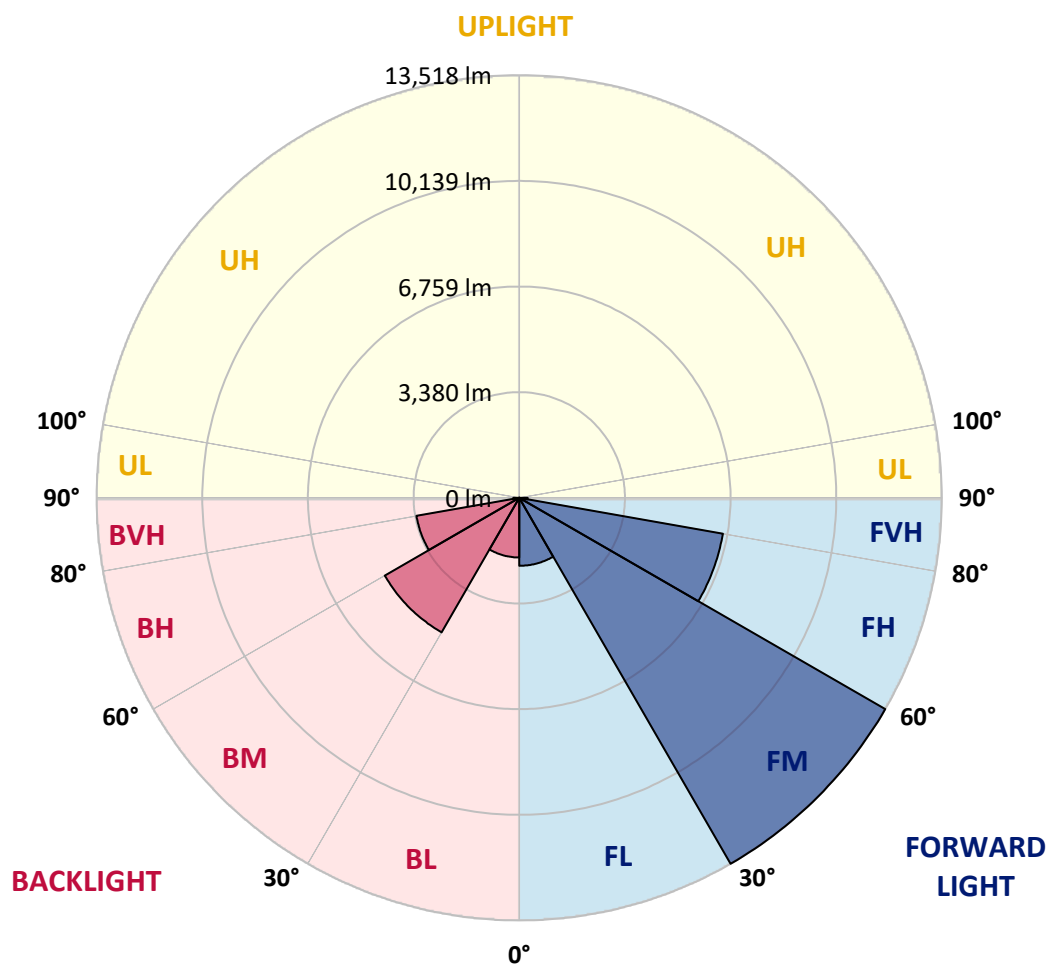
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2174.1  | 6.6       |                         |      |         |
| FM   | (30°-60°)   | 13518.1 | 41.0      |                         |      |         |
| FH   | (60°-80°)   | 6615.7  | 20.1      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 268.1   | 0.8       |                         |      | G3/500  |
| BL   | (0°-30°)    | 1908.8  | 5.8       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 4968.9  | 15.1      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 3339.0  | 10.1      | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 191.9   | 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 Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 67°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3634.8  | 3634.8  | 3634.8  | 3634.8  | 3634.8  | 3634.8  | 3634.8  | 3634.8  | 3634.8  | 3634.8  | 3634.8  |
| 2.5°  | 3610.8  | 3600.5  | 3609.1  | 3609.1  | 3612.5  | 3610.8  | 3622.8  | 3626.1  | 3631.4  | 3641.6  | 3641.6  |
| 5°    | 3574.9  | 3573.2  | 3588.5  | 3602.3  | 3615.9  | 3627.9  | 3643.3  | 3665.5  | 3669.0  | 3681.0  | 3696.4  |
| 7.5°  | 3562.9  | 3552.6  | 3576.5  | 3593.6  | 3626.1  | 3655.3  | 3696.4  | 3734.0  | 3749.4  | 3754.6  | 3783.6  |
| 10°   | 3655.3  | 3638.1  | 3660.4  | 3670.7  | 3698.1  | 3727.2  | 3775.1  | 3834.9  | 3852.1  | 3872.7  | 3905.1  |
| 12.5° | 3812.7  | 3793.9  | 3826.4  | 3841.8  | 3867.5  | 3893.2  | 3925.6  | 3983.9  | 3992.4  | 4030.1  | 4060.8  |
| 15°   | 4028.4  | 4006.1  | 4026.6  | 4045.5  | 4088.2  | 4112.2  | 4144.7  | 4201.2  | 4201.2  | 4230.3  | 4252.5  |
| 17.5° | 4321.0  | 4291.9  | 4307.3  | 4314.1  | 4341.5  | 4377.5  | 4432.2  | 4481.8  | 4507.5  | 4497.2  | 4466.4  |
| 20°   | 4757.3  | 4721.5  | 4721.5  | 4687.2  | 4676.9  | 4706.0  | 4777.8  | 4846.3  | 4873.7  | 4820.7  | 4745.3  |
| 22.5° | 5412.7  | 5361.5  | 5332.4  | 5215.9  | 5169.8  | 5173.2  | 5245.0  | 5328.9  | 5351.1  | 5257.0  | 5087.6  |
| 25°   | 6246.1  | 6165.7  | 6126.3  | 5955.2  | 5850.8  | 5760.2  | 5816.7  | 5924.4  | 5955.2  | 5838.9  | 5565.0  |
| 27.5° | 7079.6  | 7084.7  | 7047.1  | 6841.7  | 6668.9  | 6502.8  | 6473.8  | 6586.6  | 6619.2  | 6487.4  | 6148.6  |
| 30°   | 8248.4  | 8126.8  | 8055.0  | 7808.6  | 7562.1  | 7329.4  | 7209.6  | 7255.8  | 7264.4  | 7106.9  | 6713.3  |
| 32.5° | 9256.3  | 9225.5  | 9071.5  | 8855.9  | 8539.3  | 8174.8  | 7974.5  | 7901.0  | 7887.3  | 7663.1  | 7195.9  |
| 35°   | 10404.6 | 10387.5 | 10224.9 | 9968.2  | 9625.9  | 9119.4  | 8758.3  | 8547.8  | 8530.7  | 8215.8  | 7673.4  |
| 37.5° | 11571.6 | 11571.6 | 11412.5 | 11131.8 | 10777.6 | 10144.4 | 9595.1  | 9261.4  | 9206.7  | 8795.9  | 8159.4  |
| 40°   | 12502.5 | 12446.1 | 12475.2 | 12357.1 | 11951.5 | 11279.0 | 10524.4 | 10040.1 | 9966.5  | 9473.7  | 8676.2  |
| 42.5° | 13031.3 | 13012.6 | 13187.1 | 13318.8 | 13152.9 | 12615.5 | 11547.6 | 10883.8 | 10781.1 | 10219.8 | 9271.7  |
| 45°   | 13149.4 | 13128.9 | 13440.3 | 13923.0 | 14155.7 | 13934.9 | 12660.0 | 11771.8 | 11647.0 | 11000.1 | 9910.0  |
| 47.5° | 12877.4 | 12836.3 | 13293.2 | 14054.7 | 14800.8 | 15189.3 | 13864.8 | 12735.3 | 12553.9 | 11759.9 | 10565.4 |
| 50°   | 12059.3 | 12020.0 | 12711.3 | 13722.7 | 15018.2 | 16041.5 | 15172.2 | 13756.9 | 13479.7 | 12574.5 | 11227.6 |
| 52.5° | 10281.4 | 10300.1 | 11383.4 | 12772.9 | 14732.3 | 16572.0 | 16298.2 | 14833.3 | 14499.6 | 13407.8 | 11848.9 |
| 55°   | 8008.7  | 8049.8  | 9381.2  | 10911.1 | 13589.2 | 16491.5 | 17066.6 | 15942.2 | 15610.2 | 14191.6 | 12490.6 |
| 57.5° | 5734.5  | 5915.9  | 7163.4  | 8677.9  | 11393.7 | 15216.6 | 17234.2 | 16996.3 | 16674.7 | 15047.2 | 13118.7 |
| 60°   | 3716.9  | 3749.4  | 5032.9  | 6559.3  | 8676.2  | 12951.0 | 16893.7 | 17795.5 | 17544.0 | 15920.0 | 13644.0 |
| 62.5° | 2382.1  | 2404.3  | 3186.4  | 4587.9  | 6244.4  | 9581.4  | 15747.2 | 18142.9 | 18065.9 | 16496.7 | 14148.8 |
| 65°   | 1750.6  | 1733.5  | 2140.8  | 3032.4  | 4206.3  | 5909.0  | 13520.8 | 17975.2 | 18127.5 | 16857.8 | 14566.4 |
| 67.5° | 1461.4  | 1437.5  | 1637.6  | 2099.7  | 3099.1  | 3355.8  | 10004.1 | 16885.1 | 17443.0 | 16816.7 | 14872.6 |
| 70°   | 1331.4  | 1310.9  | 1432.3  | 1558.9  | 2418.1  | 2246.9  | 5043.1  | 14679.3 | 15538.4 | 16349.6 | 14823.0 |
| 72.5° | 1127.7  | 1091.8  | 1257.8  | 1384.5  | 1880.7  | 1723.2  | 2084.3  | 11275.6 | 12322.9 | 14852.1 | 14124.9 |
| 75°   | 874.4   | 850.5   | 992.5   | 1218.4  | 1413.5  | 1345.1  | 1317.6  | 6846.8  | 7990.0  | 11486.0 | 12357.1 |
| 77.5° | 693.1   | 660.5   | 790.6   | 949.8   | 1271.5  | 1014.7  | 960.0   | 2948.5  | 4081.3  | 7332.8  | 9246.0  |
| 80°   | 521.9   | 492.8   | 600.6   | 751.2   | 977.1   | 765.0   | 621.2   | 1203.0  | 1538.4  | 3715.2  | 4649.5  |
| 82.5° | 371.4   | 345.6   | 419.2   | 551.0   | 657.1   | 686.2   | 381.6   | 674.2   | 758.1   | 1432.3  | 1038.7  |
| 85°   | 237.9   | 222.4   | 280.6   | 345.6   | 417.6   | 441.5   | 232.8   | 352.5   | 386.7   | 590.4   | 433.0   |
| 87.5° | 130.1   | 106.1   | 150.6   | 160.8   | 193.4   | 176.3   | 111.2   | 128.3   | 138.6   | 213.9   | 183.1   |
| 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°    | 3634.8  | 3634.8  | 3634.8  | 3634.8 | 3634.8 | 3634.8 | 3634.8 | 3634.8 | 3634.8 | 3634.8 | 3634.8 |
| 2.5°  | 3648.5  | 3653.6  | 3670.7  | 3675.9 | 3687.8 | 3703.2 | 3713.5 | 3723.7 | 3723.7 | 3734.0 | 3734.0 |
| 5°    | 3698.1  | 3710.1  | 3746.0  | 3764.8 | 3795.6 | 3826.4 | 3845.2 | 3867.5 | 3881.2 | 3888.0 | 3891.4 |
| 7.5°  | 3793.9  | 3812.7  | 3864.0  | 3896.5 | 3949.6 | 3992.4 | 4021.5 | 4052.3 | 4059.1 | 4078.0 | 4071.1 |
| 10°   | 3923.9  | 3946.2  | 4004.4  | 4066.0 | 4129.3 | 4182.3 | 4209.8 | 4232.0 | 4240.5 | 4244.0 | 4235.4 |
| 12.5° | 4072.8  | 4105.3  | 4180.7  | 4255.9 | 4322.7 | 4368.9 | 4375.7 | 4370.6 | 4346.6 | 4326.1 | 4326.1 |
| 15°   | 4255.9  | 4285.0  | 4368.9  | 4451.1 | 4516.0 | 4524.7 | 4481.8 | 4454.4 | 4425.3 | 4420.2 | 4420.2 |
| 17.5° | 4474.9  | 4490.4  | 4567.4  | 4647.9 | 4653.0 | 4623.9 | 4560.5 | 4534.9 | 4507.5 | 4488.7 | 4490.4 |
| 20°   | 4730.0  | 4724.8  | 4779.6  | 4813.8 | 4777.8 | 4688.9 | 4593.0 | 4550.3 | 4522.9 | 4500.7 | 4502.4 |
| 22.5° | 5034.6  | 4995.2  | 4988.4  | 4979.9 | 4884.0 | 4697.5 | 4567.4 | 4512.7 | 4469.8 | 4439.1 | 4449.3 |
| 25°   | 5477.8  | 5327.2  | 5222.8  | 5164.7 | 4949.0 | 4651.2 | 4485.3 | 4363.7 | 4283.4 | 4230.3 | 4250.8 |
| 27.5° | 6032.2  | 5779.0  | 5515.4  | 5373.4 | 4949.0 | 4557.2 | 4286.8 | 4090.0 | 3958.1 | 3903.4 | 3930.8 |
| 30°   | 6561.0  | 6295.8  | 5907.3  | 5625.0 | 4937.0 | 4403.1 | 3966.7 | 3693.0 | 3538.9 | 3484.2 | 3516.7 |
| 32.5° | 7012.8  | 6723.6  | 6323.1  | 5900.5 | 4907.9 | 4153.3 | 3569.8 | 3266.8 | 3117.9 | 3053.0 | 3085.5 |
| 35°   | 7432.1  | 7124.1  | 6740.7  | 6203.4 | 4830.9 | 3787.1 | 3133.3 | 2902.3 | 2736.3 | 2631.9 | 2666.1 |
| 37.5° | 7861.6  | 7495.4  | 7136.0  | 6477.2 | 4692.3 | 3359.2 | 2797.9 | 2601.1 | 2406.1 | 2265.8 | 2303.4 |
| 40°   | 8328.7  | 7890.7  | 7558.7  | 6639.7 | 4464.7 | 2952.0 | 2537.8 | 2358.1 | 2151.1 | 2002.2 | 2031.2 |
| 42.5° | 8874.7  | 8364.7  | 8029.3  | 6723.6 | 4153.3 | 2662.7 | 2368.4 | 2192.2 | 1997.0 | 1875.5 | 1899.5 |
| 45°   | 9444.6  | 8886.6  | 8458.8  | 6721.8 | 3805.9 | 2527.5 | 2313.6 | 2139.1 | 1923.5 | 1796.8 | 1817.3 |
| 47.5° | 10041.7 | 9432.6  | 8830.2  | 6612.4 | 3504.7 | 2546.4 | 2282.9 | 2024.5 | 1786.6 | 1663.4 | 1680.5 |
| 50°   | 10640.7 | 10029.8 | 9189.5  | 6407.0 | 3376.4 | 2505.3 | 2168.2 | 1863.6 | 1582.9 | 1471.7 | 1478.6 |
| 52.5° | 11234.5 | 10664.7 | 9499.3  | 6114.4 | 3246.3 | 2353.0 | 2021.0 | 1654.8 | 1499.1 | 1422.1 | 1422.1 |
| 55°   | 11831.8 | 11292.7 | 9836.4  | 5688.2 | 2921.1 | 2175.0 | 1774.6 | 1576.0 | 1432.3 | 1362.2 | 1355.4 |
| 57.5° | 12430.7 | 12018.3 | 10156.4 | 5262.1 | 2512.2 | 1956.0 | 1639.4 | 1480.2 | 1365.6 | 1305.7 | 1295.4 |
| 60°   | 13053.6 | 12848.3 | 10486.7 | 4870.3 | 2108.3 | 1675.4 | 1540.2 | 1403.2 | 1286.9 | 1220.2 | 1215.0 |
| 62.5° | 13695.3 | 13762.1 | 10745.1 | 4365.5 | 1737.0 | 1504.2 | 1451.2 | 1310.9 | 1197.9 | 1134.6 | 1132.8 |
| 65°   | 14342.2 | 14643.4 | 10914.5 | 3665.5 | 1408.4 | 1341.6 | 1355.4 | 1209.9 | 1095.2 | 1040.5 | 1038.7 |
| 67.5° | 14829.9 | 15278.2 | 10866.6 | 2774.0 | 1155.1 | 1187.7 | 1235.5 | 1103.8 | 996.0  | 953.1  | 954.9  |
| 70°   | 14884.6 | 15203.0 | 10394.3 | 1899.5 | 966.9  | 1037.0 | 1102.1 | 999.4  | 888.2  | 857.3  | 859.1  |
| 72.5° | 14155.7 | 14176.2 | 9078.3  | 1240.7 | 817.9  | 910.4  | 961.8  | 893.3  | 785.5  | 754.7  | 753.0  |
| 75°   | 12244.1 | 11723.9 | 6665.4  | 817.9  | 684.5  | 782.1  | 829.9  | 782.1  | 677.6  | 684.5  | 660.5  |
| 77.5° | 9276.9  | 8303.1  | 4047.2  | 581.8  | 571.5  | 657.1  | 722.1  | 688.0  | 598.9  | 672.5  | 592.1  |
| 80°   | 4779.6  | 4492.1  | 1805.4  | 434.7  | 451.8  | 525.3  | 593.8  | 549.3  | 474.1  | 451.8  | 412.5  |
| 82.5° | 1095.2  | 1273.2  | 711.9   | 311.5  | 326.9  | 378.2  | 453.5  | 412.5  | 340.5  | 287.5  | 284.0  |
| 85°   | 383.3   | 419.2   | 314.9   | 195.1  | 191.7  | 236.2  | 308.0  | 275.5  | 231.0  | 184.8  | 195.1  |
| 87.5° | 121.5   | 159.2   | 118.1   | 78.7   | 82.1   | 106.1  | 142.1  | 130.1  | 107.8  | 70.2   | 73.6   |
| 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)