

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: P971089

Luminaire Tested: **NAV-SB6C-835-U-T4W-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P971089  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6C-835-U-T4W-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 33258.2 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G5

Input Watts (W): 300.9  
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

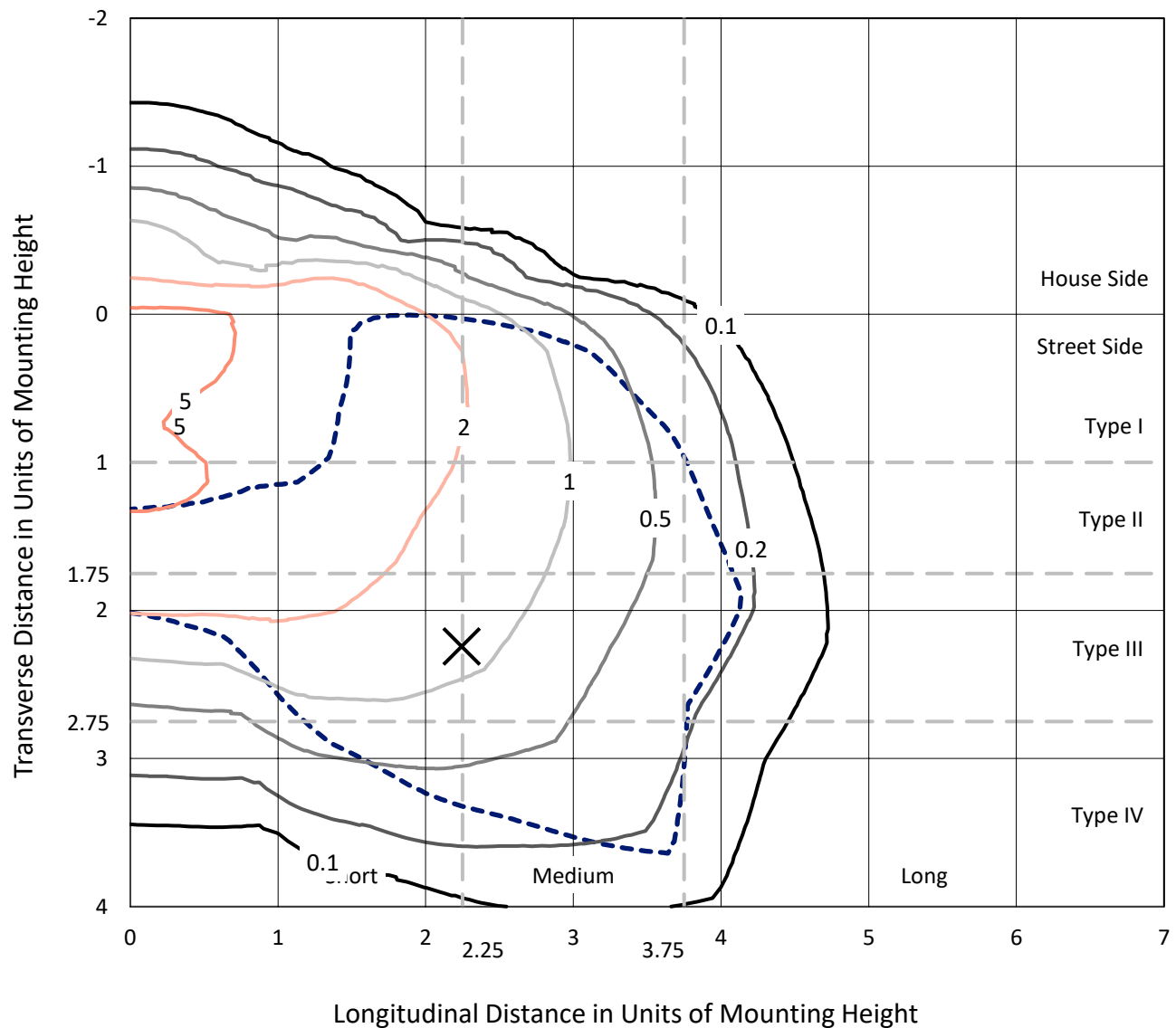


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## Iso-Footcandle Lines of Horizontal Illumination

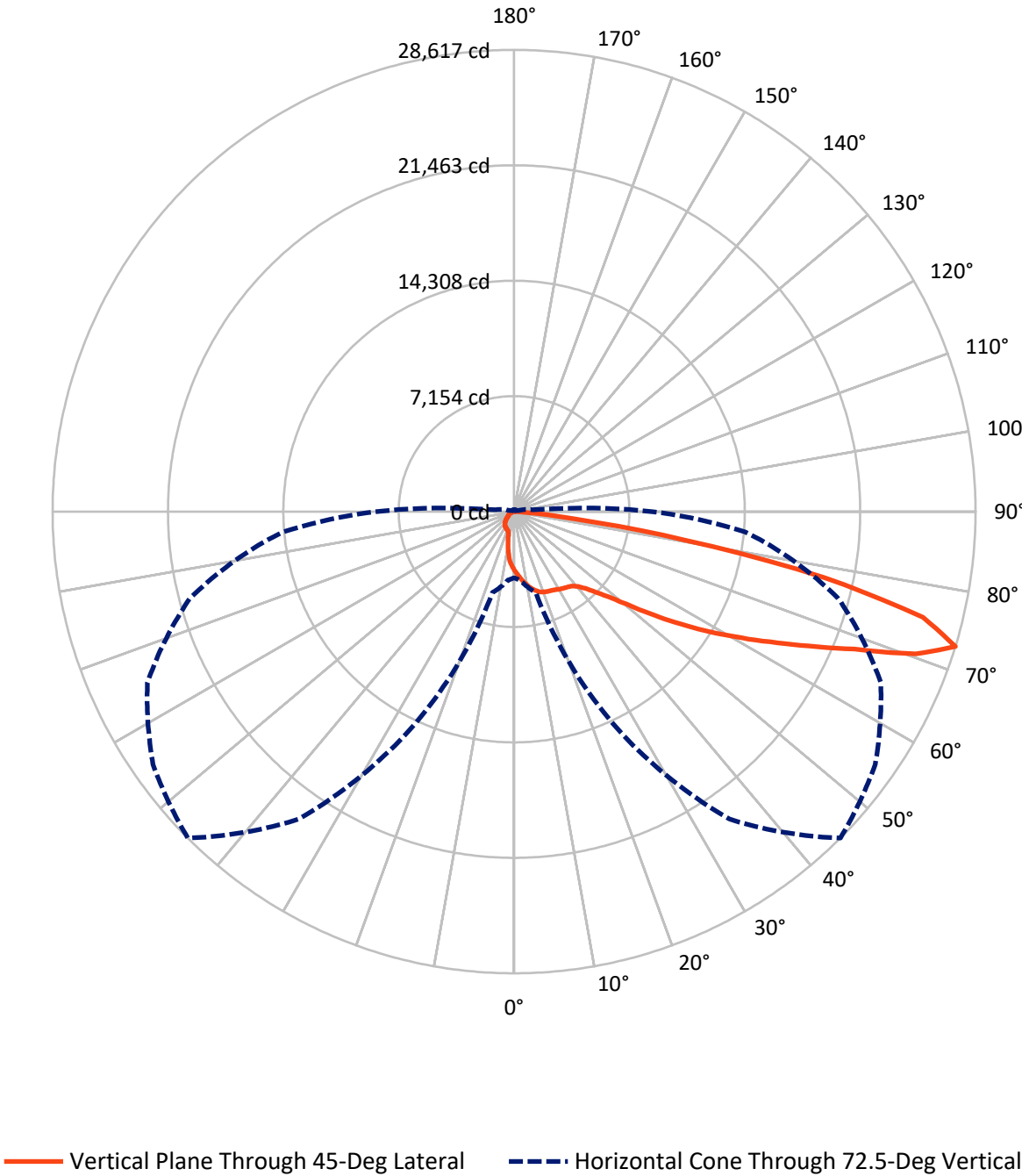
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc  
Type IV - 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    | 3494.5   | 0.0    | 3494.5  |
|                    | % Fixture | 10.5     | 0.0    | 10.5    |
| <b>Street Side</b> | Lumens    | 29763.7  | 0.0    | 29763.7 |
|                    | % Fixture | 89.5     | 0.0    | 89.5    |
| <b>Total</b>       | Lumens    | 33258.2  | 0.0    | 33258.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 343.3   | 1.0       |
| 10°-20°   | 1003.3  | 3.0       |
| 20°-30°   | 1647.6  | 5.0       |
| 30°-40°   | 2336.6  | 7.0       |
| 40°-50°   | 3862.2  | 11.6      |
| 50°-60°   | 6938.0  | 20.9      |
| 60°-70°   | 9633.8  | 29.0      |
| 70°-80°   | 6988.1  | 21.0      |
| 80°-90°   | 505.2   | 1.5       |
| 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°    | 33258.2 | 100.0     |
| 0°-180°   | 33258.2 | 100.0     |

**Coefficient of Utilization**



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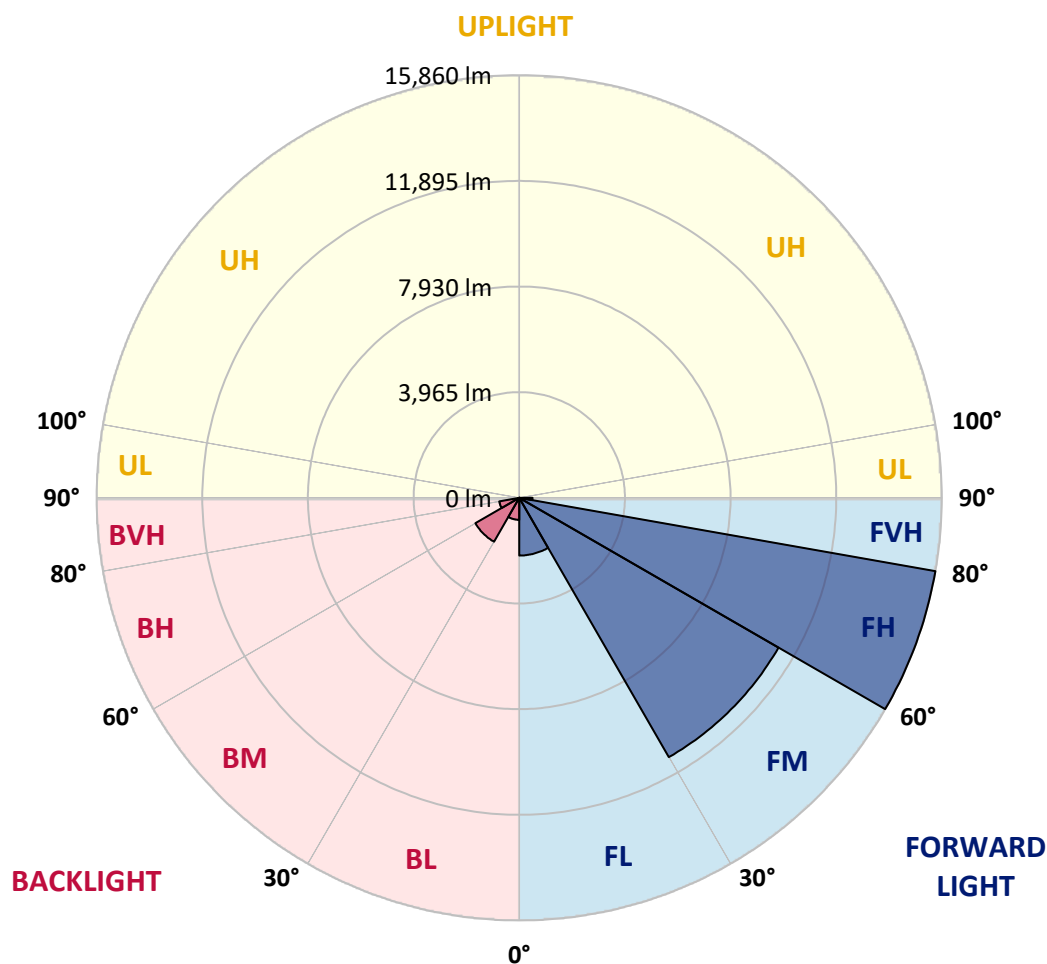
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2166.4  | 6.5       |                         |      |         |
| FM   | (30°-60°)   | 11236.4 | 33.8      |                         |      |         |
| FH   | (60°-80°)   | 15859.9 | 47.7      |                         |      | G5      |
| FVH  | (80°-90°)   | 501.0   | 1.5       |                         |      | G4/750  |
| BL   | (0°-30°)    | 827.7   | 2.5       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1900.5  | 5.7       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 762.0   | 2.3       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 4.2     | 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-G5**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 46°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3643.5  | 3643.5  | 3643.5  | 3643.5  | 3643.5  | 3643.5  | 3643.5  | 3643.5  | 3643.5  | 3643.5  | 3643.5  |
| 2.5°  | 3979.5  | 3986.3  | 3981.7  | 3954.6  | 3909.1  | 3884.1  | 3870.5  | 3825.1  | 3795.6  | 3743.4  | 3688.9  |
| 5°    | 4345.0  | 4372.2  | 4356.4  | 4301.8  | 4215.5  | 4154.3  | 4136.1  | 4043.0  | 3959.1  | 3861.5  | 3747.9  |
| 7.5°  | 4733.1  | 4746.8  | 4717.3  | 4646.8  | 4531.1  | 4426.7  | 4410.8  | 4281.4  | 4147.5  | 3997.6  | 3843.2  |
| 10°   | 5069.1  | 5085.0  | 5039.6  | 4937.4  | 4805.8  | 4676.4  | 4653.7  | 4510.7  | 4351.7  | 4167.9  | 3970.4  |
| 12.5° | 5350.6  | 5366.5  | 5307.4  | 5184.9  | 5039.6  | 4905.6  | 4883.0  | 4733.1  | 4558.4  | 4354.0  | 4108.9  |
| 15°   | 5564.0  | 5593.5  | 5514.1  | 5382.4  | 5225.8  | 5091.8  | 5080.5  | 4932.9  | 4762.7  | 4535.6  | 4274.6  |
| 17.5° | 5688.9  | 5718.4  | 5643.4  | 5484.6  | 5350.6  | 5237.1  | 5223.5  | 5100.9  | 4942.0  | 4724.0  | 4435.8  |
| 20°   | 5709.2  | 5736.5  | 5657.1  | 5518.6  | 5407.4  | 5316.6  | 5309.7  | 5221.2  | 5105.4  | 4896.6  | 4610.6  |
| 22.5° | 5648.0  | 5682.1  | 5609.4  | 5498.2  | 5421.0  | 5373.4  | 5364.2  | 5314.3  | 5248.5  | 5071.4  | 4774.0  |
| 25°   | 5584.4  | 5611.7  | 5557.2  | 5459.6  | 5418.8  | 5414.2  | 5421.0  | 5411.9  | 5398.3  | 5248.5  | 4964.7  |
| 27.5° | 5579.9  | 5609.4  | 5548.1  | 5455.0  | 5432.3  | 5480.1  | 5486.8  | 5530.0  | 5541.4  | 5409.6  | 5148.6  |
| 30°   | 5618.5  | 5638.9  | 5579.9  | 5482.3  | 5470.9  | 5579.9  | 5582.2  | 5659.3  | 5677.5  | 5545.9  | 5330.2  |
| 32.5° | 5702.5  | 5725.1  | 5666.2  | 5523.1  | 5507.2  | 5659.3  | 5666.2  | 5768.3  | 5797.8  | 5691.1  | 5520.9  |
| 35°   | 5900.0  | 5927.3  | 5859.1  | 5636.7  | 5579.9  | 5734.3  | 5754.7  | 5875.0  | 5934.0  | 5845.5  | 5718.4  |
| 37.5° | 6392.6  | 6313.2  | 6220.1  | 5866.0  | 5745.6  | 5852.3  | 5886.4  | 6027.1  | 6131.5  | 6029.4  | 5954.4  |
| 40°   | 7616.2  | 7366.5  | 7075.9  | 6256.4  | 6036.2  | 6104.3  | 6131.5  | 6272.3  | 6415.3  | 6315.4  | 6279.0  |
| 42.5° | 9452.7  | 9157.6  | 8689.9  | 7155.3  | 6474.3  | 6508.3  | 6528.8  | 6651.4  | 6853.5  | 6773.9  | 6783.0  |
| 45°   | 11089.4 | 10982.8 | 10506.0 | 8689.9  | 7293.8  | 7125.8  | 7150.8  | 7214.4  | 7511.7  | 7482.2  | 7541.2  |
| 47.5° | 12347.0 | 12285.8 | 11918.0 | 10451.5 | 8678.6  | 7881.7  | 7952.2  | 7981.7  | 8410.7  | 8515.1  | 8674.1  |
| 50°   | 13314.1 | 13291.4 | 12962.3 | 12017.9 | 10487.8 | 8996.4  | 9021.3  | 8957.8  | 9600.3  | 9859.1  | 10160.9 |
| 52.5° | 14226.7 | 14303.9 | 14061.0 | 13473.0 | 12419.7 | 10456.0 | 10451.5 | 10151.9 | 11019.1 | 11409.5 | 11924.8 |
| 55°   | 15050.7 | 15078.0 | 15103.0 | 14957.6 | 14362.9 | 12117.8 | 12074.6 | 11584.3 | 12664.9 | 13069.0 | 13627.4 |
| 57.5° | 15824.9 | 15836.1 | 16058.7 | 16356.0 | 16385.5 | 13902.1 | 13822.6 | 13234.7 | 14462.7 | 14751.1 | 15093.8 |
| 60°   | 16344.6 | 16396.9 | 16866.8 | 17693.1 | 18054.0 | 15743.1 | 15700.0 | 15100.7 | 16292.5 | 16426.4 | 16362.9 |
| 62.5° | 15595.6 | 15913.3 | 17098.3 | 18737.4 | 19629.5 | 17784.0 | 17763.5 | 17200.5 | 18217.5 | 18108.6 | 17563.7 |
| 65°   | 12624.0 | 13162.0 | 15246.0 | 19443.3 | 21175.5 | 20063.1 | 20092.7 | 19493.3 | 20194.8 | 19840.6 | 18539.9 |
| 67.5° | 8830.7  | 9398.2  | 11863.6 | 19500.1 | 22903.0 | 22739.5 | 22909.8 | 21970.0 | 22294.6 | 21500.1 | 18771.4 |
| 70°   | 6106.5  | 6399.4  | 8004.3  | 18278.8 | 24249.1 | 26426.1 | 26421.6 | 25011.9 | 24383.1 | 22256.0 | 17590.9 |
| 72.5° | 4106.6  | 4258.7  | 5198.5  | 14501.4 | 23259.4 | 28616.9 | 28485.2 | 27336.5 | 25086.9 | 20814.5 | 14371.9 |
| 75°   | 1732.0  | 1843.4  | 2406.3  | 8149.7  | 18401.4 | 26181.1 | 25824.6 | 24158.3 | 22290.1 | 16390.1 | 8966.9  |
| 77.5° | 549.4   | 597.1   | 948.9   | 2917.0  | 10136.0 | 19679.5 | 19302.6 | 15087.1 | 14939.5 | 8222.2  | 3278.1  |
| 80°   | 261.1   | 304.2   | 533.5   | 1171.4  | 3988.6  | 10703.5 | 10651.3 | 6844.3  | 6426.6  | 2220.1  | 658.4   |
| 82.5° | 113.5   | 134.0   | 295.1   | 626.6   | 1784.3  | 3818.3  | 3895.5  | 2329.1  | 1927.3  | 842.2   | 202.0   |
| 85°   | 36.3    | 47.7    | 136.2   | 288.3   | 753.7   | 948.9   | 937.6   | 553.9   | 776.3   | 458.6   | 70.4    |
| 87.5° | 0.0     | 0.0     | 45.4    | 65.8    | 77.2    | 54.5    | 61.3    | 47.7    | 215.7   | 127.1   | 25.0    |
| 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°    | 3643.5  | 3643.5  | 3643.5 | 3643.5 | 3643.5 | 3643.5 | 3643.5 | 3643.5 | 3643.5 | 3643.5 | 3643.5 |
| 2.5°  | 3661.7  | 3625.3  | 3561.8 | 3502.7 | 3450.6 | 3398.3 | 3366.5 | 3321.1 | 3316.6 | 3316.6 | 3328.0 |
| 5°    | 3686.6  | 3627.6  | 3514.1 | 3393.8 | 3255.3 | 3123.7 | 2992.0 | 2864.9 | 2824.0 | 2794.5 | 2808.1 |
| 7.5°  | 3759.3  | 3666.2  | 3486.8 | 3257.6 | 2994.2 | 2706.0 | 2503.9 | 2286.0 | 2202.0 | 2156.6 | 2163.4 |
| 10°   | 3863.7  | 3736.5  | 3464.2 | 3062.4 | 2635.6 | 2242.9 | 1954.6 | 1718.4 | 1627.7 | 1589.1 | 1589.1 |
| 12.5° | 3979.5  | 3822.8  | 3423.3 | 2819.5 | 2242.9 | 1772.9 | 1491.5 | 1382.5 | 1368.9 | 1368.9 | 1368.9 |
| 15°   | 4117.9  | 3927.3  | 3353.0 | 2533.4 | 1832.0 | 1402.9 | 1303.1 | 1307.6 | 1321.2 | 1330.2 | 1330.2 |
| 17.5° | 4260.9  | 4038.5  | 3241.7 | 2213.4 | 1468.7 | 1262.2 | 1264.4 | 1271.2 | 1282.6 | 1291.7 | 1291.7 |
| 20°   | 4415.3  | 4149.7  | 3094.2 | 1872.9 | 1259.9 | 1221.3 | 1228.2 | 1234.9 | 1244.0 | 1248.6 | 1250.8 |
| 22.5° | 4581.0  | 4254.2  | 2919.3 | 1539.1 | 1189.5 | 1187.3 | 1189.5 | 1196.4 | 1207.7 | 1207.7 | 1212.3 |
| 25°   | 4758.2  | 4370.0  | 2719.5 | 1296.2 | 1153.2 | 1153.2 | 1157.7 | 1162.2 | 1171.4 | 1171.4 | 1173.6 |
| 27.5° | 4939.7  | 4476.6  | 2508.5 | 1169.1 | 1121.5 | 1119.2 | 1119.2 | 1126.0 | 1130.5 | 1132.7 | 1135.1 |
| 30°   | 5139.5  | 4601.5  | 2297.3 | 1141.8 | 1096.4 | 1085.1 | 1078.3 | 1082.8 | 1087.4 | 1089.7 | 1094.2 |
| 32.5° | 5343.8  | 4721.8  | 2108.9 | 1153.2 | 1071.5 | 1051.0 | 1028.4 | 1023.8 | 1023.8 | 1032.9 | 1039.7 |
| 35°   | 5570.8  | 4853.5  | 1963.6 | 1191.8 | 1057.9 | 1001.1 | 964.8  | 944.3  | 946.6  | 960.2  | 967.1  |
| 37.5° | 5843.2  | 5012.4  | 1856.9 | 1225.9 | 1048.8 | 944.3  | 885.3  | 860.4  | 844.5  | 860.4  | 855.9  |
| 40°   | 6199.6  | 5246.2  | 1779.7 | 1253.1 | 1037.4 | 878.5  | 799.1  | 758.2  | 728.7  | 737.8  | 733.3  |
| 42.5° | 6724.0  | 5613.9  | 1750.3 | 1255.3 | 1012.5 | 801.3  | 710.5  | 656.1  | 612.9  | 615.2  | 606.1  |
| 45°   | 7459.5  | 6195.1  | 1902.3 | 1225.9 | 958.0  | 717.4  | 617.5  | 544.8  | 517.6  | 510.8  | 501.7  |
| 47.5° | 8467.4  | 7041.9  | 2254.2 | 1164.6 | 878.5  | 635.6  | 526.6  | 465.4  | 445.0  | 433.6  | 426.8  |
| 50°   | 9818.2  | 8129.2  | 2644.7 | 1096.4 | 799.1  | 558.4  | 451.7  | 413.2  | 399.5  | 388.2  | 385.9  |
| 52.5° | 11384.6 | 9232.5  | 2964.7 | 1028.4 | 719.7  | 490.4  | 404.1  | 381.4  | 370.0  | 360.9  | 358.6  |
| 55°   | 12821.5 | 9992.9  | 2946.6 | 955.7  | 642.5  | 435.8  | 370.0  | 356.4  | 342.8  | 333.7  | 329.1  |
| 57.5° | 13715.9 | 10099.6 | 2429.0 | 876.3  | 553.9  | 392.7  | 338.2  | 329.1  | 313.2  | 302.0  | 299.6  |
| 60°   | 14126.9 | 9491.3  | 1702.5 | 771.8  | 465.4  | 351.9  | 304.2  | 299.6  | 279.2  | 263.3  | 258.8  |
| 62.5° | 14201.7 | 8360.7  | 1135.1 | 642.5  | 388.2  | 313.2  | 270.2  | 263.3  | 236.1  | 208.9  | 195.3  |
| 65°   | 13897.6 | 6744.5  | 785.5  | 501.7  | 331.5  | 272.4  | 231.5  | 217.9  | 188.4  | 161.1  | 152.1  |
| 67.5° | 12935.0 | 4735.4  | 547.0  | 360.9  | 281.5  | 215.7  | 183.9  | 179.4  | 156.6  | 134.0  | 127.1  |
| 70°   | 11171.2 | 2699.1  | 365.5  | 270.2  | 222.4  | 147.6  | 145.2  | 149.9  | 127.1  | 109.0  | 99.8   |
| 72.5° | 8565.1  | 1234.9  | 227.0  | 197.5  | 152.1  | 99.8   | 115.8  | 118.1  | 97.6   | 81.7   | 72.7   |
| 75°   | 5041.9  | 528.9   | 143.0  | 127.1  | 77.2   | 65.8   | 83.9   | 86.3   | 65.8   | 52.2   | 45.4   |
| 77.5° | 1716.2  | 199.8   | 90.8   | 74.9   | 38.6   | 36.3   | 54.5   | 54.5   | 36.3   | 20.4   | 15.9   |
| 80°   | 390.4   | 74.9    | 45.4   | 29.5   | 18.1   | 15.9   | 18.1   | 15.9   | 9.1    | 2.3    | 0.0    |
| 82.5° | 111.2   | 29.5    | 18.1   | 11.4   | 6.8    | 6.8    | 2.3    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 31.8    | 13.6    | 4.5    | 4.5    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 13.6    | 2.3     | 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)