

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: P970526

Luminaire Tested: **NAV-SB6B-830-U-T3R-HSS**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P970526  
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-SB6B-830-U-T3R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 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: 26183.6 lumens  
Efficiency: N/A  
Efficacy: 118.8 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): 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



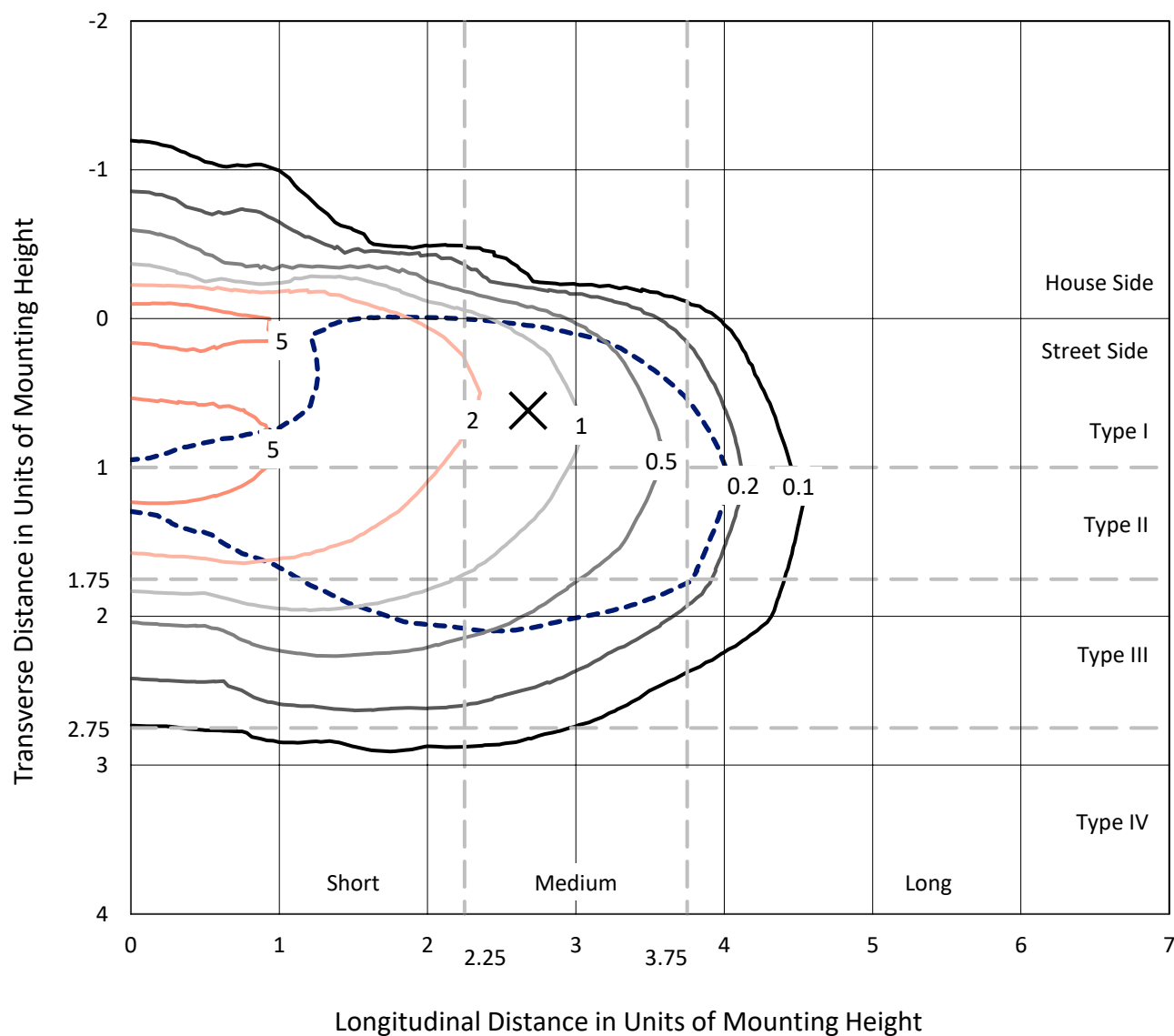
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

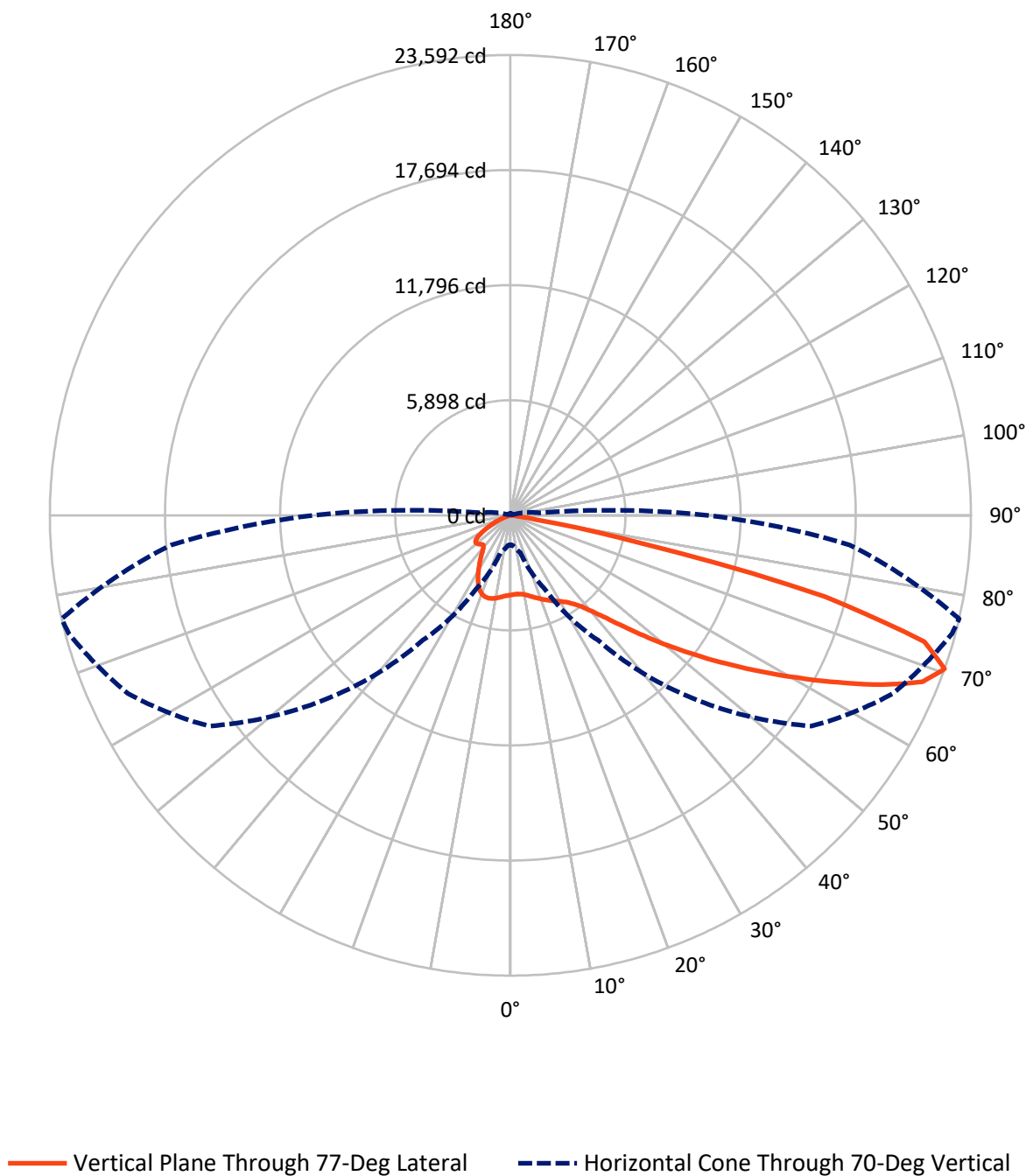
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc  
Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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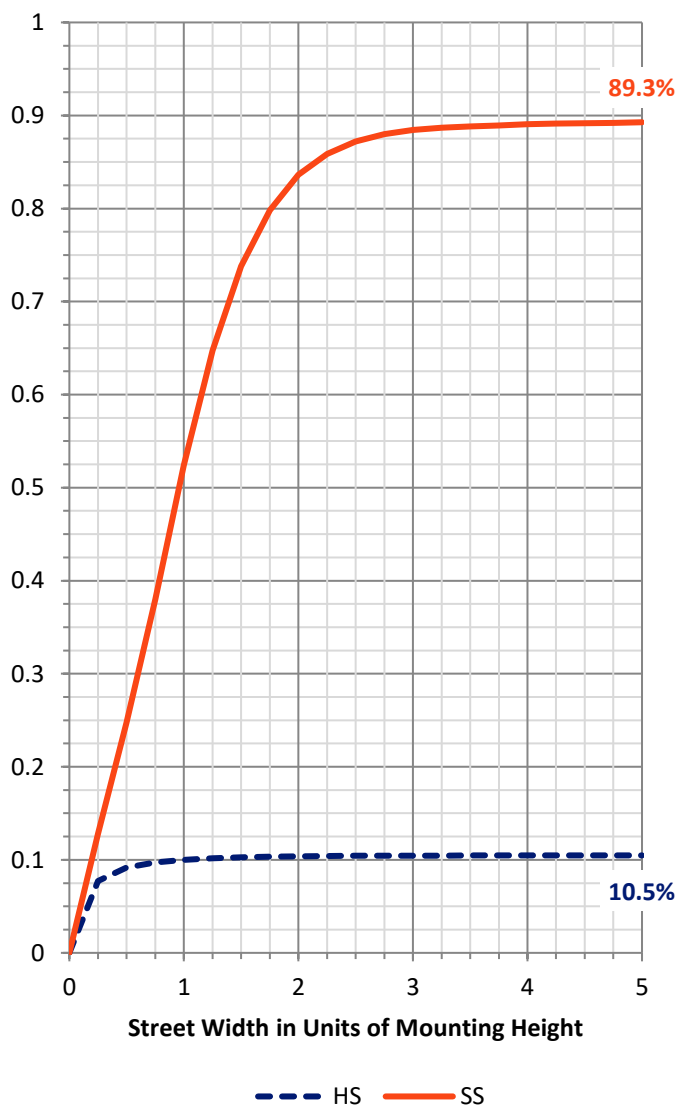
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2760.1   | 0.0    | 2760.1  |
|                    | % Fixture | 10.5     | 0.0    | 10.5    |
| <b>Street Side</b> | Lumens    | 23423.5  | 0.0    | 23423.5 |
|                    | % Fixture | 89.5     | 0.0    | 89.5    |
| <b>Total</b>       | Lumens    | 26183.6  | 0.0    | 26183.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 352.0   | 1.3       |
| 10°-20°   | 835.6   | 3.2       |
| 20°-30°   | 1292.4  | 4.9       |
| 30°-40°   | 2345.2  | 9.0       |
| 40°-50°   | 4426.8  | 16.9      |
| 50°-60°   | 6396.3  | 24.4      |
| 60°-70°   | 6808.7  | 26.0      |
| 70°-80°   | 3608.2  | 13.8      |
| 80°-90°   | 118.5   | 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°    | 26183.6 | 100.0     |
| 0°-180°   | 26183.6 | 100.0     |

**Coefficient of Utilization**



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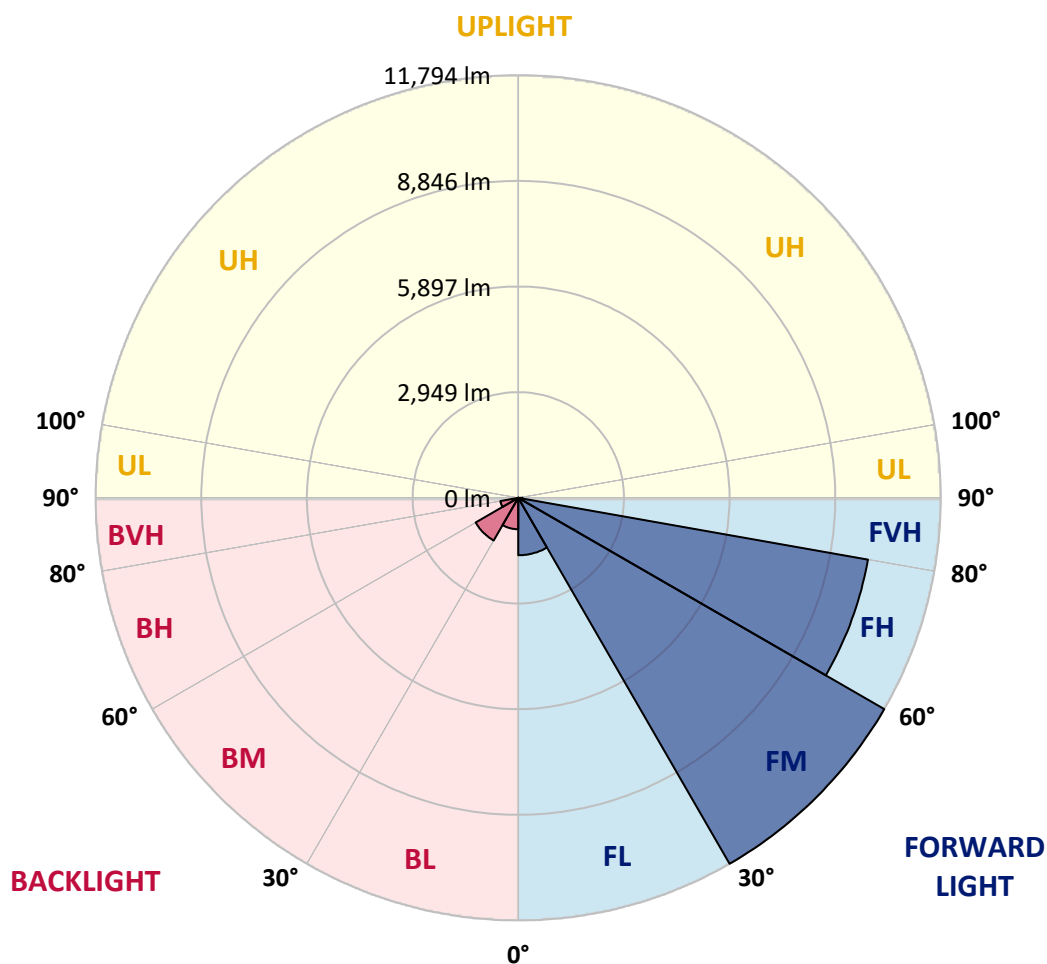
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1603.1  | 6.1       |                         |      |          |
| FM   | (30°-60°)   | 11794.3 | 45.0      |                         |      |          |
| FH   | (60°-80°)   | 9910.9  | 37.9      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 115.3   | 0.4       |                         |      | G2/225   |
| BL   | (0°-30°)    | 876.9   | 3.3       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 1374.0  | 5.2       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 506.0   | 1.9       | B2/1000                 |      | G2/1000  |
| BVH  | (80°-90°)   | 3.2     | 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-G4**

Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 77°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4084.2  | 4084.2  | 4084.2  | 4084.2  | 4084.2  | 4084.2  | 4084.2  | 4084.2  | 4084.2  | 4084.2  | 4084.2  |
| 2.5°  | 3834.5  | 3869.2  | 3864.2  | 3887.4  | 3895.7  | 3928.7  | 3961.8  | 4006.4  | 4056.0  | 4054.4  | 4087.5  |
| 5°    | 3617.8  | 3652.6  | 3660.9  | 3692.3  | 3732.0  | 3783.3  | 3851.0  | 3940.3  | 4033.0  | 4047.8  | 4113.9  |
| 7.5°  | 3361.6  | 3398.0  | 3419.5  | 3482.3  | 3555.0  | 3660.9  | 3771.7  | 3902.3  | 4056.0  | 4077.6  | 4204.9  |
| 10°   | 3105.3  | 3138.3  | 3166.4  | 3255.8  | 3371.5  | 3528.6  | 3708.9  | 3897.4  | 4104.0  | 4135.5  | 4315.7  |
| 12.5° | 2946.6  | 2977.9  | 3009.4  | 3087.1  | 3231.0  | 3422.8  | 3667.4  | 3920.5  | 4183.3  | 4228.0  | 4466.1  |
| 15°   | 2890.3  | 2918.5  | 2943.3  | 3012.7  | 3146.6  | 3364.9  | 3659.2  | 3968.4  | 4284.3  | 4343.7  | 4648.1  |
| 17.5° | 2898.6  | 2913.5  | 2930.1  | 2983.0  | 3113.5  | 3338.4  | 3674.1  | 4051.1  | 4403.3  | 4456.2  | 4829.9  |
| 20°   | 2946.6  | 2954.9  | 2956.5  | 2992.9  | 3108.6  | 3335.1  | 3703.8  | 4130.4  | 4515.7  | 4586.9  | 5010.1  |
| 22.5° | 3007.8  | 3011.0  | 3007.8  | 3032.6  | 3140.0  | 3360.0  | 3743.5  | 4226.4  | 4641.4  | 4707.5  | 5192.0  |
| 25°   | 3293.8  | 3231.0  | 3151.6  | 3103.6  | 3193.0  | 3407.9  | 3803.1  | 4355.3  | 4778.7  | 4843.1  | 5369.0  |
| 27.5° | 4181.7  | 4001.5  | 3717.1  | 3398.0  | 3302.0  | 3477.3  | 3885.8  | 4486.0  | 4917.5  | 4975.5  | 5559.1  |
| 30°   | 5623.6  | 5387.1  | 4904.3  | 4185.1  | 3652.6  | 3622.9  | 3993.2  | 4616.6  | 5064.7  | 5127.6  | 5762.4  |
| 32.5° | 7068.8  | 7010.9  | 6453.6  | 5458.2  | 4441.3  | 3947.0  | 4171.9  | 4793.5  | 5259.8  | 5309.4  | 6036.9  |
| 35°   | 8530.5  | 8413.1  | 7956.7  | 6972.9  | 5656.7  | 4606.7  | 4469.4  | 5025.1  | 5516.1  | 5572.3  | 6437.1  |
| 37.5° | 9649.9  | 9578.8  | 9296.0  | 8485.8  | 7098.5  | 5625.2  | 4978.7  | 5383.8  | 5888.1  | 5950.9  | 6949.7  |
| 40°   | 10638.7 | 10605.6 | 10509.7 | 9975.6  | 8710.7  | 6958.0  | 5770.7  | 5939.4  | 6404.1  | 6478.4  | 7578.0  |
| 42.5° | 11415.8 | 11493.5 | 11548.2 | 11399.3 | 10372.5 | 8479.2  | 6835.6  | 6719.9  | 7123.3  | 7199.4  | 8378.3  |
| 45°   | 12211.1 | 12237.7 | 12457.5 | 12672.5 | 12022.6 | 10069.9 | 8036.1  | 7634.3  | 8017.9  | 8112.2  | 9337.3  |
| 47.5° | 12722.1 | 12828.0 | 13214.8 | 13593.6 | 13410.0 | 11647.4 | 9325.8  | 8714.0  | 9054.6  | 9231.6  | 10412.2 |
| 50°   | 12760.1 | 12960.2 | 13492.7 | 14152.4 | 14420.3 | 13148.7 | 10728.0 | 9944.2  | 10306.4 | 10501.4 | 11559.7 |
| 52.5° | 12126.9 | 12437.8 | 13262.8 | 14228.4 | 14965.9 | 14420.3 | 12178.1 | 11174.4 | 11639.1 | 11893.7 | 12750.2 |
| 55°   | 9297.7  | 9704.5  | 12398.0 | 13815.1 | 14987.4 | 15384.2 | 13590.2 | 12455.9 | 13123.9 | 13411.6 | 14036.7 |
| 57.5° | 8100.6  | 8305.6  | 9747.4  | 13097.4 | 14588.9 | 15772.8 | 14866.7 | 13676.2 | 14739.4 | 15096.5 | 15252.0 |
| 60°   | 6739.7  | 7009.3  | 8175.0  | 11923.5 | 14048.2 | 15810.8 | 15994.4 | 15250.4 | 16490.5 | 16892.3 | 16366.5 |
| 62.5° | 4580.2  | 4872.8  | 6032.0  | 9906.2  | 13309.1 | 15792.7 | 16918.8 | 16870.8 | 18436.7 | 18868.2 | 17310.6 |
| 65°   | 2837.4  | 3021.0  | 3784.9  | 8089.0  | 12275.7 | 15812.6 | 17886.0 | 18838.5 | 20490.3 | 20928.4 | 18041.4 |
| 67.5° | 2242.2  | 2326.4  | 2725.0  | 6210.6  | 10494.9 | 15366.1 | 18851.7 | 20688.7 | 22423.3 | 22770.5 | 18264.7 |
| 70°   | 1506.3  | 1557.6  | 1982.6  | 4163.5  | 7807.8  | 13305.8 | 18833.5 | 21618.0 | 23418.7 | 23592.3 | 17451.1 |
| 72.5° | 793.7   | 833.3   | 1159.1  | 1928.0  | 4715.8  | 9458.1  | 15875.4 | 20506.9 | 22428.2 | 22167.0 | 14916.3 |
| 75°   | 396.9   | 463.0   | 780.4   | 978.9   | 2014.0  | 5274.6  | 9858.2  | 16168.0 | 17652.9 | 16641.0 | 9570.5  |
| 77.5° | 300.9   | 363.8   | 644.8   | 644.8   | 701.1   | 1775.9  | 4175.1  | 8818.2  | 8133.6  | 6772.8  | 2809.3  |
| 80°   | 191.8   | 248.0   | 563.9   | 487.8   | 292.6   | 451.4   | 1088.0  | 2470.4  | 1727.9  | 1314.6  | 511.0   |
| 82.5° | 112.4   | 162.1   | 469.6   | 322.5   | 163.7   | 167.0   | 307.6   | 525.8   | 448.1   | 348.9   | 157.1   |
| 85°   | 44.7    | 105.8   | 322.5   | 127.3   | 64.5    | 41.3    | 92.6    | 112.4   | 92.6    | 69.5    | 39.7    |
| 87.5° | 0.0     | 24.8    | 56.2    | 0.0     | 4.9     | 3.3     | 6.7     | 8.3     | 8.3     | 6.7     | 13.2    |
| 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°    | 4084.2  | 4084.2 | 4084.2 | 4084.2 | 4084.2 | 4084.2 | 4084.2 | 4084.2 | 4084.2 | 4084.2 | 4084.2 |
| 2.5°  | 4102.4  | 4105.6 | 4115.6 | 4117.2 | 4094.1 | 4064.3 | 4052.7 | 4047.8 | 4027.9 | 4026.3 | 4029.6 |
| 5°    | 4152.0  | 4166.8 | 4152.0 | 4109.0 | 4006.4 | 3862.6 | 3753.4 | 3664.2 | 3583.2 | 3558.4 | 3543.4 |
| 7.5°  | 4251.2  | 4266.0 | 4221.5 | 4052.7 | 3794.9 | 3508.8 | 3250.8 | 3069.0 | 2905.3 | 2844.1 | 2819.3 |
| 10°   | 4393.4  | 4413.2 | 4272.7 | 3932.0 | 3475.7 | 3016.0 | 2579.5 | 2271.9 | 2032.2 | 1934.6 | 1893.3 |
| 12.5° | 4571.9  | 4580.2 | 4300.8 | 3748.5 | 3060.6 | 2404.2 | 1785.8 | 1456.7 | 1243.4 | 1164.1 | 1139.3 |
| 15°   | 4768.7  | 4757.1 | 4304.1 | 3498.8 | 2495.2 | 1699.9 | 1165.7 | 957.4  | 871.4  | 844.9  | 844.9  |
| 17.5° | 4975.5  | 4927.5 | 4238.0 | 3138.3 | 1875.0 | 1162.5 | 864.8  | 815.2  | 800.3  | 793.7  | 792.0  |
| 20°   | 5178.8  | 5071.3 | 4117.2 | 2667.2 | 1345.9 | 868.1  | 785.5  | 770.5  | 762.3  | 759.0  | 755.6  |
| 22.5° | 5364.0  | 5180.5 | 3910.6 | 2119.8 | 977.2  | 767.2  | 742.4  | 729.2  | 714.3  | 707.7  | 706.0  |
| 25°   | 5544.2  | 5243.3 | 3619.6 | 1608.8 | 782.1  | 717.6  | 697.8  | 673.0  | 653.1  | 644.8  | 641.5  |
| 27.5° | 5719.5  | 5283.0 | 3255.8 | 1190.5 | 697.8  | 671.4  | 635.0  | 600.2  | 585.4  | 582.0  | 578.7  |
| 30°   | 5906.4  | 5296.2 | 2842.4 | 888.0  | 646.6  | 613.5  | 560.6  | 520.9  | 512.6  | 514.2  | 514.2  |
| 32.5° | 6134.5  | 5316.1 | 2425.7 | 727.5  | 603.5  | 544.0  | 481.1  | 439.8  | 433.3  | 439.8  | 438.2  |
| 35°   | 6407.4  | 5355.7 | 2023.9 | 669.6  | 565.5  | 472.9  | 405.1  | 370.4  | 363.8  | 368.7  | 367.1  |
| 37.5° | 6777.7  | 5420.2 | 1648.5 | 658.0  | 534.1  | 413.4  | 340.6  | 312.5  | 312.5  | 314.2  | 312.5  |
| 40°   | 7270.5  | 5592.2 | 1312.9 | 649.8  | 517.5  | 368.7  | 287.7  | 276.1  | 281.1  | 284.4  | 284.4  |
| 42.5° | 7870.7  | 5957.6 | 1086.4 | 639.9  | 499.4  | 348.9  | 261.3  | 256.2  | 264.6  | 267.8  | 267.8  |
| 45°   | 8543.7  | 6420.6 | 1007.0 | 623.4  | 482.8  | 362.1  | 249.7  | 243.0  | 253.0  | 254.6  | 256.2  |
| 47.5° | 9239.9  | 6873.6 | 997.0  | 605.2  | 466.3  | 381.9  | 246.4  | 231.4  | 243.0  | 244.8  | 246.4  |
| 50°   | 9944.2  | 7169.7 | 1007.0 | 577.1  | 439.8  | 381.9  | 248.0  | 220.0  | 229.8  | 234.8  | 236.5  |
| 52.5° | 10653.5 | 7305.2 | 1000.4 | 515.9  | 393.5  | 358.9  | 248.0  | 210.0  | 220.0  | 223.2  | 223.2  |
| 55°   | 11341.4 | 7278.7 | 899.5  | 425.0  | 334.0  | 317.4  | 241.4  | 201.7  | 208.4  | 210.0  | 210.0  |
| 57.5° | 11885.4 | 6910.0 | 712.7  | 330.7  | 271.2  | 264.6  | 220.0  | 191.8  | 196.8  | 195.2  | 195.2  |
| 60°   | 12169.8 | 6099.8 | 509.3  | 254.6  | 213.3  | 208.4  | 193.4  | 178.6  | 181.8  | 173.6  | 172.0  |
| 62.5° | 12173.1 | 5028.3 | 340.6  | 201.7  | 170.4  | 165.3  | 165.3  | 160.4  | 157.1  | 140.5  | 135.6  |
| 65°   | 11913.6 | 3839.4 | 226.5  | 160.4  | 137.2  | 128.9  | 138.9  | 137.2  | 125.7  | 102.5  | 99.2   |
| 67.5° | 11324.9 | 2516.7 | 172.0  | 125.7  | 105.8  | 100.9  | 110.8  | 115.7  | 107.5  | 86.0   | 84.4   |
| 70°   | 10114.5 | 1465.0 | 142.2  | 97.6   | 79.3   | 74.4   | 89.3   | 99.2   | 89.3   | 69.5   | 66.1   |
| 72.5° | 8401.5  | 790.4  | 115.7  | 72.8   | 54.5   | 49.6   | 71.1   | 81.0   | 71.1   | 51.2   | 49.6   |
| 75°   | 5451.7  | 423.3  | 89.3   | 48.0   | 28.1   | 31.5   | 52.9   | 59.6   | 49.6   | 33.1   | 29.7   |
| 77.5° | 1830.4  | 186.9  | 56.2   | 23.2   | 13.2   | 13.2   | 31.5   | 36.4   | 23.2   | 11.6   | 9.9    |
| 80°   | 408.5   | 77.7   | 23.2   | 9.9    | 4.9    | 4.9    | 6.7    | 6.7    | 3.3    | 0.0    | 0.0    |
| 82.5° | 134.0   | 31.5   | 9.9    | 3.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 51.2    | 11.6   | 3.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 19.9    | 1.6    | 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)