

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: P968699

Luminaire Tested: **NAV-SB5C-722-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968699
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-722-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32054.8 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

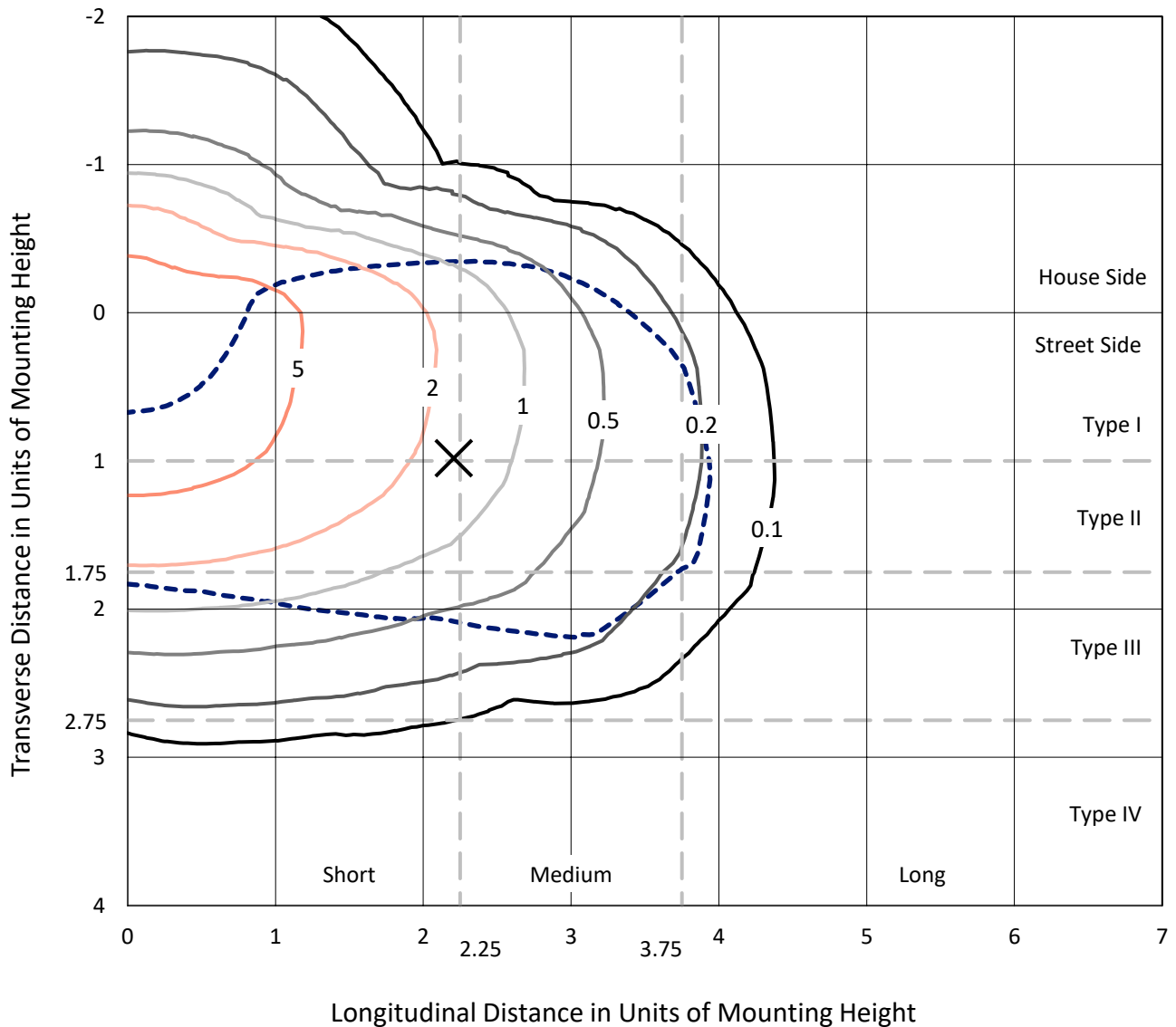
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

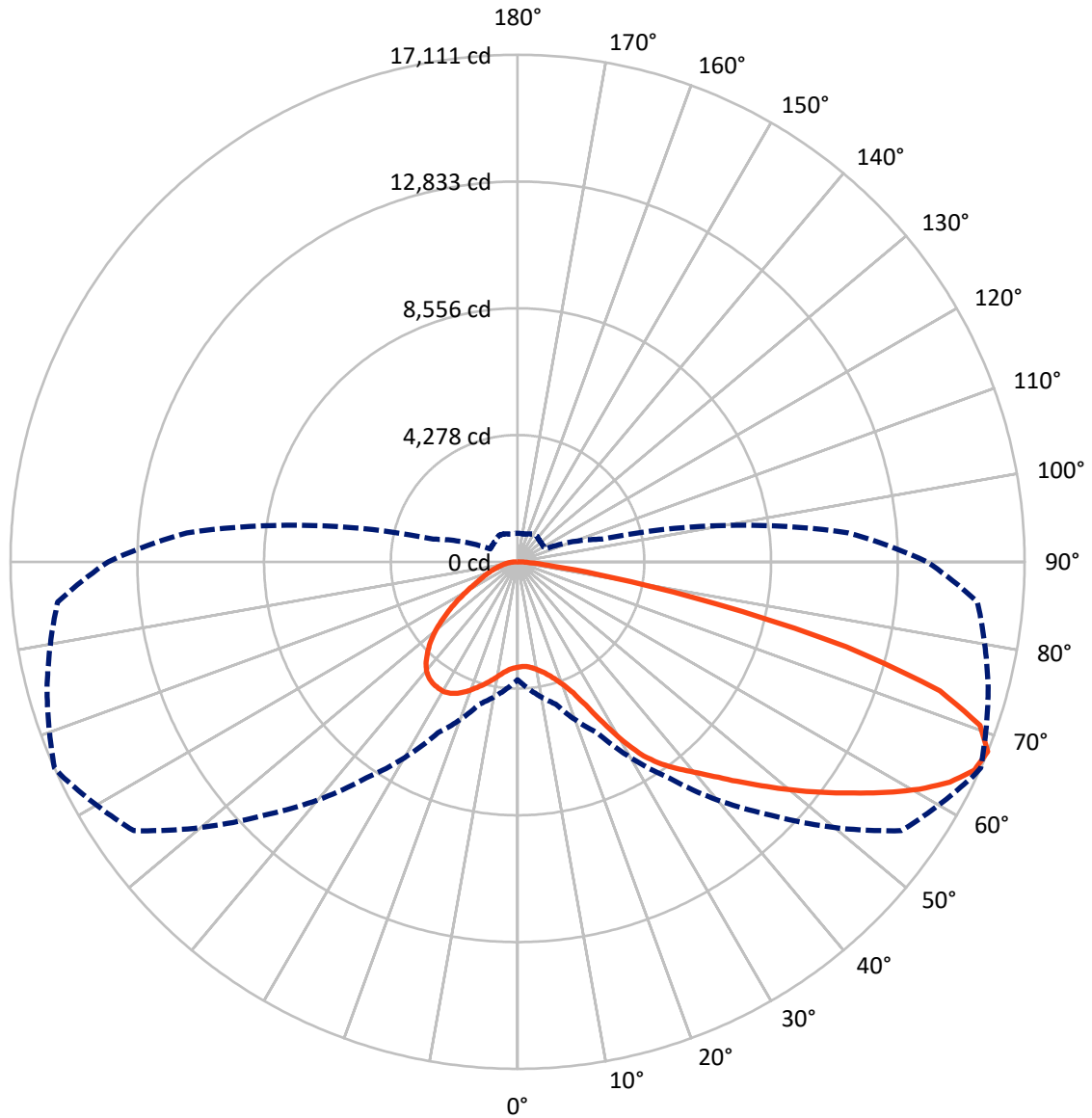
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7970.3 | 0.0 | 7970.3 |
| | % Fixture | 24.9 | 0.0 | 24.9 |
| Street Side | Lumens | 24084.5 | 0.0 | 24084.5 |
| | % Fixture | 75.1 | 0.0 | 75.1 |
| Total | Lumens | 32054.8 | 0.0 | 32054.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 352.5 | 1.1 |
| 10°-20° | 1164.6 | 3.6 |
| 20°-30° | 2244.7 | 7.0 |
| 30°-40° | 3935.8 | 12.3 |
| 40°-50° | 5851.2 | 18.3 |
| 50°-60° | 7417.0 | 23.1 |
| 60°-70° | 7257.3 | 22.6 |
| 70°-80° | 3461.8 | 10.8 |
| 80°-90° | 370.0 | 1.2 |
| 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° | 32054.8 | 100.0 |
| 0°-180° | 32054.8 | 100.0 |

Coefficient of Utilization

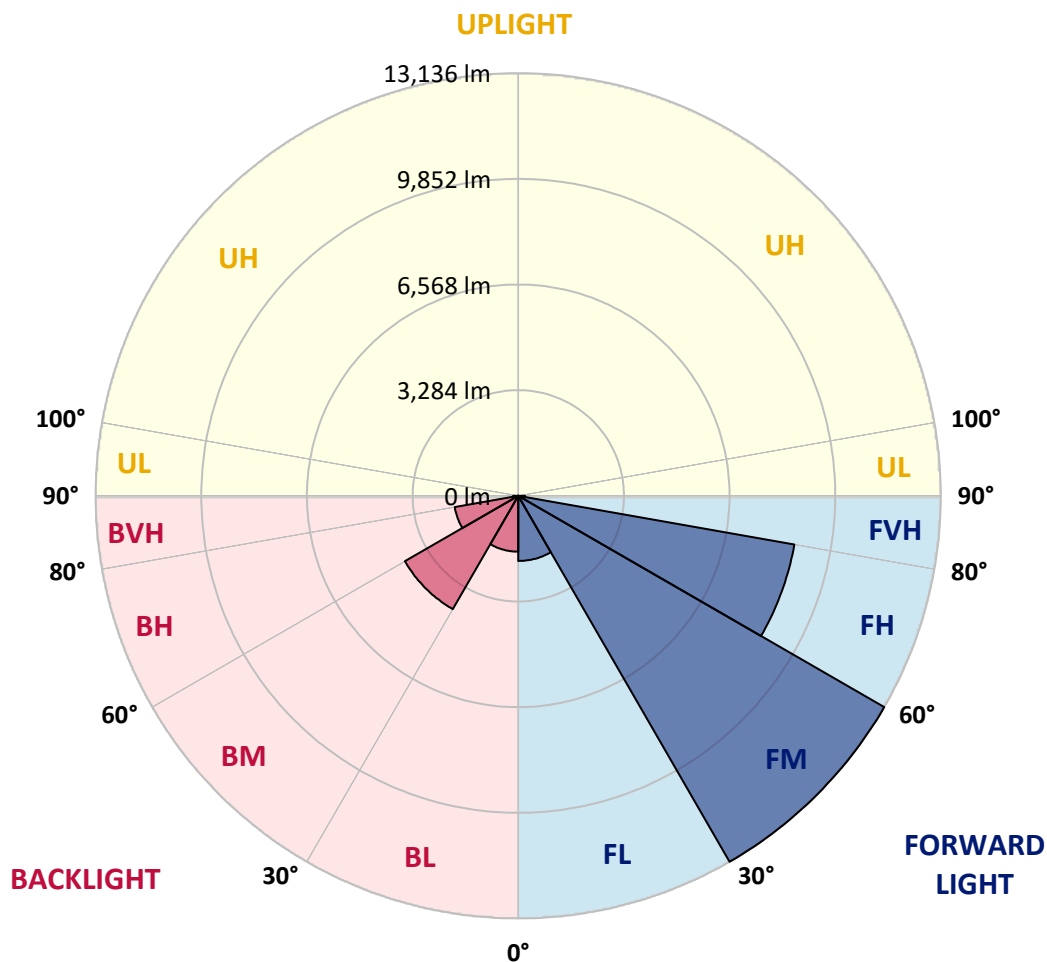


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 2025.6 | 6.3 | | | |
| FM (30°-60°) | 13135.8 | 41.0 | | | |
| FH (60°-80°) | 8713.4 | 27.2 | | | G4/12000 |
| FVH (80°-90°) | 209.8 | 0.7 | | | G2/225 |
| BL (0°-30°) | 1736.2 | 5.4 | B3/2500 | | |
| BM (30°-60°) | 4068.2 | 12.7 | B3/5000 | | |
| BH (60°-80°) | 2005.8 | 6.3 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 160.2 | 0.5 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4
 Type III Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 66° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 |
| 2.5° | 3518.2 | 3538.5 | 3533.4 | 3525.0 | 3523.3 | 3526.7 | 3531.7 | 3536.8 | 3535.1 | 3543.5 | 3557.0 |
| 5° | 3508.2 | 3528.4 | 3526.7 | 3526.7 | 3533.4 | 3546.9 | 3555.3 | 3563.7 | 3555.3 | 3565.4 | 3583.9 |
| 7.5° | 3514.9 | 3530.0 | 3536.8 | 3543.5 | 3560.3 | 3585.7 | 3605.8 | 3624.4 | 3614.3 | 3626.0 | 3649.6 |
| 10° | 3600.8 | 3612.6 | 3619.3 | 3619.3 | 3631.1 | 3659.8 | 3680.0 | 3713.6 | 3705.2 | 3723.7 | 3754.1 |
| 12.5° | 3757.4 | 3769.2 | 3769.2 | 3762.5 | 3770.9 | 3789.4 | 3796.2 | 3833.2 | 3818.0 | 3848.4 | 3878.7 |
| 15° | 3949.4 | 3973.0 | 3954.4 | 3942.7 | 3946.0 | 3964.6 | 3962.9 | 3991.6 | 3976.4 | 4001.6 | 4028.6 |
| 17.5° | 4161.6 | 4191.9 | 4161.6 | 4160.0 | 4153.2 | 4173.4 | 4175.1 | 4200.3 | 4173.4 | 4191.9 | 4210.5 |
| 20° | 4412.5 | 4454.6 | 4429.4 | 4437.8 | 4422.7 | 4431.1 | 4439.5 | 4476.6 | 4434.5 | 4447.9 | 4442.9 |
| 22.5° | 4766.2 | 4816.8 | 4789.8 | 4821.8 | 4811.7 | 4805.0 | 4803.3 | 4869.0 | 4803.3 | 4808.4 | 4759.5 |
| 25° | 5281.6 | 5342.2 | 5295.0 | 5338.8 | 5338.8 | 5360.7 | 5386.0 | 5470.2 | 5360.7 | 5328.8 | 5202.4 |
| 27.5° | 6042.9 | 6103.5 | 6010.8 | 6037.8 | 6029.4 | 6083.3 | 6056.3 | 6265.1 | 6147.2 | 6095.1 | 5840.8 |
| 30° | 6959.0 | 7066.9 | 6891.7 | 6884.9 | 6876.5 | 6962.4 | 7001.2 | 7139.2 | 7019.7 | 6967.4 | 6661.0 |
| 32.5° | 7949.3 | 8062.1 | 7853.3 | 7792.7 | 7760.7 | 7813.0 | 7780.9 | 7892.1 | 7809.6 | 7728.7 | 7349.8 |
| 35° | 8996.9 | 9108.0 | 8909.3 | 8791.4 | 8663.4 | 8553.9 | 8439.4 | 8468.0 | 8390.5 | 8267.6 | 7875.2 |
| 37.5° | 9987.2 | 10191.0 | 9980.4 | 9854.1 | 9618.4 | 9404.5 | 9084.5 | 8951.4 | 8879.0 | 8766.1 | 8370.4 |
| 40° | 10996.0 | 11112.2 | 10952.2 | 10844.4 | 10588.5 | 10253.3 | 9741.3 | 9460.0 | 9362.3 | 9252.9 | 8917.7 |
| 42.5° | 11738.7 | 11849.9 | 11764.0 | 11689.9 | 11489.4 | 11100.4 | 10438.5 | 10086.5 | 9945.1 | 9822.2 | 9537.5 |
| 45° | 12328.2 | 12410.7 | 12356.8 | 12383.7 | 12297.8 | 11920.6 | 11161.0 | 10758.5 | 10612.0 | 10462.2 | 10238.1 |
| 47.5° | 12565.7 | 12653.2 | 12739.1 | 12899.1 | 13045.7 | 12767.8 | 11937.5 | 11486.2 | 11331.2 | 11177.9 | 10957.2 |
| 50° | 12538.7 | 12628.0 | 12877.3 | 13217.5 | 13672.2 | 13579.5 | 12756.0 | 12260.8 | 12117.7 | 11942.5 | 11738.7 |
| 52.5° | 12323.2 | 12424.2 | 12744.2 | 13310.0 | 14034.3 | 14187.5 | 13589.7 | 13060.9 | 12926.1 | 12717.3 | 12513.5 |
| 55° | 11757.3 | 11817.8 | 12297.8 | 13099.5 | 14120.2 | 14612.0 | 14406.5 | 13913.0 | 13778.3 | 13487.0 | 13264.6 |
| 57.5° | 10708.0 | 10795.6 | 11494.6 | 12532.0 | 13904.6 | 14899.9 | 15124.0 | 14809.0 | 14679.3 | 14259.9 | 14027.5 |
| 60° | 9338.8 | 9478.6 | 10278.6 | 11578.7 | 13355.5 | 14898.3 | 15775.7 | 15689.8 | 15582.0 | 15021.2 | 14778.7 |
| 62.5° | 7789.3 | 7951.0 | 8720.7 | 10231.3 | 12395.5 | 14475.6 | 16183.3 | 16427.5 | 16371.9 | 15723.5 | 15413.6 |
| 65° | 5982.2 | 6093.3 | 6859.7 | 8488.2 | 10901.7 | 13567.7 | 16230.5 | 16931.1 | 16941.2 | 16257.4 | 15745.4 |
| 67.5° | 3983.0 | 4303.1 | 4968.4 | 6369.6 | 8900.9 | 12084.0 | 15816.2 | 17013.6 | 17111.2 | 16441.0 | 15578.7 |
| 70° | 1943.5 | 2364.6 | 3016.4 | 4139.7 | 6369.6 | 9808.6 | 14733.2 | 16336.6 | 16553.9 | 15905.4 | 14585.0 |
| 72.5° | 806.7 | 943.1 | 1298.5 | 2042.9 | 3656.4 | 6618.8 | 12557.3 | 14500.8 | 14903.3 | 14093.2 | 12262.5 |
| 75° | 544.0 | 589.5 | 742.7 | 1047.6 | 1665.6 | 3263.9 | 9055.9 | 10812.4 | 11460.8 | 10644.0 | 8700.5 |
| 77.5° | 419.3 | 448.0 | 540.6 | 732.6 | 990.3 | 1234.5 | 4847.0 | 6516.1 | 6851.2 | 6342.6 | 4527.1 |
| 80° | 330.0 | 352.0 | 404.2 | 533.9 | 702.3 | 660.2 | 1652.2 | 2952.4 | 3146.0 | 2639.1 | 1455.1 |
| 82.5° | 286.3 | 294.7 | 289.7 | 362.1 | 466.5 | 385.7 | 542.3 | 1089.7 | 1202.5 | 872.4 | 475.0 |
| 85° | 207.2 | 230.7 | 240.9 | 224.0 | 247.5 | 195.4 | 222.3 | 385.7 | 424.5 | 378.9 | 267.8 |
| 87.5° | 84.3 | 124.6 | 153.2 | 144.8 | 90.9 | 55.6 | 69.1 | 112.9 | 129.7 | 141.4 | 87.5 |
| 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° | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 | 3555.3 |
| 2.5° | 3558.7 | 3570.5 | 3578.9 | 3589.0 | 3595.7 | 3605.8 | 3626.0 | 3637.8 | 3639.5 | 3648.0 | 3646.2 |
| 5° | 3590.7 | 3607.5 | 3626.0 | 3653.0 | 3683.3 | 3708.6 | 3747.3 | 3774.3 | 3784.4 | 3792.8 | 3791.1 |
| 7.5° | 3659.8 | 3683.3 | 3717.0 | 3764.1 | 3808.0 | 3841.6 | 3888.7 | 3920.7 | 3952.8 | 3964.6 | 3966.2 |
| 10° | 3762.5 | 3796.2 | 3845.0 | 3908.9 | 3956.1 | 4000.0 | 4048.7 | 4075.7 | 4107.7 | 4121.2 | 4127.9 |
| 12.5° | 3890.5 | 3925.9 | 3989.8 | 4079.1 | 4122.9 | 4153.2 | 4170.0 | 4163.2 | 4170.0 | 4181.8 | 4185.2 |
| 15° | 4037.0 | 4075.7 | 4148.2 | 4244.1 | 4274.5 | 4247.5 | 4210.5 | 4176.8 | 4171.8 | 4175.1 | 4186.9 |
| 17.5° | 4210.5 | 4239.1 | 4323.2 | 4404.1 | 4382.3 | 4271.1 | 4190.2 | 4136.4 | 4109.4 | 4101.0 | 4112.8 |
| 20° | 4453.0 | 4453.0 | 4522.0 | 4572.5 | 4426.1 | 4237.3 | 4111.1 | 4023.5 | 3967.9 | 3944.3 | 3939.3 |
| 22.5° | 4747.7 | 4720.7 | 4764.5 | 4729.1 | 4417.6 | 4143.0 | 3967.9 | 3816.4 | 3732.1 | 3698.5 | 3693.4 |
| 25° | 5121.6 | 5089.6 | 5077.8 | 4858.9 | 4357.0 | 3993.2 | 3708.6 | 3525.0 | 3450.9 | 3432.3 | 3435.7 |
| 27.5° | 5685.8 | 5604.9 | 5451.7 | 4929.6 | 4245.9 | 3757.4 | 3405.5 | 3235.3 | 3193.2 | 3194.9 | 3199.9 |
| 30° | 6436.9 | 6275.3 | 5899.7 | 4941.4 | 4063.9 | 3423.9 | 3095.5 | 2974.2 | 2954.0 | 2962.5 | 2991.1 |
| 32.5° | 7132.5 | 6979.2 | 6357.8 | 4887.5 | 3784.4 | 3097.2 | 2817.6 | 2736.7 | 2706.5 | 2716.6 | 2730.1 |
| 35° | 7678.2 | 7636.0 | 6782.2 | 4811.7 | 3440.8 | 2790.7 | 2568.3 | 2499.4 | 2440.4 | 2426.9 | 2437.0 |
| 37.5° | 8193.5 | 8176.7 | 7100.5 | 4705.6 | 3100.6 | 2573.5 | 2368.0 | 2277.0 | 2191.1 | 2144.0 | 2145.6 |
| 40° | 8759.4 | 8742.5 | 7309.4 | 4542.2 | 2799.1 | 2384.8 | 2187.8 | 2068.1 | 1962.1 | 1876.2 | 1884.6 |
| 42.5° | 9396.1 | 9296.6 | 7408.7 | 4308.2 | 2543.1 | 2224.8 | 2041.2 | 1879.5 | 1739.7 | 1660.6 | 1665.6 |
| 45° | 10091.6 | 9867.6 | 7407.1 | 4010.0 | 2327.6 | 2078.3 | 1884.6 | 1655.6 | 1525.9 | 1451.8 | 1448.4 |
| 47.5° | 10829.2 | 10413.3 | 7316.0 | 3680.0 | 2118.7 | 1916.6 | 1642.0 | 1466.9 | 1381.0 | 1335.6 | 1325.4 |
| 50° | 11590.5 | 10923.6 | 7161.2 | 3301.0 | 1904.8 | 1733.1 | 1490.5 | 1370.9 | 1305.2 | 1263.1 | 1247.9 |
| 52.5° | 12306.3 | 11386.7 | 6974.2 | 2871.5 | 1687.6 | 1554.5 | 1423.1 | 1330.6 | 1261.5 | 1214.3 | 1194.1 |
| 55° | 12971.6 | 11785.9 | 6709.8 | 2431.9 | 1510.7 | 1434.9 | 1391.1 | 1313.6 | 1234.5 | 1179.0 | 1157.0 |
| 57.5° | 13562.7 | 12045.3 | 6253.3 | 2019.4 | 1384.4 | 1352.4 | 1357.4 | 1285.0 | 1194.1 | 1147.0 | 1116.6 |
| 60° | 14054.5 | 12235.5 | 5578.0 | 1637.0 | 1281.7 | 1271.5 | 1305.2 | 1231.1 | 1125.0 | 1071.1 | 1047.6 |
| 62.5° | 14349.2 | 12232.2 | 4749.3 | 1340.6 | 1194.1 | 1197.4 | 1236.1 | 1163.8 | 1056.0 | 1005.4 | 990.3 |
| 65° | 14324.0 | 11932.4 | 3840.0 | 1147.0 | 1109.9 | 1113.3 | 1163.8 | 1089.7 | 998.8 | 968.4 | 966.7 |
| 67.5° | 13817.0 | 11201.5 | 2945.6 | 1020.6 | 1017.2 | 1032.4 | 1091.3 | 1039.1 | 963.4 | 960.0 | 965.0 |
| 70° | 12444.4 | 9684.0 | 2122.1 | 919.5 | 921.3 | 943.1 | 1020.6 | 1007.2 | 944.8 | 951.6 | 949.9 |
| 72.5° | 9978.8 | 7383.5 | 1424.9 | 813.4 | 815.2 | 850.5 | 953.2 | 981.8 | 926.3 | 1015.6 | 1029.0 |
| 75° | 6645.8 | 4604.5 | 916.1 | 700.6 | 702.3 | 747.7 | 894.3 | 933.1 | 875.8 | 1012.2 | 1020.6 |
| 77.5° | 3193.2 | 2069.9 | 663.6 | 589.5 | 589.5 | 631.6 | 773.1 | 835.4 | 746.1 | 786.5 | 720.8 |
| 80° | 1103.1 | 778.1 | 522.1 | 475.0 | 464.8 | 493.4 | 651.8 | 724.2 | 643.4 | 592.9 | 555.8 |
| 82.5° | 434.5 | 404.2 | 419.3 | 368.8 | 335.2 | 353.7 | 507.0 | 597.9 | 473.2 | 427.7 | 426.1 |
| 85° | 249.3 | 262.7 | 296.4 | 244.2 | 193.7 | 217.3 | 372.2 | 429.5 | 357.0 | 315.0 | 321.6 |
| 87.5° | 67.3 | 92.7 | 136.4 | 126.3 | 87.5 | 92.7 | 176.8 | 237.5 | 205.5 | 158.4 | 163.4 |
| 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)