

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: P885350

Luminaire Tested: **NAV-SB6C-830-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885350
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6C-830-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30115 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G5

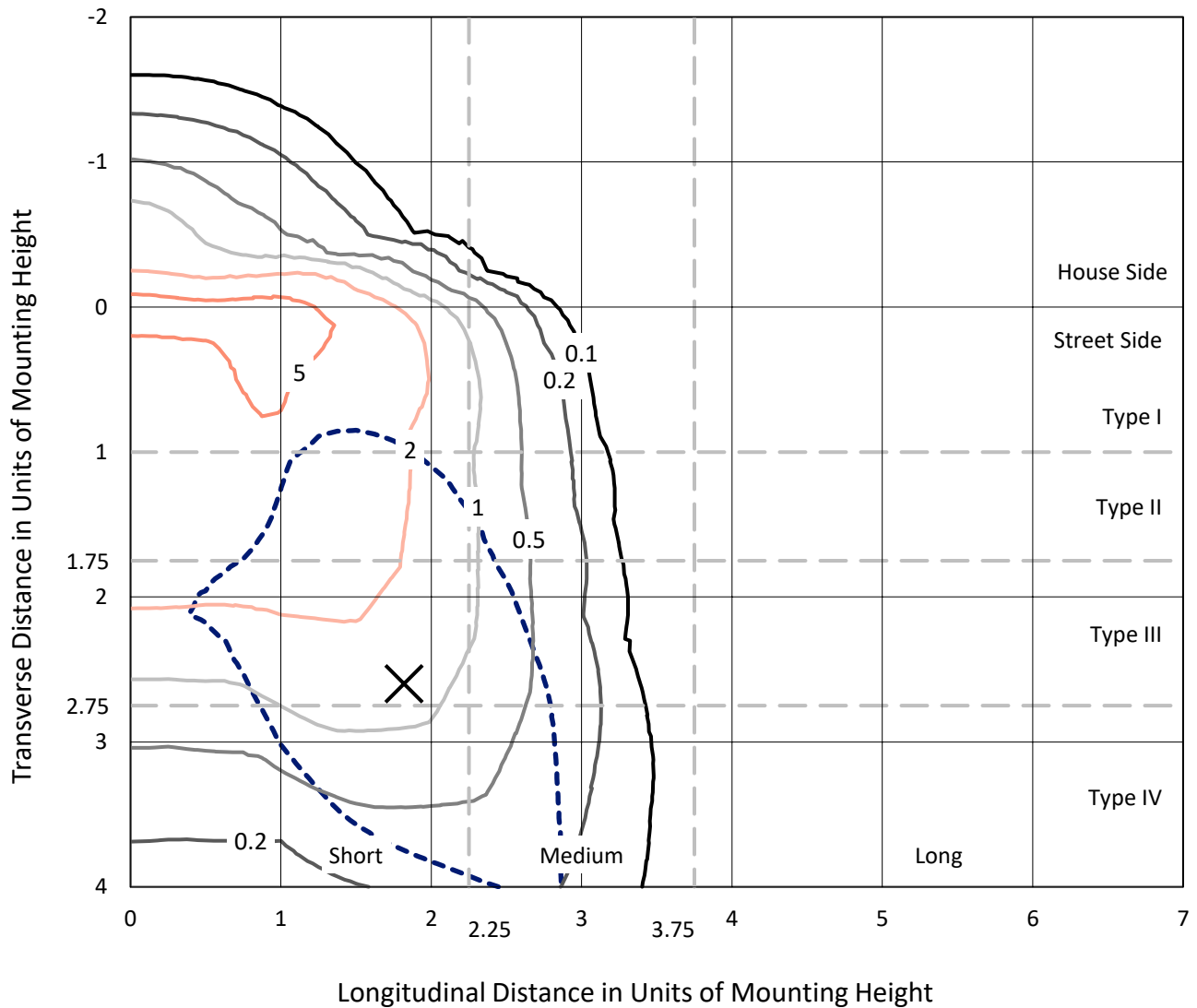
Input Watts (W): 300.9
Input Voltage (V): 120.0
Input Current (Ain): 2.518
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.297
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

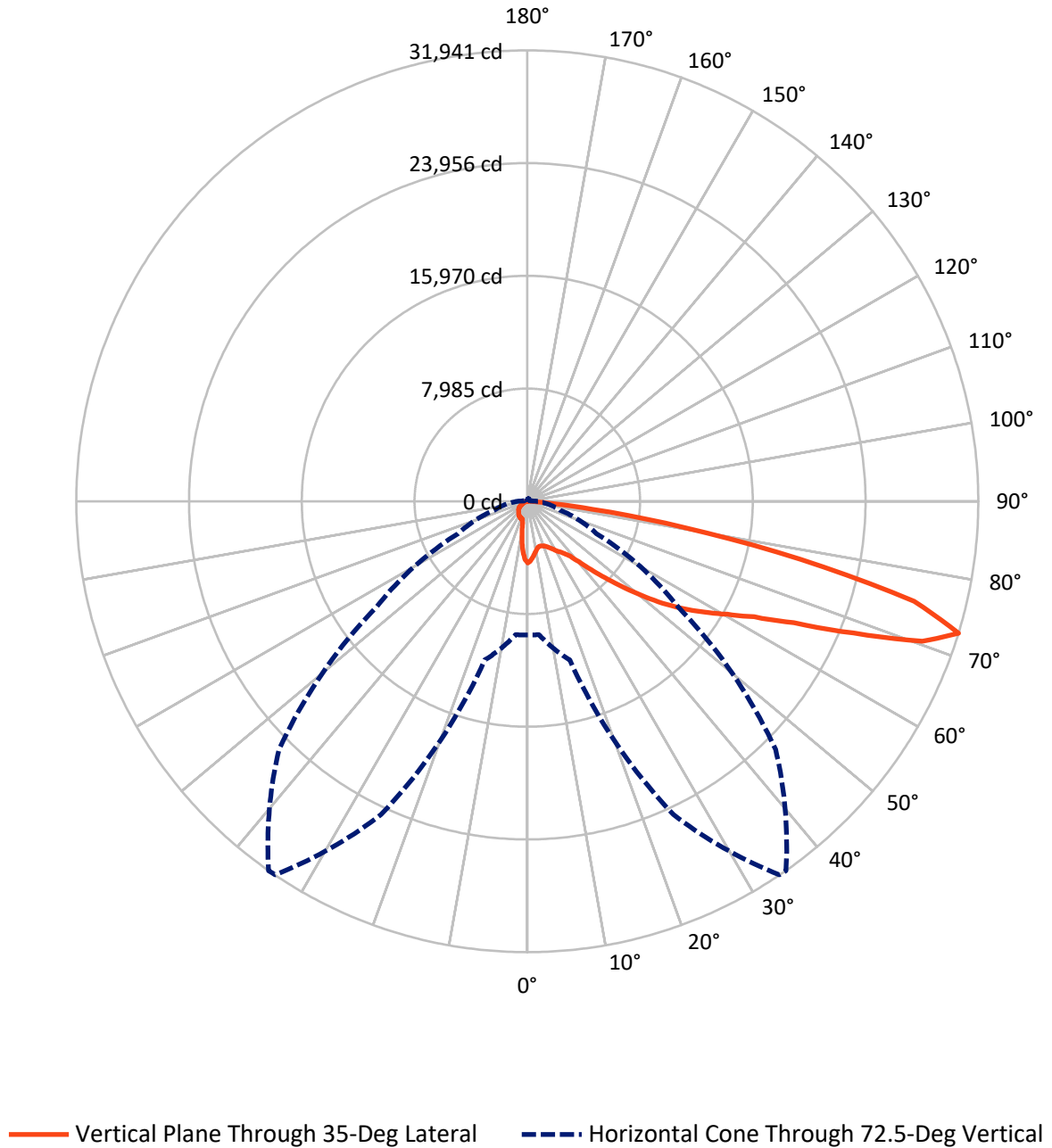
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3389.3 | 0.0 | 3389.3 |
| | % Fixture | 11.3 | 0.0 | 11.3 |
| Street Side | Lumens | 26725.7 | 0.0 | 26725.7 |
| | % Fixture | 88.7 | 0.0 | 88.7 |
| Total | Lumens | 30115.0 | 0.0 | 30115.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 358.7 | 1.2 |
| 10°-20° | 839.0 | 2.8 |
| 20°-30° | 1363.0 | 4.5 |
| 30°-40° | 2274.2 | 7.6 |
| 40°-50° | 4302.8 | 14.3 |
| 50°-60° | 6837.1 | 22.7 |
| 60°-70° | 8457.9 | 28.1 |
| 70°-80° | 5257.5 | 17.5 |
| 80°-90° | 424.9 | 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° | 30115.0 | 100.0 |
| 0°-180° | 30115.0 | 100.0 |

Coefficient of Utilization



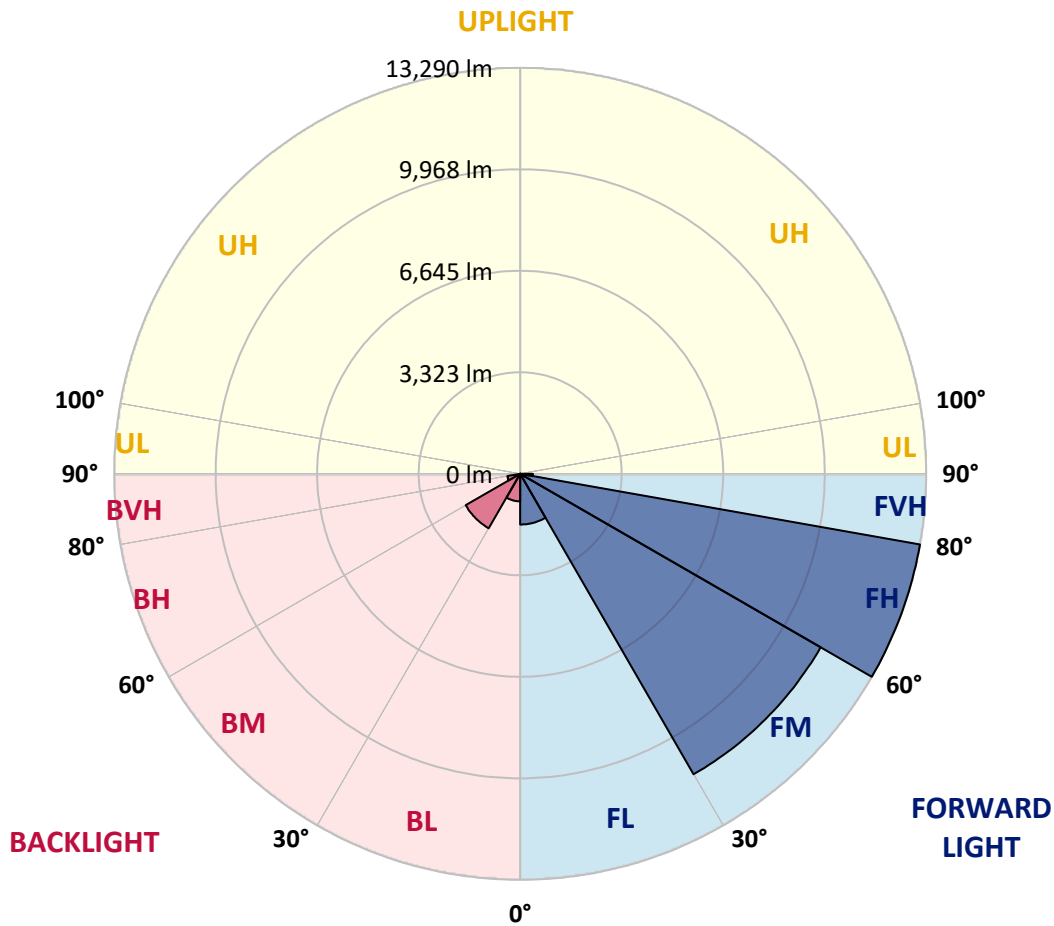
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|--------|
| | | | B | U | G |
| FL (0°-30°) | 1660.1 | 5.5 | | | |
| FM (30°-60°) | 11356.4 | 37.7 | | | |
| FH (60°-80°) | 13290.1 | 44.1 | | | G5 |
| FVH (80°-90°) | 419.1 | 1.4 | | | G3/500 |
| BL (0°-30°) | 900.6 | 3.0 | B2/1000 | | |
| BM (30°-60°) | 2057.6 | 6.8 | B2/2500 | | |
| BH (60°-80°) | 425.3 | 1.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 5.8 | 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° | 34° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 |
| 2.5° | 4170.5 | 4205.8 | 4212.4 | 4223.5 | 4223.5 | 4236.7 | 4258.8 | 4289.6 | 4340.4 | 4366.9 | 4384.5 |
| 5° | 3843.9 | 3870.4 | 3903.5 | 3930.0 | 3980.7 | 3987.3 | 4073.4 | 4157.3 | 4274.2 | 4362.5 | 4424.3 |
| 7.5° | 3515.1 | 3546.0 | 3590.2 | 3654.1 | 3720.3 | 3740.2 | 3870.4 | 4011.6 | 4197.0 | 4362.5 | 4466.2 |
| 10° | 3283.4 | 3285.6 | 3325.4 | 3389.4 | 3495.3 | 3519.5 | 3678.4 | 3879.2 | 4110.9 | 4336.0 | 4505.9 |
| 12.5° | 3153.2 | 3168.7 | 3186.3 | 3234.9 | 3336.4 | 3351.8 | 3521.7 | 3757.9 | 4024.9 | 4320.5 | 4552.2 |
| 15° | 3153.2 | 3164.3 | 3175.3 | 3199.6 | 3281.2 | 3294.5 | 3444.5 | 3680.6 | 3980.7 | 4327.2 | 4627.3 |
| 17.5° | 3186.3 | 3204.0 | 3195.2 | 3223.9 | 3309.9 | 3318.7 | 3451.1 | 3658.6 | 3978.5 | 4369.1 | 4742.0 |
| 20° | 3265.8 | 3279.0 | 3261.4 | 3279.0 | 3365.1 | 3382.7 | 3519.5 | 3700.5 | 4016.0 | 4441.9 | 4885.4 |
| 22.5° | 3391.6 | 3398.2 | 3356.3 | 3369.5 | 3457.8 | 3479.8 | 3638.7 | 3819.6 | 4106.5 | 4558.9 | 5077.4 |
| 25° | 3550.4 | 3563.7 | 3499.7 | 3515.1 | 3599.0 | 3625.5 | 3808.6 | 3998.4 | 4249.9 | 4719.9 | 5322.3 |
| 27.5° | 3733.6 | 3740.2 | 3685.0 | 3682.8 | 3791.0 | 3828.5 | 4013.8 | 4219.0 | 4441.9 | 4922.9 | 5631.3 |
| 30° | 3943.2 | 3963.1 | 3910.1 | 3901.3 | 4038.1 | 4069.0 | 4252.1 | 4490.4 | 4724.4 | 5227.5 | 6070.4 |
| 32.5° | 4108.7 | 4124.2 | 4093.3 | 4115.3 | 4254.3 | 4278.6 | 4541.2 | 4874.4 | 5167.9 | 5660.0 | 6668.4 |
| 35° | 4347.0 | 4355.8 | 4285.2 | 4325.0 | 4483.8 | 4545.6 | 4936.2 | 5412.8 | 5726.2 | 6202.8 | 7449.5 |
| 37.5° | 5209.8 | 5209.8 | 4909.7 | 4713.3 | 4865.6 | 4920.7 | 5476.8 | 6090.2 | 6414.6 | 6931.0 | 8433.7 |
| 40° | 6403.6 | 6383.7 | 5944.6 | 5543.0 | 5523.1 | 5631.3 | 6246.9 | 6944.2 | 7303.9 | 7804.8 | 9541.4 |
| 42.5° | 7676.8 | 7645.9 | 7047.9 | 6650.7 | 6584.5 | 6622.0 | 7136.2 | 7996.8 | 8363.0 | 8870.6 | 10732.9 |
| 45° | 8806.6 | 8797.8 | 8250.5 | 7716.5 | 7597.4 | 7716.5 | 8246.1 | 9228.0 | 9490.6 | 10024.6 | 11922.3 |
| 47.5° | 9753.2 | 9753.2 | 9353.8 | 9005.2 | 8943.4 | 9014.0 | 9748.8 | 10593.9 | 10569.7 | 11253.7 | 13080.8 |
| 50° | 10843.3 | 10834.5 | 10454.9 | 10304.9 | 10368.9 | 10468.2 | 11478.8 | 12032.6 | 11686.2 | 12460.7 | 14115.7 |
| 52.5° | 11606.8 | 11659.7 | 11529.5 | 11505.3 | 11831.8 | 12004.0 | 13235.2 | 13440.5 | 12685.8 | 13606.0 | 14890.2 |
| 55° | 12211.4 | 12273.2 | 12423.2 | 12593.1 | 13222.0 | 13447.1 | 14936.5 | 14775.5 | 13522.1 | 14598.9 | 15335.9 |
| 57.5° | 13067.5 | 12979.3 | 13211.0 | 13546.4 | 14563.6 | 14835.0 | 16584.9 | 16035.4 | 14195.1 | 15404.3 | 15384.5 |
| 60° | 14106.9 | 14120.1 | 14159.8 | 14583.5 | 15903.0 | 16251.7 | 18208.9 | 17227.0 | 14627.6 | 15898.6 | 14846.1 |
| 62.5° | 15355.8 | 15375.7 | 15457.3 | 16108.2 | 17701.4 | 18030.2 | 19938.9 | 18202.3 | 14826.2 | 15759.6 | 13455.9 |
| 65° | 15269.7 | 15353.6 | 16264.9 | 18491.4 | 20435.4 | 20759.8 | 21958.0 | 18886.4 | 14526.1 | 14488.6 | 10955.8 |
| 67.5° | 13910.5 | 14047.3 | 15572.0 | 21337.9 | 24557.4 | 24919.2 | 24398.5 | 19021.0 | 13230.8 | 11266.9 | 7147.2 |
| 70° | 12127.5 | 12176.1 | 14009.8 | 23897.6 | 29330.3 | 29696.5 | 26583.0 | 17540.3 | 10040.1 | 6284.4 | 3201.8 |
| 72.5° | 9470.8 | 9481.8 | 11633.2 | 24491.2 | 31920.8 | 31940.7 | 24868.5 | 13021.2 | 5399.6 | 2414.0 | 1112.1 |
| 75° | 6765.5 | 6699.3 | 7791.5 | 19861.7 | 28083.5 | 28308.6 | 18643.6 | 6107.9 | 2063.2 | 1140.8 | 553.9 |
| 77.5° | 3627.7 | 3700.5 | 4408.8 | 11778.9 | 19400.5 | 19784.5 | 10172.5 | 1760.9 | 1050.3 | 776.7 | 366.3 |
| 80° | 1121.0 | 1182.7 | 1807.2 | 5393.0 | 10988.9 | 11220.6 | 3771.1 | 783.3 | 732.6 | 553.9 | 240.5 |
| 82.5° | 353.1 | 366.3 | 842.9 | 2266.2 | 4561.1 | 4667.0 | 1092.3 | 443.5 | 500.9 | 366.3 | 141.2 |
| 85° | 101.5 | 103.7 | 375.1 | 845.1 | 1127.6 | 1149.6 | 306.7 | 172.1 | 286.9 | 227.3 | 72.8 |
| 87.5° | 11.0 | 35.3 | 141.2 | 141.2 | 99.3 | 97.1 | 33.1 | 37.5 | 81.6 | 28.7 | 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° | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 | 4364.7 |
| 2.5° | 4373.5 | 4375.7 | 4347.0 | 4298.5 | 4245.5 | 4201.4 | 4146.2 | 4102.1 | 4071.2 | 4062.4 | 4077.8 |
| 5° | 4404.4 | 4388.9 | 4307.3 | 4159.5 | 3982.9 | 3830.7 | 3660.8 | 3526.2 | 3437.9 | 3400.4 | 3413.6 |
| 7.5° | 4450.7 | 4406.6 | 4227.9 | 3936.6 | 3599.0 | 3298.9 | 2994.4 | 2758.3 | 2608.2 | 2533.2 | 2544.2 |
| 10° | 4490.4 | 4402.2 | 4095.5 | 3614.4 | 3098.1 | 2643.5 | 2233.1 | 1948.4 | 1789.6 | 1714.5 | 1716.7 |
| 12.5° | 4528.0 | 4400.0 | 3923.4 | 3232.7 | 2533.2 | 1977.1 | 1595.4 | 1454.2 | 1410.0 | 1394.6 | 1390.2 |
| 15° | 4598.6 | 4406.6 | 3707.1 | 2795.8 | 1970.5 | 1493.9 | 1354.9 | 1352.7 | 1361.5 | 1357.1 | 1354.9 |
| 17.5° | 4695.7 | 4413.2 | 3462.2 | 2332.4 | 1520.4 | 1317.3 | 1310.7 | 1330.6 | 1343.8 | 1337.2 | 1335.0 |
| 20° | 4821.4 | 4439.7 | 3201.8 | 1873.4 | 1306.3 | 1273.2 | 1288.7 | 1306.3 | 1317.3 | 1306.3 | 1304.1 |
| 22.5° | 4998.0 | 4486.0 | 2917.1 | 1504.9 | 1237.9 | 1246.7 | 1260.0 | 1279.8 | 1290.9 | 1275.4 | 1273.2 |
| 25° | 5214.2 | 4558.9 | 2636.9 | 1308.5 | 1204.8 | 1215.8 | 1235.7 | 1257.8 | 1271.0 | 1255.6 | 1253.4 |
| 27.5° | 5494.5 | 4675.8 | 2378.7 | 1264.4 | 1171.7 | 1178.3 | 1207.0 | 1240.1 | 1257.8 | 1237.9 | 1237.9 |
| 30° | 5900.5 | 4867.8 | 2155.9 | 1284.2 | 1151.9 | 1136.4 | 1176.1 | 1222.5 | 1242.3 | 1224.7 | 1222.5 |
| 32.5° | 6438.9 | 5139.2 | 2019.0 | 1315.1 | 1143.0 | 1087.9 | 1125.4 | 1184.9 | 1218.0 | 1207.0 | 1207.0 |
| 35° | 7145.0 | 5551.8 | 1966.1 | 1350.4 | 1136.4 | 1037.1 | 1063.6 | 1127.6 | 1184.9 | 1196.0 | 1196.0 |
| 37.5° | 8001.2 | 6125.5 | 1981.5 | 1365.9 | 1116.5 | 995.2 | 1008.4 | 1063.6 | 1138.6 | 1173.9 | 1182.7 |
| 40° | 8974.3 | 6794.2 | 2069.8 | 1350.4 | 1094.5 | 959.9 | 962.1 | 1004.0 | 1070.2 | 1123.2 | 1140.8 |
| 42.5° | 9978.3 | 7575.3 | 2233.1 | 1293.1 | 1074.6 | 929.0 | 922.4 | 951.0 | 995.2 | 1032.7 | 1048.1 |
| 45° | 10933.7 | 8378.5 | 2394.2 | 1213.6 | 1050.3 | 898.1 | 882.6 | 893.7 | 902.5 | 917.9 | 926.8 |
| 47.5° | 11767.8 | 8943.4 | 2347.8 | 1140.8 | 1017.2 | 862.8 | 836.3 | 831.9 | 805.4 | 803.2 | 801.0 |
| 50° | 12343.8 | 9067.0 | 2085.2 | 1068.0 | 968.7 | 823.1 | 781.1 | 754.7 | 708.3 | 686.3 | 688.5 |
| 52.5° | 12526.9 | 8579.3 | 1703.5 | 995.2 | 889.3 | 770.1 | 710.5 | 668.6 | 611.2 | 591.4 | 589.2 |
| 55° | 12284.2 | 7623.8 | 1361.5 | 906.9 | 778.9 | 699.5 | 633.3 | 578.1 | 531.8 | 507.5 | 507.5 |
| 57.5° | 11690.6 | 6408.0 | 1076.8 | 803.2 | 662.0 | 620.1 | 553.9 | 498.7 | 459.0 | 434.7 | 430.3 |
| 60° | 10706.5 | 5088.4 | 851.8 | 679.6 | 564.9 | 534.0 | 465.6 | 430.3 | 395.0 | 366.3 | 359.7 |
| 62.5° | 9212.6 | 3632.1 | 668.6 | 538.4 | 472.2 | 436.9 | 397.2 | 370.7 | 328.8 | 289.1 | 282.4 |
| 65° | 7189.1 | 2222.1 | 516.3 | 395.0 | 379.5 | 361.9 | 337.6 | 313.3 | 262.6 | 222.9 | 216.2 |
| 67.5° | 4534.6 | 1052.6 | 368.5 | 297.9 | 300.1 | 291.3 | 280.2 | 260.4 | 222.9 | 187.6 | 183.1 |
| 70° | 1997.0 | 509.7 | 242.7 | 227.3 | 222.9 | 222.9 | 231.7 | 225.1 | 189.8 | 156.7 | 150.0 |
| 72.5° | 679.6 | 273.6 | 180.9 | 172.1 | 161.1 | 158.9 | 194.2 | 187.6 | 152.3 | 121.4 | 114.7 |
| 75° | 355.3 | 183.1 | 132.4 | 123.6 | 97.1 | 117.0 | 154.5 | 145.6 | 108.1 | 79.4 | 72.8 |
| 77.5° | 231.7 | 130.2 | 90.5 | 79.4 | 55.2 | 77.2 | 114.7 | 101.5 | 64.0 | 39.7 | 35.3 |
| 80° | 145.6 | 86.1 | 53.0 | 37.5 | 26.5 | 41.9 | 61.8 | 44.1 | 24.3 | 8.8 | 6.6 |
| 82.5° | 77.2 | 44.1 | 19.9 | 13.2 | 11.0 | 13.2 | 15.4 | 11.0 | 4.4 | 0.0 | 0.0 |
| 85° | 30.9 | 15.4 | 6.6 | 4.4 | 2.2 | 0.0 | 4.4 | 2.2 | 0.0 | 0.0 | 0.0 |
| 87.5° | 11.0 | 2.2 | 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)