

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: STREETWORKS

Report Number: P271137

Luminaire Tested: **NVN-AF-06-LED-U-AFL-7027-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271137
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24283)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-AF-06-LED-U-AFL-7027-800-HSS
Description: NAVION ROADWAY AND AREA LUMINAIRE
(6) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21223.5 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 249
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: 28.75 FT

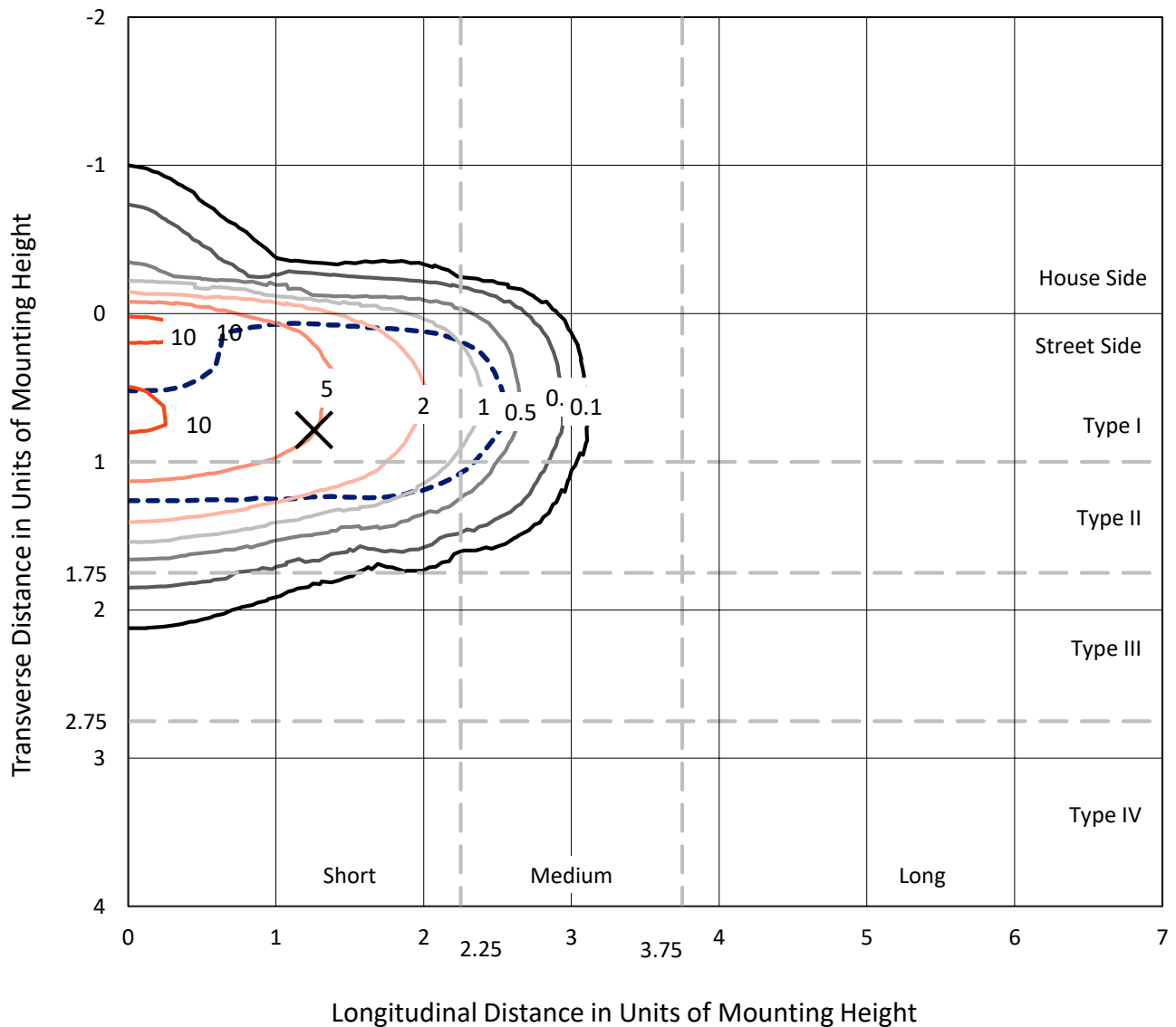


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

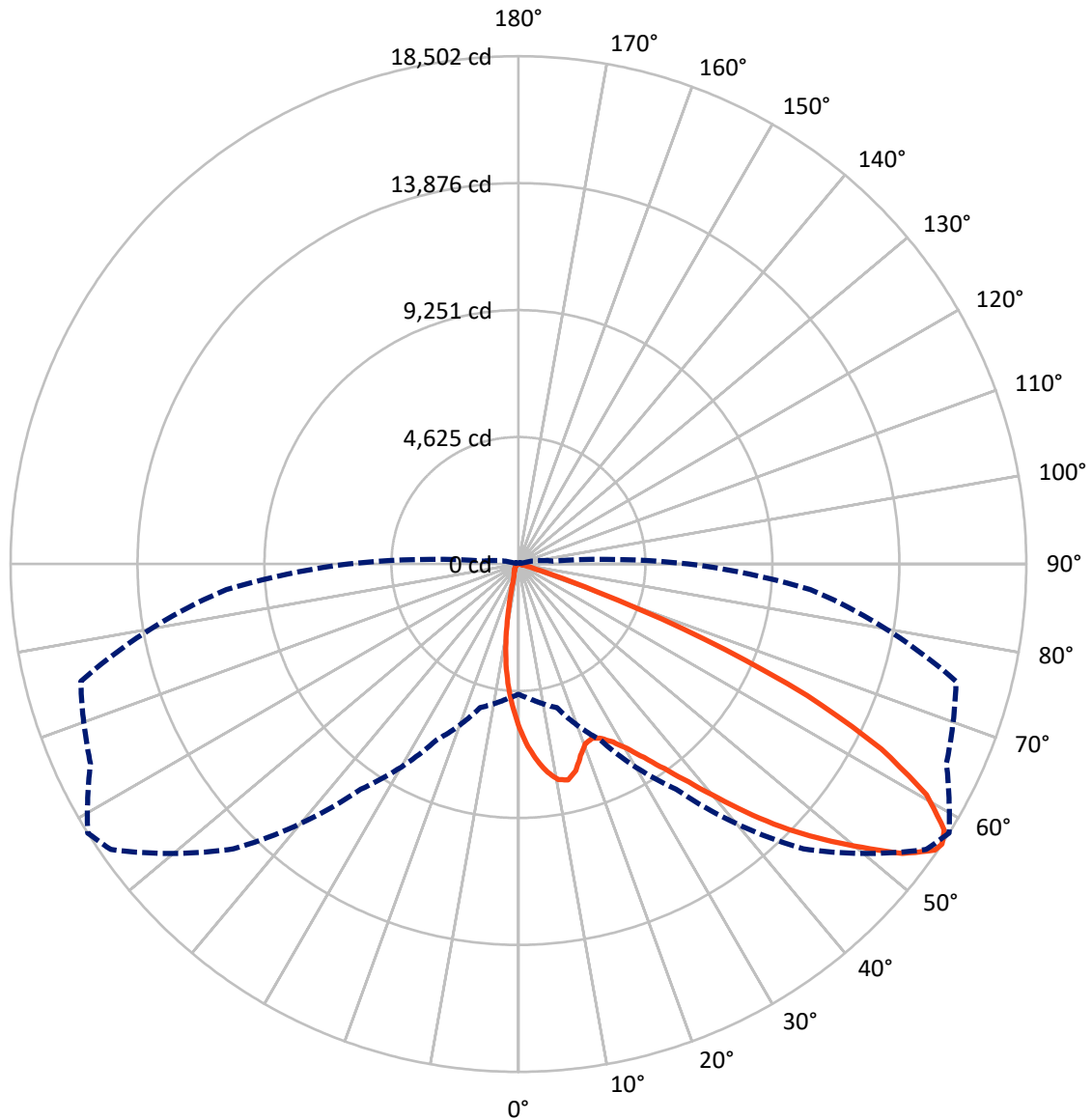


Based on 25 foot mounting height. Maximum calculated value = 11.9 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 56-Deg Vertical

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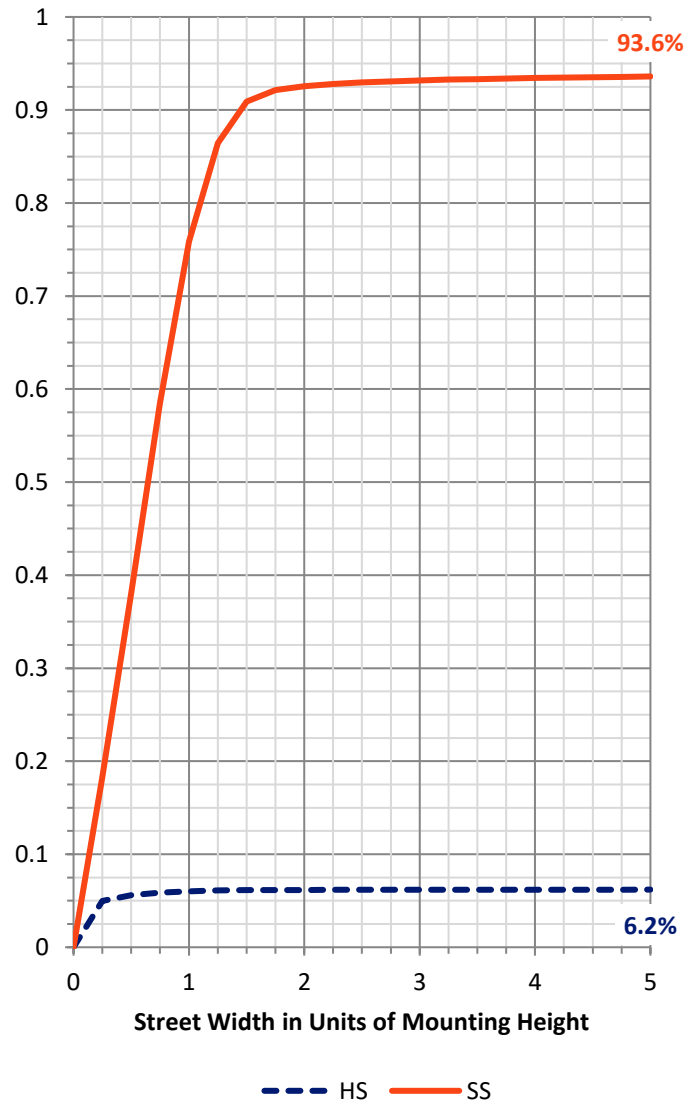
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1324.8 | 0.0 | 1324.8 |
| | % Fixture | 6.2 | 0.0 | 6.2 |
| Street Side | Lumens | 19898.8 | 0.0 | 19898.8 |
| | % Fixture | 93.8 | 0.0 | 93.8 |
| Total | Lumens | 21223.5 | 0.0 | 21223.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 512.6 | 2.4 |
| 10°-20° | 1192.8 | 5.6 |
| 20°-30° | 2007.0 | 9.5 |
| 30°-40° | 3436.8 | 16.2 |
| 40°-50° | 5186.2 | 24.4 |
| 50°-60° | 5390.9 | 25.4 |
| 60°-70° | 3026.4 | 14.3 |
| 70°-80° | 414.8 | 2.0 |
| 80°-90° | 56.2 | 0.3 |
| 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° | 21223.5 | 100.0 |
| 0°-180° | 21223.5 | 100.0 |

Coefficient of Utilization



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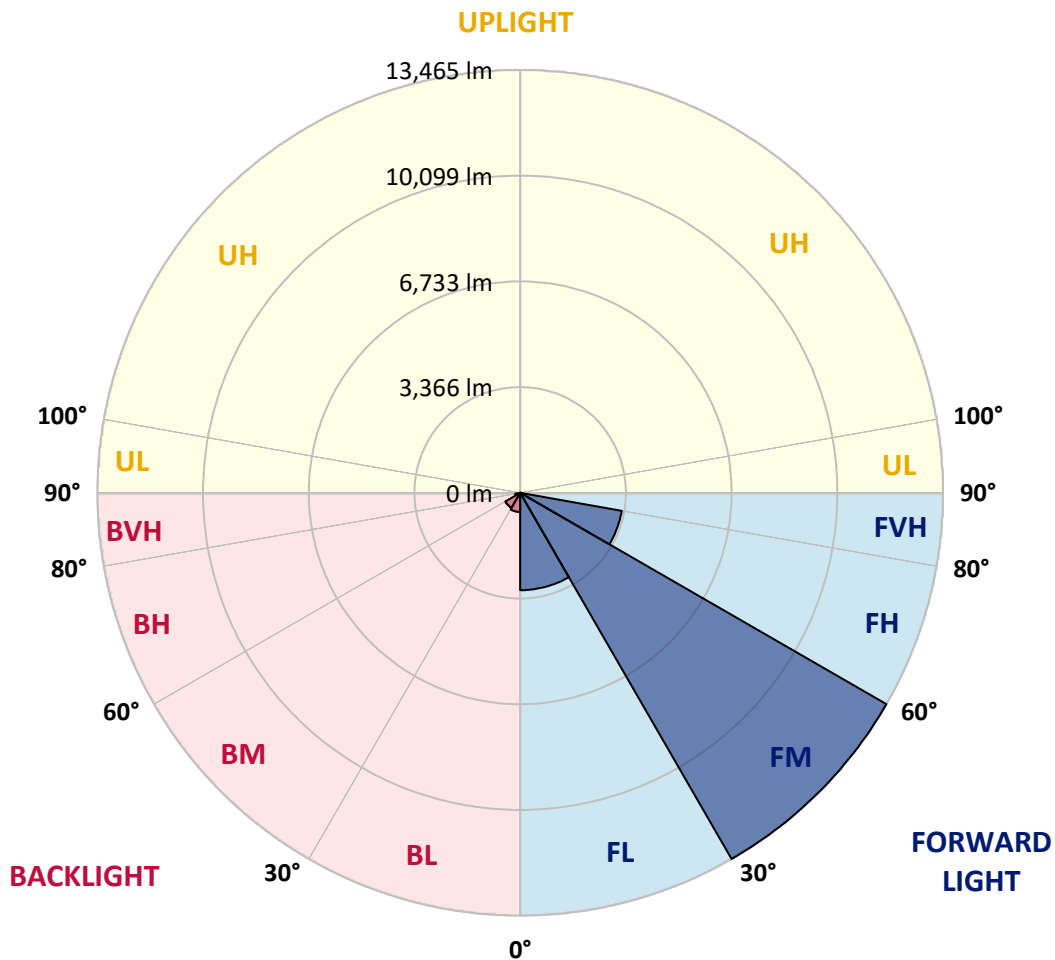
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 3101.2 | 14.6 | | | |
| FM | (30°-60°) | 13465.1 | 63.4 | | | |
| FH | (60°-80°) | 3284.0 | 15.5 | | | G2/5000 |
| FVH | (80°-90°) | 48.4 | 0.2 | | | G1/100 |
| BL | (0°-30°) | 611.1 | 2.9 | B2/1000 | | |
| BM | (30°-60°) | 548.8 | 2.6 | B1/1000 | | |
| BH | (60°-80°) | 157.1 | 0.7 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 7.8 | 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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 58° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 |
| 2.5° | 7230.0 | 7186.3 | 7140.8 | 7056.6 | 6978.9 | 6859.2 | 6694.0 | 6653.4 | 6523.9 | 6310.2 | 6111.0 |
| 5° | 7853.3 | 7845.3 | 7814.4 | 7746.4 | 7662.4 | 7516.6 | 7330.3 | 7205.7 | 7004.9 | 6668.1 | 6284.4 |
| 7.5° | 7484.1 | 7552.2 | 7663.9 | 7822.6 | 7929.5 | 7914.8 | 7772.3 | 7663.9 | 7464.7 | 7004.9 | 6454.3 |
| 10° | 6308.5 | 6321.6 | 6475.4 | 6809.0 | 7336.7 | 7829.1 | 8015.2 | 7986.1 | 7803.1 | 7299.5 | 6603.4 |
| 12.5° | 5894.0 | 5902.1 | 5937.7 | 6044.6 | 6387.9 | 7074.5 | 7918.1 | 8070.4 | 8055.8 | 7581.3 | 6762.0 |
| 15° | 5926.5 | 5931.2 | 5941.0 | 5975.0 | 6072.3 | 6417.1 | 7425.8 | 7812.9 | 8217.6 | 7848.5 | 6917.4 |
| 17.5° | 6182.2 | 6179.0 | 6148.3 | 6115.9 | 6146.7 | 6260.0 | 6923.9 | 7332.0 | 8183.6 | 8073.5 | 7045.3 |
| 20° | 6681.1 | 6697.3 | 6593.6 | 6449.6 | 6375.0 | 6379.9 | 6676.2 | 6982.2 | 7992.6 | 8248.4 | 7140.8 |
| 22.5° | 7382.1 | 7393.5 | 7223.5 | 6974.1 | 6755.6 | 6645.4 | 6727.9 | 6889.9 | 7772.3 | 8410.4 | 7218.6 |
| 25° | 8219.3 | 8219.3 | 7981.4 | 7626.7 | 7288.3 | 7046.9 | 6975.7 | 7037.2 | 7688.2 | 8593.4 | 7296.4 |
| 27.5° | 9122.8 | 9155.3 | 8844.4 | 8379.6 | 7932.8 | 7579.7 | 7356.2 | 7344.9 | 7752.9 | 8823.3 | 7383.8 |
| 30° | 10105.8 | 10134.9 | 9765.7 | 9197.3 | 8667.8 | 8216.1 | 7872.7 | 7798.2 | 8000.8 | 9132.6 | 7511.6 |
| 32.5° | 11083.7 | 11108.0 | 10700.0 | 10120.3 | 9503.3 | 8972.2 | 8520.5 | 8402.2 | 8446.0 | 9584.3 | 7699.6 |
| 35° | 12327.4 | 12332.2 | 11815.6 | 11125.9 | 10466.8 | 9843.4 | 9271.9 | 9155.3 | 9106.7 | 10154.4 | 7969.9 |
| 37.5° | 13316.7 | 13277.8 | 12950.8 | 12298.2 | 11542.1 | 10891.1 | 10219.1 | 10066.9 | 9950.3 | 10955.8 | 8389.4 |
| 40° | 13549.9 | 13549.9 | 13501.3 | 13305.3 | 12704.5 | 12078.0 | 11427.0 | 11200.3 | 10942.9 | 11899.8 | 8952.8 |
| 42.5° | 12942.7 | 12981.4 | 13302.1 | 13728.0 | 13732.8 | 13331.2 | 12694.8 | 12503.9 | 12050.5 | 12974.9 | 9568.1 |
| 45° | 11584.2 | 11595.4 | 12364.6 | 13514.2 | 14294.6 | 14524.7 | 14055.2 | 13791.0 | 13162.9 | 14092.3 | 10131.7 |
| 47.5° | 11095.1 | 11130.7 | 11457.8 | 12863.3 | 14336.8 | 15491.4 | 15360.2 | 14997.5 | 14192.7 | 15112.5 | 10657.9 |
| 50° | 10343.8 | 10387.6 | 10787.4 | 11904.7 | 13958.0 | 16111.6 | 16608.7 | 16219.9 | 15130.2 | 15962.5 | 10918.5 |
| 52.5° | 8546.4 | 8614.3 | 9179.5 | 10636.8 | 13010.6 | 16137.4 | 17751.9 | 17518.7 | 16090.5 | 16417.6 | 10887.8 |
| 55° | 5881.2 | 5931.2 | 6590.3 | 8303.6 | 11099.9 | 15345.7 | 18244.0 | 18404.4 | 16947.1 | 16519.7 | 10738.9 |
| 56° | 4744.4 | 4932.2 | 5414.8 | 7074.5 | 10011.8 | 14671.9 | 18130.8 | 18501.5 | 17201.3 | 16503.4 | 10674.1 |
| 57.5° | 3136.5 | 3172.2 | 3698.3 | 5126.5 | 8039.7 | 13209.8 | 17619.0 | 18294.3 | 17528.4 | 16420.7 | 10627.0 |
| 60° | 1475.1 | 1491.4 | 1680.8 | 2365.7 | 4350.9 | 9626.4 | 15956.1 | 17076.6 | 17648.2 | 16247.6 | 10625.5 |
| 62.5° | 961.8 | 965.0 | 987.7 | 1128.6 | 1779.5 | 5243.1 | 13227.6 | 14840.4 | 16655.6 | 16228.2 | 10594.7 |
| 65° | 791.9 | 799.9 | 772.5 | 790.1 | 931.1 | 1977.1 | 9330.1 | 11569.5 | 14325.5 | 15771.5 | 10248.3 |
| 67.5° | 698.0 | 699.5 | 662.3 | 641.2 | 681.8 | 867.9 | 4700.7 | 7297.9 | 10714.5 | 13400.8 | 8441.2 |
| 70° | 636.4 | 634.7 | 592.6 | 544.1 | 545.7 | 576.4 | 1531.8 | 3031.2 | 5928.1 | 7956.9 | 4846.4 |
| 72.5° | 565.2 | 568.4 | 544.1 | 476.0 | 453.4 | 408.0 | 576.4 | 817.6 | 2017.7 | 2555.1 | 1277.6 |
| 75° | 495.4 | 488.9 | 464.8 | 420.9 | 378.9 | 273.7 | 289.9 | 348.2 | 526.2 | 521.3 | 275.3 |
| 77.5° | 375.8 | 369.3 | 380.5 | 359.5 | 296.4 | 191.1 | 158.7 | 181.4 | 238.1 | 221.8 | 111.7 |
| 80° | 286.6 | 283.3 | 259.2 | 307.7 | 270.4 | 144.1 | 108.4 | 111.7 | 129.5 | 118.1 | 55.1 |
| 82.5° | 207.2 | 205.6 | 195.9 | 189.5 | 171.7 | 105.2 | 82.6 | 87.5 | 97.1 | 82.6 | 40.5 |
| 85° | 79.3 | 79.3 | 153.8 | 129.5 | 118.1 | 71.2 | 58.3 | 63.2 | 74.5 | 59.8 | 27.5 |
| 87.5° | 12.9 | 12.9 | 103.7 | 85.8 | 53.4 | 35.7 | 37.2 | 40.5 | 43.7 | 35.7 | 21.0 |
| 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° | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 | 6009.0 |
| 2.5° | 5992.9 | 5884.3 | 5646.3 | 5416.4 | 5215.6 | 4995.4 | 4883.6 | 4754.1 | 4705.5 | 4608.3 | 4618.0 |
| 5° | 6054.3 | 5827.7 | 5349.9 | 4846.4 | 4384.9 | 3915.4 | 3581.8 | 3267.7 | 3092.8 | 2919.5 | 2919.5 |
| 7.5° | 6117.5 | 5771.0 | 5032.7 | 4227.9 | 3450.6 | 2645.9 | 2075.9 | 1619.3 | 1365.1 | 1195.0 | 1190.2 |
| 10° | 6161.2 | 5698.0 | 4671.5 | 3510.5 | 2364.1 | 1363.4 | 822.6 | 647.7 | 584.5 | 556.9 | 555.4 |
| 12.5° | 6217.9 | 5625.2 | 4260.2 | 2665.4 | 1313.2 | 647.7 | 513.3 | 485.8 | 474.5 | 467.9 | 467.9 |
| 15° | 6266.4 | 5521.6 | 3761.6 | 1792.5 | 689.8 | 485.8 | 442.1 | 432.4 | 430.6 | 429.1 | 430.6 |
| 17.5° | 6277.9 | 5374.3 | 3164.0 | 1049.3 | 500.4 | 424.2 | 404.9 | 396.7 | 396.7 | 395.2 | 395.2 |
| 20° | 6251.9 | 5179.9 | 2503.3 | 647.7 | 432.4 | 390.3 | 369.3 | 359.5 | 357.9 | 357.9 | 357.9 |
| 22.5° | 6198.5 | 4932.2 | 1850.8 | 490.7 | 393.5 | 359.5 | 332.0 | 322.2 | 322.2 | 323.8 | 325.5 |
| 25° | 6132.1 | 4639.1 | 1271.1 | 422.7 | 364.4 | 327.2 | 299.6 | 289.9 | 293.0 | 296.4 | 298.0 |
| 27.5° | 6047.8 | 4289.3 | 832.3 | 366.0 | 325.5 | 294.7 | 270.4 | 263.9 | 270.4 | 276.9 | 280.1 |
| 30° | 5963.7 | 3905.7 | 563.4 | 317.5 | 281.8 | 259.2 | 244.5 | 242.9 | 252.7 | 267.2 | 268.9 |
| 32.5° | 5908.6 | 3512.2 | 425.8 | 285.0 | 247.8 | 228.3 | 221.8 | 225.0 | 239.7 | 255.8 | 259.2 |
| 35° | 5903.8 | 3128.3 | 362.7 | 259.2 | 225.0 | 207.2 | 204.1 | 213.7 | 230.0 | 242.9 | 246.1 |
| 37.5° | 5979.8 | 2768.9 | 328.7 | 239.7 | 207.2 | 189.5 | 184.6 | 202.4 | 217.0 | 230.0 | 233.2 |
| 40° | 6133.6 | 2446.7 | 306.1 | 221.8 | 192.6 | 171.7 | 168.4 | 183.0 | 197.5 | 212.1 | 217.0 |
| 42.5° | 6326.5 | 2145.5 | 280.1 | 204.1 | 176.4 | 152.3 | 148.9 | 160.3 | 174.9 | 195.9 | 199.2 |
| 45° | 6493.2 | 1865.4 | 252.7 | 184.6 | 158.7 | 131.2 | 129.5 | 142.6 | 153.8 | 173.3 | 176.4 |
| 47.5° | 6634.1 | 1632.2 | 226.7 | 163.5 | 136.1 | 116.6 | 115.0 | 121.5 | 127.9 | 145.7 | 148.9 |
| 50° | 6559.6 | 1434.7 | 200.9 | 134.3 | 110.1 | 100.4 | 98.8 | 98.8 | 106.9 | 124.7 | 127.9 |
| 52.5° | 6376.6 | 1311.5 | 176.4 | 111.7 | 90.6 | 85.8 | 80.9 | 82.6 | 90.6 | 98.8 | 100.4 |
| 55° | 6229.2 | 1253.2 | 155.4 | 98.8 | 76.0 | 71.2 | 66.4 | 64.8 | 66.4 | 63.2 | 59.8 |
| 56° | 6193.6 | 1246.8 | 150.6 | 95.5 | 72.9 | 66.4 | 59.8 | 56.7 | 55.1 | 48.6 | 46.9 |
| 57.5° | 6177.5 | 1246.8 | 142.6 | 89.0 | 68.0 | 59.8 | 51.8 | 45.4 | 38.8 | 34.0 | 34.0 |
| 60° | 6164.4 | 1254.9 | 132.8 | 77.8 | 58.3 | 48.6 | 37.2 | 27.5 | 22.6 | 22.6 | 22.6 |
| 62.5° | 6137.0 | 1251.7 | 121.5 | 64.8 | 50.1 | 37.2 | 22.6 | 17.7 | 16.2 | 17.7 | 19.5 |
| 65° | 5827.7 | 1162.6 | 106.9 | 51.8 | 38.8 | 26.0 | 12.9 | 12.9 | 14.6 | 17.7 | 19.5 |
| 67.5° | 4695.8 | 880.9 | 87.5 | 40.5 | 27.5 | 19.5 | 11.3 | 11.3 | 14.6 | 17.7 | 19.5 |
| 70° | 2579.5 | 464.8 | 74.5 | 29.1 | 21.0 | 16.2 | 11.3 | 9.7 | 14.6 | 17.7 | 19.5 |
| 72.5° | 629.9 | 194.4 | 68.0 | 22.6 | 19.5 | 14.6 | 9.7 | 9.7 | 14.6 | 17.7 | 19.5 |
| 75° | 155.4 | 145.7 | 55.1 | 17.7 | 16.2 | 12.9 | 9.7 | 9.7 | 14.6 | 17.7 | 19.5 |
| 77.5° | 72.9 | 192.6 | 37.2 | 16.2 | 14.6 | 11.3 | 9.7 | 9.7 | 14.6 | 17.7 | 17.7 |
| 80° | 43.7 | 145.7 | 22.6 | 14.6 | 12.9 | 11.3 | 9.7 | 9.7 | 14.6 | 17.7 | 19.5 |
| 82.5° | 26.0 | 42.1 | 16.2 | 14.6 | 12.9 | 9.7 | 9.7 | 9.7 | 14.6 | 17.7 | 19.5 |
| 85° | 22.6 | 21.0 | 16.2 | 14.6 | 12.9 | 11.3 | 9.7 | 9.7 | 16.2 | 19.5 | 19.5 |
| 87.5° | 17.7 | 16.2 | 14.6 | 12.9 | 12.9 | 11.3 | 9.7 | 9.7 | 14.6 | 17.7 | 19.5 |
| 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)