

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: P270786

Luminaire Tested: **NVN-AF-01-LED-U-T3-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P270786
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (p24135)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-AF-01-LED-U-T3-7027-600
Description: NAVION ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3498 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

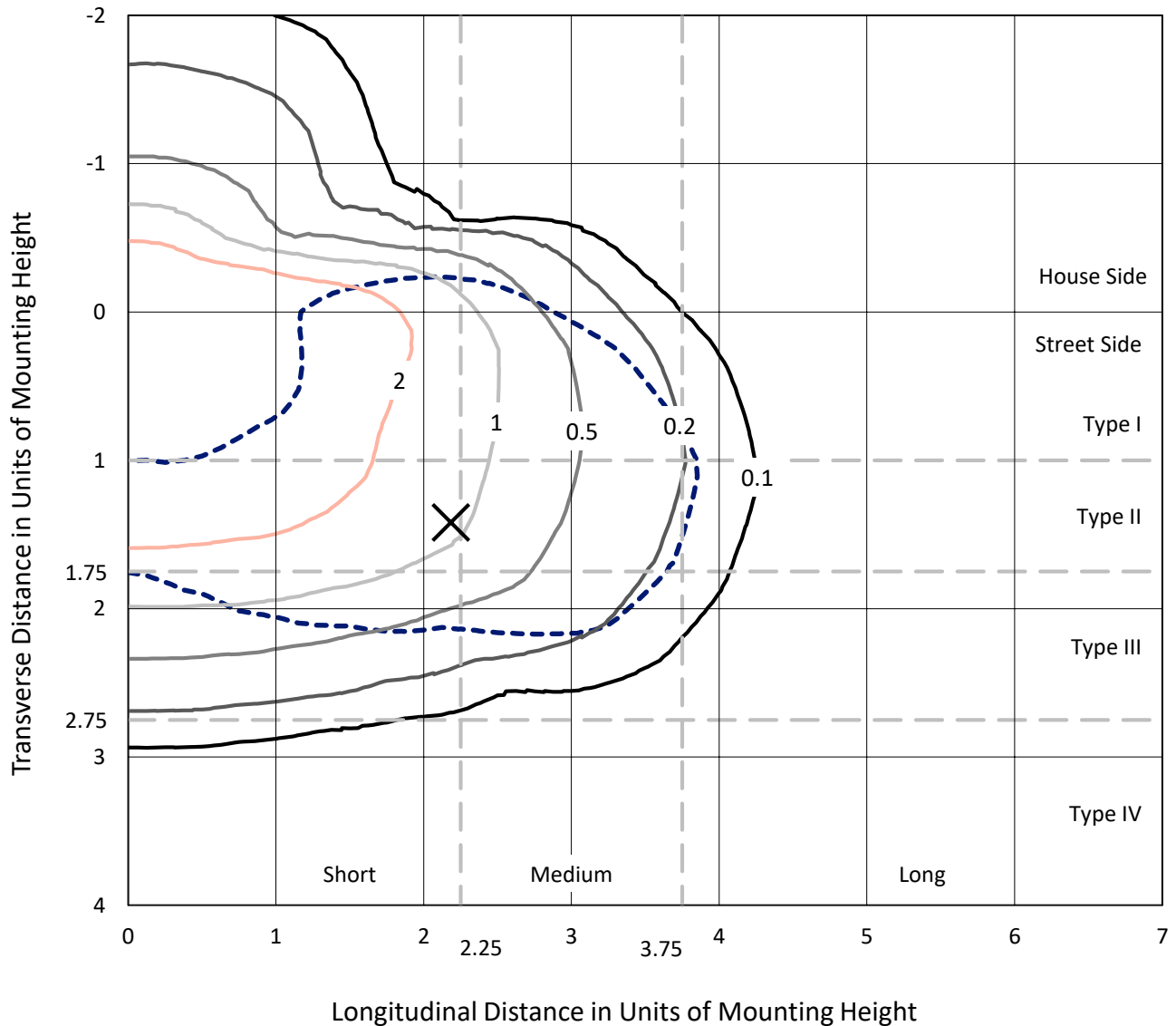
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

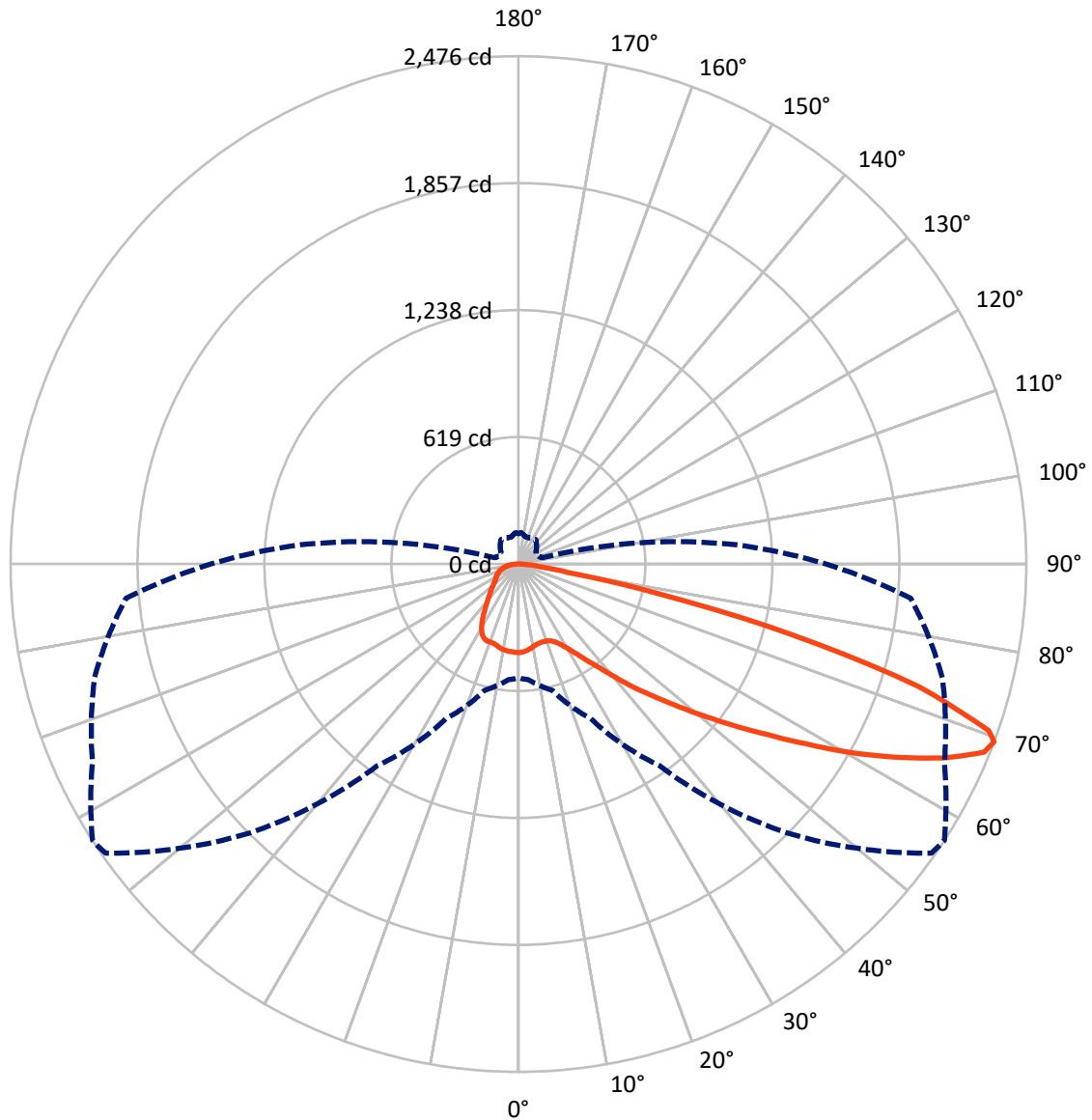
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.4 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 771.9 | 0.0 | 771.9 |
| | % Fixture | 22.1 | 0.0 | 22.1 |
| Street Side | Lumens | 2726.1 | 0.0 | 2726.1 |
| | % Fixture | 77.9 | 0.0 | 77.9 |
| Total | Lumens | 3498.0 | 0.0 | 3498.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 40.5 | 1.2 |
| 10°-20° | 115.1 | 3.3 |
| 20°-30° | 191.4 | 5.5 |
| 30°-40° | 312.5 | 8.9 |
| 40°-50° | 527.5 | 15.1 |
| 50°-60° | 820.5 | 23.5 |
| 60°-70° | 977.4 | 27.9 |
| 70°-80° | 455.3 | 13.0 |
| 80°-90° | 57.9 | 1.7 |
| 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° | 3498.0 | 100.0 |
| 0°-180° | 3498.0 | 100.0 |

Coefficient of Utilization



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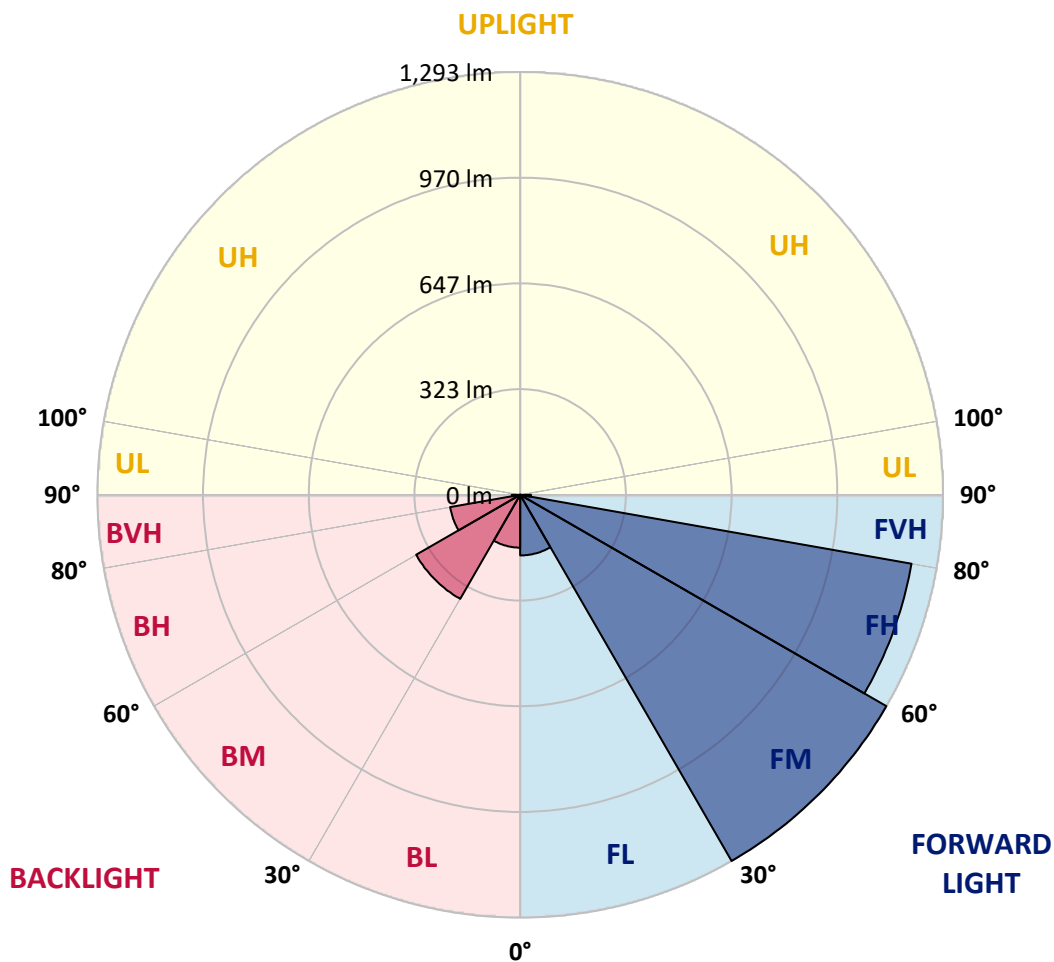
CATALOG NUMBER: NVN-AF-01-LED-U-T3-7027-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 185.2 | 5.3 | | | |
| FM | (30°-60°) | 1293.1 | 37.0 | | | |
| FH | (60°-80°) | 1215.2 | 34.7 | | | G1/1800 |
| FVH | (80°-90°) | 32.5 | 0.9 | | | G1/100 |
| BL | (0°-30°) | 161.7 | 4.6 | B1/500 | | |
| BM | (30°-60°) | 367.4 | 10.5 | B1/1000 | | |
| BH | (60°-80°) | 217.5 | 6.2 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 25.4 | 0.7 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 |
| 2.5° | 429.7 | 429.7 | 430.8 | 430.8 | 430.8 | 430.4 | 429.1 | 429.5 | 428.6 | 428.0 | 426.9 |
| 5° | 421.0 | 421.5 | 422.8 | 423.2 | 423.9 | 424.2 | 424.2 | 423.9 | 424.2 | 424.2 | 423.6 |
| 7.5° | 408.9 | 409.4 | 411.0 | 411.9 | 413.8 | 415.6 | 416.5 | 416.5 | 417.6 | 418.5 | 418.8 |
| 10° | 401.5 | 401.5 | 402.4 | 402.4 | 404.0 | 404.9 | 407.8 | 407.7 | 410.7 | 413.6 | 414.9 |
| 12.5° | 400.6 | 400.6 | 400.1 | 398.6 | 397.7 | 397.5 | 400.5 | 400.9 | 405.6 | 410.7 | 413.2 |
| 15° | 403.6 | 403.6 | 402.3 | 399.0 | 395.8 | 394.1 | 397.1 | 397.9 | 403.1 | 409.2 | 413.0 |
| 17.5° | 413.0 | 412.7 | 409.8 | 403.6 | 397.7 | 395.3 | 396.2 | 397.1 | 401.7 | 408.6 | 413.4 |
| 20° | 433.8 | 433.8 | 427.6 | 416.1 | 406.0 | 400.1 | 398.8 | 399.6 | 402.9 | 409.4 | 415.5 |
| 22.5° | 470.4 | 470.9 | 459.8 | 441.0 | 423.7 | 411.3 | 406.0 | 406.8 | 408.3 | 414.5 | 421.2 |
| 25° | 524.0 | 522.3 | 506.4 | 479.6 | 452.8 | 431.7 | 420.8 | 421.5 | 421.5 | 427.2 | 434.2 |
| 27.5° | 580.9 | 581.4 | 558.6 | 529.8 | 494.4 | 463.2 | 445.6 | 445.4 | 445.2 | 450.8 | 458.1 |
| 30° | 645.3 | 645.4 | 619.0 | 585.9 | 545.4 | 505.2 | 479.1 | 478.7 | 476.8 | 483.6 | 493.3 |
| 32.5° | 715.5 | 715.3 | 684.6 | 647.1 | 602.1 | 556.7 | 522.6 | 522.5 | 520.8 | 530.3 | 541.9 |
| 35° | 793.5 | 793.5 | 763.0 | 716.8 | 668.2 | 617.7 | 578.1 | 578.0 | 578.9 | 591.7 | 602.7 |
| 37.5° | 887.3 | 889.3 | 852.5 | 796.5 | 743.4 | 689.4 | 643.6 | 642.3 | 635.6 | 657.0 | 675.2 |
| 40° | 985.1 | 990.7 | 952.7 | 887.3 | 829.9 | 774.2 | 723.6 | 722.6 | 716.8 | 739.7 | 768.9 |
| 42.5° | 1091.0 | 1103.7 | 1061.4 | 994.8 | 932.4 | 872.1 | 821.2 | 818.7 | 796.3 | 831.9 | 877.9 |
| 45° | 1229.9 | 1238.1 | 1176.8 | 1116.4 | 1057.5 | 988.8 | 928.3 | 915.1 | 892.6 | 938.3 | 997.8 |
| 47.5° | 1324.5 | 1320.4 | 1282.2 | 1241.5 | 1203.6 | 1137.9 | 1044.9 | 1028.1 | 1000.8 | 1061.3 | 1126.8 |
| 50° | 1383.1 | 1385.9 | 1364.4 | 1362.5 | 1360.5 | 1314.6 | 1176.6 | 1156.5 | 1124.9 | 1196.5 | 1273.1 |
| 52.5° | 1421.7 | 1408.6 | 1412.5 | 1458.0 | 1513.5 | 1491.5 | 1325.4 | 1303.1 | 1270.7 | 1342.2 | 1428.8 |
| 55° | 1405.7 | 1388.2 | 1423.4 | 1513.5 | 1643.4 | 1648.5 | 1489.0 | 1465.9 | 1438.1 | 1497.2 | 1616.1 |
| 57.5° | 1339.0 | 1347.6 | 1403.2 | 1528.5 | 1732.4 | 1789.1 | 1676.9 | 1653.4 | 1598.8 | 1658.8 | 1793.7 |
| 60° | 1245.1 | 1262.7 | 1347.6 | 1504.8 | 1794.6 | 1898.6 | 1883.1 | 1867.4 | 1773.4 | 1816.0 | 1980.6 |
| 62.5° | 1144.4 | 1161.8 | 1266.3 | 1464.1 | 1766.6 | 1995.6 | 2085.5 | 2076.0 | 1966.2 | 1967.4 | 2099.0 |
| 65° | 995.4 | 1002.6 | 1109.1 | 1353.6 | 1689.1 | 2083.1 | 2288.3 | 2279.8 | 2150.5 | 2096.6 | 2132.1 |
| 67.5° | 751.8 | 760.8 | 848.3 | 1068.4 | 1452.5 | 2035.6 | 2450.1 | 2448.8 | 2261.5 | 2144.6 | 2053.3 |
| 69° | 555.2 | 566.1 | 637.5 | 829.5 | 1201.0 | 1854.7 | 2457.9 | 2475.9 | 2291.3 | 2139.6 | 1920.0 |
| 70° | 406.3 | 418.8 | 484.8 | 658.4 | 1000.4 | 1654.9 | 2392.6 | 2431.6 | 2280.0 | 2108.4 | 1816.3 |
| 72.5° | 172.7 | 177.0 | 209.3 | 297.2 | 507.5 | 997.8 | 1959.7 | 2041.7 | 2059.2 | 1889.1 | 1419.0 |
| 75° | 108.2 | 109.6 | 122.3 | 152.5 | 225.7 | 412.7 | 1269.0 | 1380.9 | 1537.4 | 1465.8 | 950.0 |
| 77.5° | 81.6 | 82.6 | 90.0 | 105.0 | 140.1 | 154.1 | 588.7 | 702.0 | 880.6 | 862.3 | 472.8 |
| 80° | 62.5 | 63.2 | 68.1 | 76.4 | 98.8 | 96.5 | 191.0 | 240.0 | 367.4 | 324.3 | 167.3 |
| 82.5° | 49.0 | 49.2 | 53.4 | 55.1 | 69.0 | 64.9 | 95.8 | 106.8 | 148.5 | 123.3 | 81.7 |
| 85° | 43.5 | 44.0 | 48.4 | 40.3 | 44.0 | 39.2 | 52.6 | 57.1 | 78.8 | 74.4 | 30.9 |
| 87.5° | 22.2 | 23.3 | 40.6 | 34.5 | 22.2 | 18.5 | 23.0 | 24.9 | 32.0 | 34.8 | 15.0 |
| 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° | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 |
| 2.5° | 427.1 | 427.2 | 428.0 | 429.1 | 430.8 | 433.2 | 435.8 | 438.6 | 440.1 | 441.2 | 440.7 |
| 5° | 423.6 | 423.7 | 425.1 | 427.1 | 429.3 | 432.7 | 437.1 | 440.4 | 443.0 | 444.5 | 444.3 |
| 7.5° | 419.0 | 419.7 | 422.4 | 424.5 | 427.8 | 430.4 | 434.1 | 437.1 | 439.6 | 441.2 | 441.0 |
| 10° | 415.6 | 416.4 | 419.7 | 422.7 | 425.3 | 425.7 | 425.1 | 424.2 | 423.9 | 425.1 | 424.5 |
| 12.5° | 414.1 | 415.5 | 418.5 | 420.5 | 419.5 | 415.1 | 410.3 | 408.3 | 407.7 | 409.8 | 410.0 |
| 15° | 414.5 | 415.6 | 418.3 | 417.1 | 411.0 | 403.8 | 401.2 | 402.6 | 404.0 | 405.3 | 405.6 |
| 17.5° | 415.6 | 416.4 | 417.1 | 412.1 | 403.6 | 398.8 | 397.9 | 396.4 | 392.4 | 390.1 | 389.9 |
| 20° | 417.6 | 418.5 | 417.4 | 409.5 | 402.0 | 395.8 | 385.0 | 375.3 | 366.1 | 361.2 | 359.2 |
| 22.5° | 424.5 | 425.3 | 421.9 | 414.3 | 402.6 | 382.3 | 360.6 | 344.1 | 329.9 | 322.2 | 319.3 |
| 25° | 438.3 | 439.5 | 434.7 | 425.1 | 394.5 | 359.1 | 328.3 | 306.0 | 288.3 | 279.1 | 276.6 |
| 27.5° | 462.2 | 463.3 | 458.1 | 433.2 | 375.9 | 327.8 | 290.7 | 268.6 | 253.3 | 245.4 | 244.2 |
| 30° | 498.0 | 499.5 | 495.0 | 433.0 | 347.1 | 288.3 | 254.0 | 240.9 | 232.2 | 226.8 | 226.6 |
| 32.5° | 547.7 | 553.5 | 534.3 | 425.3 | 311.7 | 248.1 | 226.3 | 221.7 | 217.5 | 213.8 | 213.8 |
| 35° | 610.8 | 624.6 | 573.3 | 409.4 | 272.7 | 220.9 | 210.7 | 206.5 | 201.1 | 197.3 | 196.9 |
| 37.5° | 686.3 | 707.7 | 601.1 | 381.2 | 239.2 | 207.6 | 201.3 | 194.5 | 185.9 | 178.6 | 176.6 |
| 40° | 790.1 | 795.0 | 614.7 | 335.2 | 214.1 | 200.4 | 192.5 | 183.9 | 173.2 | 164.7 | 163.9 |
| 42.5° | 894.3 | 878.2 | 612.0 | 286.0 | 199.8 | 193.9 | 183.7 | 174.0 | 164.4 | 157.5 | 157.5 |
| 45° | 1012.7 | 950.6 | 591.7 | 236.4 | 186.8 | 186.6 | 175.3 | 166.1 | 158.8 | 153.6 | 152.5 |
| 47.5° | 1125.9 | 1015.9 | 556.5 | 200.1 | 173.4 | 179.1 | 170.0 | 162.7 | 155.9 | 150.9 | 150.0 |
| 50° | 1263.5 | 1091.4 | 519.1 | 174.5 | 160.3 | 172.7 | 167.8 | 163.9 | 157.5 | 148.8 | 148.0 |
| 52.5° | 1400.1 | 1179.6 | 490.3 | 155.1 | 148.8 | 167.5 | 169.2 | 169.5 | 163.5 | 147.0 | 145.7 |
| 55° | 1546.8 | 1273.7 | 459.8 | 140.1 | 139.4 | 165.1 | 172.2 | 171.8 | 168.8 | 147.3 | 145.5 |
| 57.5° | 1686.3 | 1368.5 | 414.3 | 129.6 | 132.1 | 162.7 | 172.8 | 165.6 | 160.5 | 149.6 | 146.8 |
| 60° | 1801.9 | 1446.9 | 347.6 | 122.3 | 125.9 | 157.7 | 168.4 | 157.7 | 148.8 | 149.2 | 146.5 |
| 62.5° | 1858.1 | 1468.9 | 265.8 | 113.7 | 120.7 | 149.6 | 162.0 | 151.6 | 143.5 | 150.0 | 148.5 |
| 65° | 1815.2 | 1406.3 | 189.5 | 105.9 | 114.4 | 140.1 | 158.1 | 146.5 | 140.9 | 154.5 | 152.7 |
| 67.5° | 1661.7 | 1236.2 | 137.5 | 99.1 | 108.3 | 130.6 | 150.9 | 141.8 | 138.2 | 157.9 | 153.9 |
| 69° | 1498.5 | 1067.4 | 119.1 | 95.0 | 104.2 | 125.5 | 146.2 | 139.2 | 136.2 | 153.3 | 147.3 |
| 70° | 1362.6 | 937.2 | 110.0 | 92.4 | 100.5 | 122.4 | 142.7 | 137.7 | 134.1 | 147.6 | 140.7 |
| 72.5° | 977.0 | 605.7 | 92.4 | 85.1 | 91.2 | 116.1 | 134.8 | 132.0 | 126.5 | 133.3 | 128.7 |
| 75° | 590.4 | 316.3 | 78.6 | 77.4 | 81.2 | 107.1 | 125.7 | 122.1 | 116.7 | 117.4 | 115.2 |
| 77.5° | 271.2 | 146.1 | 65.8 | 68.5 | 71.0 | 95.8 | 114.4 | 110.4 | 105.6 | 103.7 | 103.9 |
| 80° | 118.9 | 85.2 | 55.1 | 58.5 | 59.7 | 86.1 | 102.3 | 97.8 | 92.4 | 102.0 | 94.7 |
| 82.5° | 64.3 | 49.4 | 42.9 | 45.3 | 49.0 | 75.0 | 88.9 | 83.2 | 78.0 | 90.6 | 73.2 |
| 85° | 26.1 | 25.3 | 29.1 | 31.4 | 34.0 | 54.0 | 74.4 | 68.4 | 62.1 | 55.5 | 54.2 |
| 87.5° | 11.1 | 12.0 | 14.4 | 15.2 | 18.1 | 33.5 | 49.9 | 43.7 | 43.8 | 37.5 | 36.9 |
| 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)