

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: P143851

Luminaire Tested: **OVH-E02-LED-E-U-5MQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143851
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33697)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: OVH-E02-LED-E-U-5MQ-7050
Description: OVH LED ROADWAY SMALL CUTOFF COBRAHEAD LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (42) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6377.6 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

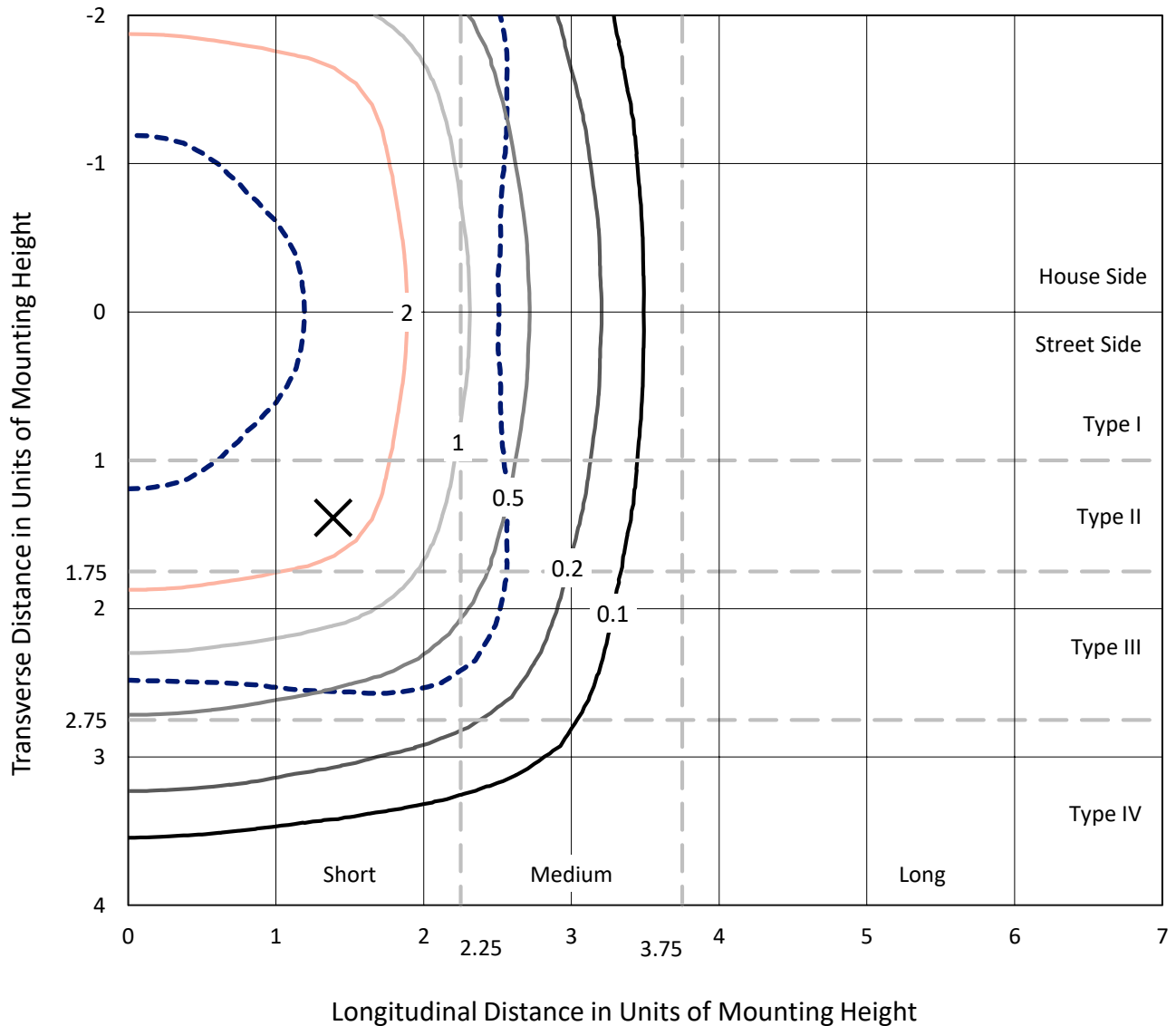
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

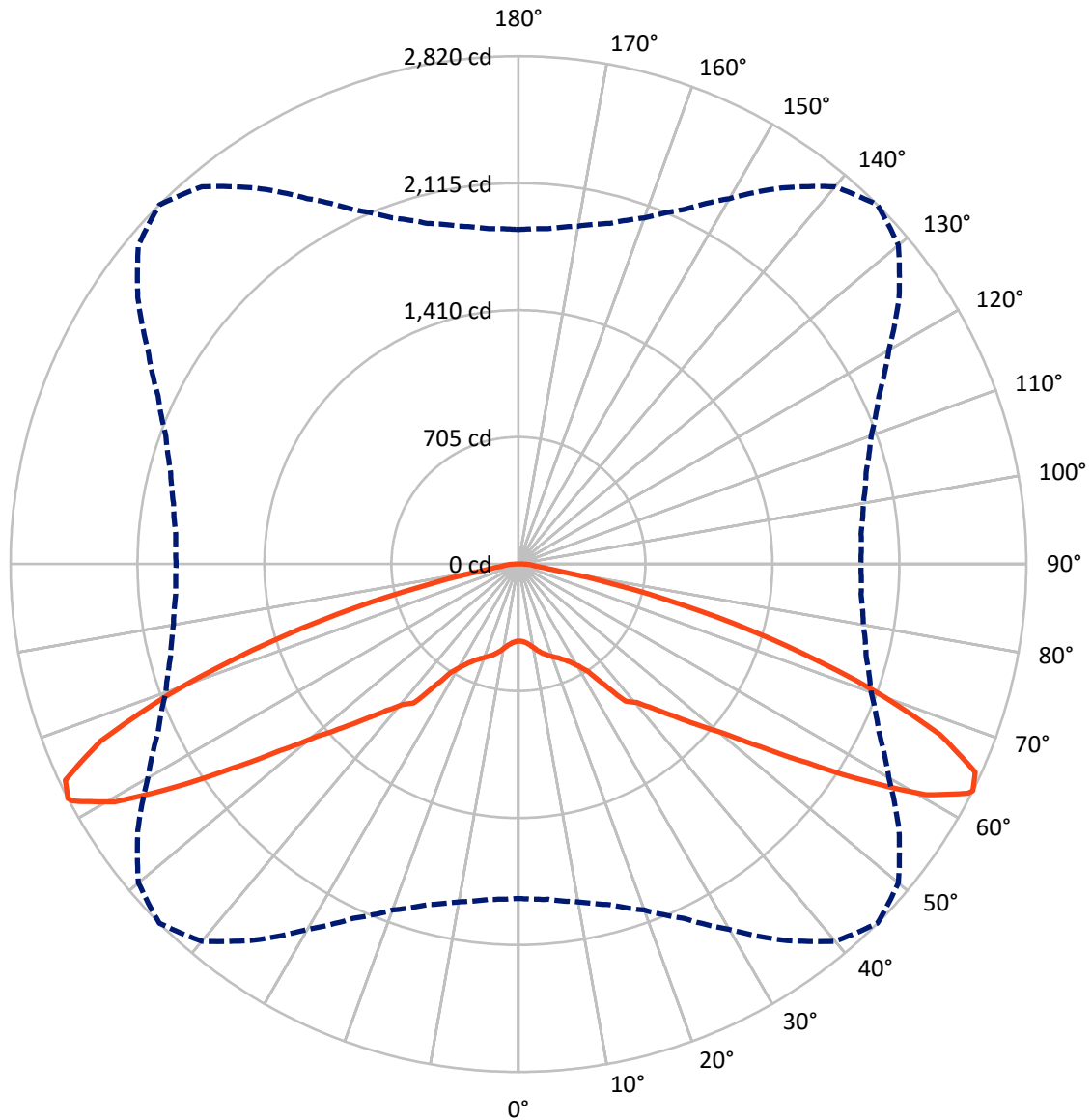
× Max cd
- - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.7 fc
Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical



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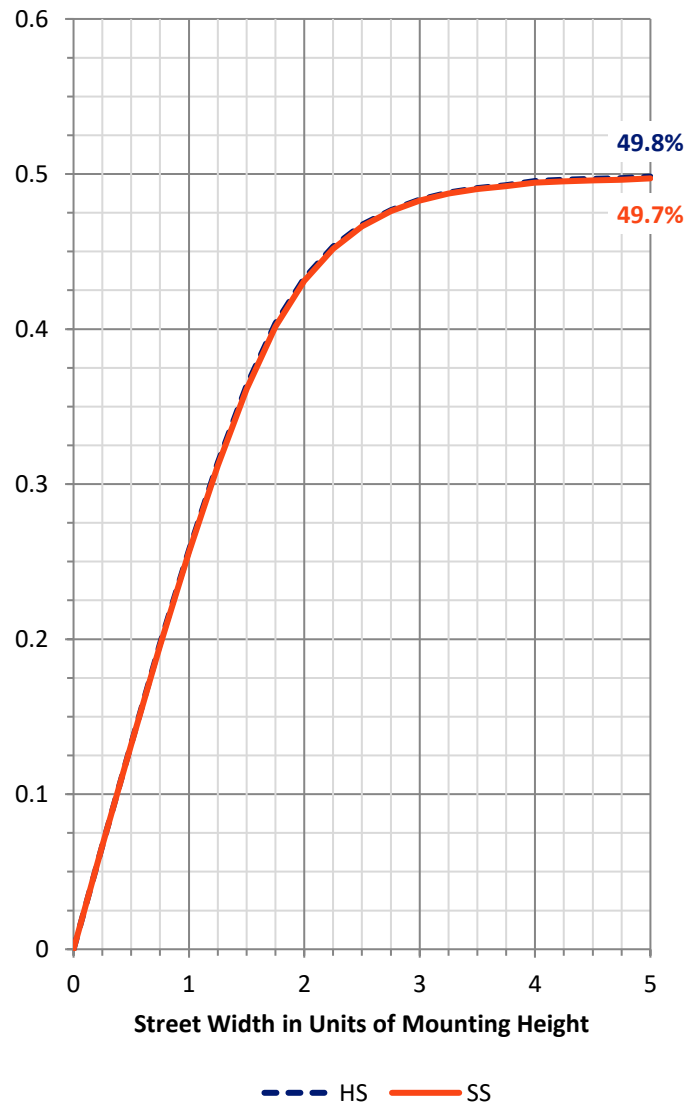
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 3188.8 | 0.0 | 3188.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 3188.8 | 0.0 | 3188.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 6377.6 | 0.0 | 6377.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 43.1 | 0.7 |
| 10°-20° | 147.2 | 2.3 |
| 20°-30° | 281.2 | 4.4 |
| 30°-40° | 535.8 | 8.4 |
| 40°-50° | 922.6 | 14.5 |
| 50°-60° | 1648.6 | 25.8 |
| 60°-70° | 2008.0 | 31.5 |
| 70°-80° | 715.3 | 11.2 |
| 80°-90° | 75.8 | 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° | 6377.6 | 100.0 |
| 0°-180° | 6377.6 | 100.0 |

Coefficient of Utilization



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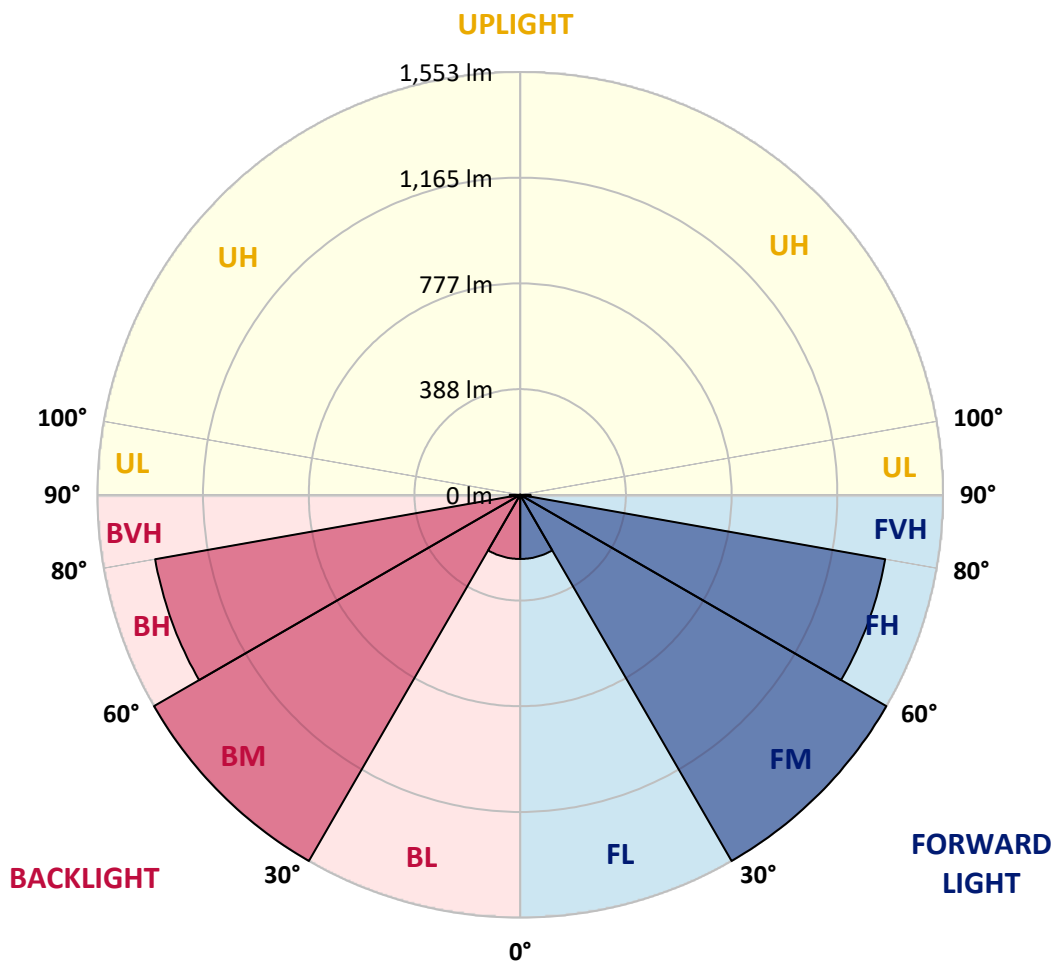
CATALOG NUMBER: OVH-E02-LED-E-U-5MQ-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 235.8 | 3.7 | | | |
| FM | (30°-60°) | 1553.5 | 24.4 | | | |
| FH | (60°-80°) | 1361.6 | 21.4 | | | G1/1800 |
| FVH | (80°-90°) | 37.9 | 0.6 | | | G1/100 |
| BL | (0°-30°) | 235.8 | 3.7 | B1/500 | | |
| BM | (30°-60°) | 1553.5 | 24.4 | B2/2500 | | |
| BH | (60°-80°) | 1361.6 | 21.4 | B3/2500 | | G1/1800 |
| BVH | (80°-90°) | 37.9 | 0.6 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 428.1 | 428.1 | 428.1 | 428.1 | 428.1 | 428.1 | 428.1 | 428.1 | 428.1 | 428.1 | 428.1 |
| 2.5° | 431.4 | 431.0 | 431.4 | 430.6 | 430.6 | 430.1 | 430.1 | 430.1 | 429.3 | 430.1 | 429.3 |
| 5° | 440.4 | 440.0 | 440.4 | 439.6 | 439.6 | 438.8 | 438.8 | 438.8 | 437.9 | 438.8 | 438.4 |
| 7.5° | 456.0 | 456.8 | 456.0 | 455.2 | 455.2 | 454.4 | 453.9 | 453.9 | 453.5 | 453.1 | 453.9 |
| 10° | 477.8 | 478.6 | 477.3 | 476.5 | 476.1 | 475.7 | 474.9 | 474.5 | 474.5 | 472.8 | 473.2 |
| 12.5° | 500.7 | 500.7 | 499.5 | 499.1 | 499.1 | 498.3 | 496.6 | 496.2 | 496.2 | 495.4 | 494.6 |
| 15° | 521.3 | 521.3 | 520.4 | 518.8 | 519.2 | 518.0 | 516.7 | 515.9 | 515.9 | 515.1 | 514.3 |
| 17.5° | 540.1 | 540.1 | 538.9 | 537.3 | 536.4 | 536.0 | 534.4 | 533.6 | 533.6 | 532.8 | 531.9 |
| 20° | 559.0 | 559.8 | 557.8 | 556.1 | 554.5 | 552.9 | 551.2 | 550.4 | 549.2 | 549.6 | 549.2 |
| 22.5° | 581.6 | 582.0 | 578.7 | 576.7 | 573.4 | 571.3 | 568.9 | 568.1 | 566.4 | 566.4 | 567.2 |
| 25° | 610.3 | 609.9 | 606.2 | 602.5 | 598.8 | 594.7 | 591.0 | 590.2 | 588.6 | 588.2 | 588.6 |
| 27.5° | 648.1 | 647.7 | 643.2 | 638.2 | 633.3 | 627.2 | 622.6 | 620.2 | 618.9 | 617.3 | 618.1 |
| 30° | 694.5 | 695.3 | 690.0 | 684.2 | 678.1 | 670.7 | 664.9 | 661.6 | 659.2 | 657.5 | 658.3 |
| 32.5° | 788.9 | 788.0 | 779.8 | 767.5 | 754.4 | 737.2 | 723.2 | 717.5 | 712.9 | 711.3 | 712.5 |
| 35° | 883.7 | 882.9 | 879.6 | 875.9 | 872.6 | 861.5 | 851.3 | 839.4 | 829.5 | 823.3 | 825.0 |
| 37.5° | 928.4 | 928.4 | 926.0 | 925.1 | 925.1 | 931.7 | 939.9 | 954.7 | 966.2 | 967.0 | 963.3 |
| 40° | 998.2 | 998.2 | 994.1 | 992.0 | 990.8 | 992.9 | 998.2 | 1003.5 | 1009.3 | 1010.5 | 1006.4 |
| 42.5° | 1080.3 | 1076.6 | 1073.7 | 1069.6 | 1069.2 | 1071.3 | 1077.0 | 1083.6 | 1089.3 | 1094.2 | 1085.6 |
| 45° | 1168.9 | 1165.7 | 1162.8 | 1160.3 | 1162.0 | 1167.3 | 1175.1 | 1186.6 | 1194.8 | 1202.2 | 1195.2 |
| 47.5° | 1267.9 | 1260.9 | 1263.8 | 1261.3 | 1265.4 | 1276.1 | 1290.0 | 1307.3 | 1315.9 | 1329.0 | 1317.9 |
| 50° | 1391.0 | 1392.6 | 1391.0 | 1391.0 | 1395.9 | 1409.9 | 1430.4 | 1453.8 | 1468.6 | 1476.0 | 1469.4 |
| 52.5° | 1574.0 | 1569.1 | 1558.0 | 1561.3 | 1567.9 | 1590.1 | 1616.7 | 1649.6 | 1668.4 | 1686.1 | 1665.6 |
| 55° | 1774.3 | 1775.2 | 1773.5 | 1778.0 | 1790.8 | 1813.3 | 1847.0 | 1896.7 | 1920.5 | 1951.2 | 1926.6 |
| 57.5° | 1940.2 | 1945.9 | 1955.8 | 1969.3 | 1996.8 | 2034.6 | 2100.6 | 2176.6 | 2239.8 | 2273.0 | 2234.4 |
| 60° | 1993.9 | 1999.7 | 2023.5 | 2061.2 | 2113.0 | 2190.1 | 2297.2 | 2427.4 | 2541.0 | 2600.2 | 2549.7 |
| 62.5° | 1890.5 | 1901.2 | 1936.5 | 1988.6 | 2074.0 | 2194.6 | 2353.9 | 2546.4 | 2721.6 | 2802.5 | 2741.3 |
| 63° | 1856.8 | 1868.7 | 1904.9 | 1957.8 | 2044.8 | 2170.8 | 2342.8 | 2548.8 | 2734.4 | 2819.7 | 2753.7 |
| 65° | 1707.4 | 1715.2 | 1753.4 | 1813.7 | 1910.6 | 2041.9 | 2233.2 | 2477.0 | 2688.4 | 2787.3 | 2717.1 |
| 67.5° | 1472.3 | 1482.5 | 1517.4 | 1569.5 | 1663.5 | 1802.7 | 1990.6 | 2233.6 | 2441.7 | 2520.9 | 2461.0 |
| 70° | 1180.8 | 1192.3 | 1221.1 | 1269.5 | 1343.4 | 1472.3 | 1633.1 | 1860.1 | 2016.5 | 2078.5 | 2014.5 |
| 72.5° | 829.9 | 834.8 | 855.8 | 906.7 | 962.1 | 1064.7 | 1192.3 | 1368.8 | 1519.0 | 1559.7 | 1498.1 |
| 75° | 351.3 | 351.7 | 379.2 | 411.7 | 481.0 | 583.2 | 694.5 | 846.3 | 981.4 | 1044.6 | 966.6 |
| 77.5° | 112.5 | 113.7 | 121.5 | 133.4 | 156.4 | 201.9 | 284.0 | 367.3 | 491.3 | 551.2 | 478.2 |
| 80° | 94.0 | 95.6 | 98.9 | 101.4 | 103.0 | 105.5 | 114.9 | 128.1 | 161.3 | 187.6 | 151.5 |
| 82.5° | 80.9 | 83.7 | 91.1 | 94.0 | 95.6 | 96.5 | 97.7 | 97.3 | 95.2 | 94.4 | 94.8 |
| 85° | 61.6 | 68.5 | 76.8 | 83.3 | 84.1 | 84.6 | 87.0 | 87.8 | 81.3 | 74.7 | 81.3 |
| 87.5° | 26.7 | 34.5 | 52.9 | 58.7 | 57.5 | 53.4 | 57.1 | 60.3 | 55.0 | 40.2 | 53.8 |
| 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):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 428.1 | 428.1 | 428.1 | 428.1 | 428.1 | 428.1 | 428.1 | 428.1 |
| 2.5° | 429.7 | 430.6 | 430.6 | 430.6 | 430.6 | 431.0 | 431.4 | 431.0 |
| 5° | 438.8 | 439.6 | 439.2 | 439.6 | 439.6 | 440.0 | 440.4 | 440.0 |
| 7.5° | 454.4 | 454.4 | 454.4 | 455.2 | 455.2 | 456.0 | 456.0 | 456.0 |
| 10° | 473.7 | 473.2 | 473.2 | 474.1 | 474.9 | 475.3 | 476.1 | 475.7 |
| 12.5° | 494.6 | 493.8 | 494.2 | 495.0 | 495.8 | 496.2 | 497.0 | 496.6 |
| 15° | 513.5 | 513.1 | 513.1 | 514.3 | 514.7 | 515.1 | 516.7 | 516.7 |
| 17.5° | 531.5 | 531.5 | 531.5 | 533.2 | 533.6 | 535.2 | 536.4 | 536.4 |
| 20° | 549.6 | 549.6 | 549.6 | 551.2 | 552.5 | 554.9 | 557.4 | 557.0 |
| 22.5° | 568.1 | 568.5 | 569.3 | 570.9 | 573.8 | 577.5 | 579.5 | 579.5 |
| 25° | 591.0 | 592.7 | 594.3 | 596.8 | 600.9 | 605.8 | 609.1 | 610.3 |
| 27.5° | 620.6 | 624.3 | 628.4 | 632.1 | 636.6 | 642.8 | 647.3 | 648.1 |
| 30° | 660.8 | 666.1 | 672.7 | 677.6 | 683.4 | 690.4 | 695.7 | 698.6 |
| 32.5° | 717.9 | 731.0 | 739.6 | 757.3 | 767.9 | 779.8 | 789.7 | 793.8 |
| 35° | 835.2 | 848.4 | 859.9 | 871.8 | 874.2 | 878.3 | 883.7 | 884.9 |
| 37.5° | 951.4 | 940.7 | 930.5 | 930.1 | 927.2 | 928.0 | 929.7 | 931.7 |
| 40° | 1001.9 | 998.6 | 993.3 | 995.3 | 995.7 | 995.7 | 999.0 | 999.4 |
| 42.5° | 1083.2 | 1075.4 | 1069.2 | 1074.1 | 1074.9 | 1075.8 | 1079.1 | 1082.7 |
| 45° | 1186.6 | 1174.7 | 1166.9 | 1164.0 | 1166.9 | 1166.1 | 1170.6 | 1171.4 |
| 47.5° | 1304.8 | 1289.2 | 1271.5 | 1265.8 | 1264.2 | 1260.5 | 1268.3 | 1267.4 |
| 50° | 1449.7 | 1424.6 | 1403.3 | 1395.1 | 1391.0 | 1388.9 | 1391.0 | 1391.0 |
| 52.5° | 1633.1 | 1608.1 | 1579.0 | 1569.5 | 1566.2 | 1570.8 | 1564.2 | 1571.2 |
| 55° | 1885.6 | 1844.9 | 1805.1 | 1792.4 | 1790.3 | 1788.3 | 1789.1 | 1792.0 |
| 57.5° | 2169.6 | 2097.4 | 2044.0 | 2012.8 | 1992.7 | 1982.8 | 1972.2 | 1970.5 |
| 60° | 2443.8 | 2312.4 | 2211.1 | 2142.1 | 2093.3 | 2056.3 | 2037.4 | 2030.9 |
| 62.5° | 2575.9 | 2383.8 | 2226.2 | 2108.9 | 2036.2 | 1975.9 | 1942.6 | 1934.0 |
| 63° | 2579.6 | 2374.8 | 2207.8 | 2083.8 | 1999.3 | 1945.1 | 1909.8 | 1900.8 |
| 65° | 2511.1 | 2278.0 | 2082.2 | 1945.9 | 1856.4 | 1799.8 | 1756.3 | 1746.8 |
| 67.5° | 2261.5 | 2035.4 | 1835.1 | 1696.8 | 1599.9 | 1554.3 | 1506.3 | 1505.1 |
| 70° | 1856.0 | 1654.1 | 1485.4 | 1358.2 | 1277.3 | 1232.1 | 1183.3 | 1184.5 |
| 72.5° | 1356.9 | 1177.6 | 1061.4 | 962.1 | 876.7 | 834.0 | 788.0 | 792.6 |
| 75° | 816.8 | 656.7 | 552.0 | 465.9 | 378.0 | 325.5 | 290.2 | 270.1 |
| 77.5° | 349.3 | 238.9 | 171.6 | 136.3 | 114.9 | 106.3 | 102.2 | 101.0 |
| 80° | 121.5 | 107.5 | 101.4 | 99.7 | 98.5 | 96.9 | 94.0 | 91.1 |
| 82.5° | 98.5 | 98.5 | 95.2 | 94.8 | 91.1 | 88.2 | 80.9 | 77.2 |
| 85° | 87.4 | 85.8 | 82.9 | 81.7 | 80.9 | 74.7 | 65.3 | 60.3 |
| 87.5° | 57.9 | 53.8 | 51.3 | 52.5 | 50.9 | 45.6 | 27.9 | 22.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)