

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: P509088

Luminaire Tested: **VERD-CA2-100-750-U-T4-HSS**

Issue Date: 3/4/2021

Test Information

Test Method: LM-79-08
Report Number: P509088
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-139-7)
Test Lab: INNOVATION CENTER
Issue Date: 3/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-CA2-100-750-U-T4-HSS
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1370mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12869 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

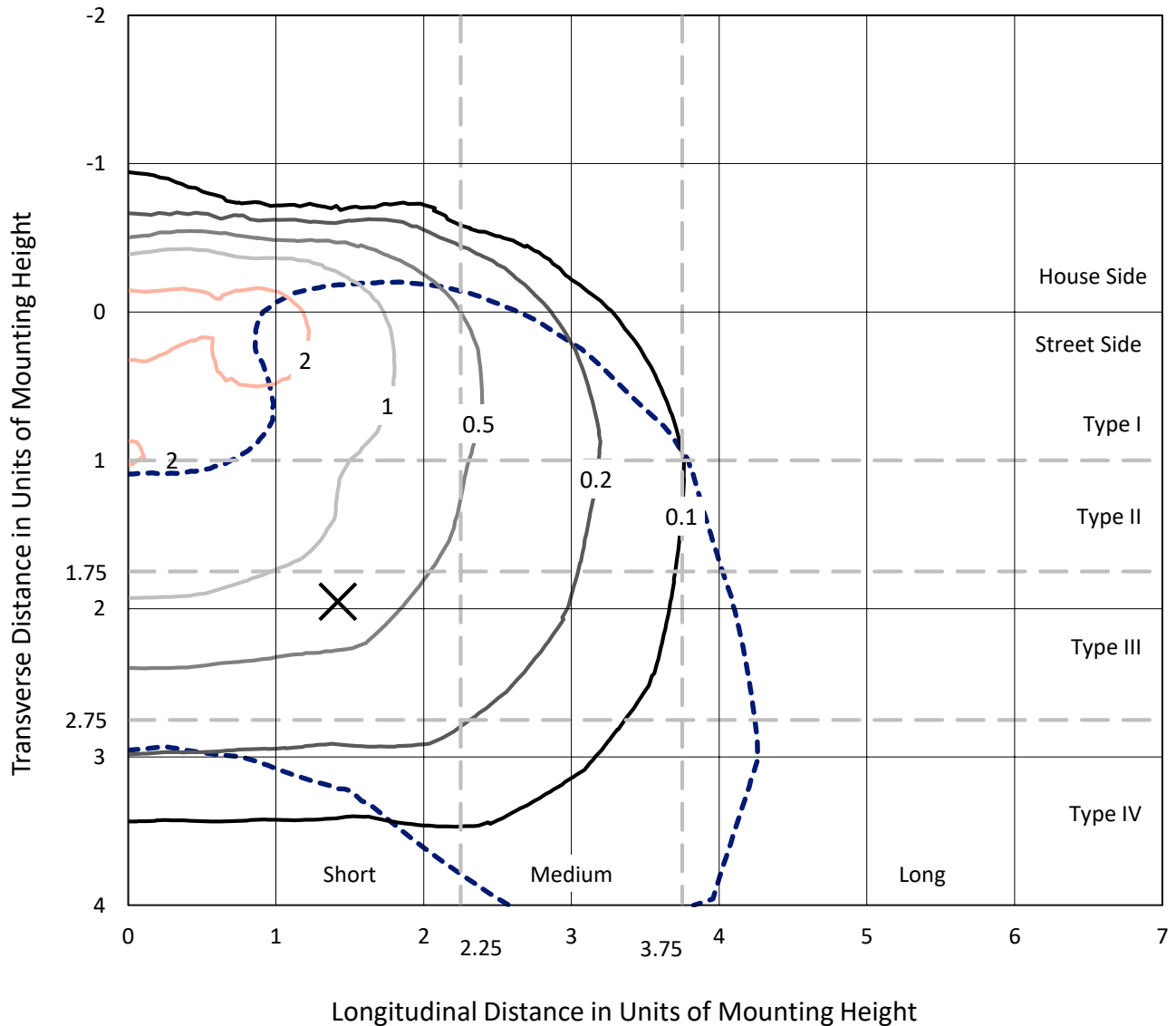
Input Watts (W): 103.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

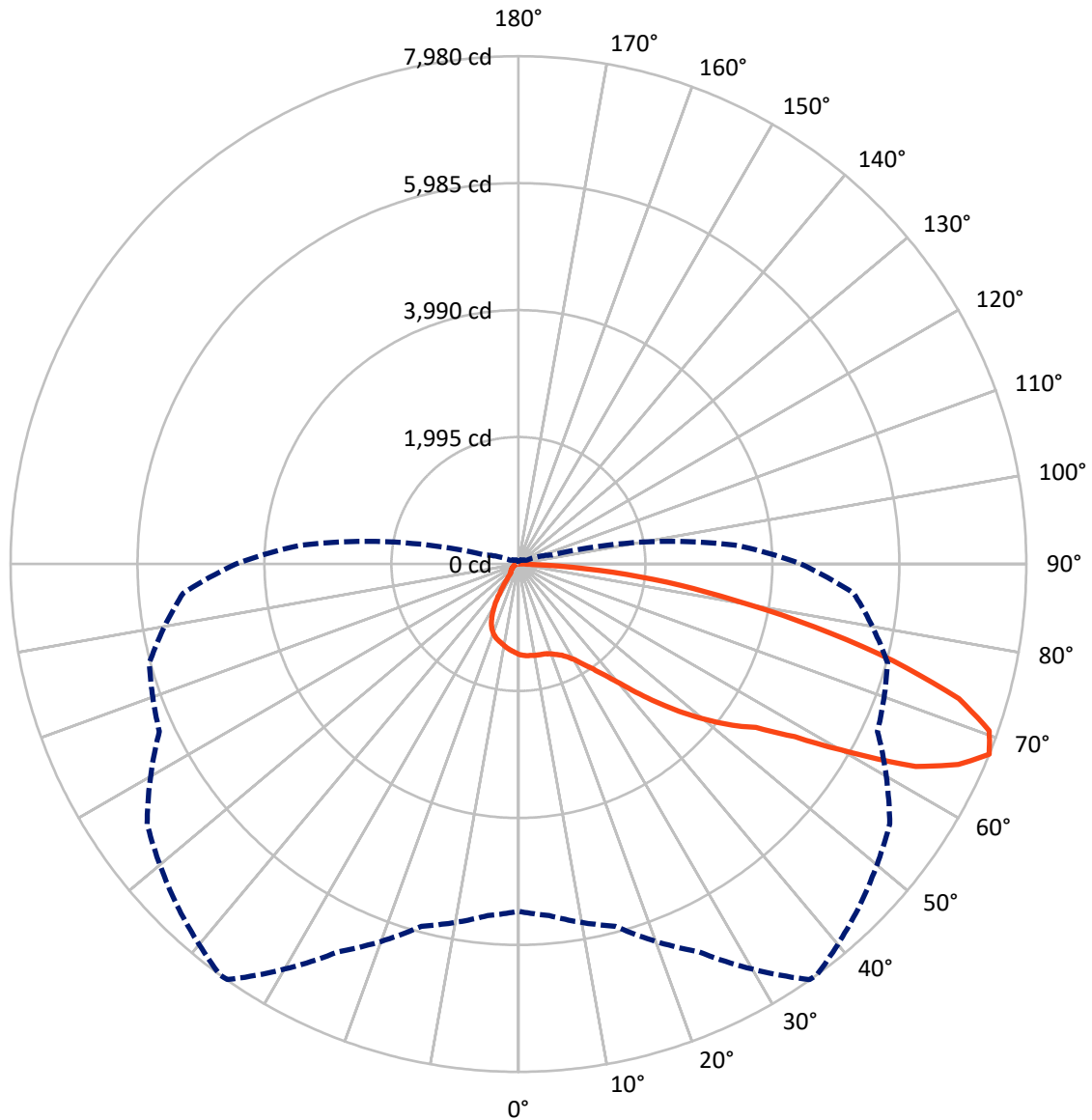
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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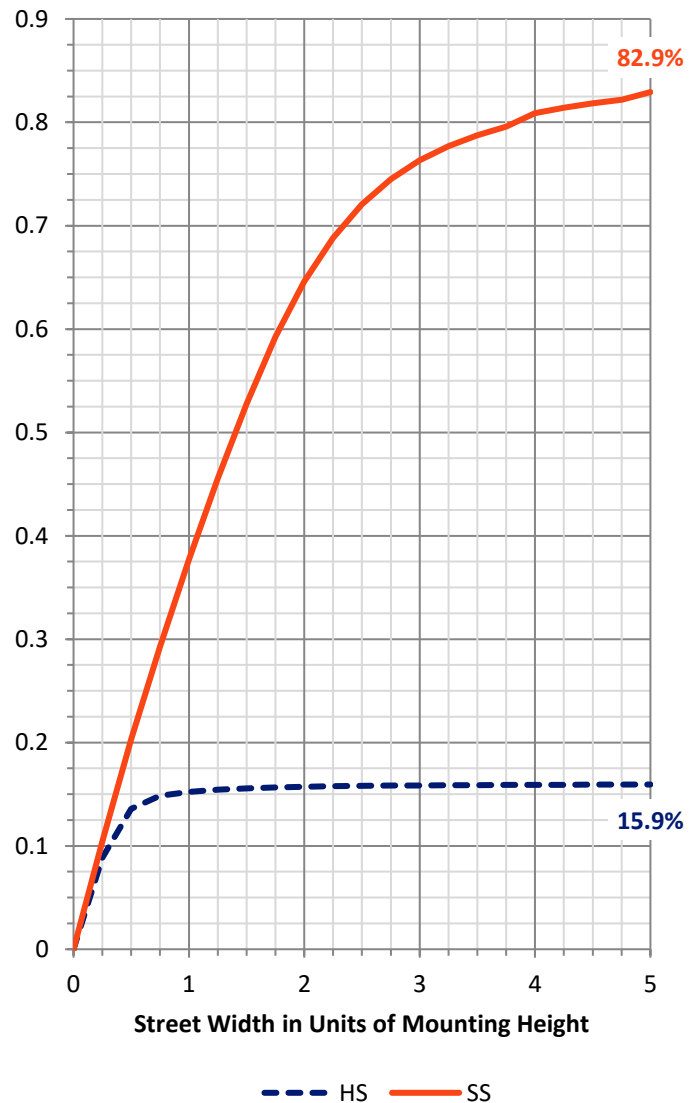
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2075.4 | 0.0 | 2075.4 |
| | % Fixture | 16.1 | 0.0 | 16.1 |
| Street Side | Lumens | 10793.6 | 0.0 | 10793.6 |
| | % Fixture | 83.9 | 0.0 | 83.9 |
| Total | Lumens | 12869.0 | 0.0 | 12869.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 134.2 | 1.0 |
| 10°-20° | 397.7 | 3.1 |
| 20°-30° | 657.6 | 5.1 |
| 30°-40° | 1043.2 | 8.1 |
| 40°-50° | 1800.6 | 14.0 |
| 50°-60° | 2668.9 | 20.7 |
| 60°-70° | 3450.5 | 26.8 |
| 70°-80° | 2329.2 | 18.1 |
| 80°-90° | 387.2 | 3.0 |
| 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° | 12869.0 | 100.0 |
| 0°-180° | 12869.0 | 100.0 |



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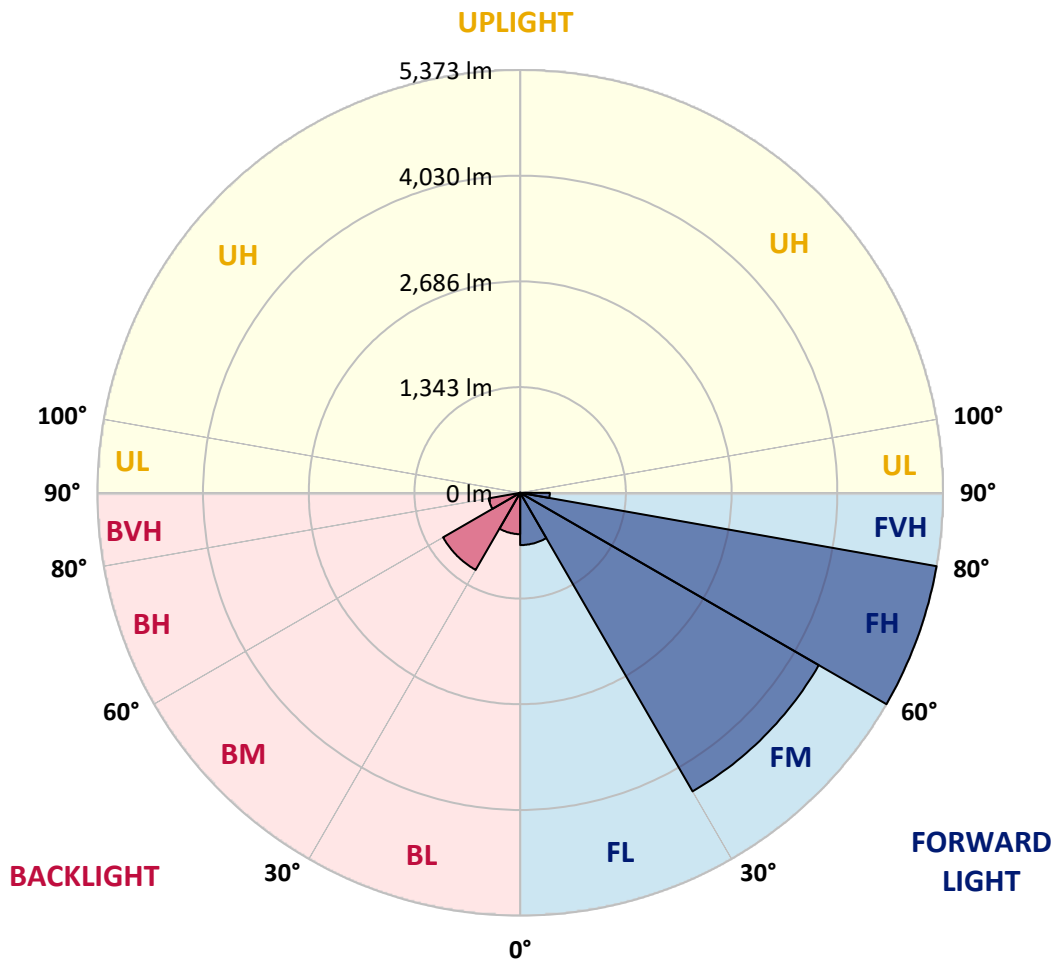
CATALOG NUMBER: VERD-CA2-100-750-U-T4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 664.3 | 5.2 | | | |
| FM (30°-60°) | 4380.4 | 34.0 | | | |
| FH (60°-80°) | 5372.8 | 41.8 | | | G3/7500 |
| FVH (80°-90°) | 376.2 | 2.9 | | | G3/500 |
| BL (0°-30°) | 525.2 | 4.1 | B2/1000 | | |
| BM (30°-60°) | 1132.2 | 8.8 | B2/2500 | | |
| BH (60°-80°) | 406.9 | 3.2 | B1/500 | | G1/500 |
| BVH (80°-90°) | 11.0 | 0.1 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 36° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 |
| 2.5° | 1428.4 | 1442.3 | 1440.7 | 1439.2 | 1439.2 | 1437.7 | 1428.4 | 1419.2 | 1423.8 | 1422.3 | 1420.7 |
| 5° | 1434.6 | 1448.4 | 1446.9 | 1445.4 | 1445.4 | 1446.9 | 1433.0 | 1422.3 | 1425.3 | 1428.4 | 1426.9 |
| 7.5° | 1437.7 | 1450.0 | 1446.9 | 1445.4 | 1443.8 | 1448.4 | 1437.7 | 1439.2 | 1442.3 | 1442.3 | 1442.3 |
| 10° | 1442.3 | 1451.5 | 1451.5 | 1453.0 | 1454.6 | 1459.2 | 1454.6 | 1459.2 | 1471.5 | 1468.4 | 1476.1 |
| 12.5° | 1430.0 | 1440.7 | 1445.4 | 1453.0 | 1460.7 | 1463.8 | 1468.4 | 1480.8 | 1496.1 | 1503.8 | 1511.5 |
| 15° | 1425.3 | 1436.1 | 1443.8 | 1453.0 | 1465.4 | 1468.4 | 1480.8 | 1502.3 | 1520.8 | 1536.2 | 1553.1 |
| 17.5° | 1440.7 | 1453.0 | 1463.8 | 1470.0 | 1476.1 | 1480.8 | 1493.1 | 1520.8 | 1553.1 | 1580.8 | 1605.4 |
| 20° | 1470.0 | 1482.3 | 1494.6 | 1500.8 | 1505.4 | 1508.5 | 1517.7 | 1543.9 | 1585.4 | 1628.5 | 1663.9 |
| 22.5° | 1503.8 | 1516.2 | 1530.0 | 1534.6 | 1545.4 | 1545.4 | 1546.9 | 1573.1 | 1623.9 | 1682.4 | 1725.5 |
| 25° | 1540.8 | 1548.5 | 1560.8 | 1568.5 | 1583.9 | 1587.0 | 1591.6 | 1614.7 | 1677.8 | 1744.0 | 1811.7 |
| 27.5° | 1583.9 | 1599.3 | 1611.6 | 1620.8 | 1651.6 | 1653.2 | 1650.1 | 1679.3 | 1740.9 | 1822.5 | 1917.9 |
| 30° | 1662.4 | 1679.3 | 1691.6 | 1707.0 | 1747.0 | 1745.5 | 1765.5 | 1796.3 | 1831.7 | 1921.0 | 2048.7 |
| 32.5° | 1787.1 | 1788.6 | 1794.8 | 1814.8 | 1871.7 | 1877.9 | 1916.4 | 1971.8 | 2042.6 | 2099.5 | 2235.0 |
| 35° | 2014.9 | 2007.2 | 1988.7 | 1985.6 | 2024.1 | 2027.2 | 2102.6 | 2219.6 | 2373.5 | 2562.8 | 2772.2 |
| 37.5° | 2281.2 | 2301.2 | 2279.6 | 2213.4 | 2219.6 | 2221.1 | 2310.4 | 2459.7 | 2746.0 | 3220.1 | 3418.7 |
| 40° | 2749.1 | 2759.9 | 2626.0 | 2521.3 | 2484.3 | 2467.4 | 2513.6 | 2739.9 | 3106.2 | 3723.4 | 3863.5 |
| 42.5° | 3161.6 | 3161.6 | 3036.9 | 2875.3 | 2781.4 | 2793.7 | 2779.9 | 3004.6 | 3475.6 | 4160.6 | 4211.4 |
| 45° | 3574.1 | 3560.3 | 3446.4 | 3310.9 | 3146.2 | 3135.4 | 3100.0 | 3272.4 | 3815.8 | 4474.6 | 4476.1 |
| 47.5° | 3958.9 | 3991.3 | 3820.4 | 3671.1 | 3503.3 | 3495.6 | 3432.5 | 3566.4 | 4142.1 | 4750.1 | 4708.6 |
| 50° | 4363.8 | 4408.4 | 4194.4 | 4026.7 | 3845.0 | 3855.8 | 3803.5 | 3897.4 | 4466.9 | 5007.2 | 4931.7 |
| 52.5° | 4939.4 | 4856.3 | 4600.8 | 4368.4 | 4180.6 | 4211.4 | 4157.5 | 4212.9 | 4804.0 | 5211.9 | 5054.9 |
| 55° | 5556.7 | 5408.9 | 5196.5 | 4807.1 | 4534.6 | 4531.5 | 4491.5 | 4557.7 | 5144.2 | 5445.9 | 5195.0 |
| 57.5° | 5887.6 | 5932.3 | 5883.0 | 5567.5 | 5127.2 | 5119.5 | 4879.4 | 4887.1 | 5456.6 | 5646.0 | 5390.4 |
| 60° | 6264.7 | 6320.1 | 6427.9 | 6230.9 | 6010.8 | 6016.9 | 5418.1 | 5239.6 | 5786.0 | 5806.0 | 5405.8 |
| 62.5° | 6464.8 | 6471.0 | 6718.8 | 6788.1 | 6966.6 | 7006.6 | 6552.6 | 5670.6 | 6004.6 | 5929.2 | 5432.0 |
| 65° | 6110.8 | 6121.6 | 6598.7 | 6948.2 | 7543.8 | 7597.7 | 7402.2 | 6504.9 | 6167.8 | 5993.8 | 5407.4 |
| 67.5° | 5456.6 | 5544.4 | 5892.2 | 6726.5 | 7971.8 | 7979.5 | 7585.4 | 7122.1 | 6224.7 | 6003.1 | 5288.9 |
| 70° | 4573.1 | 4542.3 | 4982.5 | 5984.6 | 7905.6 | 7848.6 | 7505.4 | 7192.9 | 6183.2 | 5876.8 | 4748.6 |
| 72.5° | 3391.0 | 3344.8 | 3798.9 | 4811.7 | 7131.3 | 7239.1 | 7146.7 | 6778.8 | 6026.1 | 5405.8 | 3854.3 |
| 75° | 2321.2 | 2375.1 | 2783.0 | 3628.0 | 5923.0 | 6086.2 | 6494.1 | 6458.7 | 5361.2 | 4480.7 | 2638.3 |
| 77.5° | 1588.5 | 1611.6 | 1961.0 | 2699.8 | 4694.7 | 4757.8 | 5433.5 | 5218.0 | 3942.0 | 2753.7 | 880.4 |
| 80° | 1034.4 | 1026.7 | 1340.7 | 1922.5 | 3441.8 | 3434.1 | 3880.4 | 3301.7 | 2124.2 | 938.9 | 121.6 |
| 82.5° | 577.2 | 611.1 | 803.5 | 1263.7 | 2325.8 | 2350.4 | 2422.8 | 1805.5 | 817.3 | 109.3 | 77.0 |
| 85° | 324.8 | 338.6 | 461.8 | 715.7 | 1219.1 | 1280.7 | 1080.6 | 663.4 | 146.2 | 60.0 | 44.6 |
| 87.5° | 77.0 | 73.9 | 147.8 | 274.0 | 203.2 | 220.1 | 104.7 | 30.8 | 15.4 | 10.8 | 10.8 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 | 1422.3 |
| 2.5° | 1420.7 | 1417.6 | 1414.6 | 1408.4 | 1403.8 | 1389.9 | 1391.5 | 1400.7 | 1391.5 | 1406.9 | 1397.6 |
| 5° | 1423.8 | 1419.2 | 1411.5 | 1393.0 | 1379.2 | 1368.4 | 1365.3 | 1363.8 | 1351.5 | 1365.3 | 1359.2 |
| 7.5° | 1436.1 | 1431.5 | 1414.6 | 1394.6 | 1374.5 | 1342.2 | 1337.6 | 1331.4 | 1308.4 | 1317.6 | 1309.9 |
| 10° | 1465.4 | 1459.2 | 1430.0 | 1402.3 | 1371.5 | 1328.4 | 1303.7 | 1285.3 | 1259.1 | 1262.2 | 1254.5 |
| 12.5° | 1502.3 | 1496.1 | 1462.3 | 1416.1 | 1373.0 | 1313.0 | 1269.9 | 1234.5 | 1196.0 | 1196.0 | 1188.3 |
| 15° | 1545.4 | 1539.2 | 1500.8 | 1446.9 | 1379.2 | 1300.7 | 1236.0 | 1179.1 | 1117.5 | 1109.8 | 1100.6 |
| 17.5° | 1603.9 | 1594.7 | 1550.0 | 1480.8 | 1396.1 | 1289.9 | 1202.2 | 1117.5 | 1023.6 | 994.4 | 979.0 |
| 20° | 1663.9 | 1653.2 | 1614.7 | 1528.5 | 1419.2 | 1279.1 | 1152.9 | 1037.5 | 915.9 | 855.8 | 845.0 |
| 22.5° | 1740.9 | 1737.8 | 1690.1 | 1570.0 | 1426.9 | 1256.0 | 1091.3 | 948.2 | 785.0 | 701.9 | 685.0 |
| 25° | 1831.7 | 1827.1 | 1753.2 | 1602.4 | 1417.6 | 1209.8 | 1003.6 | 820.4 | 637.2 | 554.1 | 535.7 |
| 27.5° | 1939.5 | 1927.1 | 1807.1 | 1610.1 | 1391.5 | 1137.5 | 891.2 | 655.7 | 471.0 | 400.2 | 386.4 |
| 30° | 2053.4 | 2034.9 | 1864.0 | 1611.6 | 1339.1 | 1048.2 | 743.5 | 481.8 | 334.0 | 283.2 | 283.2 |
| 32.5° | 2244.2 | 2181.1 | 1919.4 | 1590.0 | 1263.7 | 920.5 | 566.4 | 324.8 | 234.0 | 214.0 | 214.0 |
| 35° | 2653.7 | 2502.8 | 2007.2 | 1562.3 | 1165.2 | 761.9 | 384.8 | 220.1 | 195.5 | 195.5 | 193.9 |
| 37.5° | 3267.8 | 2987.7 | 2156.5 | 1516.2 | 1031.3 | 566.4 | 254.0 | 181.6 | 186.2 | 186.2 | 186.2 |
| 40° | 3660.3 | 3366.3 | 2359.7 | 1443.8 | 877.4 | 384.8 | 181.6 | 172.4 | 175.5 | 178.6 | 178.6 |
| 42.5° | 4026.7 | 3695.7 | 2562.8 | 1343.8 | 708.1 | 246.3 | 169.3 | 161.6 | 163.2 | 163.2 | 164.7 |
| 45° | 4259.1 | 3940.5 | 2713.7 | 1237.6 | 521.8 | 175.5 | 166.2 | 152.4 | 147.8 | 147.8 | 150.8 |
| 47.5° | 4474.6 | 4100.6 | 2779.9 | 1097.5 | 337.1 | 164.7 | 158.5 | 141.6 | 135.5 | 133.9 | 133.9 |
| 50° | 4690.1 | 4265.3 | 2816.8 | 931.2 | 210.9 | 158.5 | 146.2 | 129.3 | 123.1 | 121.6 | 121.6 |
| 52.5° | 4785.5 | 4317.6 | 2733.7 | 743.5 | 157.0 | 152.4 | 137.0 | 118.5 | 109.3 | 109.3 | 109.3 |
| 55° | 4885.6 | 4414.6 | 2593.6 | 532.6 | 149.3 | 141.6 | 126.2 | 106.2 | 98.5 | 101.6 | 101.6 |
| 57.5° | 4996.4 | 4345.3 | 2444.3 | 346.3 | 147.8 | 127.8 | 112.4 | 95.4 | 89.3 | 92.4 | 93.9 |
| 60° | 4962.5 | 4362.2 | 2230.4 | 232.4 | 141.6 | 117.0 | 101.6 | 84.7 | 80.0 | 80.0 | 80.0 |
| 62.5° | 4962.5 | 4231.4 | 1879.4 | 177.0 | 129.3 | 107.7 | 93.9 | 78.5 | 70.8 | 67.7 | 64.6 |
| 65° | 4831.7 | 3922.0 | 1373.0 | 153.9 | 115.4 | 100.1 | 84.7 | 69.3 | 60.0 | 55.4 | 53.9 |
| 67.5° | 4436.1 | 3409.4 | 552.6 | 140.1 | 106.2 | 92.4 | 78.5 | 63.1 | 52.3 | 46.2 | 44.6 |
| 70° | 3771.2 | 2516.7 | 158.5 | 124.7 | 107.7 | 86.2 | 73.9 | 55.4 | 46.2 | 38.5 | 36.9 |
| 72.5° | 2795.3 | 1329.9 | 129.3 | 98.5 | 95.4 | 73.9 | 69.3 | 52.3 | 40.0 | 32.3 | 30.8 |
| 75° | 1411.5 | 181.6 | 110.8 | 70.8 | 73.9 | 77.0 | 66.2 | 46.2 | 36.9 | 26.2 | 24.6 |
| 77.5° | 146.2 | 107.7 | 97.0 | 47.7 | 52.3 | 53.9 | 57.0 | 43.1 | 32.3 | 21.5 | 20.0 |
| 80° | 90.8 | 81.6 | 95.4 | 41.6 | 30.8 | 36.9 | 38.5 | 33.9 | 26.2 | 16.9 | 16.9 |
| 82.5° | 64.6 | 69.3 | 70.8 | 26.2 | 23.1 | 21.5 | 20.0 | 20.0 | 23.1 | 15.4 | 15.4 |
| 85° | 44.6 | 46.2 | 29.2 | 16.9 | 15.4 | 13.9 | 12.3 | 12.3 | 10.8 | 12.3 | 10.8 |
| 87.5° | 10.8 | 9.2 | 9.2 | 9.2 | 7.7 | 7.7 | 6.2 | 6.2 | 6.2 | 6.2 | 7.7 |
| 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)