

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: P509065

Luminaire Tested: **VERD-CA2-100-727-U-T4**

Issue Date: 3/4/2021

Test Information

Test Method: LM-79-08
Report Number: P509065
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-139-6)
Test Lab: INNOVATION CENTER
Issue Date: 3/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-CA2-100-727-U-T4
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1370mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11874 lumens
Efficiency: N/A
Efficacy: 114.8 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

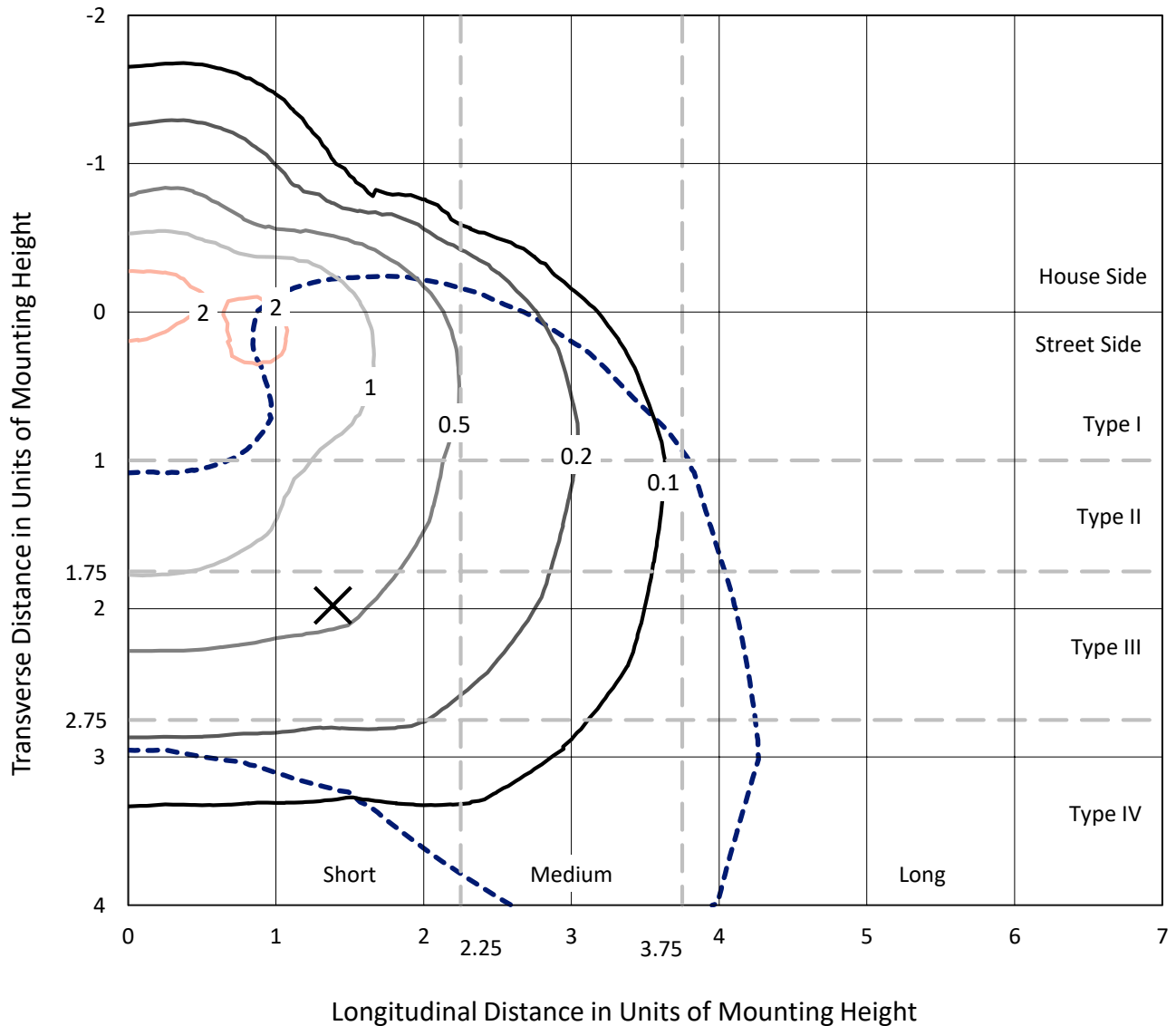
Input Watts (W): 103.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P509065
 CATALOG NUMBER: VERD-CA2-100-727-U-T4

Iso-Footcandle Lines of Horizontal Illumination

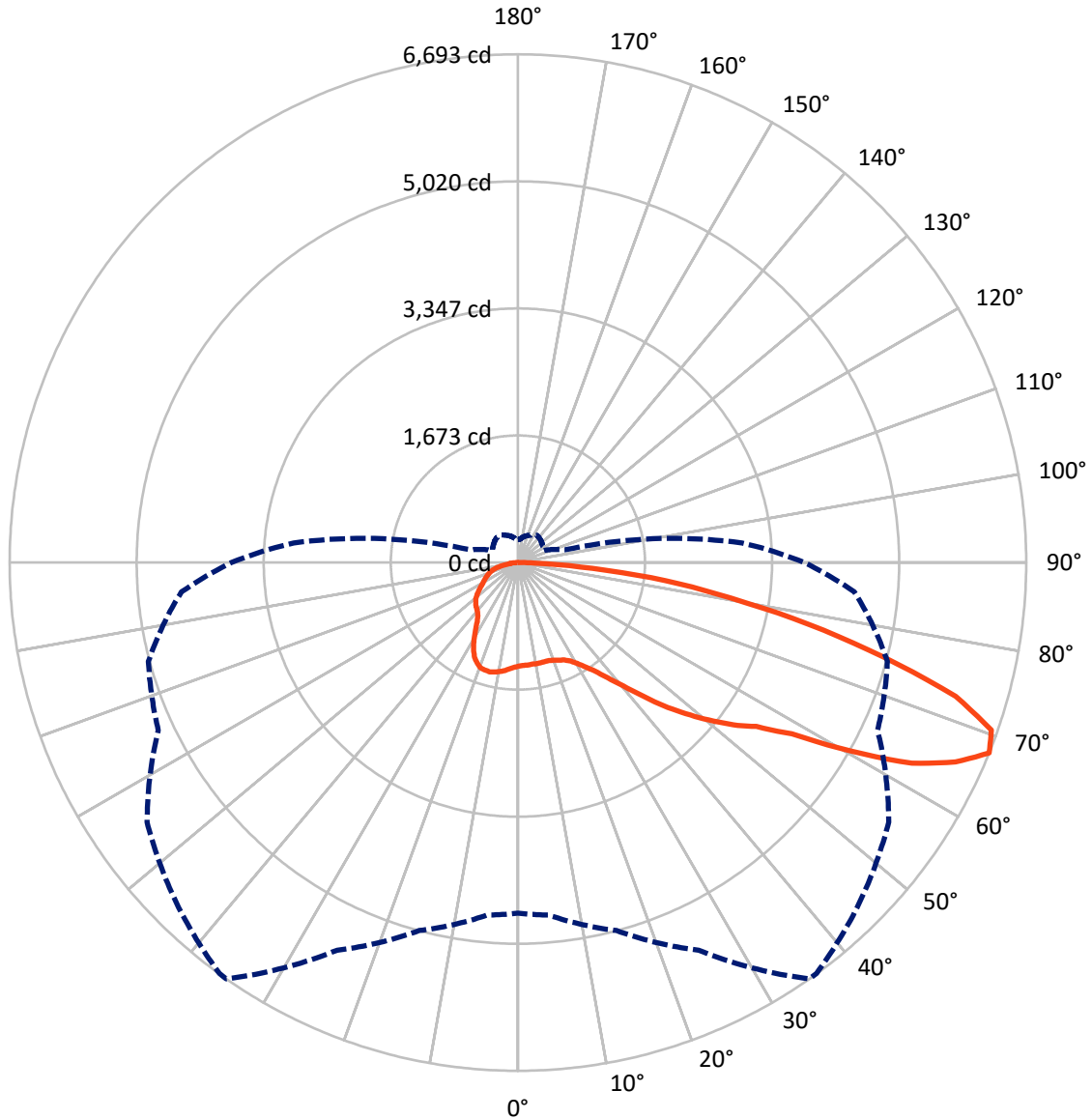
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type IV - Short - N/A

REPORT NUMBER: P509065
CATALOG NUMBER: VERD-CA2-100-727-U-T4

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P509065

CATALOG NUMBER: VERD-CA2-100-727-U-T4

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2705.2 | 0.0 | 2705.2 |
| | % Fixture | 22.8 | 0.0 | 22.8 |
| Street Side | Lumens | 9168.8 | 0.0 | 9168.8 |
| | % Fixture | 77.2 | 0.0 | 77.2 |
| Total | Lumens | 11874.0 | 0.0 | 11874.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 132.1 | 1.1 |
| 10°-20° | 405.0 | 3.4 |
| 20°-30° | 676.0 | 5.7 |
| 30°-40° | 1040.1 | 8.8 |
| 40°-50° | 1714.0 | 14.4 |
| 50°-60° | 2448.2 | 20.6 |
| 60°-70° | 3048.1 | 25.7 |
| 70°-80° | 2057.0 | 17.3 |
| 80°-90° | 353.6 | 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° | 11874.0 | 100.0 |
| 0°-180° | 11874.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P509065

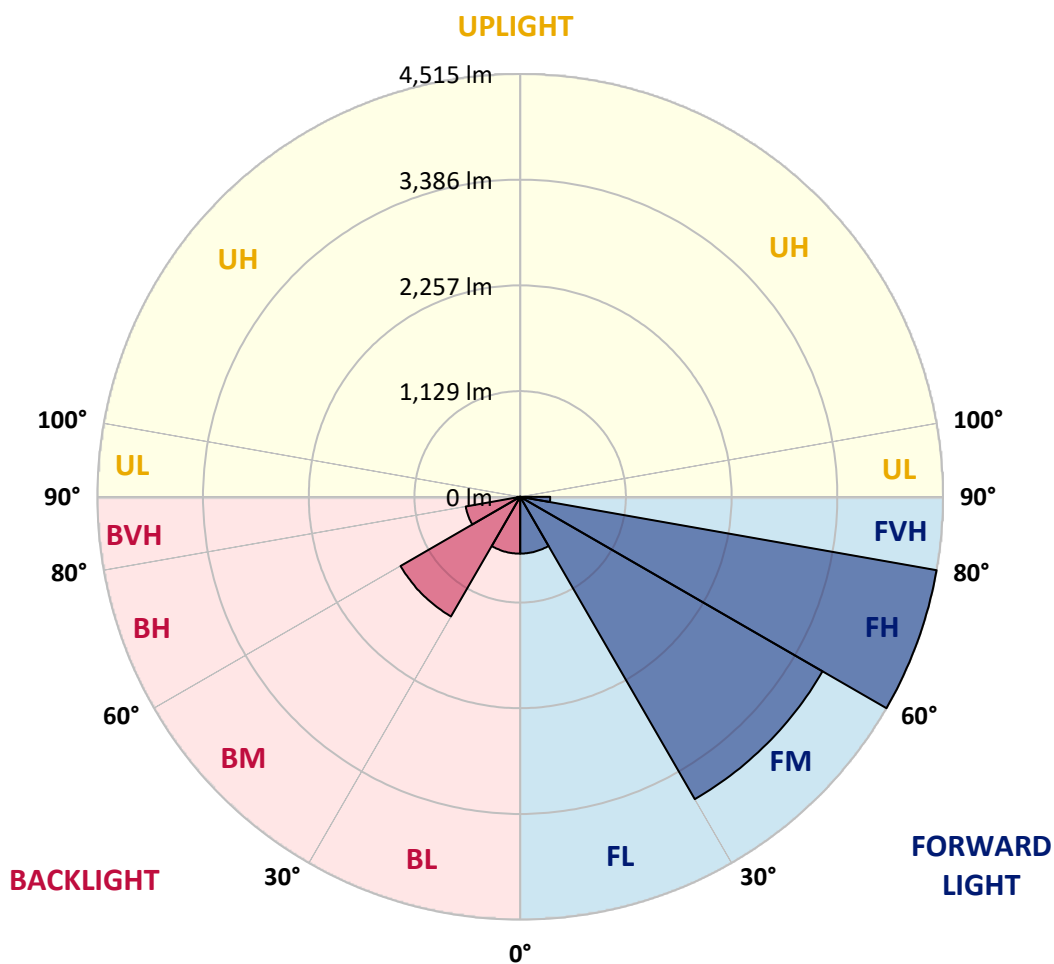
CATALOG NUMBER: VERD-CA2-100-727-U-T4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 605.9 | 5.1 | | | |
| FM (30°-60°) | 3727.4 | 31.4 | | | |
| FH (60°-80°) | 4514.6 | 38.0 | | | G2/5000 |
| FVH (80°-90°) | 321.0 | 2.7 | | | G3/500 |
| BL (0°-30°) | 607.1 | 5.1 | B2/1000 | | |
| BM (30°-60°) | 1474.9 | 12.4 | B2/2500 | | |
| BH (60°-80°) | 590.5 | 5.0 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 32.6 | 0.3 | | | 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





REPORT NUMBER: P509065

CATALOG NUMBER: VERD-CA2-100-727-U-T4

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 36° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 |
| 2.5° | 1345.3 | 1358.1 | 1356.8 | 1354.2 | 1355.5 | 1356.8 | 1350.4 | 1346.6 | 1351.7 | 1353.0 | 1359.4 |
| 5° | 1344.0 | 1354.2 | 1353.0 | 1353.0 | 1356.8 | 1355.5 | 1345.3 | 1337.6 | 1346.6 | 1353.0 | 1359.4 |
| 7.5° | 1342.7 | 1351.7 | 1351.7 | 1347.8 | 1350.4 | 1350.4 | 1345.3 | 1350.4 | 1350.4 | 1360.6 | 1368.3 |
| 10° | 1341.4 | 1349.1 | 1349.1 | 1350.4 | 1354.2 | 1355.5 | 1355.5 | 1359.4 | 1373.4 | 1377.3 | 1392.6 |
| 12.5° | 1326.1 | 1332.5 | 1337.6 | 1345.3 | 1353.0 | 1355.5 | 1361.9 | 1373.4 | 1391.4 | 1400.3 | 1418.2 |
| 15° | 1313.3 | 1322.2 | 1331.2 | 1338.9 | 1350.4 | 1353.0 | 1367.0 | 1386.2 | 1405.4 | 1424.6 | 1451.5 |
| 17.5° | 1318.4 | 1329.9 | 1340.2 | 1346.6 | 1355.5 | 1358.1 | 1372.2 | 1397.8 | 1428.5 | 1456.6 | 1493.8 |
| 20° | 1329.9 | 1342.7 | 1353.0 | 1360.6 | 1372.2 | 1374.7 | 1386.2 | 1410.6 | 1450.2 | 1493.8 | 1536.0 |
| 22.5° | 1358.1 | 1367.0 | 1378.6 | 1382.4 | 1395.2 | 1397.8 | 1405.4 | 1429.8 | 1481.0 | 1536.0 | 1589.8 |
| 25° | 1383.7 | 1393.9 | 1402.9 | 1406.7 | 1420.8 | 1423.4 | 1437.4 | 1457.9 | 1518.1 | 1580.8 | 1658.9 |
| 27.5° | 1417.0 | 1427.2 | 1438.7 | 1442.6 | 1466.9 | 1469.4 | 1475.8 | 1506.6 | 1566.7 | 1639.7 | 1737.0 |
| 30° | 1481.0 | 1487.4 | 1500.2 | 1515.5 | 1539.8 | 1542.4 | 1556.5 | 1588.5 | 1632.0 | 1721.6 | 1850.9 |
| 32.5° | 1578.2 | 1587.2 | 1582.1 | 1602.6 | 1638.4 | 1638.4 | 1687.0 | 1740.8 | 1794.6 | 1857.3 | 2028.8 |
| 35° | 1765.1 | 1760.0 | 1754.9 | 1737.0 | 1758.7 | 1766.4 | 1834.2 | 1925.1 | 2074.9 | 2251.5 | 2420.5 |
| 37.5° | 1996.8 | 1995.5 | 1968.6 | 1927.7 | 1926.4 | 1929.0 | 1990.4 | 2144.0 | 2382.1 | 2775.0 | 2956.8 |
| 40° | 2352.6 | 2362.9 | 2268.2 | 2183.7 | 2136.3 | 2126.1 | 2174.7 | 2368.0 | 2688.0 | 3211.5 | 3335.7 |
| 42.5° | 2708.5 | 2686.7 | 2609.9 | 2473.0 | 2393.6 | 2387.2 | 2396.2 | 2565.1 | 2984.9 | 3564.8 | 3609.6 |
| 45° | 3023.3 | 3040.0 | 2919.7 | 2836.5 | 2690.5 | 2693.1 | 2653.4 | 2808.3 | 3279.3 | 3814.4 | 3822.1 |
| 47.5° | 3344.6 | 3357.4 | 3207.7 | 3112.9 | 2973.4 | 2973.4 | 2910.7 | 3033.6 | 3541.7 | 4052.5 | 4037.1 |
| 50° | 3687.7 | 3717.1 | 3528.9 | 3385.6 | 3257.6 | 3252.5 | 3233.3 | 3310.1 | 3800.3 | 4253.4 | 4192.0 |
| 52.5° | 4151.0 | 4049.9 | 3872.0 | 3677.4 | 3550.7 | 3535.3 | 3517.4 | 3572.5 | 4097.3 | 4417.3 | 4291.8 |
| 55° | 4629.7 | 4492.8 | 4311.0 | 4049.9 | 3810.5 | 3832.3 | 3787.5 | 3850.2 | 4369.9 | 4613.1 | 4422.4 |
| 57.5° | 4920.3 | 4971.5 | 4872.9 | 4648.9 | 4254.7 | 4250.9 | 4081.9 | 4115.2 | 4614.4 | 4778.2 | 4560.6 |
| 60° | 5226.2 | 5297.9 | 5364.5 | 5231.3 | 5044.5 | 4960.0 | 4526.1 | 4396.8 | 4889.6 | 4898.5 | 4545.3 |
| 62.5° | 5386.2 | 5372.1 | 5661.4 | 5676.8 | 5821.4 | 5831.7 | 5408.0 | 4761.6 | 5052.1 | 4999.7 | 4599.0 |
| 65° | 5100.8 | 5108.5 | 5584.6 | 5832.9 | 6330.9 | 6360.3 | 6205.4 | 5402.9 | 5189.1 | 5047.0 | 4537.6 |
| 67.5° | 4616.9 | 4660.5 | 5017.6 | 5632.0 | 6693.1 | 6688.0 | 6352.6 | 5960.9 | 5224.9 | 5036.8 | 4448.0 |
| 70° | 3776.0 | 3822.1 | 4188.1 | 5080.3 | 6613.7 | 6571.5 | 6289.9 | 6005.7 | 5194.2 | 4944.6 | 4001.3 |
| 72.5° | 2896.6 | 2890.2 | 3269.1 | 4057.6 | 6030.1 | 6071.0 | 5968.6 | 5689.6 | 5047.0 | 4550.4 | 3278.1 |
| 75° | 2041.6 | 2009.6 | 2346.2 | 3075.8 | 4972.8 | 5123.8 | 5473.3 | 5396.5 | 4490.2 | 3745.3 | 2191.4 |
| 77.5° | 1340.2 | 1388.8 | 1657.6 | 2274.6 | 3910.4 | 4037.1 | 4519.7 | 4367.3 | 3322.9 | 2389.8 | 791.0 |
| 80° | 851.2 | 894.7 | 1112.3 | 1624.3 | 2842.9 | 2900.5 | 3294.7 | 2777.6 | 1775.4 | 788.5 | 110.1 |
| 82.5° | 517.1 | 523.5 | 716.8 | 1098.2 | 1961.0 | 1961.0 | 2074.9 | 1552.6 | 695.0 | 102.4 | 71.7 |
| 85° | 275.2 | 290.6 | 386.6 | 592.6 | 988.2 | 1062.4 | 940.8 | 592.6 | 134.4 | 56.3 | 43.5 |
| 87.5° | 87.0 | 88.3 | 126.7 | 229.1 | 212.5 | 218.9 | 73.0 | 30.7 | 15.4 | 10.2 | 9.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P509065
 CATALOG NUMBER: VERD-CA2-100-727-U-T4

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 | 1364.5 |
| 2.5° | 1361.9 | 1363.2 | 1370.9 | 1374.7 | 1376.0 | 1372.2 | 1381.1 | 1393.9 | 1390.1 | 1404.2 | 1399.0 |
| 5° | 1361.9 | 1368.3 | 1378.6 | 1377.3 | 1387.5 | 1392.6 | 1402.9 | 1415.7 | 1411.8 | 1432.3 | 1424.6 |
| 7.5° | 1372.2 | 1382.4 | 1390.1 | 1405.4 | 1413.1 | 1410.6 | 1433.6 | 1443.8 | 1438.7 | 1454.1 | 1446.4 |
| 10° | 1397.8 | 1409.3 | 1419.5 | 1436.2 | 1447.7 | 1442.6 | 1455.4 | 1461.8 | 1452.8 | 1468.2 | 1464.3 |
| 12.5° | 1427.2 | 1440.0 | 1460.5 | 1472.0 | 1481.0 | 1472.0 | 1472.0 | 1468.2 | 1455.4 | 1469.4 | 1460.5 |
| 15° | 1460.5 | 1477.1 | 1505.3 | 1518.1 | 1515.5 | 1500.2 | 1486.1 | 1459.2 | 1424.6 | 1431.0 | 1418.2 |
| 17.5° | 1505.3 | 1525.8 | 1557.8 | 1565.4 | 1555.2 | 1518.1 | 1481.0 | 1432.3 | 1370.9 | 1355.5 | 1345.3 |
| 20° | 1553.9 | 1577.0 | 1621.8 | 1617.9 | 1594.9 | 1529.6 | 1470.7 | 1395.2 | 1299.2 | 1255.7 | 1235.2 |
| 22.5° | 1620.5 | 1643.5 | 1685.8 | 1662.7 | 1615.4 | 1529.6 | 1429.8 | 1324.8 | 1210.9 | 1146.9 | 1132.8 |
| 25° | 1693.4 | 1725.4 | 1743.4 | 1692.2 | 1610.2 | 1495.0 | 1374.7 | 1236.5 | 1090.6 | 1021.4 | 1007.4 |
| 27.5° | 1783.0 | 1804.8 | 1786.9 | 1696.0 | 1584.6 | 1437.4 | 1285.1 | 1118.7 | 979.2 | 920.3 | 899.8 |
| 30° | 1888.0 | 1890.6 | 1820.2 | 1688.3 | 1527.0 | 1355.5 | 1175.0 | 999.7 | 892.2 | 837.1 | 824.3 |
| 32.5° | 2027.5 | 2001.9 | 1849.6 | 1652.5 | 1449.0 | 1242.9 | 1052.2 | 920.3 | 830.7 | 761.6 | 743.7 |
| 35° | 2391.0 | 2274.6 | 1914.9 | 1611.5 | 1354.2 | 1117.4 | 945.9 | 848.6 | 773.1 | 695.0 | 681.0 |
| 37.5° | 2862.1 | 2656.0 | 2030.1 | 1569.3 | 1246.7 | 1002.2 | 875.5 | 806.4 | 742.4 | 655.4 | 636.2 |
| 40° | 3215.3 | 2977.3 | 2208.0 | 1523.2 | 1148.2 | 920.3 | 837.1 | 789.8 | 719.4 | 640.0 | 619.5 |
| 42.5° | 3485.4 | 3244.8 | 2391.0 | 1472.0 | 1056.0 | 856.3 | 810.2 | 778.2 | 710.4 | 636.2 | 619.5 |
| 45° | 3672.3 | 3431.7 | 2548.5 | 1411.8 | 938.2 | 801.3 | 789.8 | 759.0 | 693.8 | 622.1 | 605.4 |
| 47.5° | 3861.7 | 3563.5 | 2636.8 | 1349.1 | 839.7 | 770.6 | 760.3 | 725.8 | 665.6 | 597.8 | 585.0 |
| 50° | 4026.9 | 3713.3 | 2712.3 | 1285.1 | 761.6 | 733.4 | 727.0 | 681.0 | 623.4 | 559.4 | 542.7 |
| 52.5° | 4074.2 | 3749.1 | 2681.6 | 1281.3 | 691.2 | 693.8 | 681.0 | 643.8 | 590.1 | 521.0 | 504.3 |
| 55° | 4181.7 | 3848.9 | 2607.4 | 1163.5 | 623.4 | 632.3 | 629.8 | 610.6 | 560.6 | 496.6 | 483.8 |
| 57.5° | 4227.8 | 3773.4 | 2499.8 | 865.3 | 553.0 | 560.6 | 582.4 | 582.4 | 538.9 | 481.3 | 469.8 |
| 60° | 4221.4 | 3776.0 | 2307.8 | 605.4 | 483.8 | 504.3 | 535.0 | 535.0 | 500.5 | 444.2 | 430.1 |
| 62.5° | 4172.8 | 3678.7 | 1989.1 | 462.1 | 440.3 | 469.8 | 505.6 | 482.6 | 451.8 | 389.1 | 378.9 |
| 65° | 4092.1 | 3411.2 | 1378.6 | 405.8 | 416.0 | 450.6 | 468.5 | 440.3 | 403.2 | 346.9 | 340.5 |
| 67.5° | 3769.6 | 2963.2 | 641.3 | 371.2 | 395.5 | 422.4 | 437.8 | 398.1 | 359.7 | 308.5 | 300.8 |
| 70° | 3208.9 | 2168.3 | 276.5 | 344.3 | 371.2 | 390.4 | 405.8 | 364.8 | 323.8 | 279.0 | 276.5 |
| 72.5° | 2333.4 | 1157.1 | 230.4 | 302.1 | 330.2 | 350.7 | 369.9 | 329.0 | 289.3 | 236.8 | 236.8 |
| 75° | 1123.8 | 192.0 | 198.4 | 250.9 | 276.5 | 317.4 | 326.4 | 268.8 | 224.0 | 180.5 | 176.6 |
| 77.5° | 138.2 | 124.2 | 171.5 | 199.7 | 221.4 | 243.2 | 265.0 | 233.0 | 193.3 | 148.5 | 140.8 |
| 80° | 87.0 | 87.0 | 135.7 | 139.5 | 151.0 | 174.1 | 194.6 | 181.8 | 152.3 | 85.8 | 79.4 |
| 82.5° | 64.0 | 69.1 | 89.6 | 66.6 | 79.4 | 99.8 | 113.9 | 129.3 | 110.1 | 60.2 | 56.3 |
| 85° | 41.0 | 44.8 | 42.2 | 33.3 | 43.5 | 66.6 | 90.9 | 89.6 | 74.2 | 44.8 | 42.2 |
| 87.5° | 9.0 | 9.0 | 9.0 | 7.7 | 9.0 | 11.5 | 21.8 | 42.2 | 30.7 | 24.3 | 23.0 |
| 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)