

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: P509192

Luminaire Tested: **VERD-CA2-120-760-U-T4-HSS**

Issue Date: 3/4/2021

Test Information

Test Method: LM-79-08
Report Number: P509192
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-CA2-120-760-U-T4-HSS
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5700K, 1120mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15494 lumens
Efficiency: N/A
Efficacy: 126.3 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

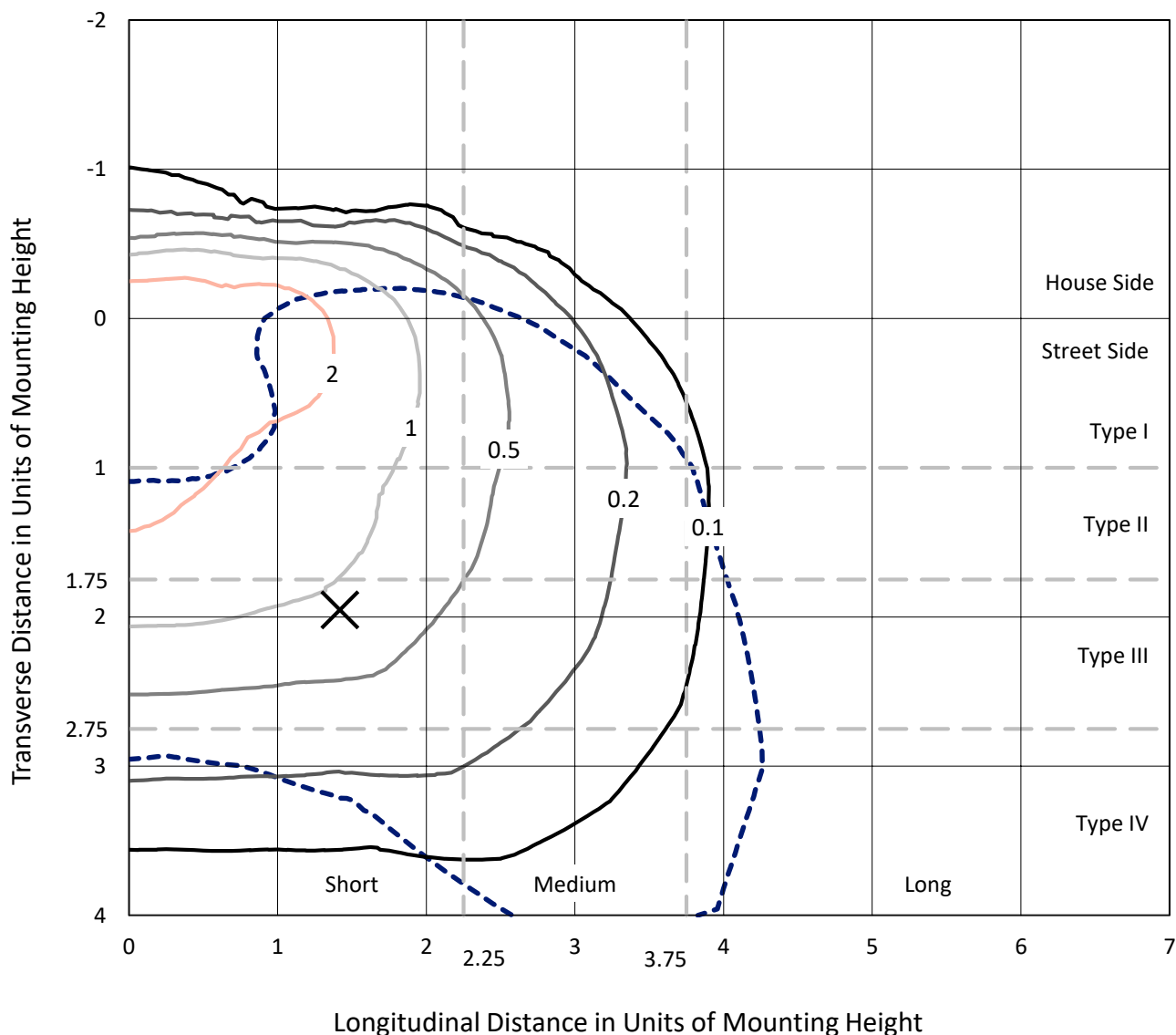
Input Watts (W): 122.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P509192
 CATALOG NUMBER: VERD-CA2-120-760-U-T4-HSS

Iso-Footcandle Lines of Horizontal Illumination

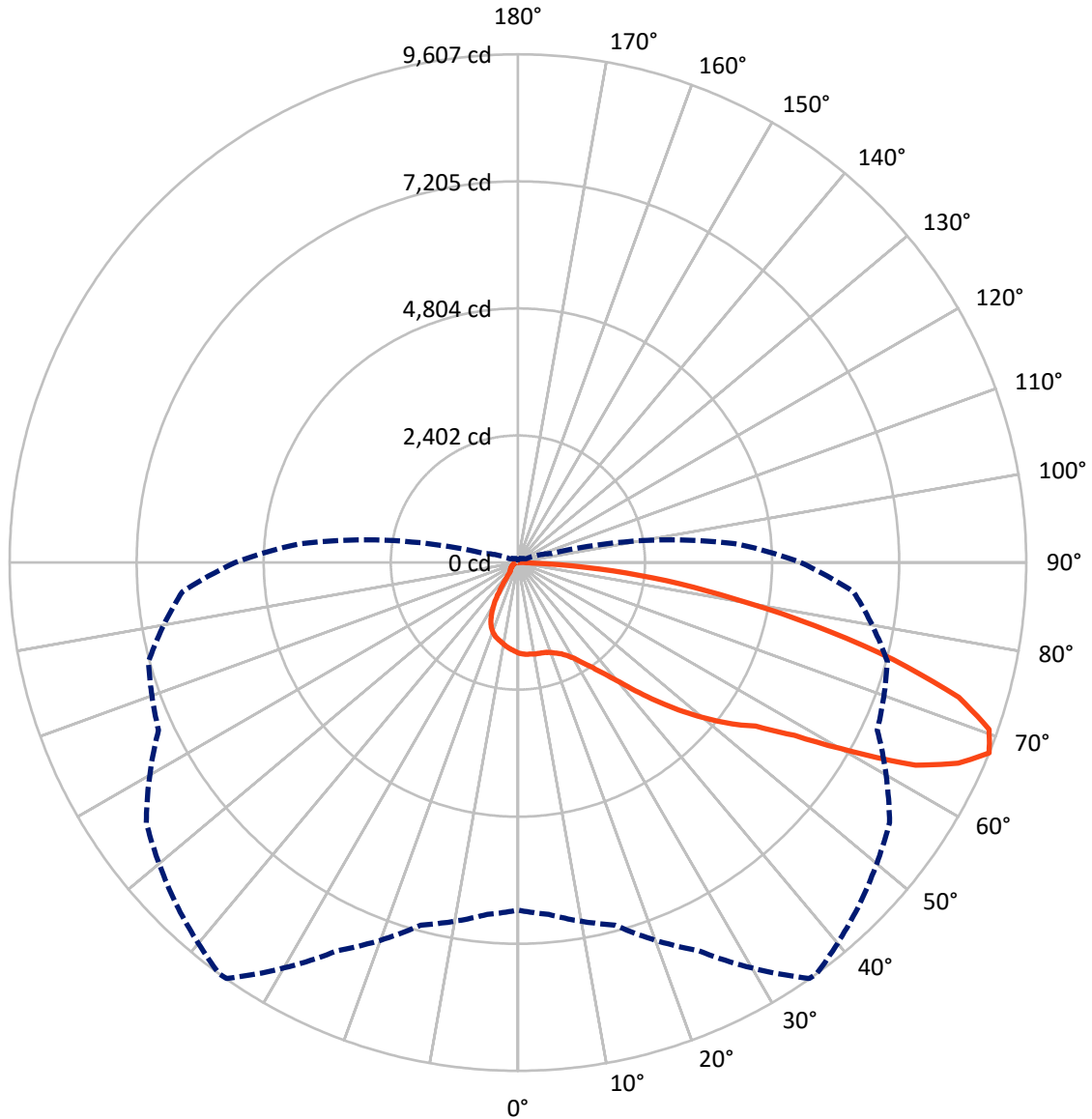
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type IV - Short - N/A

REPORT NUMBER: P509192
CATALOG NUMBER: VERD-CA2-120-760-U-T4-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P509192
 CATALOG NUMBER: VERD-CA2-120-760-U-T4-HSS

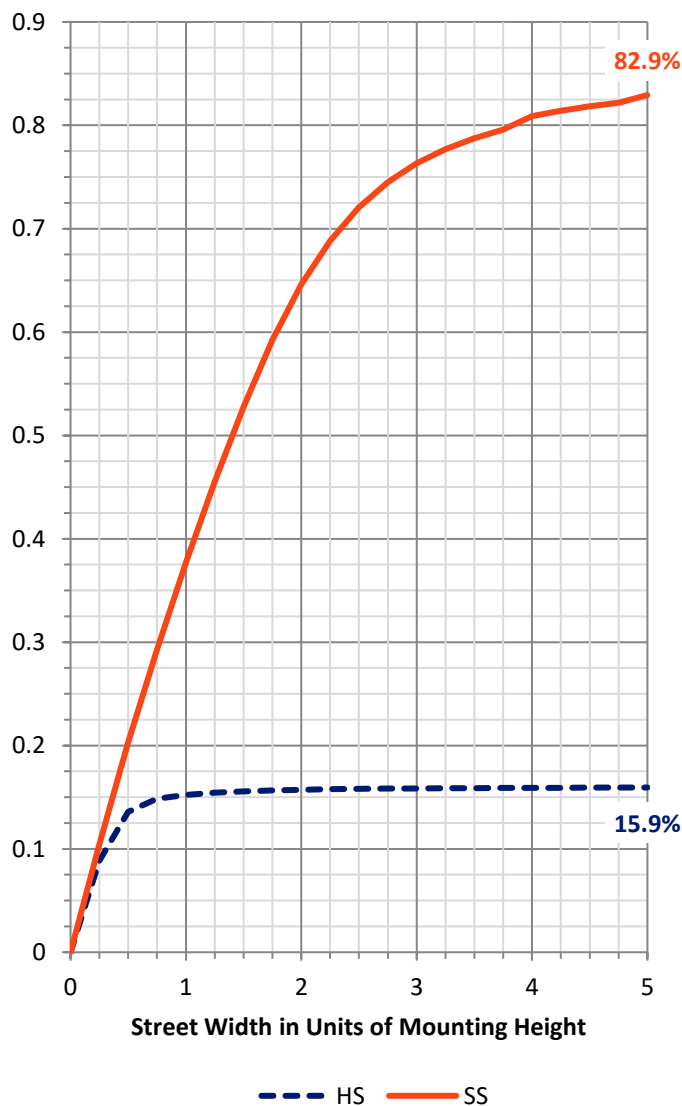
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2498.7 | 0.0 | 2498.7 |
| | % Fixture | 16.1 | 0.0 | 16.1 |
| Street Side | Lumens | 12995.3 | 0.0 | 12995.3 |
| | % Fixture | 83.9 | 0.0 | 83.9 |
| Total | Lumens | 15494.0 | 0.0 | 15494.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 161.6 | 1.0 |
| 10°-20° | 478.8 | 3.1 |
| 20°-30° | 791.8 | 5.1 |
| 30°-40° | 1256.0 | 8.1 |
| 40°-50° | 2167.9 | 14.0 |
| 50°-60° | 3213.3 | 20.7 |
| 60°-70° | 4154.3 | 26.8 |
| 70°-80° | 2804.3 | 18.1 |
| 80°-90° | 466.1 | 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° | 15494.0 | 100.0 |
| 0°-180° | 15494.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P509192

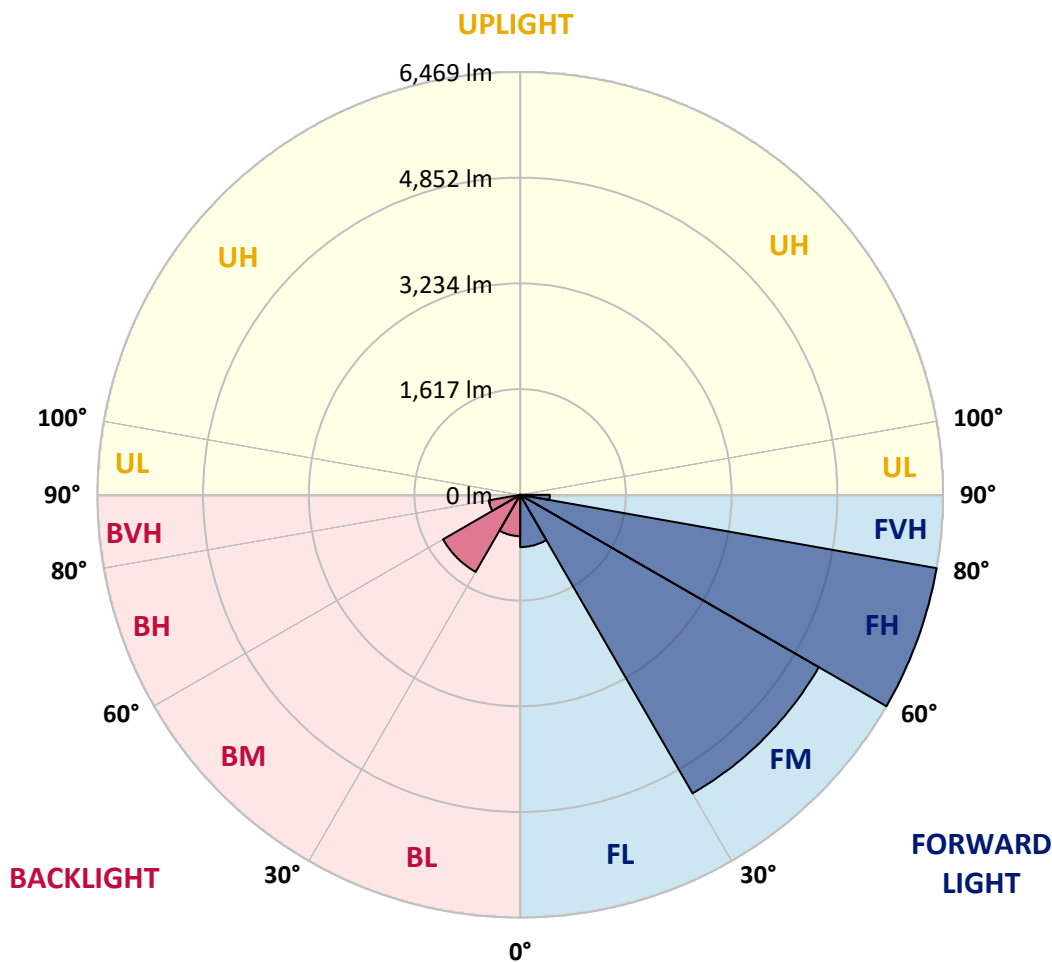
CATALOG NUMBER: VERD-CA2-120-760-U-T4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 799.8 | 5.2 | | | |
| FM | (30°-60°) | 5273.9 | 34.0 | | | |
| FH | (60°-80°) | 6468.8 | 41.8 | | | G3/7500 |
| FVH | (80°-90°) | 452.9 | 2.9 | | | G3/500 |
| BL | (0°-30°) | 632.4 | 4.1 | B2/1000 | | |
| BM | (30°-60°) | 1363.2 | 8.8 | B2/2500 | | |
| BH | (60°-80°) | 489.9 | 3.2 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 13.2 | 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





REPORT NUMBER: P509192

CATALOG NUMBER: VERD-CA2-120-760-U-T4-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 36° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 |
| 2.5° | 1719.8 | 1736.5 | 1734.6 | 1732.8 | 1732.8 | 1730.9 | 1719.8 | 1708.7 | 1714.2 | 1712.4 | 1710.5 |
| 5° | 1727.2 | 1743.9 | 1742.0 | 1740.2 | 1740.2 | 1742.0 | 1725.3 | 1712.4 | 1716.1 | 1719.8 | 1717.9 |
| 7.5° | 1730.9 | 1745.7 | 1742.0 | 1740.2 | 1738.3 | 1743.9 | 1730.9 | 1732.8 | 1736.5 | 1736.5 | 1736.5 |
| 10° | 1736.5 | 1747.6 | 1747.6 | 1749.4 | 1751.3 | 1756.9 | 1751.3 | 1756.9 | 1771.7 | 1768.0 | 1777.2 |
| 12.5° | 1721.6 | 1734.6 | 1740.2 | 1749.4 | 1758.7 | 1762.4 | 1768.0 | 1782.8 | 1801.3 | 1810.6 | 1819.9 |
| 15° | 1716.1 | 1729.1 | 1738.3 | 1749.4 | 1764.3 | 1768.0 | 1782.8 | 1808.7 | 1831.0 | 1849.5 | 1869.9 |
| 17.5° | 1734.6 | 1749.4 | 1762.4 | 1769.8 | 1777.2 | 1782.8 | 1797.6 | 1831.0 | 1869.9 | 1903.3 | 1932.9 |
| 20° | 1769.8 | 1784.7 | 1799.5 | 1806.9 | 1812.4 | 1816.2 | 1827.3 | 1858.8 | 1908.8 | 1960.7 | 2003.3 |
| 22.5° | 1810.6 | 1825.4 | 1842.1 | 1847.7 | 1860.6 | 1860.6 | 1862.5 | 1894.0 | 1955.1 | 2025.6 | 2077.5 |
| 25° | 1855.1 | 1864.3 | 1879.2 | 1888.4 | 1907.0 | 1910.7 | 1916.2 | 1944.0 | 2020.0 | 2099.7 | 2181.2 |
| 27.5° | 1907.0 | 1925.5 | 1940.3 | 1951.4 | 1988.5 | 1990.4 | 1986.7 | 2021.9 | 2096.0 | 2194.2 | 2309.1 |
| 30° | 2001.5 | 2021.9 | 2036.7 | 2055.2 | 2103.4 | 2101.6 | 2125.6 | 2162.7 | 2205.3 | 2312.8 | 2466.6 |
| 32.5° | 2151.6 | 2153.4 | 2160.9 | 2184.9 | 2253.5 | 2260.9 | 2307.3 | 2374.0 | 2459.2 | 2527.8 | 2690.9 |
| 35° | 2425.9 | 2416.6 | 2394.4 | 2390.7 | 2437.0 | 2440.7 | 2531.5 | 2672.3 | 2857.7 | 3085.6 | 3337.6 |
| 37.5° | 2746.5 | 2770.6 | 2744.6 | 2664.9 | 2672.3 | 2674.2 | 2781.7 | 2961.4 | 3306.1 | 3876.9 | 4116.0 |
| 40° | 3309.9 | 3322.8 | 3161.6 | 3035.6 | 2991.1 | 2970.7 | 3026.3 | 3298.7 | 3739.8 | 4482.9 | 4651.6 |
| 42.5° | 3806.5 | 3806.5 | 3656.4 | 3461.8 | 3348.8 | 3363.6 | 3346.9 | 3617.5 | 4184.6 | 5009.3 | 5070.4 |
| 45° | 4303.2 | 4286.5 | 4149.4 | 3986.3 | 3788.0 | 3775.0 | 3732.4 | 3939.9 | 4594.1 | 5387.3 | 5389.2 |
| 47.5° | 4766.5 | 4805.4 | 4599.7 | 4419.9 | 4217.9 | 4208.7 | 4132.7 | 4293.9 | 4987.0 | 5719.0 | 5669.0 |
| 50° | 5253.9 | 5307.6 | 5050.0 | 4848.0 | 4629.3 | 4642.3 | 4579.3 | 4692.4 | 5378.0 | 6028.5 | 5937.7 |
| 52.5° | 5947.0 | 5846.9 | 5539.3 | 5259.4 | 5033.3 | 5070.4 | 5005.5 | 5072.3 | 5783.9 | 6275.0 | 6086.0 |
| 55° | 6690.1 | 6512.2 | 6256.5 | 5787.6 | 5459.6 | 5455.9 | 5407.7 | 5487.4 | 6193.5 | 6556.7 | 6254.6 |
| 57.5° | 7088.6 | 7142.3 | 7083.0 | 6703.1 | 6173.1 | 6163.8 | 5874.7 | 5884.0 | 6569.7 | 6797.6 | 6490.0 |
| 60° | 7542.6 | 7609.3 | 7739.0 | 7501.8 | 7236.8 | 7244.2 | 6523.3 | 6308.4 | 6966.3 | 6990.3 | 6508.5 |
| 62.5° | 7783.5 | 7790.9 | 8089.3 | 8172.7 | 8387.7 | 8435.9 | 7889.2 | 6827.3 | 7229.4 | 7138.6 | 6540.0 |
| 65° | 7357.3 | 7370.3 | 7944.8 | 8365.4 | 9082.6 | 9147.5 | 8912.1 | 7831.7 | 7425.9 | 7216.4 | 6510.4 |
| 67.5° | 6569.7 | 6675.3 | 7094.1 | 8098.6 | 9597.8 | 9607.1 | 9132.7 | 8574.8 | 7494.4 | 7227.6 | 6367.7 |
| 70° | 5505.9 | 5468.9 | 5998.9 | 7205.3 | 9518.1 | 9449.6 | 9036.3 | 8660.1 | 7444.4 | 7075.6 | 5717.2 |
| 72.5° | 4082.6 | 4027.0 | 4573.7 | 5793.2 | 8586.0 | 8715.7 | 8604.5 | 8161.6 | 7255.4 | 6508.5 | 4640.5 |
| 75° | 2794.7 | 2859.5 | 3350.6 | 4368.0 | 7131.2 | 7327.6 | 7818.7 | 7776.1 | 6454.8 | 5394.7 | 3176.4 |
| 77.5° | 1912.5 | 1940.3 | 2361.0 | 3250.5 | 5652.3 | 5728.3 | 6541.9 | 6282.4 | 4746.1 | 3315.4 | 1060.0 |
| 80° | 1245.4 | 1236.1 | 1614.2 | 2314.7 | 4143.8 | 4134.5 | 4672.0 | 3975.2 | 2557.4 | 1130.5 | 146.4 |
| 82.5° | 695.0 | 735.7 | 967.4 | 1521.5 | 2800.2 | 2829.9 | 2917.0 | 2173.8 | 984.1 | 131.6 | 92.7 |
| 85° | 391.0 | 407.7 | 556.0 | 861.7 | 1467.7 | 1541.9 | 1301.0 | 798.7 | 176.1 | 72.3 | 53.7 |
| 87.5° | 92.7 | 89.0 | 177.9 | 329.9 | 244.6 | 265.0 | 126.0 | 37.1 | 18.5 | 13.0 | 13.0 |
| 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: P509192
 CATALOG NUMBER: VERD-CA2-120-760-U-T4-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 | 1712.4 |
| 2.5° | 1710.5 | 1706.8 | 1703.1 | 1695.7 | 1690.1 | 1673.5 | 1675.3 | 1686.4 | 1675.3 | 1693.8 | 1682.7 |
| 5° | 1714.2 | 1708.7 | 1699.4 | 1677.2 | 1660.5 | 1647.5 | 1643.8 | 1642.0 | 1627.1 | 1643.8 | 1636.4 |
| 7.5° | 1729.1 | 1723.5 | 1703.1 | 1679.0 | 1654.9 | 1616.0 | 1610.4 | 1603.0 | 1575.2 | 1586.4 | 1577.1 |
| 10° | 1764.3 | 1756.9 | 1721.6 | 1688.3 | 1651.2 | 1599.3 | 1569.7 | 1547.4 | 1515.9 | 1519.6 | 1510.4 |
| 12.5° | 1808.7 | 1801.3 | 1760.6 | 1705.0 | 1653.1 | 1580.8 | 1528.9 | 1486.3 | 1440.0 | 1440.0 | 1430.7 |
| 15° | 1860.6 | 1853.2 | 1806.9 | 1742.0 | 1660.5 | 1566.0 | 1488.1 | 1419.6 | 1345.4 | 1336.2 | 1325.1 |
| 17.5° | 1931.1 | 1919.9 | 1866.2 | 1782.8 | 1680.9 | 1553.0 | 1447.4 | 1345.4 | 1232.4 | 1197.2 | 1178.6 |
| 20° | 2003.3 | 1990.4 | 1944.0 | 1840.2 | 1708.7 | 1540.0 | 1388.1 | 1249.1 | 1102.7 | 1030.4 | 1017.4 |
| 22.5° | 2096.0 | 2092.3 | 2034.8 | 1890.3 | 1717.9 | 1512.2 | 1313.9 | 1141.6 | 945.1 | 845.1 | 824.7 |
| 25° | 2205.3 | 2199.8 | 2110.8 | 1929.2 | 1706.8 | 1456.6 | 1208.3 | 987.8 | 767.2 | 667.2 | 644.9 |
| 27.5° | 2335.1 | 2320.2 | 2175.7 | 1938.5 | 1675.3 | 1369.5 | 1073.0 | 789.5 | 567.1 | 481.8 | 465.2 |
| 30° | 2472.2 | 2450.0 | 2244.2 | 1940.3 | 1612.3 | 1262.0 | 895.1 | 580.1 | 402.1 | 341.0 | 341.0 |
| 32.5° | 2702.0 | 2626.0 | 2311.0 | 1914.4 | 1521.5 | 1108.2 | 682.0 | 391.0 | 281.7 | 257.6 | 257.6 |
| 35° | 3195.0 | 3013.3 | 2416.6 | 1881.0 | 1402.9 | 917.3 | 463.3 | 265.0 | 235.4 | 235.4 | 233.5 |
| 37.5° | 3934.4 | 3597.1 | 2596.4 | 1825.4 | 1241.7 | 682.0 | 305.8 | 218.7 | 224.2 | 224.2 | 224.2 |
| 40° | 4407.0 | 4053.0 | 2841.0 | 1738.3 | 1056.3 | 463.3 | 218.7 | 207.6 | 211.3 | 215.0 | 215.0 |
| 42.5° | 4848.0 | 4449.6 | 3085.6 | 1617.9 | 852.5 | 296.5 | 203.9 | 194.6 | 196.4 | 196.4 | 198.3 |
| 45° | 5127.9 | 4744.2 | 3267.2 | 1490.0 | 628.2 | 211.3 | 200.1 | 183.5 | 177.9 | 177.9 | 181.6 |
| 47.5° | 5387.3 | 4937.0 | 3346.9 | 1321.3 | 405.9 | 198.3 | 190.9 | 170.5 | 163.1 | 161.2 | 161.2 |
| 50° | 5646.8 | 5135.3 | 3391.4 | 1121.2 | 253.9 | 190.9 | 176.1 | 155.7 | 148.3 | 146.4 | 146.4 |
| 52.5° | 5761.7 | 5198.3 | 3291.3 | 895.1 | 189.0 | 183.5 | 164.9 | 142.7 | 131.6 | 131.6 | 131.6 |
| 55° | 5882.1 | 5315.0 | 3122.7 | 641.2 | 179.8 | 170.5 | 152.0 | 127.9 | 118.6 | 122.3 | 122.3 |
| 57.5° | 6015.6 | 5231.6 | 2942.9 | 417.0 | 177.9 | 153.8 | 135.3 | 114.9 | 107.5 | 111.2 | 113.0 |
| 60° | 5974.8 | 5252.0 | 2685.3 | 279.8 | 170.5 | 140.8 | 122.3 | 101.9 | 96.4 | 96.4 | 96.4 |
| 62.5° | 5974.8 | 5094.5 | 2262.8 | 213.1 | 155.7 | 129.7 | 113.0 | 94.5 | 85.2 | 81.5 | 77.8 |
| 65° | 5817.3 | 4722.0 | 1653.1 | 185.3 | 139.0 | 120.5 | 101.9 | 83.4 | 72.3 | 66.7 | 64.9 |
| 67.5° | 5341.0 | 4104.9 | 665.3 | 168.6 | 127.9 | 111.2 | 94.5 | 76.0 | 63.0 | 55.6 | 53.7 |
| 70° | 4540.4 | 3030.0 | 190.9 | 150.1 | 129.7 | 103.8 | 89.0 | 66.7 | 55.6 | 46.3 | 44.5 |
| 72.5° | 3365.4 | 1601.2 | 155.7 | 118.6 | 114.9 | 89.0 | 83.4 | 63.0 | 48.2 | 38.9 | 37.1 |
| 75° | 1699.4 | 218.7 | 133.4 | 85.2 | 89.0 | 92.7 | 79.7 | 55.6 | 44.5 | 31.5 | 29.7 |
| 77.5° | 176.1 | 129.7 | 116.8 | 57.4 | 63.0 | 64.9 | 68.6 | 51.9 | 38.9 | 25.9 | 24.1 |
| 80° | 109.3 | 98.2 | 114.9 | 50.0 | 37.1 | 44.5 | 46.3 | 40.8 | 31.5 | 20.4 | 20.4 |
| 82.5° | 77.8 | 83.4 | 85.2 | 31.5 | 27.8 | 25.9 | 24.1 | 24.1 | 27.8 | 18.5 | 18.5 |
| 85° | 53.7 | 55.6 | 35.2 | 20.4 | 18.5 | 16.7 | 14.8 | 14.8 | 13.0 | 14.8 | 13.0 |
| 87.5° | 13.0 | 11.1 | 11.1 | 11.1 | 9.3 | 9.3 | 7.4 | 7.4 | 7.4 | 7.4 | 9.3 |
| 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)