

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: P509404

Luminaire Tested: **VERD-CA2-90-730-U-T2-HSS**

Issue Date: 3/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P509404  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-139-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-CA2-90-730-U-T2-HSS  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 1250mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11569 lumens  
Efficiency: N/A  
Efficacy: 122.8 lumens/watt  
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

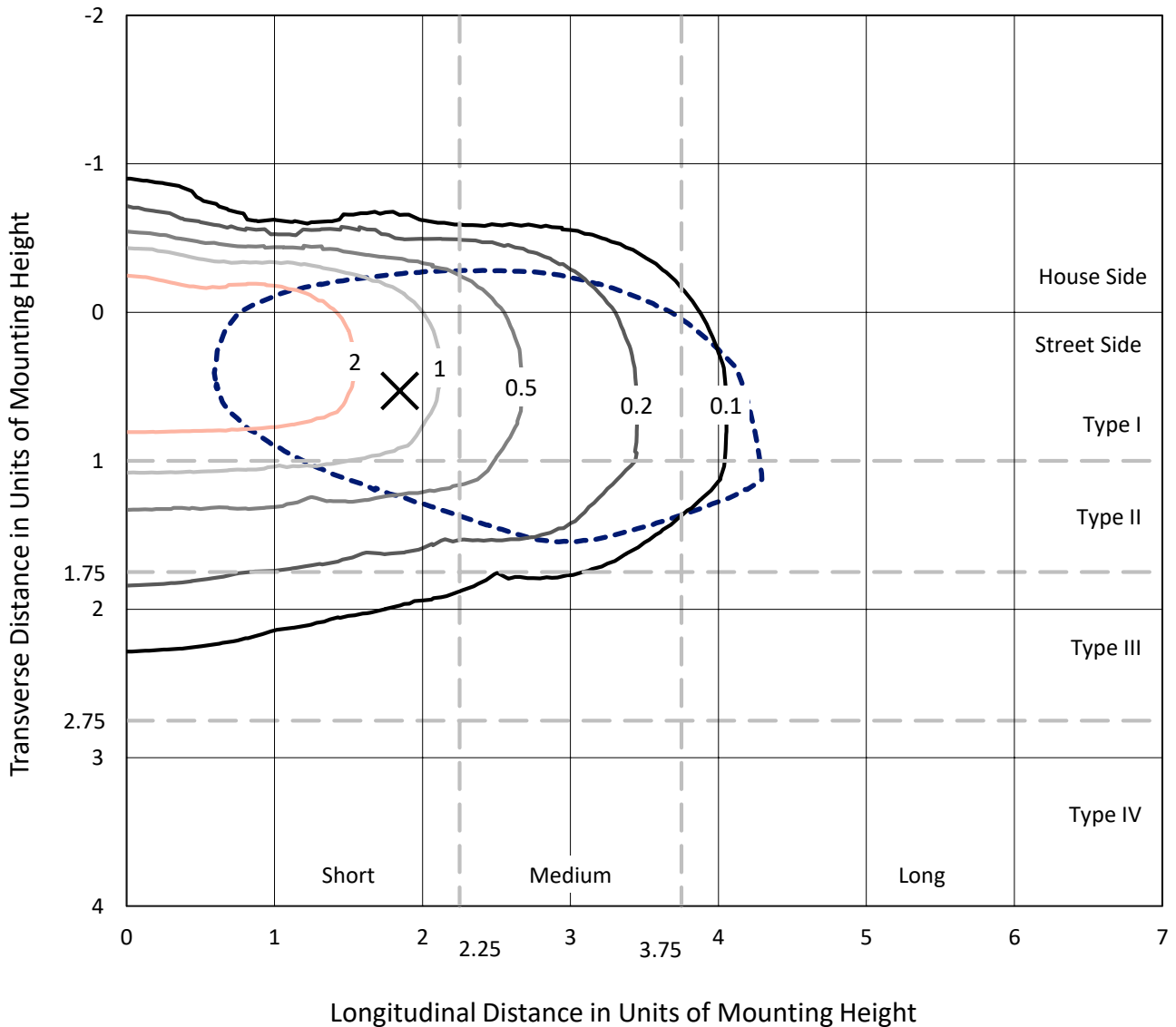
Input Watts (W): 94.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P509404  
 CATALOG NUMBER: VERD-CA2-90-730-U-T2-HSS

### Iso-Footcandle Lines of Horizontal Illumination

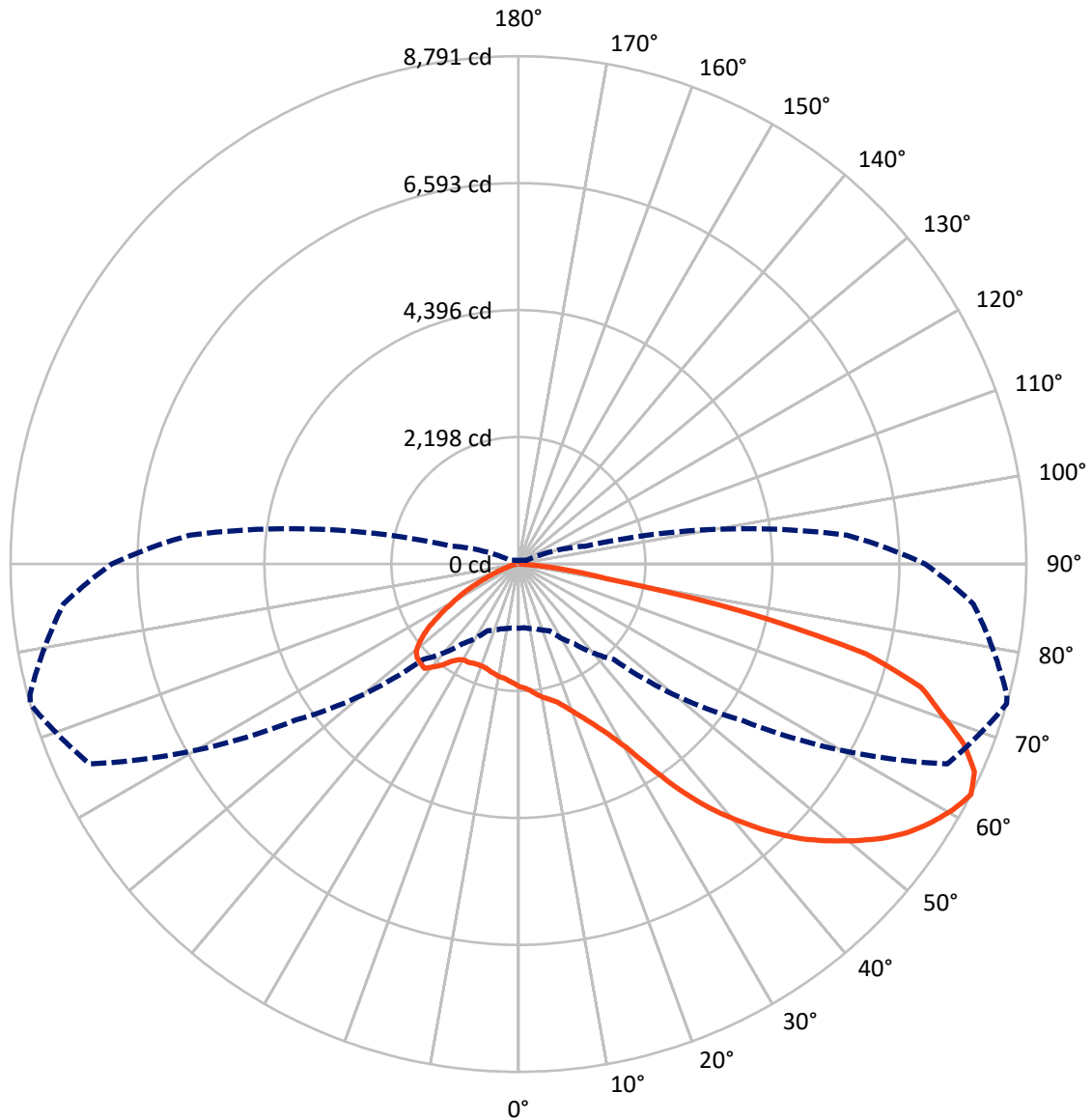
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc  
 Type II - Short - N/A

REPORT NUMBER: P509404  
CATALOG NUMBER: VERD-CA2-90-730-U-T2-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P509404

CATALOG NUMBER: VERD-CA2-90-730-U-T2-HSS

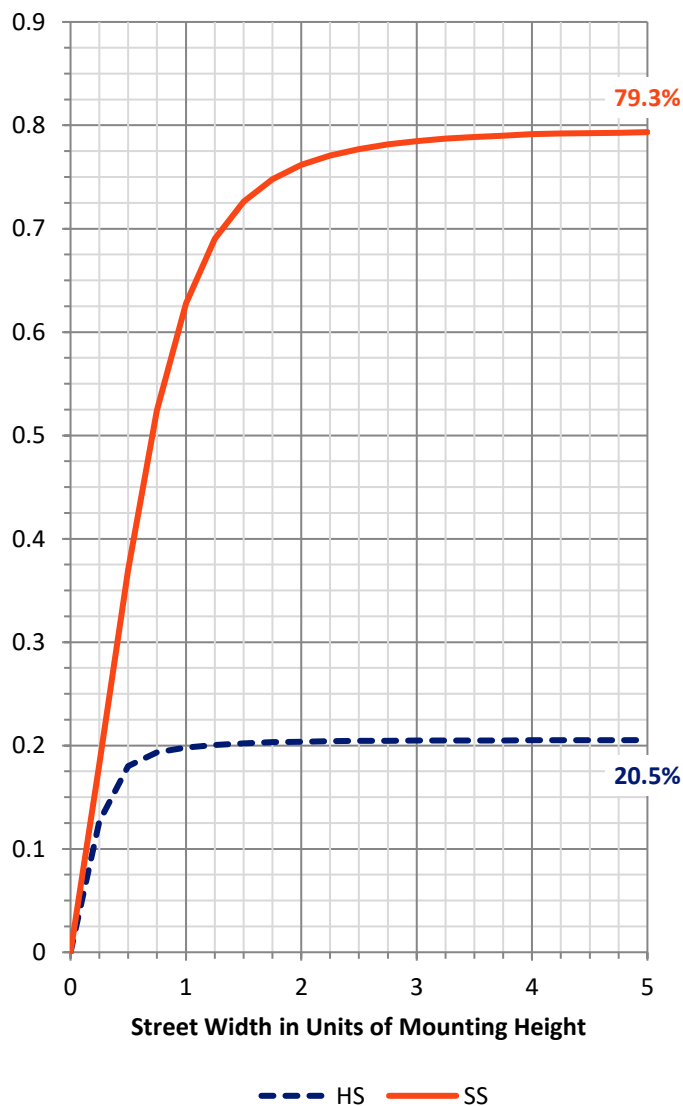
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2402.4   | 0.0    | 2402.4  |
|                    | % Fixture | 20.8     | 0.0    | 20.8    |
| <b>Street Side</b> | Lumens    | 9166.6   | 0.0    | 9166.6  |
|                    | % Fixture | 79.2     | 0.0    | 79.2    |
| <b>Total</b>       | Lumens    | 11569.0  | 0.0    | 11569.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 202.1   | 1.7       |
| 10°-20°   | 610.6   | 5.3       |
| 20°-30°   | 1030.9  | 8.9       |
| 30°-40°   | 1533.3  | 13.3      |
| 40°-50°   | 2075.3  | 17.9      |
| 50°-60°   | 2387.6  | 20.6      |
| 60°-70°   | 2304.6  | 19.9      |
| 70°-80°   | 1304.8  | 11.3      |
| 80°-90°   | 119.7   | 1.0       |
| 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°    | 11569.0 | 100.0     |
| 0°-180°   | 11569.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P509404

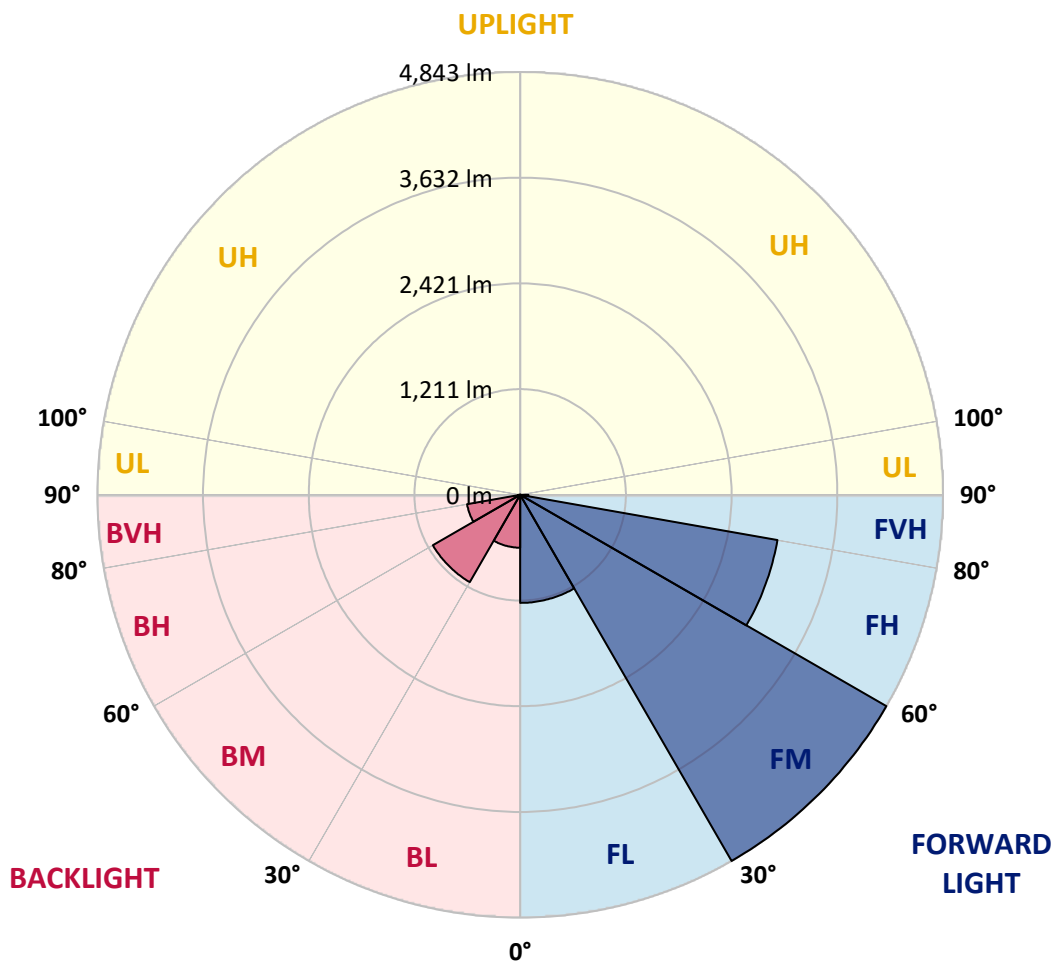
CATALOG NUMBER: VERD-CA2-90-730-U-T2-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1237.9 | 10.7      |                         |      |         |
| FM   | (30°-60°)   | 4842.6 | 41.9      |                         |      |         |
| FH   | (60°-80°)   | 2991.9 | 25.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 94.3   | 0.8       |                         |      | G1/100  |
| BL   | (0°-30°)    | 605.7  | 5.2       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1153.6 | 10.0      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 617.6  | 5.3       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 25.4   | 0.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type II Short





REPORT NUMBER: P509404

CATALOG NUMBER: VERD-CA2-90-730-U-T2-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 74°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 |
| 2.5°  | 2312.2 | 2297.0 | 2284.6 | 2277.7 | 2258.4 | 2241.9 | 2208.8 | 2174.3 | 2150.9 | 2149.5 | 2127.4 |
| 5°    | 2408.7 | 2407.3 | 2379.7 | 2374.2 | 2348.0 | 2339.8 | 2306.7 | 2257.0 | 2199.1 | 2192.2 | 2132.9 |
| 7.5°  | 2535.5 | 2520.4 | 2490.0 | 2477.6 | 2447.3 | 2425.2 | 2381.1 | 2334.2 | 2276.3 | 2269.4 | 2166.0 |
| 10°   | 2658.3 | 2650.0 | 2632.1 | 2633.4 | 2590.7 | 2549.3 | 2483.2 | 2403.2 | 2348.0 | 2339.8 | 2212.9 |
| 12.5° | 2800.3 | 2774.1 | 2743.7 | 2727.2 | 2684.5 | 2658.3 | 2594.8 | 2490.0 | 2403.2 | 2394.9 | 2268.1 |
| 15°   | 2898.2 | 2884.4 | 2856.8 | 2845.8 | 2804.4 | 2761.7 | 2688.6 | 2607.2 | 2476.3 | 2468.0 | 2324.6 |
| 17.5° | 3002.9 | 2996.1 | 2964.3 | 2957.5 | 2917.5 | 2866.5 | 2809.9 | 2703.8 | 2589.3 | 2575.5 | 2392.2 |
| 20°   | 3073.3 | 3060.9 | 3056.7 | 3055.3 | 3044.3 | 3012.6 | 2940.9 | 2858.2 | 2731.3 | 2706.5 | 2479.0 |
| 22.5° | 3167.0 | 3154.6 | 3160.1 | 3165.6 | 3180.8 | 3167.0 | 3120.1 | 3022.3 | 2896.8 | 2874.7 | 2615.5 |
| 25°   | 3176.7 | 3168.4 | 3205.6 | 3282.8 | 3313.2 | 3328.3 | 3292.5 | 3216.7 | 3095.3 | 3066.4 | 2778.2 |
| 27.5° | 3202.9 | 3190.5 | 3230.4 | 3311.8 | 3448.3 | 3471.7 | 3478.6 | 3442.8 | 3340.7 | 3324.2 | 2998.8 |
| 30°   | 3156.0 | 3147.7 | 3209.8 | 3349.0 | 3502.1 | 3634.4 | 3685.4 | 3735.1 | 3688.2 | 3659.2 | 3306.3 |
| 32.5° | 3041.6 | 3047.1 | 3128.4 | 3313.2 | 3595.8 | 3799.9 | 3932.2 | 4107.3 | 4191.4 | 4185.9 | 3850.9 |
| 35°   | 2874.7 | 2872.0 | 3008.5 | 3269.1 | 3604.1 | 3955.7 | 4202.5 | 4558.2 | 4794.0 | 4777.4 | 4423.1 |
| 37.5° | 2732.7 | 2725.8 | 2880.2 | 3157.4 | 3611.0 | 4079.8 | 4519.6 | 5050.4 | 5349.6 | 5333.1 | 4890.5 |
| 40°   | 2559.0 | 2570.0 | 2707.9 | 3027.8 | 3553.1 | 4172.1 | 4795.3 | 5528.8 | 5834.9 | 5834.9 | 5374.4 |
| 42.5° | 2383.9 | 2393.5 | 2530.0 | 2847.1 | 3469.0 | 4239.7 | 5054.6 | 6005.9 | 6317.5 | 6324.4 | 5706.7 |
| 45°   | 2230.8 | 2235.0 | 2359.1 | 2644.5 | 3317.3 | 4250.7 | 5293.1 | 6484.3 | 6769.7 | 6751.8 | 6085.9 |
| 47.5° | 1962.0 | 2007.5 | 2201.9 | 2462.5 | 3110.5 | 4202.5 | 5494.4 | 6910.4 | 7158.5 | 7121.3 | 6447.1 |
| 50°   | 1563.5 | 1563.5 | 1832.4 | 2288.7 | 2873.3 | 4074.2 | 5652.9 | 7299.2 | 7528.1 | 7493.6 | 6762.8 |
| 52.5° | 1436.7 | 1439.4 | 1522.2 | 2044.7 | 2633.4 | 3853.6 | 5743.9 | 7685.2 | 7890.7 | 7867.2 | 7062.0 |
| 55°   | 1369.1 | 1373.2 | 1411.9 | 1657.3 | 2415.6 | 3515.9 | 5746.7 | 7984.4 | 8198.1 | 8145.7 | 7314.3 |
| 57.5° | 1267.1 | 1260.2 | 1341.5 | 1476.7 | 2160.5 | 3080.2 | 5611.6 | 8216.1 | 8436.7 | 8396.7 | 7521.2 |
| 60°   | 1195.4 | 1184.4 | 1239.5 | 1360.8 | 1886.2 | 2629.3 | 5251.7 | 8384.3 | 8640.7 | 8664.2 | 7723.8 |
| 62.5° | 1111.3 | 1107.1 | 1159.5 | 1274.0 | 1683.5 | 2334.2 | 4711.2 | 8188.5 | 8791.0 | 8753.8 | 7903.1 |
| 65°   | 1027.2 | 1018.9 | 1068.5 | 1158.2 | 1487.7 | 2093.0 | 4166.6 | 7898.9 | 8675.2 | 8708.3 | 7938.9 |
| 67.5° | 916.9  | 915.5  | 962.4  | 1028.6 | 1274.0 | 1822.7 | 3378.0 | 7518.4 | 8316.7 | 8293.3 | 7613.5 |
| 70°   | 783.1  | 783.1  | 830.0  | 887.9  | 1064.4 | 1555.2 | 2593.5 | 6866.2 | 7765.2 | 7901.7 | 7056.5 |
| 72.5° | 632.9  | 635.6  | 682.5  | 748.7  | 878.3  | 1267.1 | 1912.3 | 5971.4 | 7286.8 | 7067.5 | 6270.6 |
| 75°   | 337.8  | 303.3  | 535.0  | 602.5  | 708.7  | 1010.6 | 1308.4 | 3882.6 | 6214.1 | 6062.4 | 5202.1 |
| 77.5° | 81.3   | 85.5   | 168.2  | 313.0  | 377.8  | 559.8  | 643.9  | 1797.9 | 4006.7 | 4248.0 | 3710.3 |
| 80°   | 53.8   | 59.3   | 91.0   | 222.0  | 252.3  | 297.8  | 255.1  | 783.1  | 1553.9 | 1655.9 | 2153.6 |
| 82.5° | 27.6   | 30.3   | 56.5   | 88.2   | 89.6   | 77.2   | 96.5   | 394.3  | 821.7  | 890.7  | 1035.5 |
| 85°   | 9.7    | 15.2   | 29.0   | 38.6   | 35.8   | 29.0   | 23.4   | 97.9   | 194.4  | 216.5  | 224.7  |
| 87.5° | 0.0    | 0.0    | 4.1    | 4.1    | 2.8    | 2.8    | 4.1    | 4.1    | 5.5    | 4.1    | 4.1    |
| 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: P509404  
 CATALOG NUMBER: VERD-CA2-90-730-U-T2-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 | 2120.5 |
| 2.5°  | 2109.5 | 2094.3 | 2070.9 | 2046.1 | 2019.9 | 1997.8 | 1985.4 | 1992.3 | 2000.6 | 1974.4 | 1964.7 |
| 5°    | 2105.4 | 2079.2 | 2035.1 | 1982.7 | 1942.7 | 1902.7 | 1855.8 | 1844.8 | 1833.8 | 1820.0 | 1804.8 |
| 7.5°  | 2124.7 | 2086.1 | 1996.5 | 1948.2 | 1864.1 | 1789.6 | 1748.3 | 1717.9 | 1690.4 | 1665.5 | 1650.4 |
| 10°   | 2160.5 | 2088.8 | 1988.2 | 1890.3 | 1797.9 | 1706.9 | 1617.3 | 1599.4 | 1593.9 | 1558.0 | 1531.8 |
| 12.5° | 2184.0 | 2095.7 | 1959.2 | 1840.7 | 1708.3 | 1610.4 | 1520.8 | 1469.8 | 1465.6 | 1449.1 | 1431.2 |
| 15°   | 2221.2 | 2123.3 | 1939.9 | 1778.6 | 1617.3 | 1513.9 | 1431.2 | 1365.0 | 1331.9 | 1330.5 | 1316.7 |
| 17.5° | 2288.7 | 2155.0 | 1909.6 | 1715.2 | 1544.2 | 1428.4 | 1309.8 | 1285.0 | 1229.9 | 1198.1 | 1189.9 |
| 20°   | 2357.7 | 2201.9 | 1901.3 | 1651.8 | 1449.1 | 1305.7 | 1214.7 | 1145.8 | 1101.6 | 1068.5 | 1047.9 |
| 22.5° | 2447.3 | 2269.4 | 1904.1 | 1614.5 | 1371.9 | 1213.3 | 1094.7 | 992.7  | 911.4  | 871.4  | 852.1  |
| 25°   | 2576.9 | 2348.0 | 1924.8 | 1558.0 | 1280.9 | 1114.0 | 941.7  | 806.6  | 692.1  | 663.2  | 649.4  |
| 27.5° | 2742.4 | 2458.3 | 1953.7 | 1500.1 | 1196.8 | 980.3  | 756.9  | 605.3  | 510.1  | 488.1  | 474.3  |
| 30°   | 2996.1 | 2623.8 | 1957.8 | 1464.2 | 1120.9 | 806.6  | 566.7  | 448.1  | 373.6  | 350.2  | 353.0  |
| 32.5° | 3473.1 | 2978.1 | 2013.0 | 1389.8 | 985.8  | 619.1  | 416.4  | 326.8  | 270.2  | 262.0  | 275.8  |
| 35°   | 4027.4 | 3395.9 | 2119.2 | 1351.2 | 831.4  | 448.1  | 297.8  | 239.9  | 204.1  | 215.1  | 220.6  |
| 37.5° | 4384.5 | 3764.0 | 2288.7 | 1262.9 | 650.8  | 329.5  | 208.2  | 187.5  | 180.6  | 187.5  | 199.9  |
| 40°   | 4800.9 | 4063.2 | 2433.5 | 1173.3 | 461.9  | 226.1  | 166.8  | 171.0  | 162.7  | 161.3  | 166.8  |
| 42.5° | 5138.7 | 4370.7 | 2587.9 | 1025.8 | 321.3  | 168.2  | 153.0  | 155.8  | 150.3  | 143.4  | 143.4  |
| 45°   | 5459.9 | 4636.8 | 2586.6 | 827.3  | 212.3  | 148.9  | 140.6  | 146.1  | 144.8  | 135.1  | 133.7  |
| 47.5° | 5741.2 | 4905.6 | 2587.9 | 601.1  | 161.3  | 136.5  | 131.0  | 136.5  | 136.5  | 128.2  | 126.8  |
| 50°   | 6090.0 | 5129.0 | 2546.6 | 384.7  | 147.5  | 126.8  | 125.5  | 124.1  | 129.6  | 118.6  | 115.8  |
| 52.5° | 6303.7 | 5291.7 | 2360.4 | 259.2  | 136.5  | 120.0  | 117.2  | 114.4  | 117.2  | 107.5  | 107.5  |
| 55°   | 6538.1 | 5494.4 | 2117.8 | 205.4  | 129.6  | 111.7  | 110.3  | 107.5  | 107.5  | 96.5   | 97.9   |
| 57.5° | 6793.2 | 5659.8 | 1791.0 | 180.6  | 124.1  | 106.2  | 103.4  | 99.3   | 93.8   | 85.5   | 84.1   |
| 60°   | 6977.9 | 5694.3 | 1465.6 | 164.1  | 120.0  | 103.4  | 92.4   | 86.9   | 77.2   | 71.7   | 70.3   |
| 62.5° | 7040.0 | 5712.2 | 1188.5 | 147.5  | 113.1  | 95.1   | 82.7   | 73.1   | 62.0   | 57.9   | 57.9   |
| 65°   | 6989.0 | 5505.4 | 890.7  | 133.7  | 104.8  | 88.2   | 73.1   | 59.3   | 48.3   | 44.1   | 42.7   |
| 67.5° | 6660.8 | 5124.9 | 648.0  | 120.0  | 92.4   | 80.0   | 63.4   | 48.3   | 38.6   | 34.5   | 34.5   |
| 70°   | 6063.8 | 4676.8 | 438.4  | 100.6  | 80.0   | 70.3   | 59.3   | 38.6   | 31.7   | 27.6   | 26.2   |
| 72.5° | 5413.0 | 3965.3 | 279.9  | 81.3   | 62.0   | 55.2   | 42.7   | 33.1   | 26.2   | 20.7   | 20.7   |
| 75°   | 4281.1 | 3114.6 | 194.4  | 59.3   | 44.1   | 41.4   | 33.1   | 27.6   | 22.1   | 16.5   | 16.5   |
| 77.5° | 2979.5 | 2024.0 | 153.0  | 45.5   | 30.3   | 27.6   | 24.8   | 20.7   | 17.9   | 13.8   | 12.4   |
| 80°   | 1727.6 | 1217.4 | 92.4   | 30.3   | 20.7   | 17.9   | 16.5   | 16.5   | 13.8   | 9.7    | 9.7    |
| 82.5° | 857.6  | 507.4  | 40.0   | 19.3   | 13.8   | 12.4   | 11.0   | 9.7    | 9.7    | 6.9    | 6.9    |
| 85°   | 168.2  | 86.9   | 15.2   | 9.7    | 6.9    | 6.9    | 5.5    | 5.5    | 4.1    | 2.8    | 2.8    |
| 87.5° | 5.5    | 4.1    | 4.1    | 4.1    | 2.8    | 2.8    | 1.4    | 0.0    | 0.0    | 0.0    | 0.0    |
| 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)