

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: P509853

Luminaire Tested: **VERD-M-CA3-150-750-U-T2**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P509853  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA3-150-750-U-T2  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 940mA LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22535 lumens  
Efficiency: N/A  
Efficacy: 147.3 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

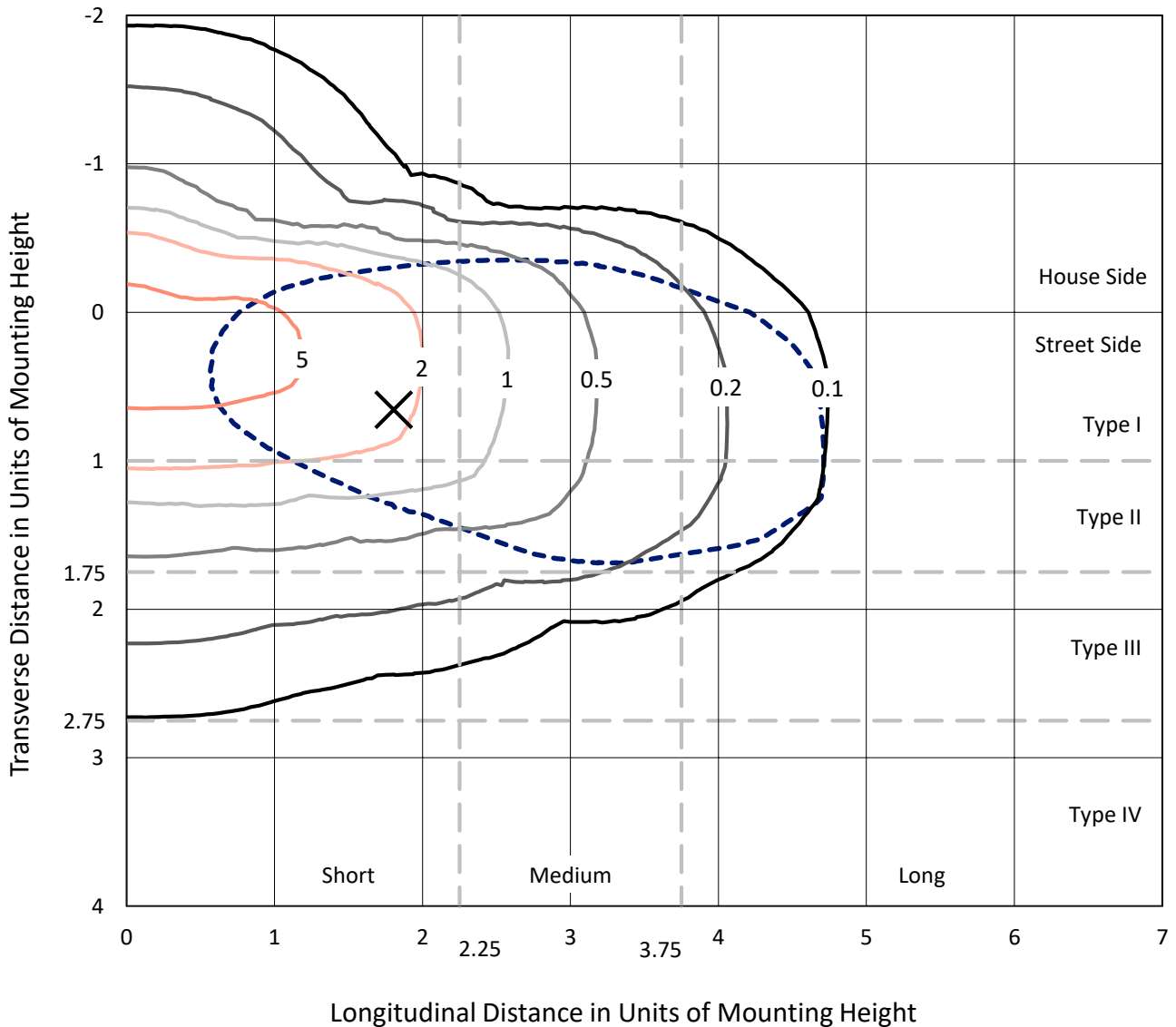
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P509853  
 CATALOG NUMBER: VERD-M-CA3-150-750-U-T2

### Iso-Footcandle Lines of Horizontal Illumination

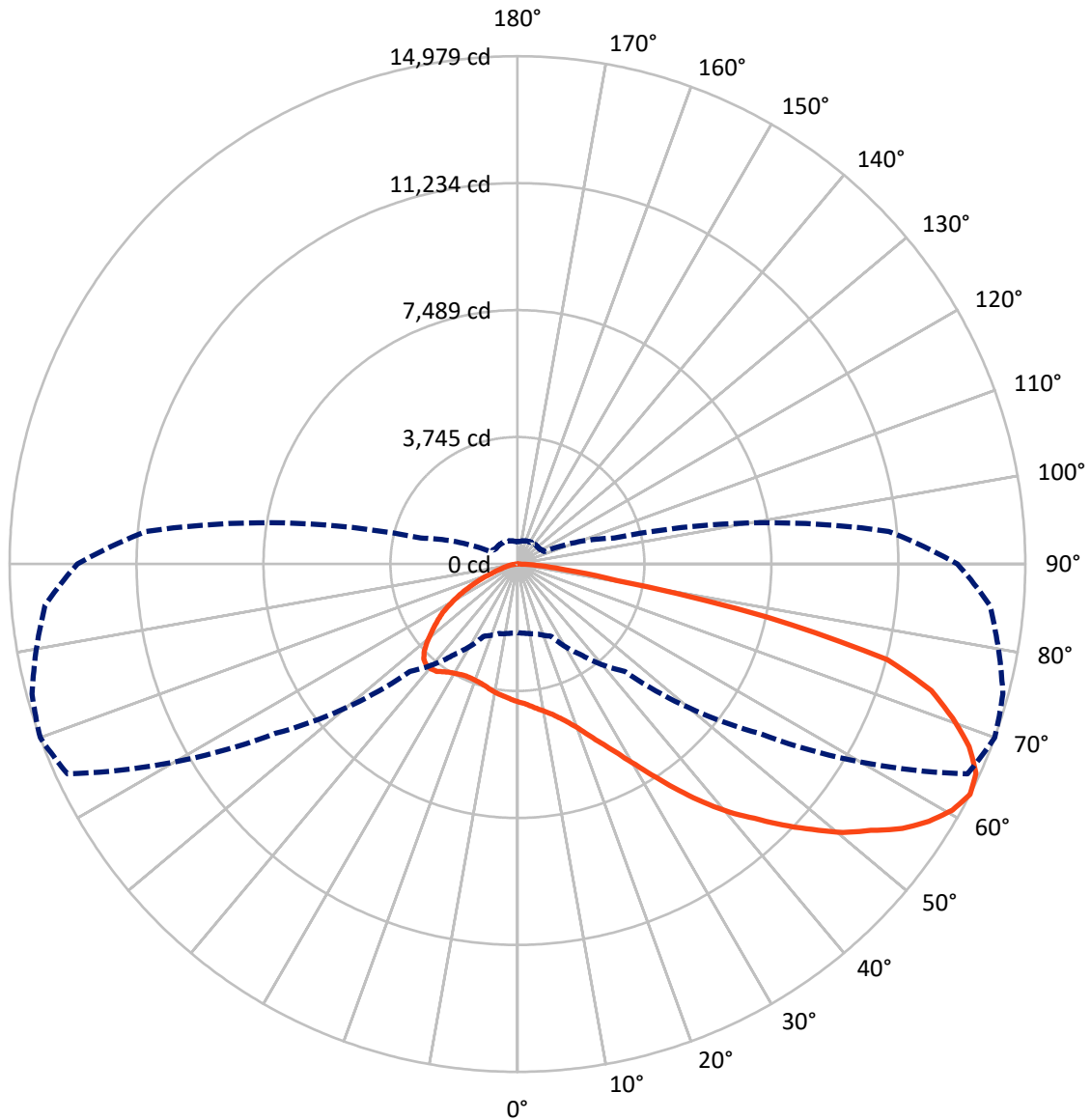
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc  
 Type II - Short - N/A

REPORT NUMBER: P509853  
CATALOG NUMBER: VERD-M-CA3-150-750-U-T2

### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P509853

CATALOG NUMBER: VERD-M-CA3-150-750-U-T2

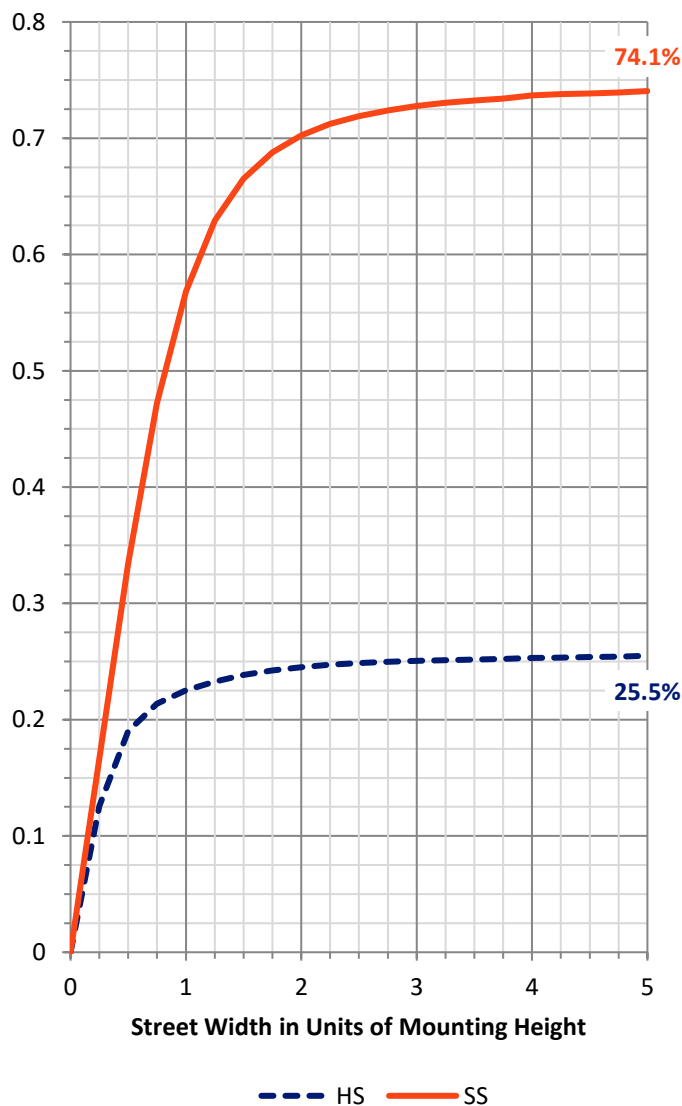
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5834.4   | 0.0    | 5834.4  |
|                    | % Fixture | 25.9     | 0.0    | 25.9    |
| <b>Street Side</b> | Lumens    | 16700.6  | 0.0    | 16700.6 |
|                    | % Fixture | 74.1     | 0.0    | 74.1    |
| <b>Total</b>       | Lumens    | 22535.0  | 0.0    | 22535.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 390.7   | 1.7       |
| 10°-20°   | 1186.4  | 5.3       |
| 20°-30°   | 2013.5  | 8.9       |
| 30°-40°   | 2913.4  | 12.9      |
| 40°-50°   | 3823.0  | 17.0      |
| 50°-60°   | 4467.1  | 19.8      |
| 60°-70°   | 4482.9  | 19.9      |
| 70°-80°   | 2856.6  | 12.7      |
| 80°-90°   | 401.4   | 1.8       |
| 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°    | 22535.0 | 100.0     |
| 0°-180°   | 22535.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P509853

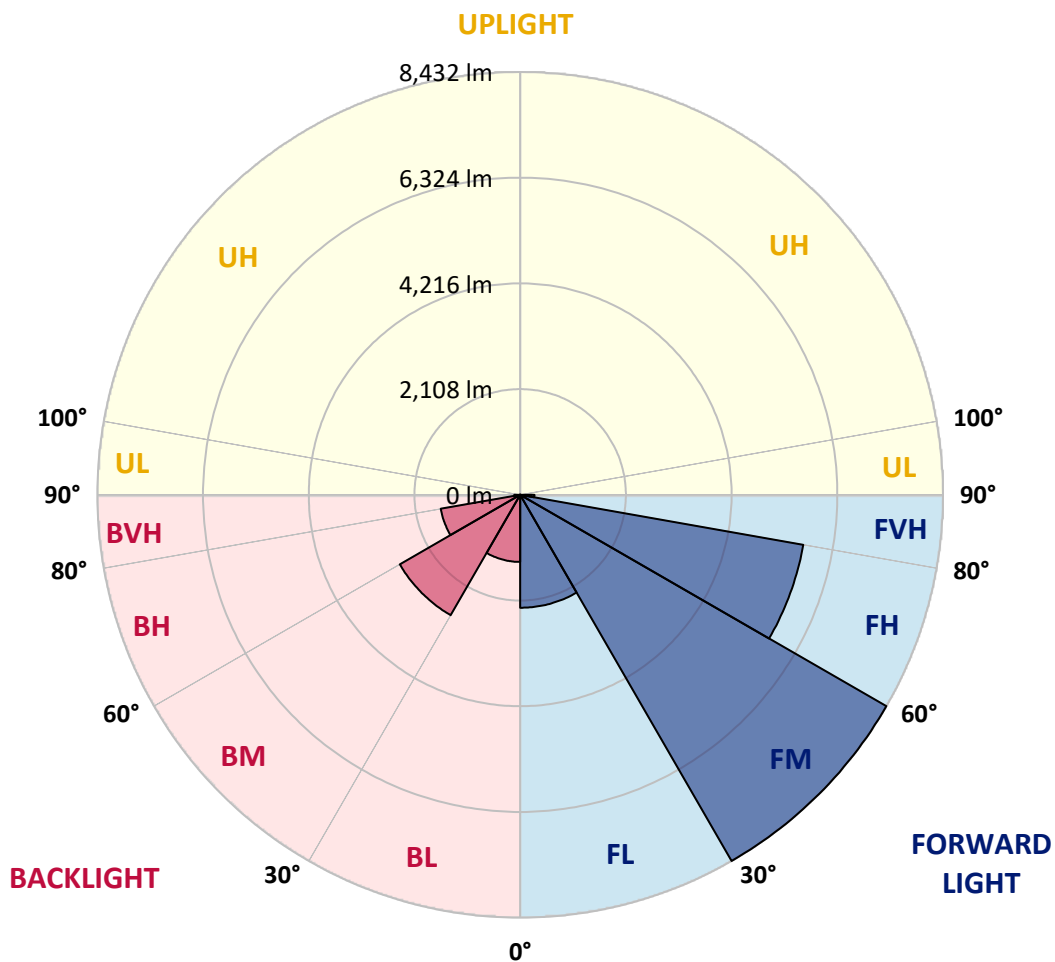
CATALOG NUMBER: VERD-M-CA3-150-750-U-T2

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 2252.4 | 10.0      |                         |      |         |
| FM (30°-60°)   | 8432.3 | 37.4      |                         |      |         |
| FH (60°-80°)   | 5732.7 | 25.4      |                         |      | G3/7500 |
| FVH (80°-90°)  | 283.2  | 1.3       |                         |      | G3/500  |
| BL (0°-30°)    | 1338.1 | 5.9       | B3/2500                 |      |         |
| BM (30°-60°)   | 2771.2 | 12.3      | B3/5000                 |      |         |
| BH (60°-80°)   | 1606.9 | 7.1       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 118.3  | 0.5       |                         |      | G2/225  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Short





REPORT NUMBER: P509853

CATALOG NUMBER: VERD-M-CA3-150-750-U-T2

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°     | 70°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| 0°    | 4067.3 | 4067.3 | 4067.3 | 4067.3 | 4067.3 | 4067.3 | 4067.3 | 4067.3  | 4067.3  | 4067.3  | 4067.3  |
| 2.5°  | 4223.1 | 4267.9 | 4261.8 | 4234.3 | 4253.6 | 4200.7 | 4181.3 | 4151.8  | 4121.2  | 4111.0  | 4093.7  |
| 5°    | 4422.7 | 4481.7 | 4470.5 | 4433.9 | 4432.8 | 4357.5 | 4314.7 | 4258.7  | 4211.9  | 4175.2  | 4121.2  |
| 7.5°  | 4609.0 | 4677.2 | 4667.1 | 4631.4 | 4629.4 | 4542.8 | 4454.2 | 4366.6  | 4312.7  | 4265.8  | 4167.1  |
| 10°   | 4806.6 | 4858.5 | 4849.3 | 4803.5 | 4794.4 | 4709.8 | 4606.0 | 4496.0  | 4416.5  | 4351.4  | 4210.8  |
| 12.5° | 4988.9 | 5043.8 | 5047.9 | 4990.9 | 4976.6 | 4886.0 | 4795.4 | 4649.7  | 4546.9  | 4472.6  | 4265.8  |
| 15°   | 5158.9 | 5224.1 | 5211.9 | 5154.8 | 5139.6 | 5047.9 | 4959.3 | 4824.9  | 4718.0  | 4614.1  | 4355.4  |
| 17.5° | 5295.4 | 5357.5 | 5342.2 | 5316.8 | 5308.6 | 5237.3 | 5164.0 | 5018.4  | 4923.7  | 4790.3  | 4493.9  |
| 20°   | 5389.1 | 5447.1 | 5453.2 | 5446.1 | 5492.9 | 5425.7 | 5385.0 | 5282.1  | 5178.3  | 5058.1  | 4683.4  |
| 22.5° | 5425.7 | 5495.0 | 5554.0 | 5599.9 | 5696.6 | 5686.4 | 5679.3 | 5620.2  | 5518.4  | 5343.2  | 4933.9  |
| 25°   | 5436.9 | 5506.2 | 5597.8 | 5710.9 | 5884.0 | 5946.1 | 5990.9 | 6005.2  | 5894.2  | 5755.7  | 5245.5  |
| 27.5° | 5439.0 | 5513.3 | 5607.0 | 5789.3 | 6053.0 | 6240.4 | 6347.3 | 6397.2  | 6335.1  | 6225.1  | 5669.1  |
| 30°   | 5396.2 | 5472.6 | 5592.7 | 5836.1 | 6185.4 | 6492.9 | 6670.1 | 6891.1  | 6864.6  | 6772.0  | 6199.7  |
| 32.5° | 5273.0 | 5342.2 | 5508.2 | 5828.0 | 6316.8 | 6751.6 | 7027.6 | 7410.5  | 7500.1  | 7440.0  | 6811.7  |
| 35°   | 5052.0 | 5136.5 | 5351.4 | 5760.8 | 6388.1 | 7003.1 | 7448.2 | 8043.9  | 8205.8  | 8209.9  | 7562.2  |
| 37.5° | 4829.0 | 4893.1 | 5145.7 | 5634.5 | 6427.8 | 7226.2 | 7847.3 | 8678.3  | 8913.5  | 8918.6  | 8186.4  |
| 40°   | 4591.7 | 4650.8 | 4928.8 | 5465.4 | 6387.0 | 7401.3 | 8219.0 | 9288.3  | 9625.4  | 9593.8  | 8799.5  |
| 42.5° | 4284.2 | 4349.3 | 4625.3 | 5235.3 | 6285.2 | 7536.7 | 8596.8 | 9928.8  | 10252.7 | 10288.3 | 9439.0  |
| 45°   | 4021.4 | 4073.4 | 4314.7 | 4875.8 | 6098.8 | 7610.1 | 8951.2 | 10612.1 | 10982.8 | 10945.1 | 10121.3 |
| 47.5° | 3697.6 | 3775.0 | 4032.6 | 4583.6 | 5763.8 | 7591.7 | 9290.3 | 11288.3 | 11700.7 | 11666.1 | 10713.0 |
| 50°   | 2852.4 | 2942.0 | 3540.8 | 4277.0 | 5336.1 | 7448.2 | 9597.9 | 11935.0 | 12447.2 | 12356.6 | 11339.2 |
| 52.5° | 2590.7 | 2616.1 | 2854.4 | 3924.7 | 4914.5 | 7122.3 | 9823.9 | 12751.7 | 13055.1 | 13019.5 | 11973.7 |
| 55°   | 2430.8 | 2479.7 | 2588.6 | 3233.2 | 4535.7 | 6592.7 | 9980.8 | 13434.0 | 13776.1 | 13609.1 | 12548.0 |
| 57.5° | 2290.3 | 2324.9 | 2454.2 | 2767.9 | 4099.8 | 5863.6 | 9934.9 | 14009.3 | 14314.8 | 14081.6 | 13109.1 |
| 60°   | 2140.6 | 2163.0 | 2292.3 | 2526.5 | 3629.4 | 5058.1 | 9469.6 | 14603.0 | 14738.5 | 14524.6 | 13583.7 |
| 62.5° | 2024.5 | 2045.8 | 2123.2 | 2348.3 | 3262.8 | 4481.7 | 8707.8 | 14644.8 | 14978.8 | 14823.0 | 13986.9 |
| 65°   | 1875.8 | 1890.0 | 1986.8 | 2164.0 | 2922.6 | 4138.5 | 8036.8 | 14252.7 | 14862.7 | 14824.0 | 14141.7 |
| 67.5° | 1711.8 | 1729.1 | 1820.8 | 1946.1 | 2487.8 | 3734.3 | 6914.5 | 14040.9 | 14371.9 | 14409.5 | 13851.5 |
| 70°   | 1519.4 | 1531.6 | 1626.3 | 1716.9 | 2128.3 | 3278.0 | 5497.0 | 13229.3 | 13615.2 | 13614.2 | 12955.3 |
| 72.5° | 1311.6 | 1310.6 | 1404.3 | 1500.0 | 1783.1 | 2753.6 | 4303.5 | 11745.6 | 12766.9 | 12690.6 | 11680.4 |
| 75°   | 1081.5 | 1096.8 | 1187.4 | 1262.7 | 1483.7 | 2232.2 | 2997.0 | 8508.2  | 11271.0 | 11375.9 | 10080.6 |
| 77.5° | 691.5  | 701.6  | 752.6  | 829.9  | 1037.7 | 1705.7 | 1955.2 | 4728.2  | 7525.5  | 9077.5  | 7934.9  |
| 80°   | 505.1  | 510.2  | 555.0  | 599.8  | 690.4  | 1038.7 | 993.9  | 2055.0  | 2982.7  | 4456.3  | 4867.7  |
| 82.5° | 344.2  | 345.2  | 380.9  | 391.0  | 396.1  | 468.4  | 471.5  | 1000.0  | 1420.6  | 1673.1  | 2149.7  |
| 85°   | 228.1  | 189.4  | 147.7  | 195.5  | 200.6  | 172.1  | 168.0  | 451.1   | 704.7   | 845.2   | 796.3   |
| 87.5° | 50.9   | 49.9   | 58.0   | 59.1   | 57.0   | 48.9   | 40.7   | 69.2    | 105.9   | 104.9   | 134.4   |
| 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: P509853

CATALOG NUMBER: VERD-M-CA3-150-750-U-T2

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4067.3  | 4067.3  | 4067.3 | 4067.3 | 4067.3 | 4067.3 | 4067.3 | 4067.3 | 4067.3 | 4067.3 | 4067.3 |
| 2.5°  | 4077.4  | 4072.3  | 4043.8 | 3983.8 | 3943.0 | 3901.3 | 3877.8 | 3863.6 | 3868.7 | 3845.3 | 3835.1 |
| 5°    | 4087.6  | 4062.2  | 3981.7 | 3910.4 | 3846.3 | 3774.0 | 3713.9 | 3705.7 | 3718.0 | 3696.6 | 3684.4 |
| 7.5°  | 4114.1  | 4060.1  | 3957.3 | 3835.1 | 3728.1 | 3659.9 | 3573.4 | 3529.6 | 3526.5 | 3505.1 | 3509.2 |
| 10°   | 4129.4  | 4059.1  | 3921.6 | 3774.0 | 3648.7 | 3527.5 | 3434.9 | 3386.0 | 3382.9 | 3352.4 | 3345.3 |
| 12.5° | 4171.1  | 4070.3  | 3879.9 | 3699.6 | 3560.1 | 3398.2 | 3300.4 | 3255.6 | 3250.5 | 3207.8 | 3191.5 |
| 15°   | 4235.3  | 4095.8  | 3836.1 | 3613.1 | 3432.8 | 3281.1 | 3164.0 | 3103.9 | 3094.7 | 3044.8 | 3027.5 |
| 17.5° | 4337.1  | 4168.1  | 3822.9 | 3534.7 | 3321.8 | 3155.8 | 3018.4 | 2953.2 | 2900.2 | 2872.7 | 2849.3 |
| 20°   | 4474.6  | 4257.7  | 3838.1 | 3461.3 | 3182.3 | 2990.9 | 2819.8 | 2734.2 | 2697.6 | 2652.8 | 2655.8 |
| 22.5° | 4670.1  | 4398.2  | 3864.6 | 3404.3 | 3056.0 | 2814.7 | 2622.2 | 2526.5 | 2460.3 | 2422.6 | 2424.7 |
| 25°   | 4945.1  | 4610.0  | 3916.5 | 3350.3 | 2918.6 | 2622.2 | 2395.1 | 2261.7 | 2194.5 | 2170.1 | 2144.6 |
| 27.5° | 5292.3  | 4863.6  | 4039.8 | 3284.2 | 2755.6 | 2404.3 | 2152.8 | 1997.0 | 1928.7 | 1892.1 | 1887.0 |
| 30°   | 5738.4  | 5196.6  | 4184.4 | 3235.3 | 2584.6 | 2132.4 | 1852.4 | 1729.1 | 1669.1 | 1617.1 | 1592.7 |
| 32.5° | 6282.1  | 5667.1  | 4345.3 | 3186.4 | 2372.7 | 1827.9 | 1574.4 | 1479.7 | 1383.9 | 1317.7 | 1320.8 |
| 35°   | 6913.5  | 6179.3  | 4584.6 | 3124.3 | 2124.3 | 1543.8 | 1368.7 | 1246.5 | 1156.8 | 1113.0 | 1092.7 |
| 37.5° | 7509.3  | 6704.8  | 4865.6 | 3061.1 | 1846.3 | 1359.5 | 1166.0 | 1053.0 | 983.7  | 950.1  | 957.2  |
| 40°   | 8112.1  | 7246.5  | 5108.0 | 2906.3 | 1534.6 | 1192.5 | 965.4  | 901.2  | 873.7  | 847.3  | 850.3  |
| 42.5° | 8651.8  | 7678.3  | 5285.2 | 2734.2 | 1316.7 | 1001.0 | 822.8  | 837.1  | 853.4  | 838.1  | 834.0  |
| 45°   | 9214.0  | 8183.4  | 5441.0 | 2441.0 | 1134.4 | 850.3  | 787.2  | 826.9  | 862.5  | 860.5  | 855.4  |
| 47.5° | 9778.1  | 8651.8  | 5456.3 | 2052.0 | 968.4  | 799.4  | 786.2  | 815.7  | 862.5  | 870.7  | 864.6  |
| 50°   | 10359.6 | 9142.7  | 5366.7 | 1593.7 | 898.2  | 805.5  | 787.2  | 792.3  | 844.2  | 853.4  | 850.3  |
| 52.5° | 11004.2 | 9673.2  | 5145.7 | 1211.8 | 870.7  | 815.7  | 790.2  | 783.1  | 812.6  | 828.9  | 832.0  |
| 55°   | 11596.9 | 10094.8 | 4731.2 | 1070.3 | 850.3  | 816.7  | 812.6  | 789.2  | 790.2  | 782.1  | 802.5  |
| 57.5° | 12094.8 | 10497.1 | 4260.7 | 992.9  | 832.0  | 807.5  | 822.8  | 779.0  | 766.8  | 733.2  | 725.1  |
| 60°   | 12610.1 | 10824.0 | 3598.8 | 939.9  | 810.6  | 796.3  | 797.4  | 761.7  | 731.2  | 682.3  | 668.0  |
| 62.5° | 12975.7 | 10997.1 | 2956.2 | 877.8  | 781.1  | 779.0  | 763.8  | 737.3  | 709.8  | 667.0  | 660.9  |
| 65°   | 13081.6 | 10905.4 | 2270.9 | 812.6  | 742.4  | 750.5  | 723.0  | 686.4  | 572.3  | 519.4  | 519.4  |
| 67.5° | 12731.3 | 10341.3 | 1681.3 | 737.3  | 695.5  | 711.8  | 657.8  | 540.7  | 481.7  | 450.1  | 455.2  |
| 70°   | 11771.0 | 9429.8  | 1094.7 | 627.3  | 628.3  | 641.6  | 542.8  | 486.8  | 430.8  | 411.4  | 421.6  |
| 72.5° | 10487.9 | 8078.5  | 722.0  | 500.0  | 529.5  | 507.1  | 495.9  | 448.1  | 398.2  | 375.8  | 382.9  |
| 75°   | 8642.7  | 6378.9  | 501.0  | 393.1  | 343.2  | 432.8  | 440.9  | 376.8  | 338.1  | 410.4  | 426.7  |
| 77.5° | 6828.0  | 4433.9  | 413.4  | 275.0  | 253.6  | 319.8  | 353.4  | 349.3  | 559.1  | 656.8  | 649.7  |
| 80°   | 4060.1  | 2553.0  | 337.1  | 190.4  | 179.2  | 205.7  | 278.0  | 401.2  | 626.3  | 470.5  | 448.1  |
| 82.5° | 1841.2  | 1160.9  | 179.2  | 99.8   | 117.1  | 136.5  | 207.7  | 499.0  | 410.4  | 301.4  | 284.1  |
| 85°   | 718.9   | 378.8   | 71.3   | 43.8   | 40.7   | 50.9   | 94.7   | 240.3  | 165.0  | 133.4  | 133.4  |
| 87.5° | 92.7    | 68.2    | 20.4   | 15.3   | 13.2   | 16.3   | 30.6   | 133.4  | 77.4   | 65.2   | 63.1   |
| 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)