

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: P509837

Luminaire Tested: **VERD-M-CA3-150-730-U-T2**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P509837  
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-CA3-150-730-U-T2  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 940mA LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21728 lumens  
Efficiency: N/A  
Efficacy: 142.0 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

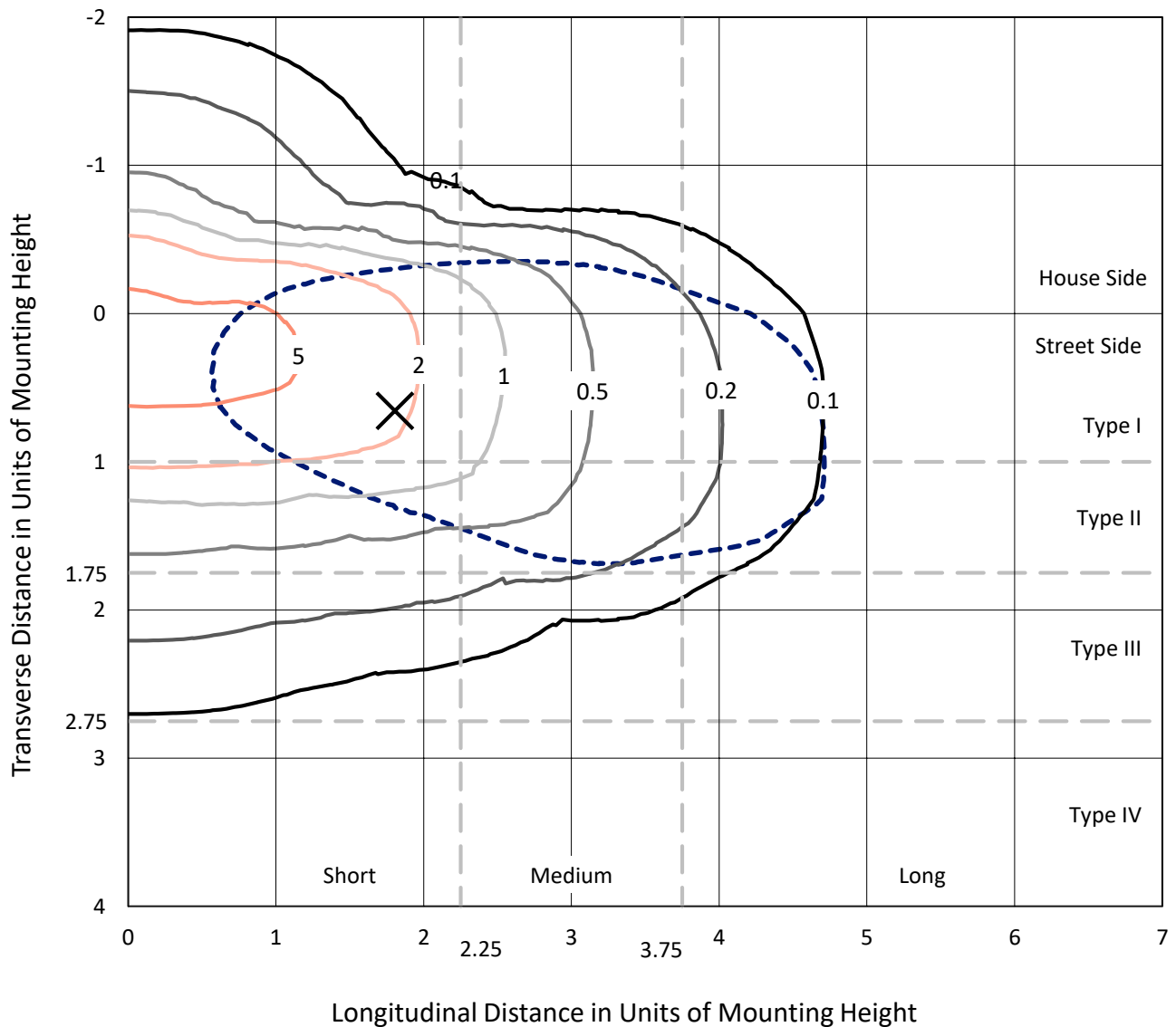
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P509837  
 CATALOG NUMBER: VERD-M-CA3-150-730-U-T2

### Iso-Footcandle Lines of Horizontal Illumination

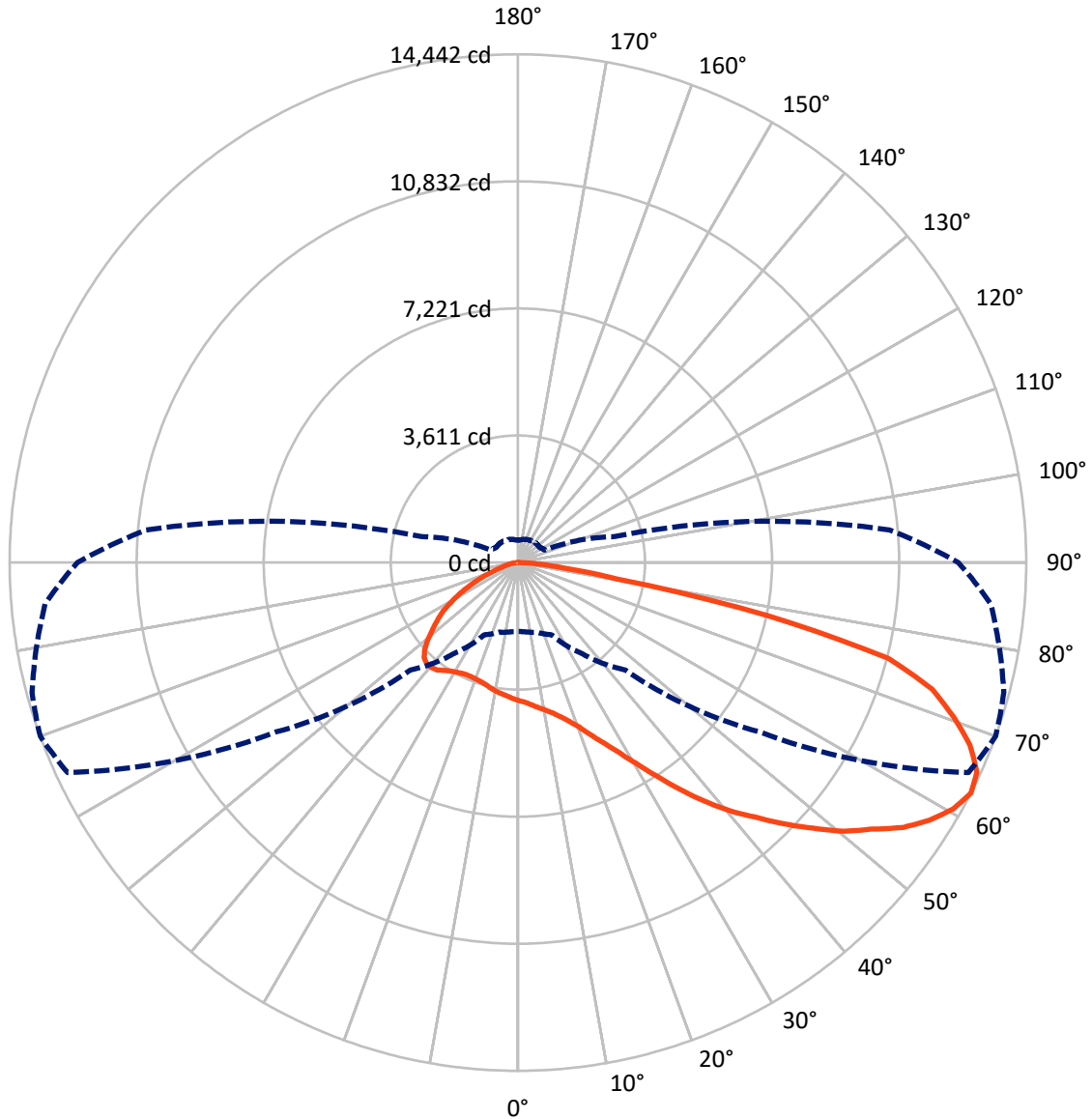
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc  
 Type II - Short - N/A

REPORT NUMBER: P509837  
CATALOG NUMBER: VERD-M-CA3-150-730-U-T2

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P509837

CATALOG NUMBER: VERD-M-CA3-150-730-U-T2

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5625.5   | 0.0    | 5625.5  |
|                    | % Fixture | 25.9     | 0.0    | 25.9    |
| <b>Street Side</b> | Lumens    | 16102.5  | 0.0    | 16102.5 |
|                    | % Fixture | 74.1     | 0.0    | 74.1    |
| <b>Total</b>       | Lumens    | 21728.0  | 0.0    | 21728.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 376.7   | 1.7       |
| 10°-20°   | 1143.9  | 5.3       |
| 20°-30°   | 1941.4  | 8.9       |
| 30°-40°   | 2809.0  | 12.9      |
| 40°-50°   | 3686.1  | 17.0      |
| 50°-60°   | 4307.1  | 19.8      |
| 60°-70°   | 4322.4  | 19.9      |
| 70°-80°   | 2754.3  | 12.7      |
| 80°-90°   | 387.1   | 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°    | 21728.0 | 100.0     |
| 0°-180°   | 21728.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P509837

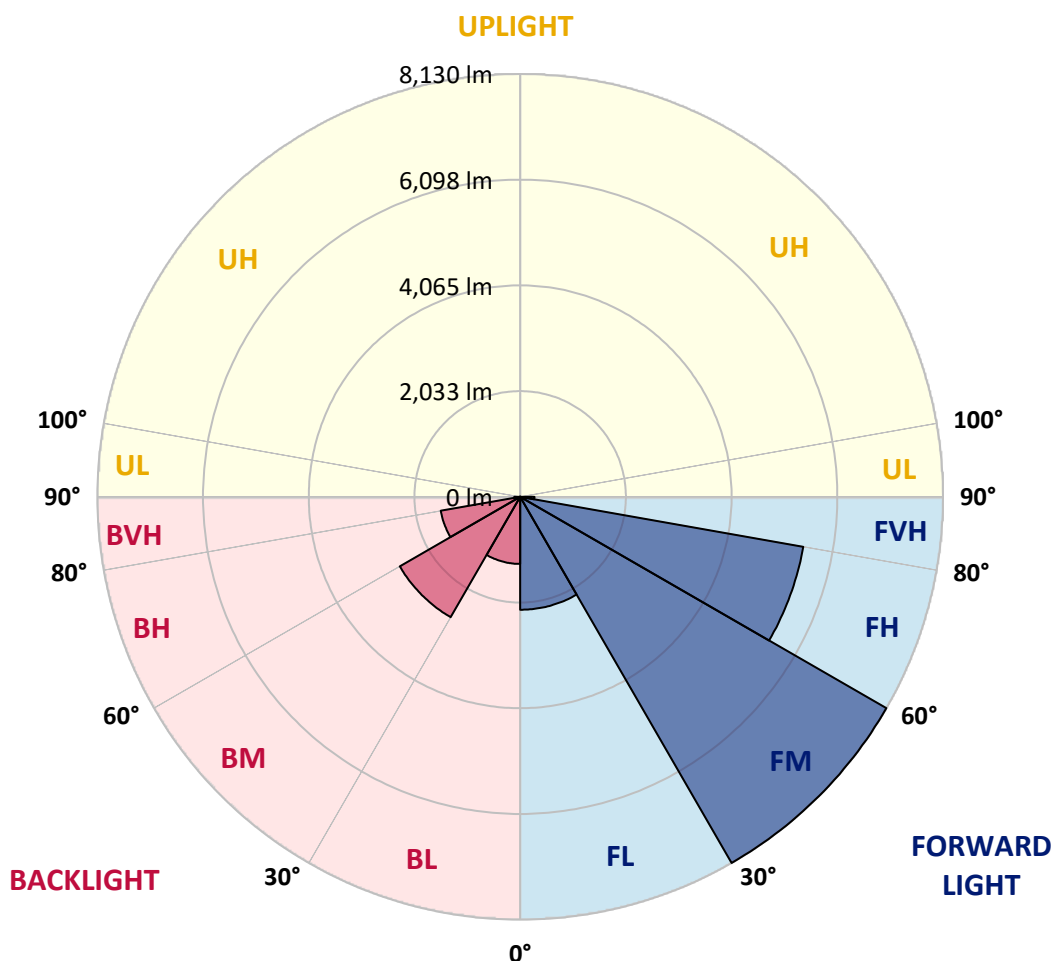
CATALOG NUMBER: VERD-M-CA3-150-730-U-T2

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 2171.7 | 10.0      |                         |      |         |
| FM (30°-60°)   | 8130.4 | 37.4      |                         |      |         |
| FH (60°-80°)   | 5527.4 | 25.4      |                         |      | G3/7500 |
| FVH (80°-90°)  | 273.0  | 1.3       |                         |      | G3/500  |
| BL (0°-30°)    | 1290.2 | 5.9       | B3/2500                 |      |         |
| BM (30°-60°)   | 2671.9 | 12.3      | B3/5000                 |      |         |
| BH (60°-80°)   | 1549.3 | 7.1       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 114.0  | 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: P509837

CATALOG NUMBER: VERD-M-CA3-150-730-U-T2

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°     | 70°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| 0°    | 3921.6 | 3921.6 | 3921.6 | 3921.6 | 3921.6 | 3921.6 | 3921.6 | 3921.6  | 3921.6  | 3921.6  | 3921.6  |
| 2.5°  | 4071.8 | 4115.0 | 4109.1 | 4082.6 | 4101.3 | 4050.2 | 4031.6 | 4003.1  | 3973.6  | 3963.8  | 3947.1  |
| 5°    | 4264.3 | 4321.2 | 4310.4 | 4275.1 | 4274.1 | 4201.4 | 4160.2 | 4106.2  | 4061.0  | 4025.7  | 3973.6  |
| 7.5°  | 4444.0 | 4509.7 | 4499.9 | 4465.6 | 4463.6 | 4380.1 | 4294.7 | 4210.3  | 4158.2  | 4113.1  | 4017.8  |
| 10°   | 4634.4 | 4684.5 | 4675.7 | 4631.5 | 4622.7 | 4541.2 | 4441.0 | 4335.0  | 4258.4  | 4195.5  | 4060.0  |
| 12.5° | 4810.2 | 4863.2 | 4867.1 | 4812.2 | 4798.4 | 4711.0 | 4623.6 | 4483.2  | 4384.1  | 4312.4  | 4113.1  |
| 15°   | 4974.2 | 5037.0 | 5025.2 | 4970.2 | 4955.5 | 4867.1 | 4781.7 | 4652.1  | 4549.0  | 4448.9  | 4199.5  |
| 17.5° | 5105.7 | 5165.6 | 5150.9 | 5126.4 | 5118.5 | 5049.8 | 4979.1 | 4838.7  | 4747.4  | 4618.7  | 4333.0  |
| 20°   | 5196.1 | 5252.0 | 5257.9 | 5251.1 | 5296.2 | 5231.4 | 5192.1 | 5093.0  | 4992.8  | 4877.0  | 4515.6  |
| 22.5° | 5231.4 | 5298.2 | 5355.1 | 5399.3 | 5492.6 | 5482.8 | 5475.9 | 5419.0  | 5320.8  | 5151.9  | 4757.2  |
| 25°   | 5242.2 | 5309.0 | 5397.4 | 5506.3 | 5673.3 | 5733.2 | 5776.4 | 5790.1  | 5683.1  | 5549.6  | 5057.6  |
| 27.5° | 5244.2 | 5315.9 | 5406.2 | 5582.0 | 5836.3 | 6016.9 | 6120.0 | 6168.1  | 6108.2  | 6002.2  | 5466.1  |
| 30°   | 5202.9 | 5276.6 | 5392.5 | 5627.1 | 5963.9 | 6260.4 | 6431.3 | 6644.3  | 6618.8  | 6529.5  | 5977.6  |
| 32.5° | 5084.1 | 5150.9 | 5311.0 | 5619.3 | 6090.6 | 6509.8 | 6775.9 | 7145.1  | 7231.5  | 7173.6  | 6567.8  |
| 35°   | 4871.1 | 4952.6 | 5159.7 | 5554.5 | 6159.3 | 6752.3 | 7181.4 | 7755.8  | 7911.9  | 7915.9  | 7291.4  |
| 37.5° | 4656.0 | 4717.9 | 4961.4 | 5432.7 | 6197.6 | 6967.4 | 7566.3 | 8367.5  | 8594.3  | 8599.3  | 7893.3  |
| 40°   | 4427.3 | 4484.2 | 4752.3 | 5269.7 | 6158.3 | 7136.3 | 7924.7 | 8955.7  | 9280.7  | 9250.2  | 8484.4  |
| 42.5° | 4130.7 | 4193.6 | 4459.7 | 5047.8 | 6060.1 | 7266.8 | 8289.0 | 9573.3  | 9885.5  | 9919.9  | 9101.0  |
| 45°   | 3877.4 | 3927.5 | 4160.2 | 4701.2 | 5880.4 | 7337.5 | 8630.7 | 10232.1 | 10589.5 | 10553.2 | 9758.8  |
| 47.5° | 3565.2 | 3639.8 | 3888.2 | 4419.4 | 5557.4 | 7319.9 | 8957.6 | 10884.1 | 11281.7 | 11248.3 | 10329.3 |
| 50°   | 2750.2 | 2836.6 | 3414.0 | 4123.9 | 5145.0 | 7181.4 | 9254.2 | 11507.6 | 12001.4 | 11914.1 | 10933.2 |
| 52.5° | 2497.9 | 2522.4 | 2752.2 | 3784.1 | 4738.5 | 6867.2 | 9472.1 | 12295.0 | 12587.6 | 12553.3 | 11544.9 |
| 55°   | 2343.7 | 2390.9 | 2495.9 | 3117.4 | 4373.3 | 6356.7 | 9623.3 | 12952.9 | 13282.8 | 13121.8 | 12098.6 |
| 57.5° | 2208.2 | 2241.6 | 2366.3 | 2668.7 | 3953.0 | 5653.6 | 9579.2 | 13507.6 | 13802.2 | 13577.4 | 12639.7 |
| 60°   | 2063.9 | 2085.5 | 2210.2 | 2436.0 | 3499.4 | 4877.0 | 9130.4 | 14080.1 | 14210.7 | 14004.5 | 13097.2 |
| 62.5° | 1952.0 | 1972.6 | 2047.2 | 2264.2 | 3145.9 | 4321.2 | 8396.0 | 14120.3 | 14442.4 | 14292.2 | 13486.0 |
| 65°   | 1808.6 | 1822.4 | 1915.6 | 2086.5 | 2818.0 | 3990.3 | 7748.9 | 13742.3 | 14330.4 | 14293.1 | 13635.3 |
| 67.5° | 1650.5 | 1667.2 | 1755.6 | 1876.4 | 2398.7 | 3600.5 | 6666.9 | 13538.1 | 13857.2 | 13893.5 | 13355.4 |
| 70°   | 1465.0 | 1476.7 | 1568.1 | 1655.4 | 2052.1 | 3160.7 | 5300.2 | 12755.5 | 13127.7 | 13126.7 | 12491.4 |
| 72.5° | 1264.7 | 1263.7 | 1354.0 | 1446.3 | 1719.3 | 2655.0 | 4149.4 | 11324.9 | 12309.8 | 12236.1 | 11262.1 |
| 75°   | 1042.7 | 1057.5 | 1144.9 | 1217.5 | 1430.6 | 2152.3 | 2889.7 | 8203.6  | 10867.4 | 10968.5 | 9719.6  |
| 77.5° | 666.7  | 676.5  | 725.6  | 800.2  | 1000.5 | 1644.6 | 1885.2 | 4558.8  | 7256.0  | 8752.4  | 7650.8  |
| 80°   | 487.0  | 491.9  | 535.1  | 578.3  | 665.7  | 1001.5 | 958.3  | 1981.4  | 2875.9  | 4296.7  | 4693.4  |
| 82.5° | 331.9  | 332.9  | 367.2  | 377.0  | 381.9  | 451.7  | 454.6  | 964.2   | 1369.7  | 1613.2  | 2072.7  |
| 85°   | 219.9  | 182.6  | 142.4  | 188.5  | 193.4  | 165.9  | 162.0  | 435.0   | 679.5   | 815.0   | 767.8   |
| 87.5° | 49.1   | 48.1   | 56.0   | 56.9   | 55.0   | 47.1   | 39.3   | 66.8    | 102.1   | 101.1   | 129.6   |
| 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: P509837

CATALOG NUMBER: VERD-M-CA3-150-730-U-T2

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3921.6  | 3921.6  | 3921.6 | 3921.6 | 3921.6 | 3921.6 | 3921.6 | 3921.6 | 3921.6 | 3921.6 | 3921.6 |
| 2.5°  | 3931.4  | 3926.5  | 3899.0 | 3841.1 | 3801.8 | 3761.6 | 3739.0 | 3725.2 | 3730.1 | 3707.6 | 3697.7 |
| 5°    | 3941.2  | 3916.7  | 3839.1 | 3770.4 | 3708.5 | 3638.8 | 3580.9 | 3573.0 | 3584.8 | 3564.2 | 3552.4 |
| 7.5°  | 3966.8  | 3914.7  | 3815.6 | 3697.7 | 3594.6 | 3528.9 | 3445.4 | 3403.2 | 3400.2 | 3379.6 | 3383.5 |
| 10°   | 3981.5  | 3913.7  | 3781.2 | 3638.8 | 3518.1 | 3401.2 | 3311.9 | 3264.7 | 3261.8 | 3232.3 | 3225.5 |
| 12.5° | 4021.8  | 3924.5  | 3740.9 | 3567.1 | 3432.6 | 3276.5 | 3182.3 | 3139.1 | 3134.1 | 3092.9 | 3077.2 |
| 15°   | 4083.6  | 3949.1  | 3698.7 | 3483.7 | 3309.9 | 3163.6 | 3050.7 | 2992.8 | 2983.9 | 2935.8 | 2919.1 |
| 17.5° | 4181.8  | 4018.8  | 3686.0 | 3408.1 | 3202.9 | 3042.8 | 2910.3 | 2847.4 | 2796.4 | 2769.9 | 2747.3 |
| 20°   | 4314.4  | 4105.2  | 3700.7 | 3337.4 | 3068.4 | 2883.8 | 2718.8 | 2636.3 | 2601.0 | 2557.8 | 2560.7 |
| 22.5° | 4502.9  | 4240.7  | 3726.2 | 3282.4 | 2946.6 | 2713.9 | 2528.3 | 2436.0 | 2372.2 | 2335.9 | 2337.8 |
| 25°   | 4768.0  | 4444.9  | 3776.3 | 3230.4 | 2814.1 | 2528.3 | 2309.4 | 2180.7 | 2115.9 | 2092.4 | 2067.8 |
| 27.5° | 5102.8  | 4689.4  | 3895.1 | 3166.5 | 2657.0 | 2318.2 | 2075.7 | 1925.5 | 1859.7 | 1824.3 | 1819.4 |
| 30°   | 5532.9  | 5010.5  | 4034.5 | 3119.4 | 2492.0 | 2056.0 | 1786.0 | 1667.2 | 1609.3 | 1559.2 | 1535.7 |
| 32.5° | 6057.2  | 5464.1  | 4189.7 | 3072.3 | 2287.8 | 1762.5 | 1518.0 | 1426.7 | 1334.4 | 1270.5 | 1273.5 |
| 35°   | 6665.9  | 5958.0  | 4420.4 | 3012.4 | 2048.2 | 1488.5 | 1319.6 | 1201.8 | 1115.4 | 1073.2 | 1053.6 |
| 37.5° | 7240.3  | 6464.7  | 4691.4 | 2951.5 | 1780.1 | 1310.8 | 1124.2 | 1015.3 | 948.5  | 916.1  | 923.0  |
| 40°   | 7821.6  | 6987.0  | 4925.1 | 2802.3 | 1479.7 | 1149.8 | 930.8  | 869.0  | 842.4  | 816.9  | 819.9  |
| 42.5° | 8342.0  | 7403.3  | 5095.9 | 2636.3 | 1269.6 | 965.2  | 793.4  | 807.1  | 822.8  | 808.1  | 804.2  |
| 45°   | 8884.0  | 7890.3  | 5246.2 | 2353.6 | 1093.8 | 819.9  | 759.0  | 797.3  | 831.6  | 829.7  | 824.8  |
| 47.5° | 9428.0  | 8342.0  | 5260.9 | 1978.5 | 933.8  | 770.8  | 758.0  | 786.5  | 831.6  | 839.5  | 833.6  |
| 50°   | 9988.6  | 8815.3  | 5174.5 | 1536.6 | 866.0  | 776.7  | 759.0  | 763.9  | 814.0  | 822.8  | 819.9  |
| 52.5° | 10610.1 | 9326.8  | 4961.4 | 1168.4 | 839.5  | 786.5  | 761.9  | 755.1  | 783.5  | 799.2  | 802.2  |
| 55°   | 11181.6 | 9733.3  | 4561.8 | 1031.9 | 819.9  | 787.5  | 783.5  | 761.0  | 761.9  | 754.1  | 773.7  |
| 57.5° | 11661.7 | 10121.2 | 4108.2 | 957.3  | 802.2  | 778.6  | 793.4  | 751.1  | 739.4  | 706.9  | 699.1  |
| 60°   | 12158.5 | 10436.3 | 3469.9 | 906.3  | 781.6  | 767.8  | 768.8  | 734.4  | 705.0  | 657.9  | 644.1  |
| 62.5° | 12511.0 | 10603.3 | 2850.4 | 846.4  | 753.1  | 751.1  | 736.4  | 710.9  | 684.4  | 643.1  | 637.2  |
| 65°   | 12613.2 | 10514.9 | 2189.6 | 783.5  | 715.8  | 723.6  | 697.1  | 661.8  | 551.8  | 500.8  | 500.8  |
| 67.5° | 12275.4 | 9970.9  | 1621.1 | 710.9  | 670.6  | 686.3  | 634.3  | 521.4  | 464.4  | 434.0  | 438.9  |
| 70°   | 11349.5 | 9092.2  | 1055.5 | 604.8  | 605.8  | 618.6  | 523.3  | 469.3  | 415.3  | 396.7  | 406.5  |
| 72.5° | 10112.3 | 7789.2  | 696.1  | 482.1  | 510.6  | 489.0  | 478.2  | 432.0  | 383.9  | 362.3  | 369.2  |
| 75°   | 8333.2  | 6150.5  | 483.1  | 379.0  | 330.9  | 417.3  | 425.2  | 363.3  | 326.0  | 395.7  | 411.4  |
| 77.5° | 6583.5  | 4275.1  | 398.6  | 265.1  | 244.5  | 308.3  | 340.7  | 336.8  | 539.0  | 633.3  | 626.4  |
| 80°   | 3914.7  | 2461.6  | 325.0  | 183.6  | 172.8  | 198.3  | 268.1  | 386.9  | 603.9  | 453.6  | 432.0  |
| 82.5° | 1775.2  | 1119.3  | 172.8  | 96.2   | 112.9  | 131.6  | 200.3  | 481.1  | 395.7  | 290.6  | 273.9  |
| 85°   | 693.2   | 365.3   | 68.7   | 42.2   | 39.3   | 49.1   | 91.3   | 231.7  | 159.1  | 128.6  | 128.6  |
| 87.5° | 89.4    | 65.8    | 19.6   | 14.7   | 12.8   | 15.7   | 29.5   | 128.6  | 74.6   | 62.8   | 60.9   |
| 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)