

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: P233860

Luminaire Tested: **VERD-G-C02H-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233860
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-14)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-G-C02H-D-U-T3
Description: VERDEON-G ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1370mA LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19080 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 155
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: 28.75 FT

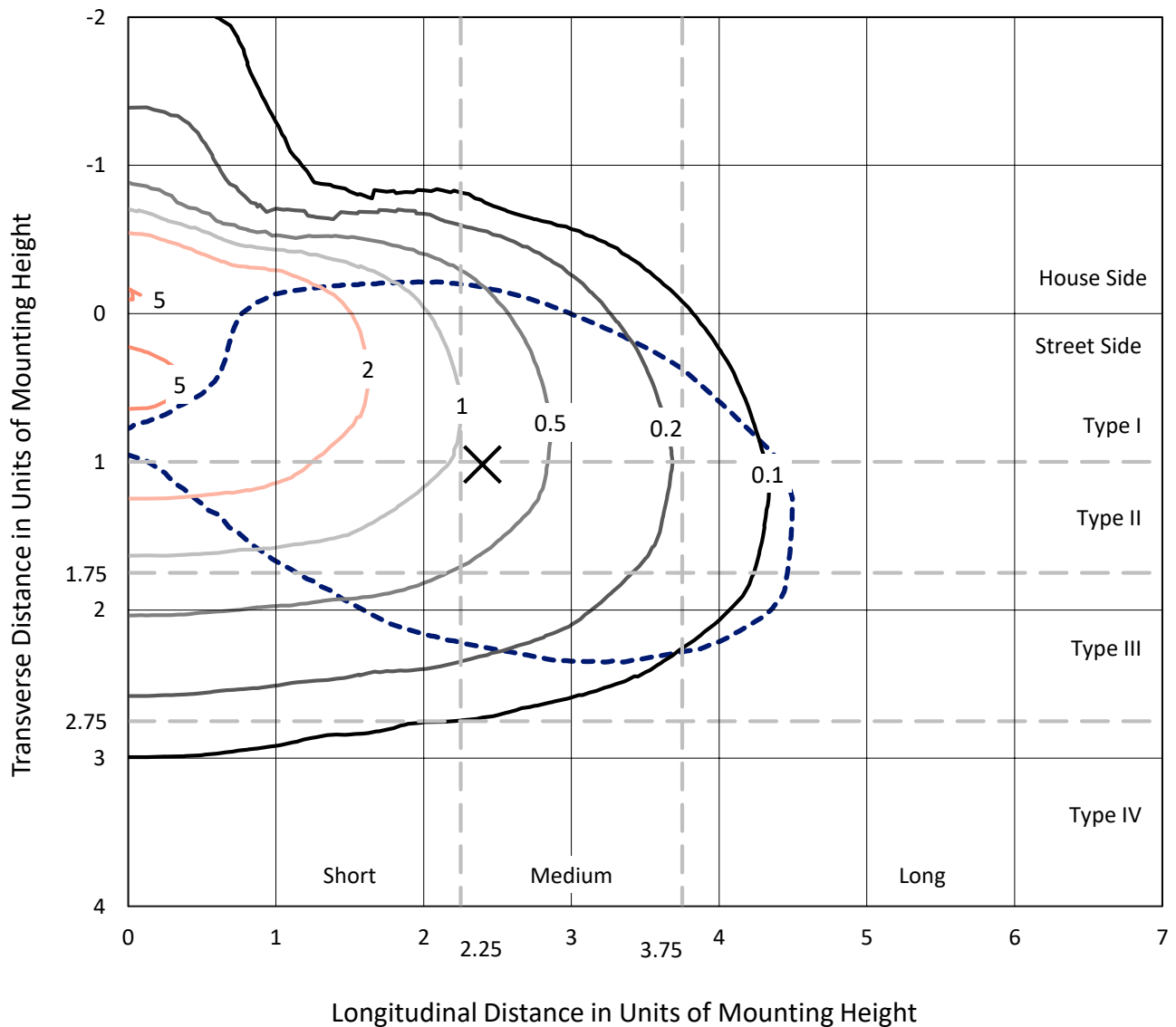


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

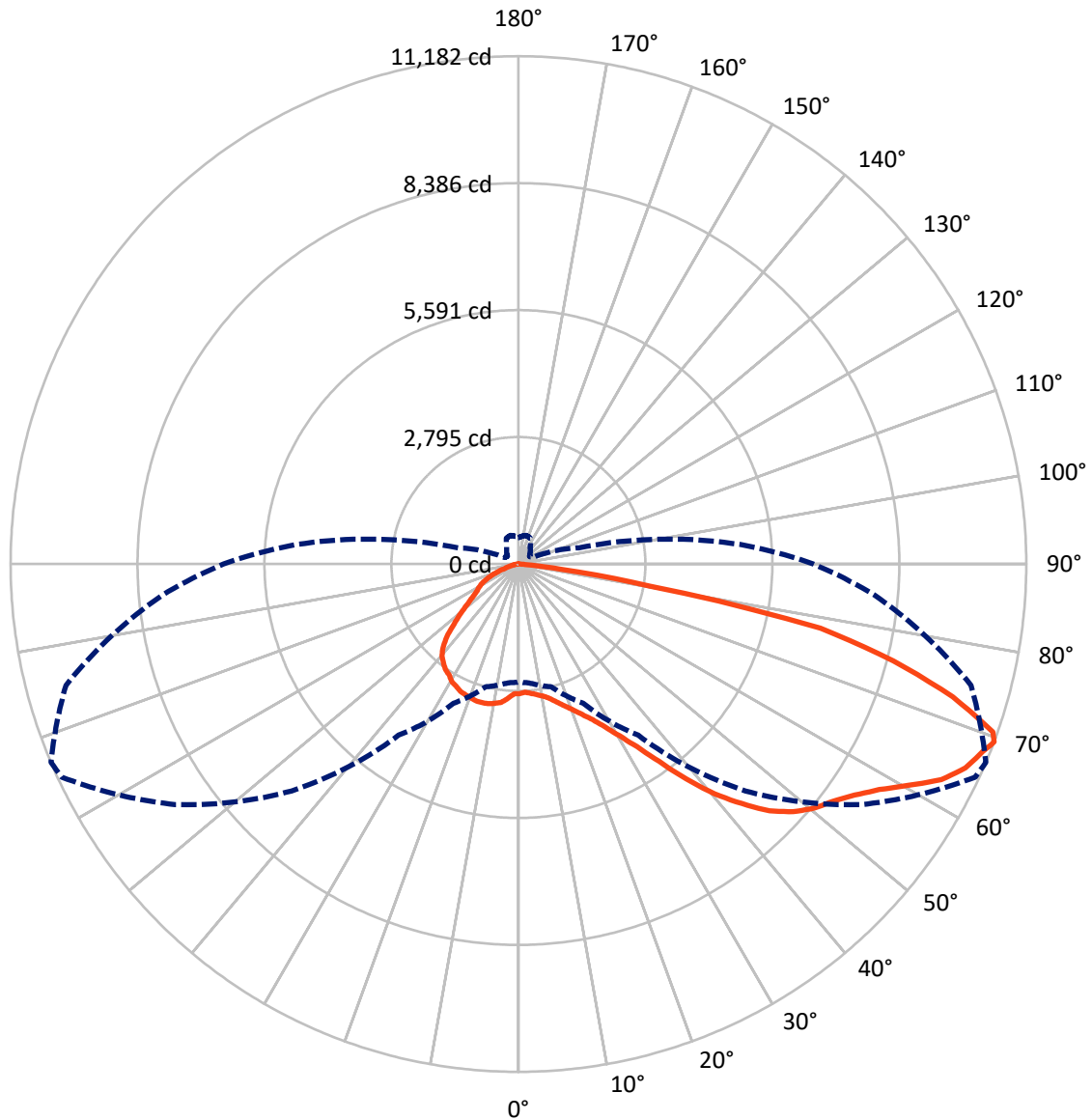


Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4296.6 | 0.0 | 4296.6 |
| | % Fixture | 22.5 | 0.0 | 22.5 |
| Street Side | Lumens | 14783.4 | 0.0 | 14783.4 |
| | % Fixture | 77.5 | 0.0 | 77.5 |
| Total | Lumens | 19080.0 | 0.0 | 19080.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 289.1 | 1.5 |
| 10°-20° | 921.2 | 4.8 |
| 20°-30° | 1587.0 | 8.3 |
| 30°-40° | 2360.5 | 12.4 |
| 40°-50° | 3251.0 | 17.0 |
| 50°-60° | 3886.3 | 20.4 |
| 60°-70° | 4101.2 | 21.5 |
| 70°-80° | 2457.7 | 12.9 |
| 80°-90° | 226.1 | 1.2 |
| 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° | 19080.0 | 100.0 |
| 0°-180° | 19080.0 | 100.0 |



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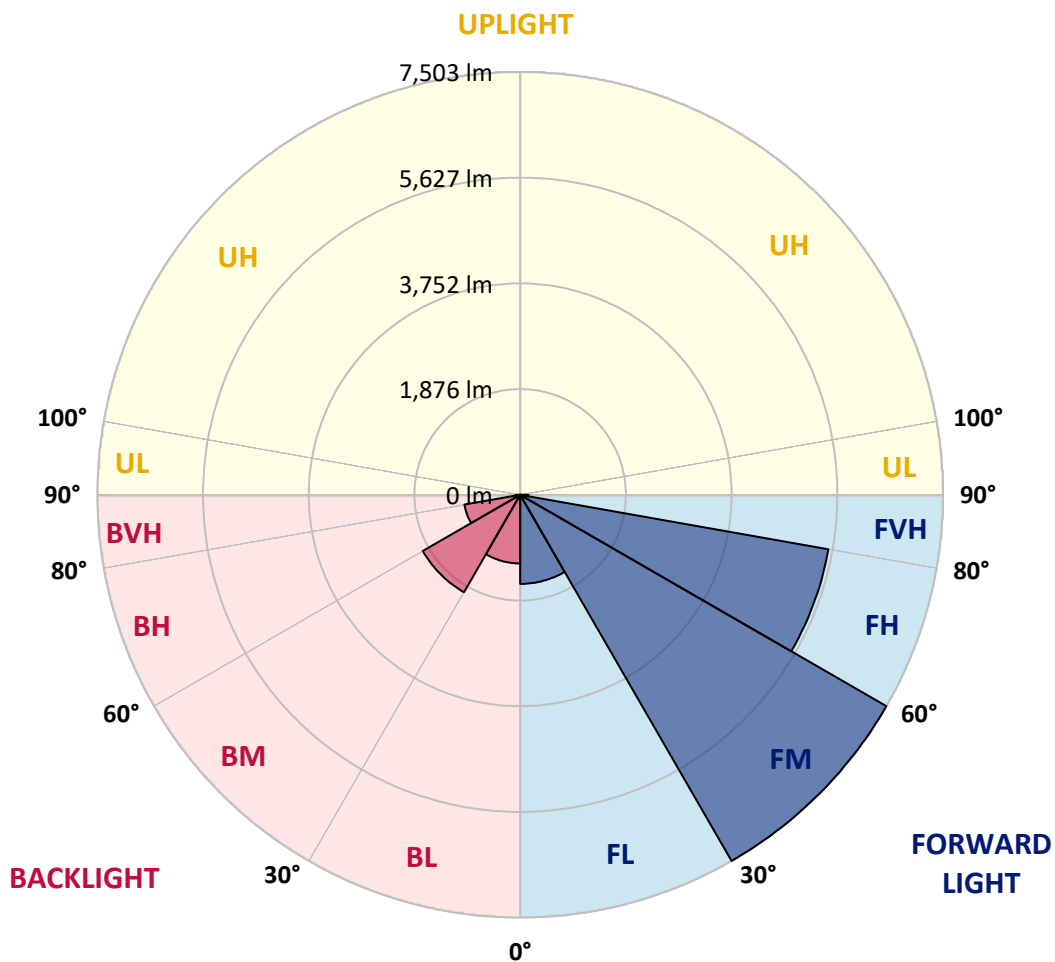
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1579.9 | 8.3 | | | |
| FM (30°-60°) | 7503.1 | 39.3 | | | |
| FH (60°-80°) | 5554.2 | 29.1 | | | G3/7500 |
| FVH (80°-90°) | 146.2 | 0.8 | | | G2/225 |
| BL (0°-30°) | 1217.5 | 6.4 | B3/2500 | | |
| BM (30°-60°) | 1994.7 | 10.5 | B2/2500 | | |
| BH (60°-80°) | 1004.6 | 5.3 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 79.9 | 0.4 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 67° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|--------|
| 0° | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 |
| 2.5° | 2900.8 | 2899.1 | 2890.4 | 2859.2 | 2855.7 | 2852.2 | 2831.4 | 2833.2 | 2828.0 | 2833.2 | 2834.9 |
| 5° | 2980.6 | 2973.7 | 2965.0 | 2932.0 | 2919.9 | 2904.3 | 2873.1 | 2871.3 | 2859.2 | 2862.6 | 2866.1 |
| 7.5° | 3079.5 | 3072.6 | 3065.6 | 3027.5 | 3015.3 | 2987.6 | 2939.0 | 2914.7 | 2904.3 | 2907.8 | 2913.0 |
| 10° | 3213.1 | 3201.0 | 3190.6 | 3135.0 | 3116.0 | 3069.1 | 3010.1 | 2968.5 | 2954.6 | 2959.8 | 2973.7 |
| 12.5° | 3365.8 | 3350.2 | 3332.8 | 3275.6 | 3249.5 | 3176.7 | 3107.3 | 3053.5 | 3032.7 | 3044.8 | 3055.2 |
| 15° | 3523.7 | 3515.0 | 3508.0 | 3440.4 | 3404.0 | 3324.1 | 3237.4 | 3169.7 | 3150.6 | 3161.1 | 3166.3 |
| 17.5° | 3731.9 | 3726.6 | 3714.5 | 3645.1 | 3575.7 | 3483.8 | 3371.0 | 3299.9 | 3280.8 | 3286.0 | 3273.8 |
| 20° | 3959.1 | 3945.3 | 3938.3 | 3860.2 | 3787.4 | 3660.7 | 3530.6 | 3430.0 | 3424.8 | 3426.5 | 3388.3 |
| 22.5° | 4214.2 | 4198.6 | 4184.7 | 4113.5 | 4023.3 | 3875.9 | 3705.8 | 3593.1 | 3596.5 | 3600.0 | 3515.0 |
| 25° | 4474.4 | 4462.3 | 4450.1 | 4382.5 | 4292.2 | 4130.9 | 3926.2 | 3799.5 | 3797.8 | 3799.5 | 3681.5 |
| 27.5° | 4746.8 | 4732.9 | 4731.2 | 4675.7 | 4585.4 | 4420.6 | 4184.7 | 4056.3 | 4056.3 | 4049.3 | 3870.6 |
| 30° | 4989.7 | 5003.6 | 5003.6 | 4972.3 | 4887.3 | 4722.5 | 4500.4 | 4372.0 | 4389.4 | 4375.5 | 4148.2 |
| 32.5° | 5255.1 | 5251.7 | 5275.9 | 5251.7 | 5182.3 | 5029.6 | 4843.9 | 4762.4 | 4791.9 | 4837.0 | 4609.7 |
| 35° | 5409.5 | 5433.8 | 5494.6 | 5529.3 | 5496.3 | 5371.4 | 5236.0 | 5298.5 | 5338.4 | 5541.4 | 5269.0 |
| 37.5° | 5588.2 | 5609.1 | 5692.3 | 5777.3 | 5791.2 | 5723.6 | 5723.6 | 5928.3 | 6006.4 | 6271.8 | 5954.3 |
| 40° | 5711.4 | 5732.2 | 5822.5 | 5921.3 | 6056.7 | 6103.5 | 6225.0 | 6542.5 | 6653.5 | 6832.2 | 6464.4 |
| 42.5° | 5638.6 | 5649.0 | 5843.3 | 6084.4 | 6283.9 | 6509.5 | 6702.1 | 7104.6 | 7210.4 | 7335.3 | 6884.2 |
| 45° | 5510.2 | 5529.3 | 5744.4 | 6133.0 | 6476.5 | 6924.1 | 7167.0 | 7633.7 | 7755.2 | 7743.0 | 7206.9 |
| 47.5° | 5367.9 | 5397.4 | 5636.8 | 6070.6 | 6641.3 | 7283.3 | 7592.1 | 8077.9 | 8147.3 | 8060.5 | 7430.7 |
| 50° | 5210.0 | 5260.3 | 5515.4 | 6008.1 | 6761.1 | 7597.3 | 7907.9 | 8411.0 | 8447.4 | 8270.5 | 7626.8 |
| 52.5° | 5029.6 | 5062.6 | 5345.3 | 5888.4 | 6844.3 | 7805.5 | 8159.4 | 8659.1 | 8674.7 | 8530.7 | 7833.3 |
| 55° | 4779.8 | 4809.3 | 5123.3 | 5728.8 | 6856.5 | 7928.7 | 8320.8 | 8924.5 | 8976.6 | 8836.0 | 8020.6 |
| 57.5° | 4510.8 | 4547.3 | 4870.0 | 5498.0 | 6745.4 | 7979.0 | 8515.1 | 9266.3 | 9366.9 | 9165.7 | 8171.6 |
| 60° | 4198.6 | 4245.4 | 4571.6 | 5217.0 | 6526.8 | 8057.1 | 8877.7 | 9764.2 | 9889.2 | 9538.7 | 8315.6 |
| 62.5° | 3874.1 | 3900.1 | 4200.3 | 4828.3 | 6186.8 | 8097.0 | 9207.3 | 10333.3 | 10453.0 | 9890.9 | 8383.2 |
| 65° | 3417.8 | 3459.5 | 3726.6 | 4361.6 | 5707.9 | 7925.2 | 9361.7 | 10730.6 | 10817.3 | 10177.2 | 8317.3 |
| 67.5° | 2933.8 | 2933.8 | 3161.1 | 3803.0 | 5069.5 | 7470.6 | 9299.3 | 10921.4 | 11025.5 | 10378.4 | 8109.1 |
| 69° | 2598.9 | 2625.0 | 2798.5 | 3383.1 | 4601.1 | 7066.4 | 9231.6 | 11096.7 | 11181.7 | 10314.2 | 7869.7 |
| 70° | 2342.2 | 2364.7 | 2540.0 | 3077.8 | 4252.3 | 6747.2 | 9085.9 | 11018.6 | 11081.1 | 10116.4 | 7618.1 |
| 72.5° | 1722.8 | 1741.9 | 1863.3 | 2144.4 | 3197.5 | 5444.2 | 8192.4 | 9962.0 | 10000.2 | 9098.0 | 6721.2 |
| 75° | 1174.6 | 1185.0 | 1276.9 | 1448.7 | 1865.1 | 3806.5 | 6693.4 | 8414.5 | 8527.2 | 7890.5 | 5503.2 |
| 77.5° | 406.0 | 437.2 | 492.7 | 666.2 | 798.1 | 1495.5 | 4536.9 | 6630.9 | 6799.2 | 6110.5 | 3849.8 |
| 80° | 138.8 | 137.1 | 263.7 | 341.8 | 419.9 | 687.0 | 1434.8 | 2779.4 | 2937.3 | 2519.1 | 1386.2 |
| 82.5° | 104.1 | 107.6 | 175.2 | 189.1 | 128.4 | 253.3 | 558.7 | 850.1 | 931.7 | 813.7 | 574.3 |
| 85° | 65.9 | 64.2 | 78.1 | 81.5 | 59.0 | 107.6 | 135.3 | 137.1 | 142.3 | 123.2 | 124.9 |
| 87.5° | 36.4 | 36.4 | 34.7 | 29.5 | 15.6 | 13.9 | 12.1 | 12.1 | 10.4 | 10.4 | 10.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: VERD-G-C02H-D-U-T3

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 | 2854.0 |
| 2.5° | 2826.2 | 2850.5 | 2855.7 | 2862.6 | 2880.0 | 2902.6 | 2933.8 | 2933.8 | 2945.9 | 2982.4 | 2994.5 |
| 5° | 2866.1 | 2895.6 | 2933.8 | 2973.7 | 3020.5 | 3070.8 | 3121.2 | 3138.5 | 3162.8 | 3211.4 | 3221.8 |
| 7.5° | 2926.8 | 2959.8 | 3025.7 | 3079.5 | 3119.4 | 3169.7 | 3211.4 | 3218.3 | 3249.5 | 3294.6 | 3303.3 |
| 10° | 2989.3 | 3018.8 | 3084.7 | 3112.5 | 3166.3 | 3221.8 | 3242.6 | 3253.0 | 3279.0 | 3313.7 | 3308.5 |
| 12.5° | 3074.3 | 3083.0 | 3129.8 | 3148.9 | 3174.9 | 3209.6 | 3220.0 | 3220.0 | 3235.7 | 3291.2 | 3292.9 |
| 15° | 3157.6 | 3157.6 | 3164.5 | 3154.1 | 3157.6 | 3174.9 | 3176.7 | 3154.1 | 3171.5 | 3199.2 | 3188.8 |
| 17.5° | 3246.1 | 3221.8 | 3190.6 | 3145.4 | 3105.5 | 3103.8 | 3067.4 | 3013.6 | 2998.0 | 3037.9 | 3036.1 |
| 20° | 3329.3 | 3287.7 | 3213.1 | 3110.7 | 3055.2 | 2980.6 | 2888.7 | 2857.4 | 2855.7 | 2862.6 | 2857.4 |
| 22.5° | 3438.6 | 3353.6 | 3218.3 | 3077.8 | 2925.1 | 2807.1 | 2730.8 | 2625.0 | 2621.5 | 2605.9 | 2581.6 |
| 25° | 3568.8 | 3447.3 | 3240.9 | 3041.3 | 2819.3 | 2666.6 | 2482.7 | 2369.9 | 2305.7 | 2319.6 | 2278.0 |
| 27.5° | 3737.1 | 3589.6 | 3249.5 | 2961.5 | 2673.5 | 2415.0 | 2193.0 | 2047.2 | 1991.7 | 1967.4 | 1939.7 |
| 30° | 3967.8 | 3740.5 | 3312.0 | 2893.9 | 2493.1 | 2151.3 | 1878.9 | 1667.3 | 1587.5 | 1608.3 | 1611.8 |
| 32.5° | 4337.3 | 4026.8 | 3345.0 | 2760.3 | 2284.9 | 1863.3 | 1509.4 | 1280.4 | 1233.5 | 1292.5 | 1308.1 |
| 35° | 4981.0 | 4470.9 | 3423.0 | 2680.5 | 2047.2 | 1526.7 | 1122.5 | 1028.8 | 1039.2 | 1089.5 | 1093.0 |
| 37.5° | 5614.3 | 5033.1 | 3664.2 | 2507.0 | 1762.7 | 1131.2 | 870.9 | 820.6 | 870.9 | 935.1 | 943.8 |
| 40° | 6058.4 | 5472.0 | 3877.6 | 2335.2 | 1363.7 | 818.9 | 664.5 | 603.8 | 676.6 | 779.0 | 798.1 |
| 42.5° | 6452.2 | 5820.7 | 4028.5 | 2097.5 | 933.4 | 584.7 | 477.1 | 492.7 | 600.3 | 674.9 | 692.2 |
| 45° | 6735.0 | 6060.1 | 4132.6 | 1788.7 | 595.1 | 442.4 | 426.8 | 477.1 | 579.5 | 638.5 | 643.7 |
| 47.5° | 6913.7 | 6200.7 | 4056.3 | 1408.8 | 447.6 | 418.1 | 419.9 | 484.0 | 586.4 | 652.3 | 650.6 |
| 50° | 7075.1 | 6275.3 | 3808.2 | 1117.3 | 425.1 | 400.8 | 428.5 | 503.1 | 609.0 | 669.7 | 666.2 |
| 52.5° | 7246.8 | 6348.1 | 3506.3 | 876.1 | 407.7 | 392.1 | 438.9 | 515.3 | 609.0 | 647.1 | 641.9 |
| 55° | 7394.3 | 6412.3 | 3279.0 | 704.4 | 395.6 | 390.4 | 449.3 | 534.4 | 605.5 | 621.1 | 610.7 |
| 57.5° | 7470.6 | 6303.0 | 3032.7 | 591.6 | 383.4 | 390.4 | 456.3 | 530.9 | 626.3 | 676.6 | 666.2 |
| 60° | 7429.0 | 6200.7 | 2833.2 | 550.0 | 366.1 | 388.6 | 459.8 | 569.1 | 768.6 | 815.4 | 812.0 |
| 62.5° | 7352.7 | 6087.9 | 2553.8 | 494.5 | 347.0 | 392.1 | 458.0 | 603.8 | 884.8 | 869.2 | 825.8 |
| 65° | 7196.5 | 5862.4 | 2172.1 | 430.3 | 327.9 | 399.0 | 458.0 | 680.1 | 772.0 | 754.7 | 735.6 |
| 67.5° | 6863.4 | 5374.8 | 1738.4 | 369.5 | 307.1 | 378.2 | 451.1 | 647.1 | 664.5 | 619.4 | 596.8 |
| 69° | 6490.4 | 4909.9 | 1375.8 | 336.6 | 294.9 | 367.8 | 449.3 | 624.6 | 654.1 | 605.5 | 579.5 |
| 70° | 6198.9 | 4547.3 | 1112.1 | 312.3 | 282.8 | 364.3 | 447.6 | 609.0 | 648.9 | 595.1 | 567.3 |
| 72.5° | 5163.2 | 3674.6 | 582.9 | 251.6 | 241.2 | 331.4 | 432.0 | 595.1 | 650.6 | 570.8 | 530.9 |
| 75° | 4056.3 | 2614.6 | 386.9 | 192.6 | 185.6 | 289.7 | 395.6 | 572.5 | 612.4 | 513.5 | 452.8 |
| 77.5° | 2501.8 | 1145.1 | 267.2 | 133.6 | 135.3 | 225.5 | 340.0 | 511.8 | 617.6 | 518.7 | 440.7 |
| 80° | 726.9 | 442.4 | 170.0 | 90.2 | 83.3 | 133.6 | 267.2 | 440.7 | 586.4 | 532.6 | 480.6 |
| 82.5° | 419.9 | 288.0 | 114.5 | 57.3 | 50.3 | 60.7 | 168.3 | 341.8 | 517.0 | 487.5 | 497.9 |
| 85° | 95.4 | 79.8 | 41.6 | 27.8 | 27.8 | 34.7 | 57.3 | 197.8 | 357.4 | 418.1 | 471.9 |
| 87.5° | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 8.7 | 10.4 | 53.8 | 156.1 | 222.1 | 258.5 |
| 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)