

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: P299918

Luminaire Tested: **GAA-AF-08-LED-U-5WQ-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299918
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-08-LED-U-5WQ-7030-800
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39128.8 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G4

Input Watts (W): 334
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

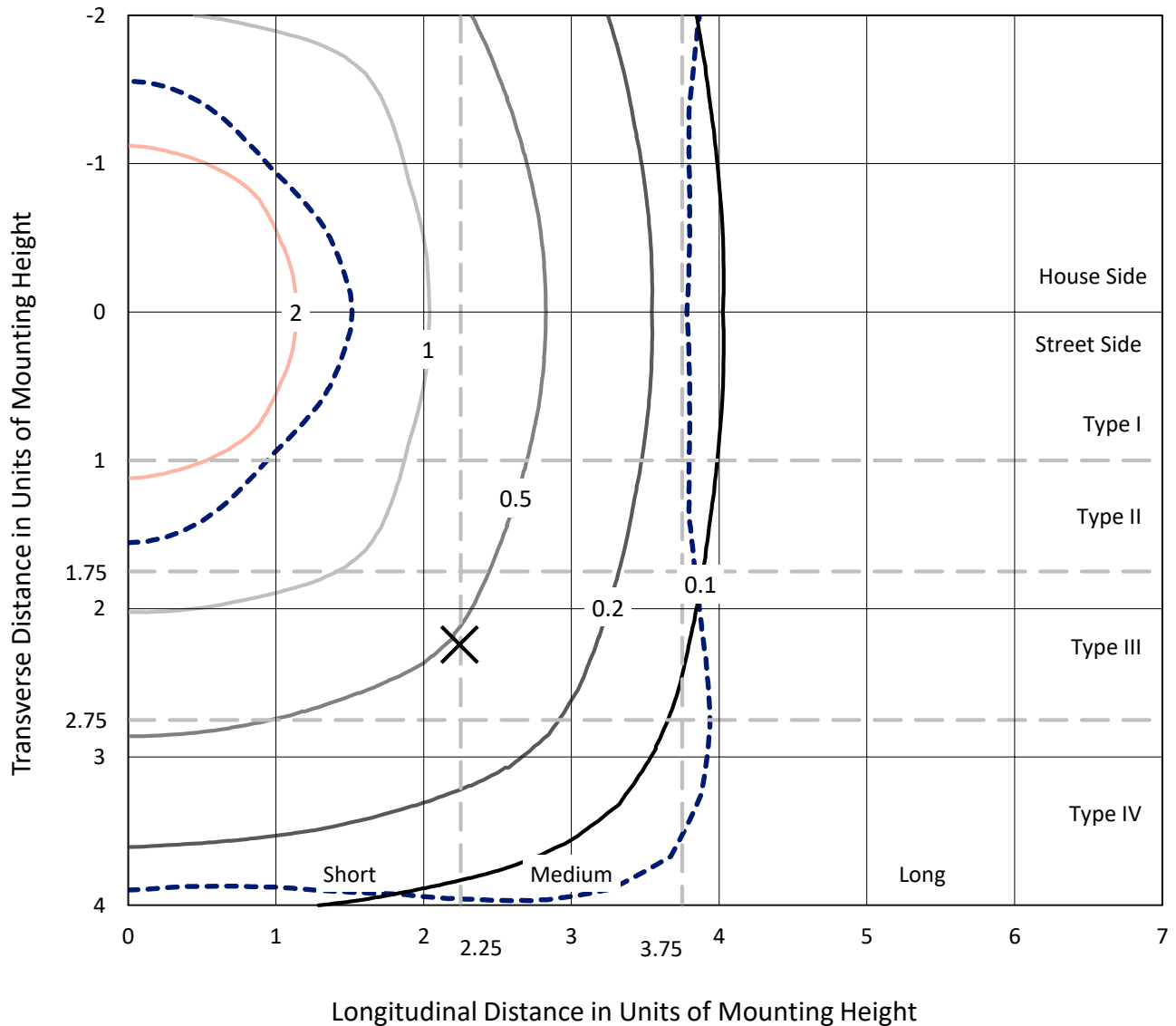


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

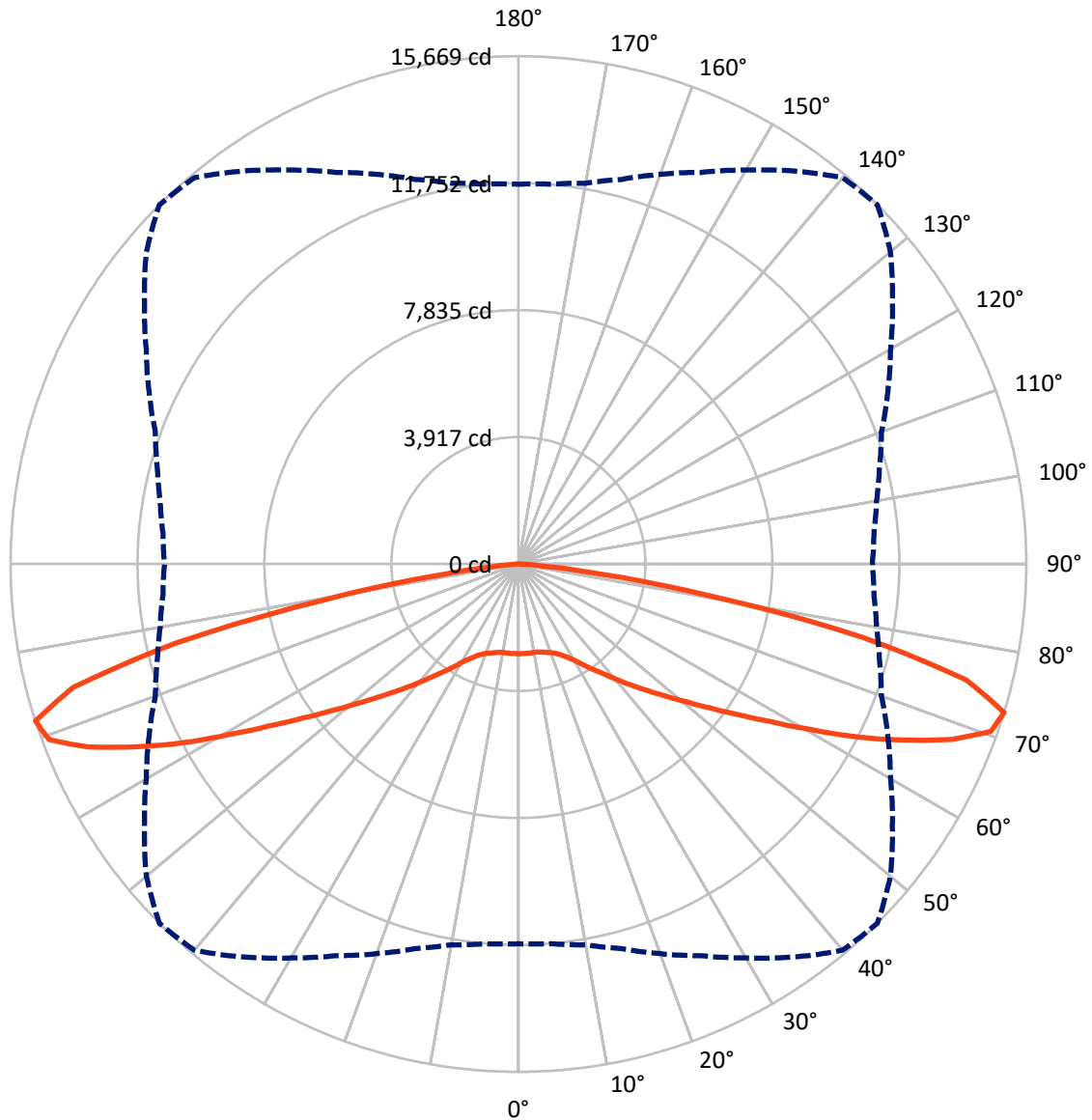


Based on 30 foot mounting height. Maximum calculated value = 3.1 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 19564.4 | 0.0 | 19564.4 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 19564.4 | 0.0 | 19564.4 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 39128.8 | 0.0 | 39128.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 264.6 | 0.7 |
| 10°-20° | 803.6 | 2.1 |
| 20°-30° | 1468.5 | 3.8 |
| 30°-40° | 2531.9 | 6.5 |
| 40°-50° | 4328.3 | 11.1 |
| 50°-60° | 7015.7 | 17.9 |
| 60°-70° | 11638.7 | 29.7 |
| 70°-80° | 10251.0 | 26.2 |
| 80°-90° | 826.5 | 2.1 |
| 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° | 39128.8 | 100.0 |
| 0°-180° | 39128.8 | 100.0 |



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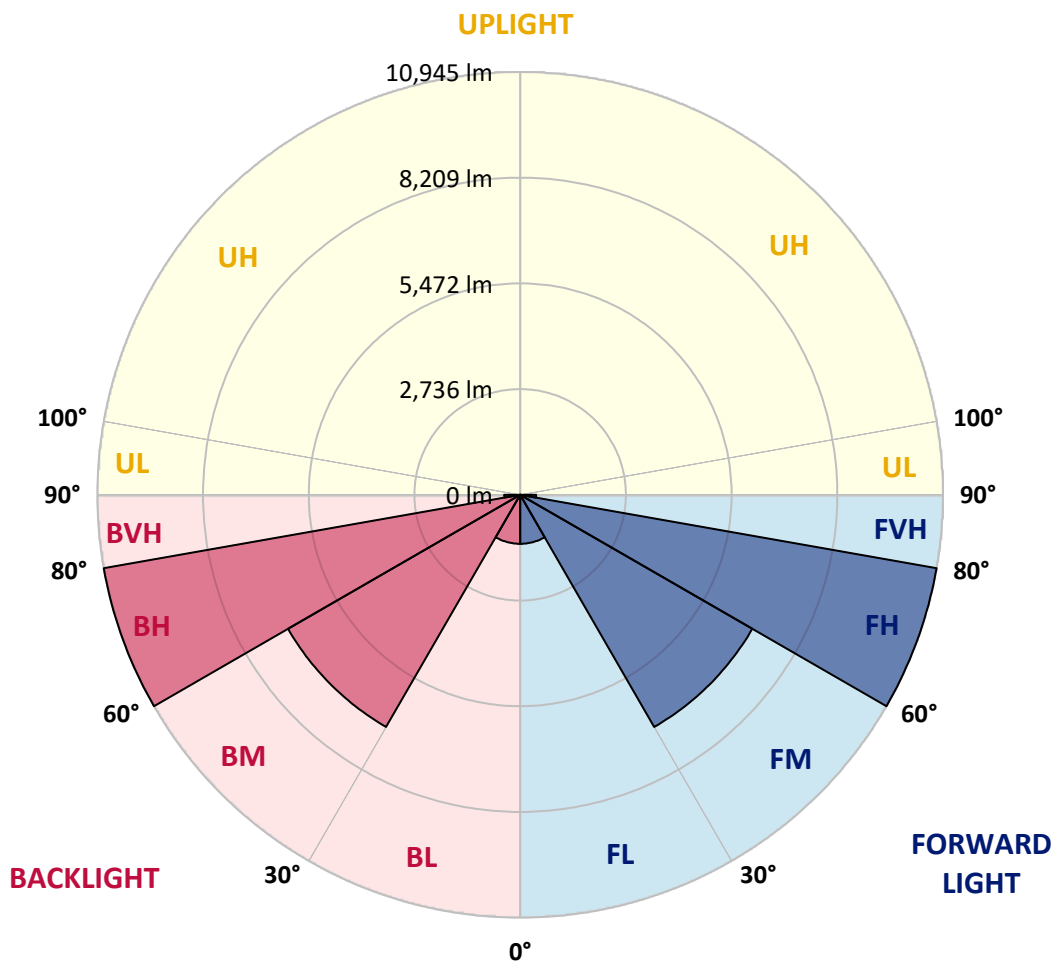
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 1268.3 | 3.2 | | | |
| FM | (30°-60°) | 6938.0 | 17.7 | | | |
| FH | (60°-80°) | 10944.9 | 28.0 | | | G4/12000 |
| FVH | (80°-90°) | 413.3 | 1.1 | | | G3/500 |
| BL | (0°-30°) | 1268.3 | 3.2 | B3/2500 | | |
| BM | (30°-60°) | 6938.0 | 17.7 | B4/8500 | | |
| BH | (60°-80°) | 10944.9 | 28.0 | B5 | | G4/12000 |
| BVH | (80°-90°) | 413.3 | 1.1 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G4

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2770.9 | 2770.9 | 2770.9 | 2770.9 | 2770.9 | 2770.9 | 2770.9 | 2770.9 | 2770.9 | 2770.9 | 2770.9 |
| 2.5° | 2770.9 | 2772.7 | 2774.5 | 2772.7 | 2772.7 | 2770.9 | 2769.1 | 2770.9 | 2769.1 | 2765.5 | 2767.3 |
| 5° | 2779.9 | 2783.5 | 2783.5 | 2779.9 | 2781.7 | 2779.9 | 2776.3 | 2778.1 | 2774.5 | 2769.1 | 2769.1 |
| 7.5° | 2790.7 | 2792.5 | 2792.5 | 2788.9 | 2790.7 | 2787.1 | 2783.5 | 2781.7 | 2778.1 | 2770.9 | 2765.5 |
| 10° | 2806.8 | 2808.6 | 2806.8 | 2803.2 | 2803.2 | 2797.9 | 2788.9 | 2785.3 | 2778.1 | 2767.3 | 2762.0 |
| 12.5° | 2824.8 | 2826.6 | 2824.8 | 2821.2 | 2819.4 | 2810.4 | 2803.2 | 2797.9 | 2792.5 | 2783.5 | 2774.5 |
| 15° | 2849.9 | 2853.5 | 2849.9 | 2842.7 | 2837.3 | 2830.2 | 2826.6 | 2828.4 | 2830.2 | 2823.0 | 2814.0 |
| 17.5° | 2896.6 | 2898.4 | 2893.0 | 2876.8 | 2869.6 | 2862.5 | 2862.5 | 2866.0 | 2871.4 | 2867.8 | 2858.9 |
| 20° | 2982.7 | 2977.3 | 2964.8 | 2945.0 | 2936.0 | 2923.5 | 2921.7 | 2923.5 | 2923.5 | 2921.7 | 2914.5 |
| 22.5° | 3090.4 | 3086.8 | 3070.6 | 3045.5 | 3032.9 | 3025.8 | 3015.0 | 3006.0 | 3004.2 | 2998.9 | 2991.7 |
| 25° | 3219.6 | 3217.8 | 3198.1 | 3176.5 | 3167.5 | 3158.6 | 3149.6 | 3137.0 | 3126.3 | 3113.7 | 3106.5 |
| 27.5° | 3384.7 | 3377.5 | 3348.8 | 3338.0 | 3325.5 | 3320.1 | 3307.5 | 3293.2 | 3284.2 | 3268.0 | 3259.1 |
| 30° | 3566.0 | 3566.0 | 3542.6 | 3539.0 | 3539.0 | 3526.5 | 3512.1 | 3487.0 | 3470.8 | 3454.7 | 3449.3 |
| 32.5° | 3747.2 | 3749.0 | 3725.7 | 3732.9 | 3738.2 | 3747.2 | 3750.8 | 3741.8 | 3731.1 | 3729.3 | 3718.5 |
| 35° | 4009.2 | 4002.1 | 3978.7 | 3984.1 | 3982.3 | 3980.5 | 3980.5 | 4000.3 | 4003.9 | 4007.4 | 3985.9 |
| 37.5° | 4334.1 | 4334.1 | 4310.7 | 4310.7 | 4300.0 | 4289.2 | 4274.8 | 4287.4 | 4307.1 | 4312.5 | 4298.2 |
| 40° | 4705.6 | 4718.1 | 4689.4 | 4687.6 | 4691.2 | 4657.1 | 4640.9 | 4660.7 | 4673.3 | 4694.8 | 4678.6 |
| 42.5° | 5143.4 | 5134.5 | 5105.8 | 5102.2 | 5082.4 | 5071.7 | 5057.3 | 5073.5 | 5093.2 | 5107.6 | 5112.9 |
| 45° | 5563.4 | 5556.2 | 5523.9 | 5523.9 | 5504.2 | 5495.2 | 5502.4 | 5529.3 | 5538.3 | 5558.0 | 5577.8 |
| 47.5° | 5978.0 | 5969.0 | 5947.5 | 5956.4 | 5958.2 | 5974.4 | 5997.7 | 6022.8 | 6048.0 | 6074.9 | 6083.8 |
| 50° | 6401.5 | 6403.3 | 6380.0 | 6401.5 | 6428.4 | 6473.3 | 6536.1 | 6577.4 | 6629.4 | 6663.5 | 6674.3 |
| 52.5° | 6787.3 | 6794.5 | 6819.6 | 6869.9 | 6923.7 | 7011.7 | 7119.4 | 7219.9 | 7306.0 | 7363.4 | 7359.8 |
| 55° | 7250.4 | 7261.1 | 7322.1 | 7408.3 | 7496.2 | 7629.0 | 7788.8 | 7966.4 | 8110.0 | 8192.5 | 8140.5 |
| 57.5° | 7842.6 | 7865.9 | 7934.1 | 8050.8 | 8181.8 | 8354.1 | 8573.0 | 8840.4 | 9063.0 | 9174.2 | 9089.9 |
| 60° | 8655.6 | 8669.9 | 8752.5 | 8881.7 | 9039.6 | 9253.2 | 9545.7 | 9904.6 | 10218.7 | 10365.9 | 10269.0 |
| 62.5° | 9727.0 | 9753.9 | 9820.3 | 9951.3 | 10112.8 | 10355.1 | 10712.2 | 11160.9 | 11552.1 | 11756.7 | 11537.8 |
| 65° | 11006.6 | 11092.7 | 11148.3 | 11281.1 | 11431.9 | 11688.5 | 12061.8 | 12542.8 | 12962.7 | 13097.3 | 12844.3 |
| 67.5° | 12273.6 | 12348.9 | 12445.9 | 12598.4 | 12750.9 | 13039.9 | 13386.2 | 13852.9 | 14314.1 | 14436.1 | 14043.1 |
| 70° | 12828.1 | 12871.2 | 13021.9 | 13230.1 | 13522.6 | 13863.6 | 14263.8 | 14787.9 | 15358.6 | 15459.1 | 14960.2 |
| 72.5° | 11717.2 | 11760.3 | 11929.0 | 12282.5 | 12792.2 | 13334.2 | 14032.3 | 14802.2 | 15556.0 | 15669.0 | 14981.7 |
| 75° | 8862.0 | 8792.0 | 9041.4 | 9509.8 | 10197.2 | 10952.7 | 11929.0 | 13032.7 | 14122.1 | 14263.8 | 13443.7 |
| 77.5° | 4579.9 | 4571.0 | 4759.4 | 5340.9 | 6161.0 | 7020.6 | 8095.6 | 9342.9 | 10408.9 | 10839.6 | 10172.0 |
| 80° | 1290.3 | 1304.7 | 1394.4 | 1683.4 | 2162.5 | 2783.5 | 3623.4 | 4791.7 | 5663.9 | 6109.0 | 5735.7 |
| 82.5° | 506.1 | 545.6 | 579.7 | 633.5 | 696.3 | 787.8 | 1051.7 | 1564.9 | 2099.7 | 2508.9 | 2054.9 |
| 85° | 181.3 | 193.8 | 274.6 | 324.8 | 330.2 | 348.2 | 396.6 | 463.0 | 558.1 | 665.8 | 547.4 |
| 87.5° | 68.2 | 75.4 | 87.9 | 145.4 | 143.6 | 131.0 | 159.7 | 166.9 | 125.6 | 114.9 | 141.8 |
| 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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CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2770.9 | 2770.9 | 2770.9 | 2770.9 | 2770.9 | 2770.9 | 2770.9 | 2770.9 |
| 2.5° | 2763.8 | 2765.5 | 2765.5 | 2767.3 | 2769.1 | 2769.1 | 2772.7 | 2772.7 |
| 5° | 2765.5 | 2765.5 | 2762.0 | 2763.8 | 2762.0 | 2762.0 | 2763.8 | 2763.8 |
| 7.5° | 2762.0 | 2760.2 | 2756.6 | 2754.8 | 2751.2 | 2751.2 | 2751.2 | 2751.2 |
| 10° | 2756.6 | 2754.8 | 2751.2 | 2749.4 | 2747.6 | 2747.6 | 2747.6 | 2747.6 |
| 12.5° | 2770.9 | 2765.5 | 2762.0 | 2760.2 | 2760.2 | 2760.2 | 2760.2 | 2760.2 |
| 15° | 2808.6 | 2796.1 | 2787.1 | 2787.1 | 2788.9 | 2792.5 | 2792.5 | 2796.1 |
| 17.5° | 2855.3 | 2840.9 | 2831.9 | 2824.8 | 2828.4 | 2833.7 | 2837.3 | 2840.9 |
| 20° | 2910.9 | 2903.7 | 2891.2 | 2884.0 | 2884.0 | 2891.2 | 2894.8 | 2896.6 |
| 22.5° | 2988.1 | 2982.7 | 2977.3 | 2968.3 | 2968.3 | 2971.9 | 2979.1 | 2979.1 |
| 25° | 3102.9 | 3099.4 | 3095.8 | 3088.6 | 3086.8 | 3086.8 | 3090.4 | 3094.0 |
| 27.5° | 3246.5 | 3248.3 | 3244.7 | 3242.9 | 3237.5 | 3235.7 | 3241.1 | 3239.3 |
| 30° | 3438.5 | 3447.5 | 3456.5 | 3449.3 | 3440.3 | 3434.9 | 3429.6 | 3422.4 |
| 32.5° | 3698.8 | 3688.0 | 3680.8 | 3668.3 | 3652.1 | 3637.7 | 3627.0 | 3614.4 |
| 35° | 3944.6 | 3926.7 | 3919.5 | 3930.3 | 3928.5 | 3919.5 | 3906.9 | 3896.2 |
| 37.5° | 4246.1 | 4242.5 | 4246.1 | 4265.9 | 4262.3 | 4271.3 | 4246.1 | 4244.3 |
| 40° | 4626.6 | 4630.2 | 4655.3 | 4678.6 | 4691.2 | 4703.8 | 4689.4 | 4675.0 |
| 42.5° | 5068.1 | 5066.3 | 5075.3 | 5107.6 | 5129.1 | 5143.4 | 5112.9 | 5109.4 |
| 45° | 5534.7 | 5522.1 | 5529.3 | 5556.2 | 5577.8 | 5593.9 | 5559.8 | 5559.8 |
| 47.5° | 6048.0 | 6026.4 | 6003.1 | 6033.6 | 6046.2 | 6056.9 | 6030.0 | 6021.0 |
| 50° | 6620.4 | 6575.6 | 6525.3 | 6537.9 | 6537.9 | 6534.3 | 6500.2 | 6498.4 |
| 52.5° | 7277.3 | 7194.7 | 7103.2 | 7069.1 | 7049.4 | 7027.8 | 6968.6 | 6939.9 |
| 55° | 8032.8 | 7909.0 | 7765.4 | 7677.5 | 7630.8 | 7571.6 | 7472.9 | 7446.0 |
| 57.5° | 8915.8 | 8722.0 | 8474.3 | 8366.6 | 8262.5 | 8165.6 | 8056.2 | 8025.6 |
| 60° | 9962.1 | 9676.7 | 9348.3 | 9149.1 | 9036.0 | 8942.7 | 8829.6 | 8824.3 |
| 62.5° | 11128.6 | 10678.1 | 10306.6 | 10127.2 | 10044.6 | 9962.1 | 9854.4 | 9868.7 |
| 65° | 12314.8 | 11844.7 | 11496.5 | 11351.1 | 11274.0 | 11205.8 | 11098.1 | 11114.2 |
| 67.5° | 13485.0 | 13052.4 | 12670.2 | 12521.2 | 12435.1 | 12348.9 | 12252.0 | 12268.2 |
| 70° | 14324.8 | 13788.2 | 13357.5 | 13027.3 | 12820.9 | 12587.6 | 12436.9 | 12399.2 |
| 72.5° | 14084.4 | 13257.0 | 12573.3 | 11918.2 | 11534.2 | 11221.9 | 11010.1 | 10918.6 |
| 75° | 12189.2 | 11058.6 | 10179.2 | 9375.2 | 8923.0 | 8555.1 | 8287.7 | 8120.8 |
| 77.5° | 9052.2 | 7781.6 | 6742.5 | 5816.4 | 5084.2 | 4592.5 | 4246.1 | 4021.8 |
| 80° | 4955.0 | 3768.8 | 2754.8 | 1936.4 | 1423.2 | 1182.7 | 1044.5 | 978.1 |
| 82.5° | 1543.4 | 996.0 | 734.0 | 633.5 | 588.6 | 563.5 | 522.2 | 455.8 |
| 85° | 491.7 | 430.7 | 400.2 | 382.3 | 364.3 | 317.7 | 218.9 | 199.2 |
| 87.5° | 190.2 | 195.6 | 193.8 | 183.1 | 186.6 | 134.6 | 107.7 | 95.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)