

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: McGRAW-EDISON

Report Number: P190886

Luminaire Tested: **GLEON-AF-08-LED-E1-5WQ-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190886
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: MCGRAW-EDISON
Catalog Number: GLEON-AF-08-LED-E1-5WQ-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41528.7 lumens
Efficiency: N/A
Efficacy: 124.3 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

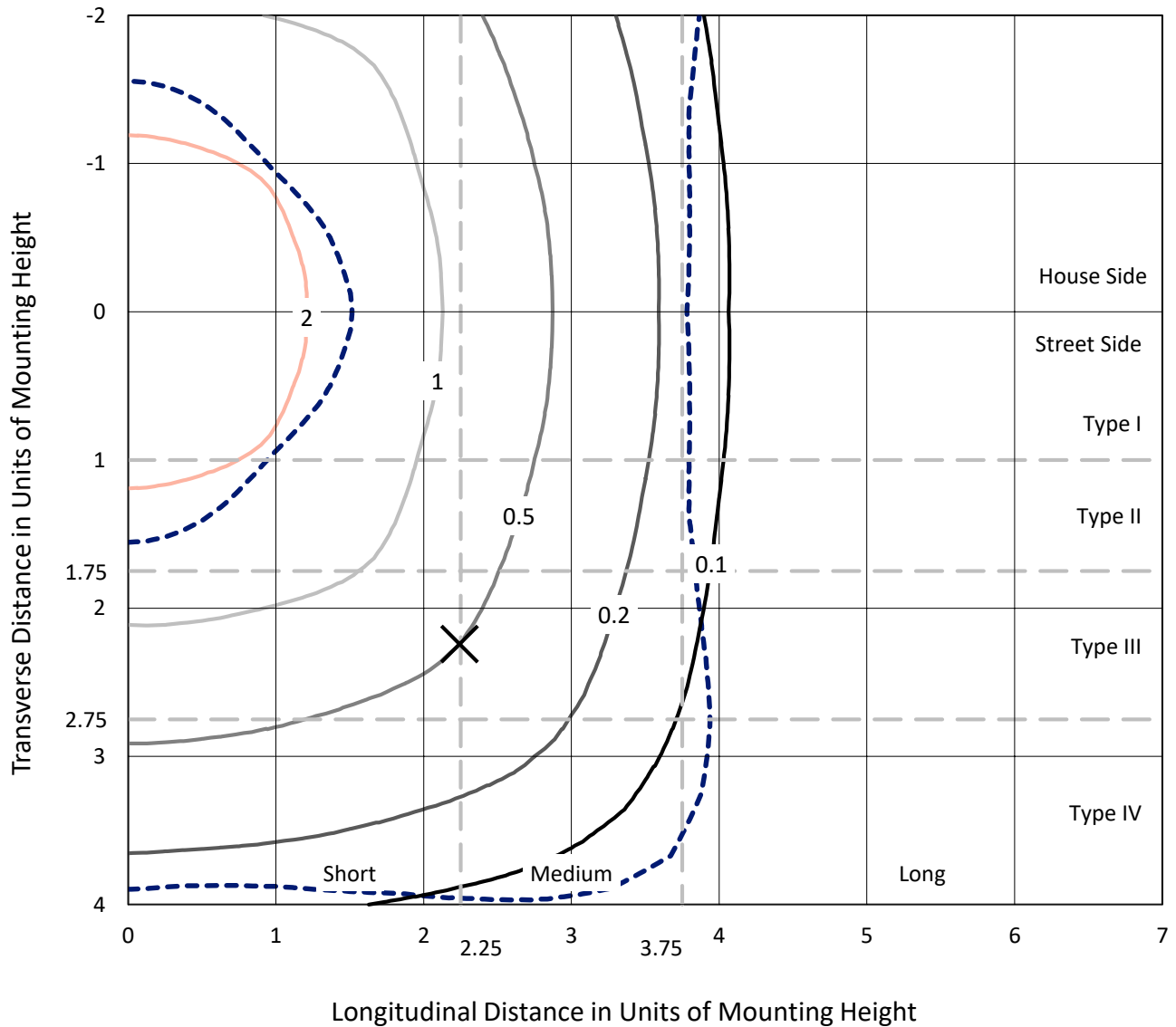
Input Watts (W): 334
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

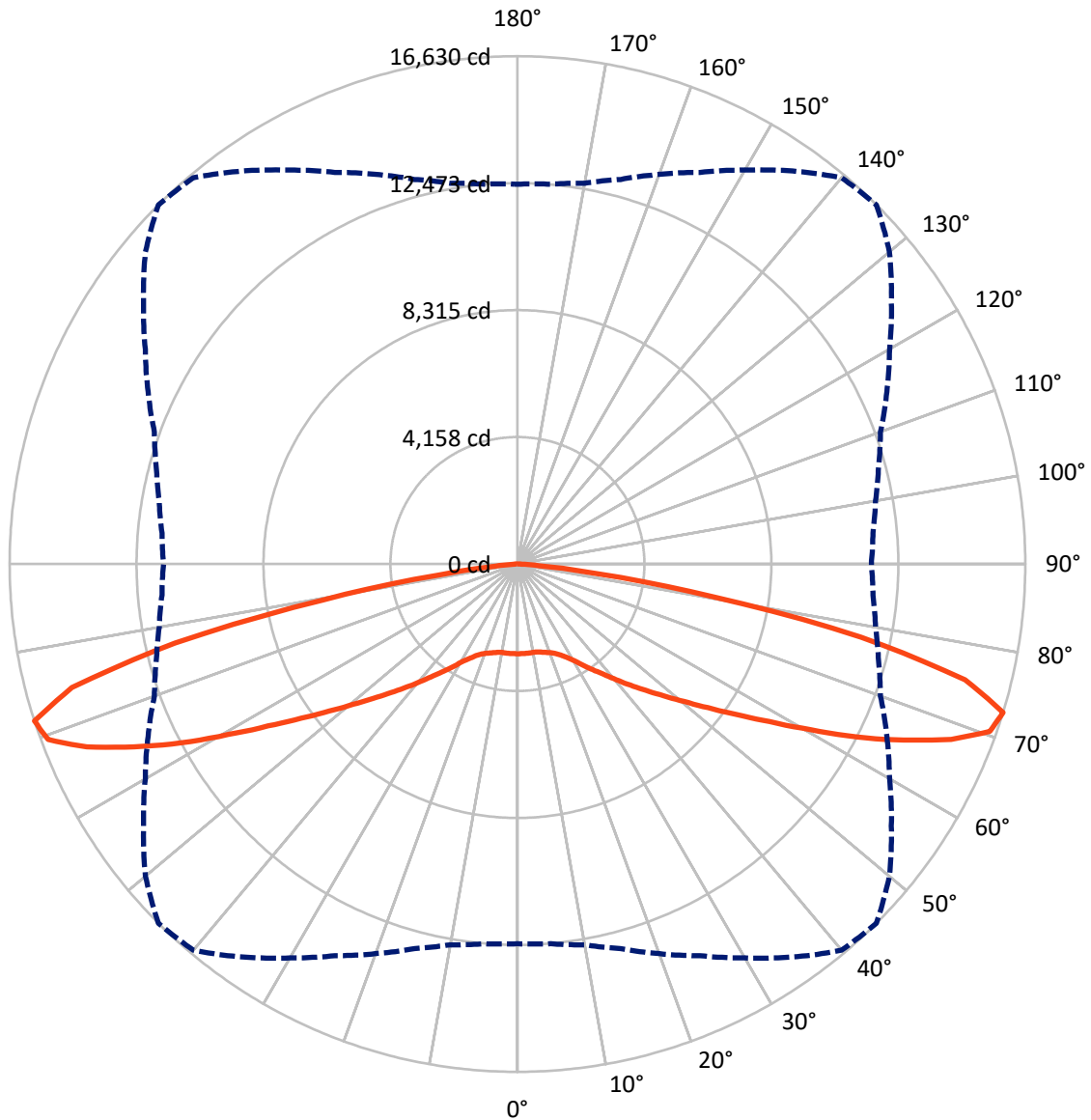
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.3 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 | 20764.4 | 0.0 | 20764.4 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 20764.4 | 0.0 | 20764.4 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 41528.7 | 0.0 | 41528.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 280.8 | 0.7 |
| 10°-20° | 852.9 | 2.1 |
| 20°-30° | 1558.6 | 3.8 |
| 30°-40° | 2687.2 | 6.5 |
| 40°-50° | 4593.8 | 11.1 |
| 50°-60° | 7445.9 | 17.9 |
| 60°-70° | 12352.6 | 29.7 |
| 70°-80° | 10879.7 | 26.2 |
| 80°-90° | 877.2 | 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° | 41528.7 | 100.0 |
| 0°-180° | 41528.7 | 100.0 |



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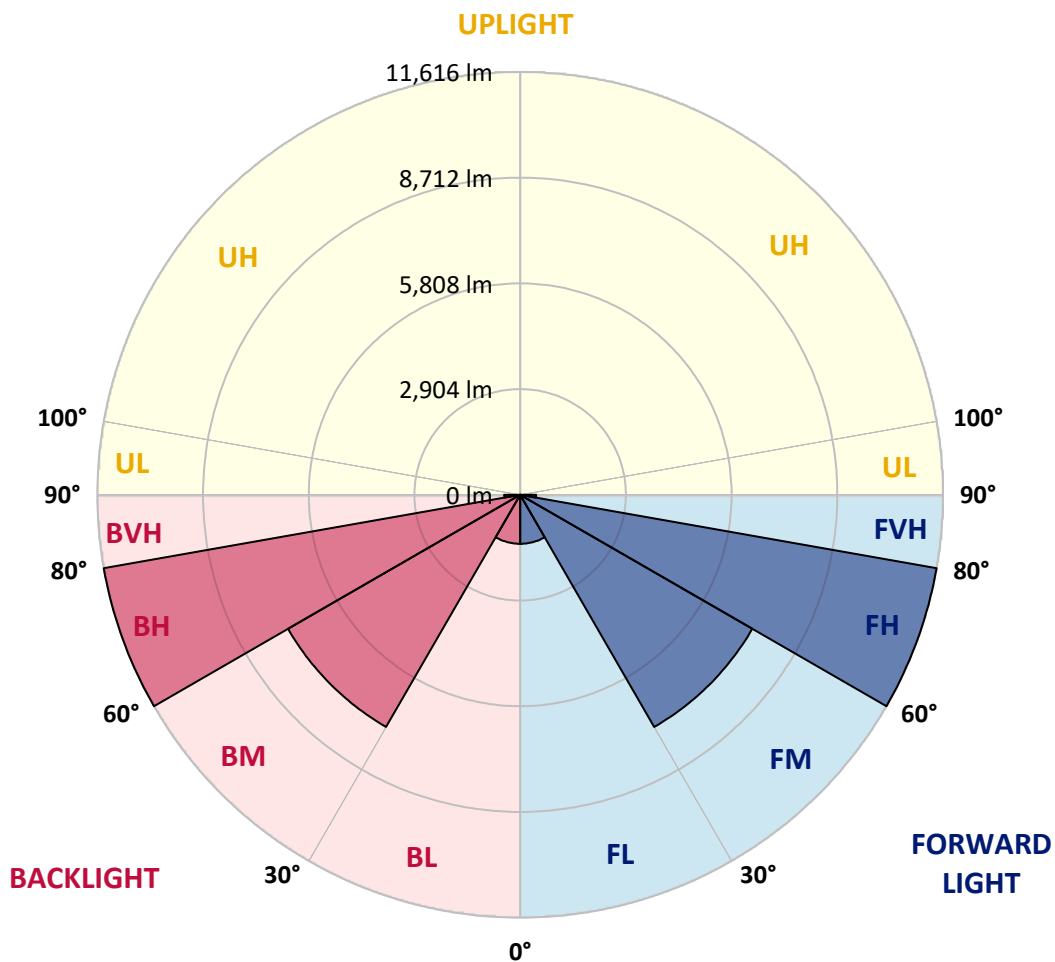
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 1346.1 | 3.2 | | | |
| FM | (30°-60°) | 7363.5 | 17.7 | | | |
| FH | (60°-80°) | 11616.1 | 28.0 | | | G4/12000 |
| FVH | (80°-90°) | 438.6 | 1.1 | | | G3/500 |
| BL | (0°-30°) | 1346.1 | 3.2 | B3/2500 | | |
| BM | (30°-60°) | 7363.5 | 17.7 | B4/8500 | | |
| BH | (60°-80°) | 11616.1 | 28.0 | B5 | | G4/12000 |
| BVH | (80°-90°) | 438.6 | 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° | 2940.9 | 2940.9 | 2940.9 | 2940.9 | 2940.9 | 2940.9 | 2940.9 | 2940.9 | 2940.9 | 2940.9 | 2940.9 |
| 2.5° | 2940.9 | 2942.8 | 2944.7 | 2942.8 | 2942.8 | 2940.9 | 2938.9 | 2940.9 | 2938.9 | 2935.2 | 2937.1 |
| 5° | 2950.4 | 2954.2 | 2954.2 | 2950.4 | 2952.3 | 2950.4 | 2946.6 | 2948.5 | 2944.7 | 2938.9 | 2938.9 |
| 7.5° | 2961.9 | 2963.7 | 2963.7 | 2959.9 | 2961.9 | 2958.1 | 2954.2 | 2952.3 | 2948.5 | 2940.9 | 2935.2 |
| 10° | 2978.9 | 2980.9 | 2978.9 | 2975.2 | 2975.2 | 2969.4 | 2959.9 | 2956.1 | 2948.5 | 2937.1 | 2931.4 |
| 12.5° | 2998.1 | 2999.9 | 2998.1 | 2994.2 | 2992.3 | 2982.8 | 2975.2 | 2969.4 | 2963.7 | 2954.2 | 2944.7 |
| 15° | 3024.7 | 3028.4 | 3024.7 | 3017.1 | 3011.4 | 3003.7 | 2999.9 | 3001.8 | 3003.7 | 2996.1 | 2986.6 |
| 17.5° | 3074.2 | 3076.1 | 3070.4 | 3053.3 | 3045.6 | 3038.1 | 3038.1 | 3041.8 | 3047.6 | 3043.7 | 3034.2 |
| 20° | 3165.6 | 3159.9 | 3146.6 | 3125.6 | 3116.1 | 3102.8 | 3100.9 | 3102.8 | 3102.8 | 3100.9 | 3093.3 |
| 22.5° | 3279.9 | 3276.1 | 3258.9 | 3232.3 | 3218.9 | 3211.3 | 3199.9 | 3190.4 | 3188.5 | 3182.8 | 3175.1 |
| 25° | 3417.1 | 3415.1 | 3394.2 | 3371.3 | 3361.8 | 3352.3 | 3342.8 | 3329.4 | 3318.0 | 3304.6 | 3297.1 |
| 27.5° | 3592.3 | 3584.6 | 3554.2 | 3542.8 | 3529.5 | 3523.8 | 3510.4 | 3495.1 | 3485.6 | 3468.5 | 3459.0 |
| 30° | 3784.7 | 3784.7 | 3759.9 | 3756.1 | 3756.1 | 3742.8 | 3727.5 | 3700.8 | 3683.7 | 3666.6 | 3660.8 |
| 32.5° | 3977.0 | 3979.0 | 3954.2 | 3961.8 | 3967.5 | 3977.0 | 3980.8 | 3971.3 | 3959.9 | 3958.0 | 3946.5 |
| 35° | 4255.2 | 4247.5 | 4222.7 | 4228.5 | 4226.5 | 4224.7 | 4224.7 | 4245.7 | 4249.4 | 4253.2 | 4230.4 |
| 37.5° | 4599.9 | 4599.9 | 4575.1 | 4575.1 | 4563.7 | 4552.2 | 4537.0 | 4550.4 | 4571.4 | 4577.0 | 4561.7 |
| 40° | 4994.1 | 5007.4 | 4977.1 | 4975.1 | 4978.9 | 4942.7 | 4925.6 | 4946.6 | 4959.9 | 4982.7 | 4965.6 |
| 42.5° | 5458.9 | 5449.4 | 5418.9 | 5415.1 | 5394.1 | 5382.8 | 5367.5 | 5384.6 | 5405.6 | 5420.8 | 5426.5 |
| 45° | 5904.6 | 5897.0 | 5862.7 | 5862.7 | 5841.8 | 5832.3 | 5839.8 | 5868.5 | 5878.0 | 5898.9 | 5919.8 |
| 47.5° | 6344.6 | 6335.0 | 6312.2 | 6321.7 | 6323.7 | 6340.8 | 6365.5 | 6392.2 | 6418.9 | 6447.5 | 6457.0 |
| 50° | 6794.1 | 6796.0 | 6771.2 | 6794.1 | 6822.7 | 6870.3 | 6936.9 | 6980.8 | 7036.1 | 7072.2 | 7083.6 |
| 52.5° | 7203.6 | 7211.3 | 7237.9 | 7291.3 | 7348.4 | 7441.8 | 7556.0 | 7662.6 | 7754.1 | 7815.0 | 7811.3 |
| 55° | 7695.0 | 7706.5 | 7771.3 | 7862.7 | 7956.0 | 8097.0 | 8266.5 | 8455.0 | 8607.4 | 8695.0 | 8639.7 |
| 57.5° | 8323.6 | 8348.4 | 8420.7 | 8544.5 | 8683.6 | 8866.4 | 9098.8 | 9382.6 | 9618.8 | 9736.9 | 9647.3 |
| 60° | 9186.4 | 9201.6 | 9289.3 | 9426.4 | 9594.1 | 9820.7 | 10131.2 | 10512.1 | 10845.4 | 11001.6 | 10898.8 |
| 62.5° | 10323.5 | 10352.2 | 10422.6 | 10561.7 | 10733.1 | 10990.2 | 11369.3 | 11845.5 | 12260.7 | 12477.7 | 12245.4 |
| 65° | 11681.6 | 11773.0 | 11832.1 | 11973.0 | 12133.0 | 12405.4 | 12801.6 | 13312.1 | 13757.8 | 13900.6 | 13632.0 |
| 67.5° | 13026.4 | 13106.4 | 13209.2 | 13371.1 | 13533.0 | 13839.7 | 14207.3 | 14702.5 | 15192.0 | 15321.6 | 14904.4 |
| 70° | 13614.9 | 13660.6 | 13820.6 | 14041.5 | 14352.0 | 14713.9 | 15138.6 | 15694.8 | 16300.5 | 16407.2 | 15877.7 |
| 72.5° | 12435.9 | 12481.6 | 12660.7 | 13035.9 | 13576.8 | 14152.0 | 14892.9 | 15710.1 | 16510.0 | 16630.1 | 15900.5 |
| 75° | 9405.5 | 9331.2 | 9596.0 | 10093.0 | 10822.6 | 11624.5 | 12660.7 | 13832.0 | 14988.2 | 15138.6 | 14268.2 |
| 77.5° | 4860.9 | 4851.3 | 5051.3 | 5668.5 | 6538.9 | 7451.3 | 8592.2 | 9916.0 | 11047.4 | 11504.5 | 10795.9 |
| 80° | 1369.5 | 1384.8 | 1480.0 | 1786.6 | 2295.2 | 2954.2 | 3845.6 | 5085.6 | 6011.3 | 6483.7 | 6087.5 |
| 82.5° | 537.2 | 579.0 | 615.2 | 672.4 | 739.0 | 836.2 | 1116.1 | 1660.9 | 2228.5 | 2662.7 | 2180.9 |
| 85° | 192.4 | 205.7 | 291.4 | 344.7 | 350.5 | 369.5 | 420.9 | 491.4 | 592.4 | 706.7 | 580.9 |
| 87.5° | 72.4 | 80.0 | 93.3 | 154.3 | 152.4 | 139.0 | 169.5 | 177.2 | 133.3 | 121.9 | 150.5 |
| 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° | 2940.9 | 2940.9 | 2940.9 | 2940.9 | 2940.9 | 2940.9 | 2940.9 | 2940.9 |
| 2.5° | 2933.3 | 2935.2 | 2935.2 | 2937.1 | 2938.9 | 2938.9 | 2942.8 | 2942.8 |
| 5° | 2935.2 | 2935.2 | 2931.4 | 2933.3 | 2931.4 | 2931.4 | 2933.3 | 2933.3 |
| 7.5° | 2931.4 | 2929.4 | 2925.6 | 2923.7 | 2919.9 | 2919.9 | 2919.9 | 2919.9 |
| 10° | 2925.6 | 2923.7 | 2919.9 | 2918.1 | 2916.1 | 2916.1 | 2916.1 | 2916.1 |
| 12.5° | 2940.9 | 2935.2 | 2931.4 | 2929.4 | 2929.4 | 2929.4 | 2929.4 | 2929.4 |
| 15° | 2980.9 | 2967.6 | 2958.1 | 2958.1 | 2959.9 | 2963.7 | 2963.7 | 2967.6 |
| 17.5° | 3030.4 | 3015.1 | 3005.6 | 2998.1 | 3001.8 | 3007.6 | 3011.4 | 3015.1 |
| 20° | 3089.4 | 3081.8 | 3068.5 | 3060.9 | 3060.9 | 3068.5 | 3072.3 | 3074.2 |
| 22.5° | 3171.4 | 3165.6 | 3159.9 | 3150.4 | 3150.4 | 3154.2 | 3161.8 | 3161.8 |
| 25° | 3293.3 | 3289.4 | 3285.6 | 3278.0 | 3276.1 | 3276.1 | 3279.9 | 3283.8 |
| 27.5° | 3445.6 | 3447.5 | 3443.8 | 3441.8 | 3436.1 | 3434.3 | 3439.9 | 3438.0 |
| 30° | 3649.5 | 3659.0 | 3668.5 | 3660.8 | 3651.3 | 3645.6 | 3639.9 | 3632.3 |
| 32.5° | 3925.6 | 3914.2 | 3906.5 | 3893.2 | 3876.1 | 3860.8 | 3849.5 | 3836.1 |
| 35° | 4186.5 | 4167.5 | 4159.9 | 4171.3 | 4169.4 | 4159.9 | 4146.5 | 4135.2 |
| 37.5° | 4506.5 | 4502.7 | 4506.5 | 4527.5 | 4523.7 | 4533.2 | 4506.5 | 4504.7 |
| 40° | 4910.4 | 4914.2 | 4940.9 | 4965.6 | 4978.9 | 4992.3 | 4977.1 | 4961.8 |
| 42.5° | 5378.9 | 5377.0 | 5386.6 | 5420.8 | 5443.6 | 5458.9 | 5426.5 | 5422.8 |
| 45° | 5874.1 | 5860.8 | 5868.5 | 5897.0 | 5919.8 | 5937.0 | 5900.8 | 5900.8 |
| 47.5° | 6418.9 | 6396.0 | 6371.2 | 6403.7 | 6417.0 | 6428.4 | 6399.9 | 6390.3 |
| 50° | 7026.4 | 6978.9 | 6925.6 | 6938.9 | 6938.9 | 6935.1 | 6898.9 | 6896.9 |
| 52.5° | 7723.6 | 7636.0 | 7538.8 | 7502.6 | 7481.8 | 7458.8 | 7396.0 | 7365.6 |
| 55° | 8525.5 | 8394.0 | 8241.7 | 8148.4 | 8098.8 | 8036.0 | 7931.2 | 7902.7 |
| 57.5° | 9462.6 | 9256.9 | 8994.1 | 8879.8 | 8769.3 | 8666.4 | 8550.2 | 8517.9 |
| 60° | 10573.1 | 10270.2 | 9921.7 | 9710.3 | 9590.3 | 9491.1 | 9371.2 | 9365.5 |
| 62.5° | 11811.1 | 11333.1 | 10938.8 | 10748.3 | 10660.7 | 10573.1 | 10458.8 | 10474.0 |
| 65° | 13070.1 | 12571.1 | 12201.6 | 12047.3 | 11965.5 | 11893.0 | 11778.8 | 11795.9 |
| 67.5° | 14312.0 | 13853.0 | 13447.3 | 13289.2 | 13197.8 | 13106.4 | 13003.4 | 13020.6 |
| 70° | 15203.4 | 14633.9 | 14176.8 | 13826.3 | 13607.3 | 13359.6 | 13199.6 | 13159.6 |
| 72.5° | 14948.2 | 14070.2 | 13344.4 | 12649.2 | 12241.7 | 11910.2 | 11685.5 | 11588.3 |
| 75° | 12936.8 | 11736.8 | 10803.6 | 9950.2 | 9470.3 | 9079.8 | 8795.9 | 8618.9 |
| 77.5° | 9607.3 | 8258.8 | 7156.1 | 6173.2 | 5396.1 | 4874.2 | 4506.5 | 4268.5 |
| 80° | 5258.9 | 3999.9 | 2923.7 | 2055.2 | 1510.5 | 1255.2 | 1108.6 | 1038.1 |
| 82.5° | 1638.1 | 1057.1 | 779.1 | 672.4 | 624.7 | 598.1 | 554.2 | 483.8 |
| 85° | 521.9 | 457.2 | 424.7 | 405.7 | 386.7 | 337.2 | 232.4 | 211.4 |
| 87.5° | 201.9 | 207.7 | 205.7 | 194.3 | 198.0 | 142.8 | 114.3 | 101.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)