

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: P193396

Luminaire Tested: **GLEON-AF-08-LED-E1-5NQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193396
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
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-E1-5NQ-8030
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40154 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

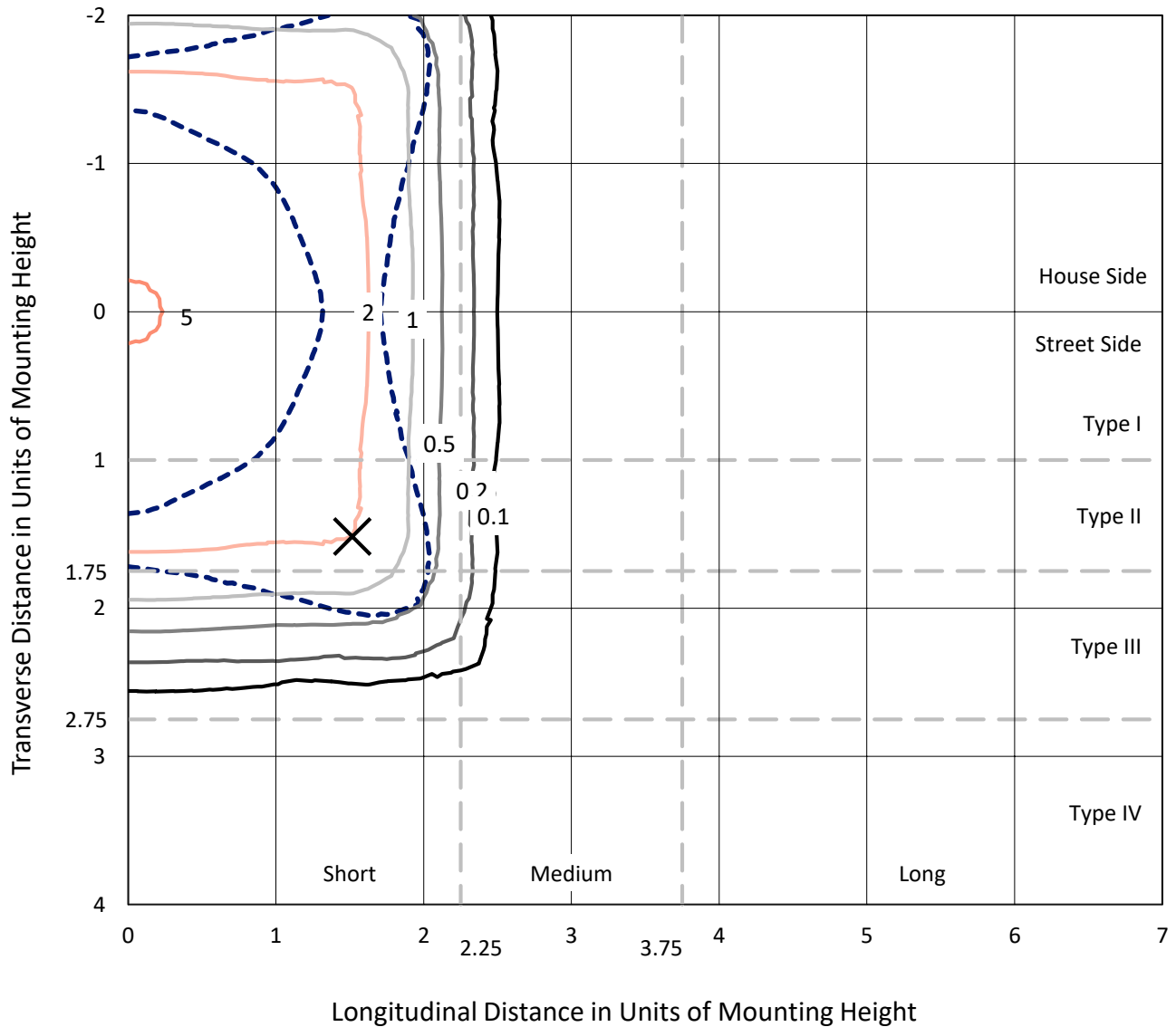
Input Watts (W): 445
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

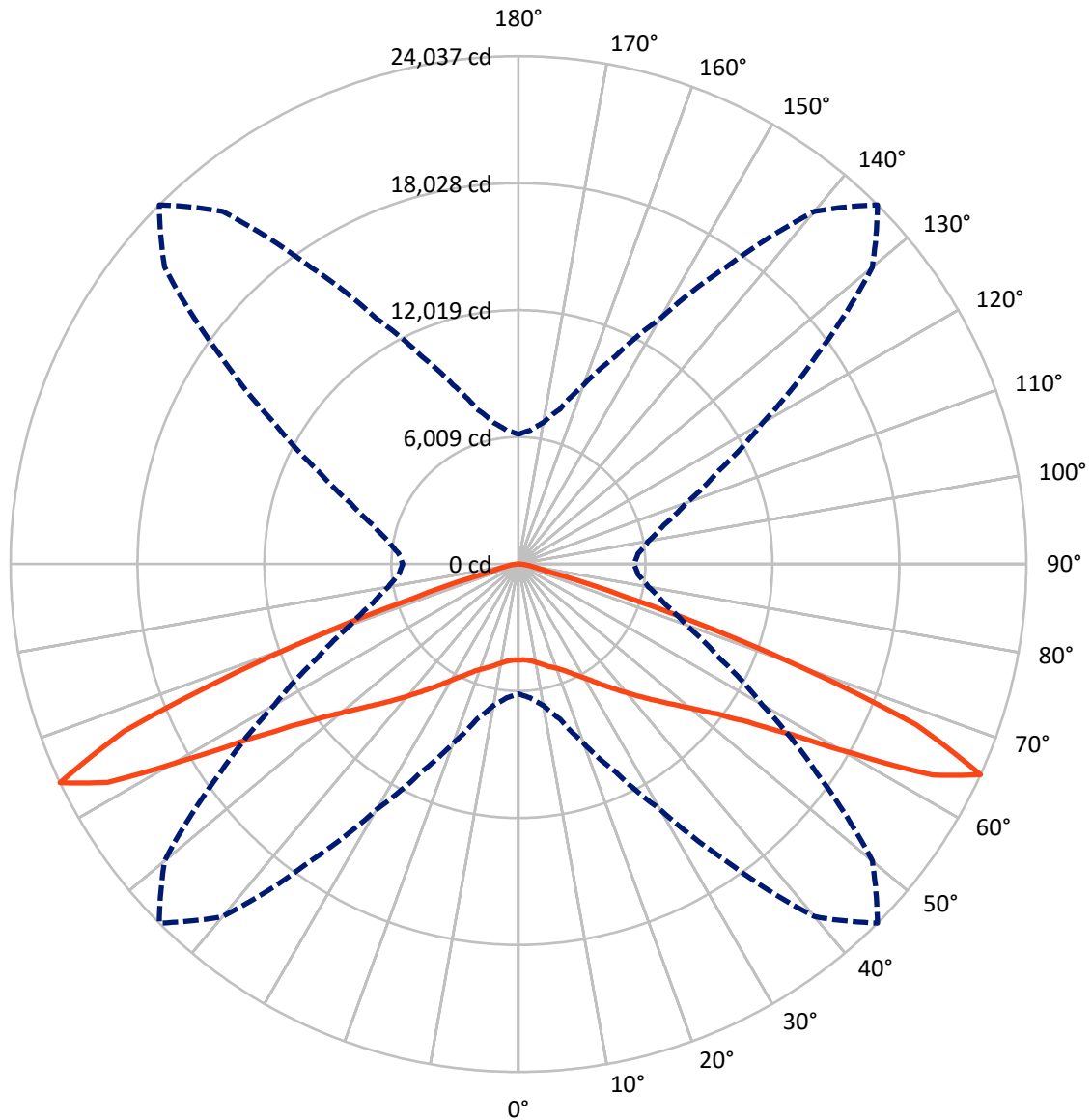
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.1 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 20077.0 | 0.0 | 20077.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 20077.0 | 0.0 | 20077.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 40154.0 | 0.0 | 40154.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 442.8 | 1.1 |
| 10°-20° | 1420.3 | 3.5 |
| 20°-30° | 2655.6 | 6.6 |
| 30°-40° | 4491.4 | 11.2 |
| 40°-50° | 7343.9 | 18.3 |
| 50°-60° | 11678.0 | 29.1 |
| 60°-70° | 10556.2 | 26.3 |
| 70°-80° | 1335.9 | 3.3 |
| 80°-90° | 229.8 | 0.6 |
| 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° | 40154.0 | 100.0 |
| 0°-180° | 40154.0 | 100.0 |



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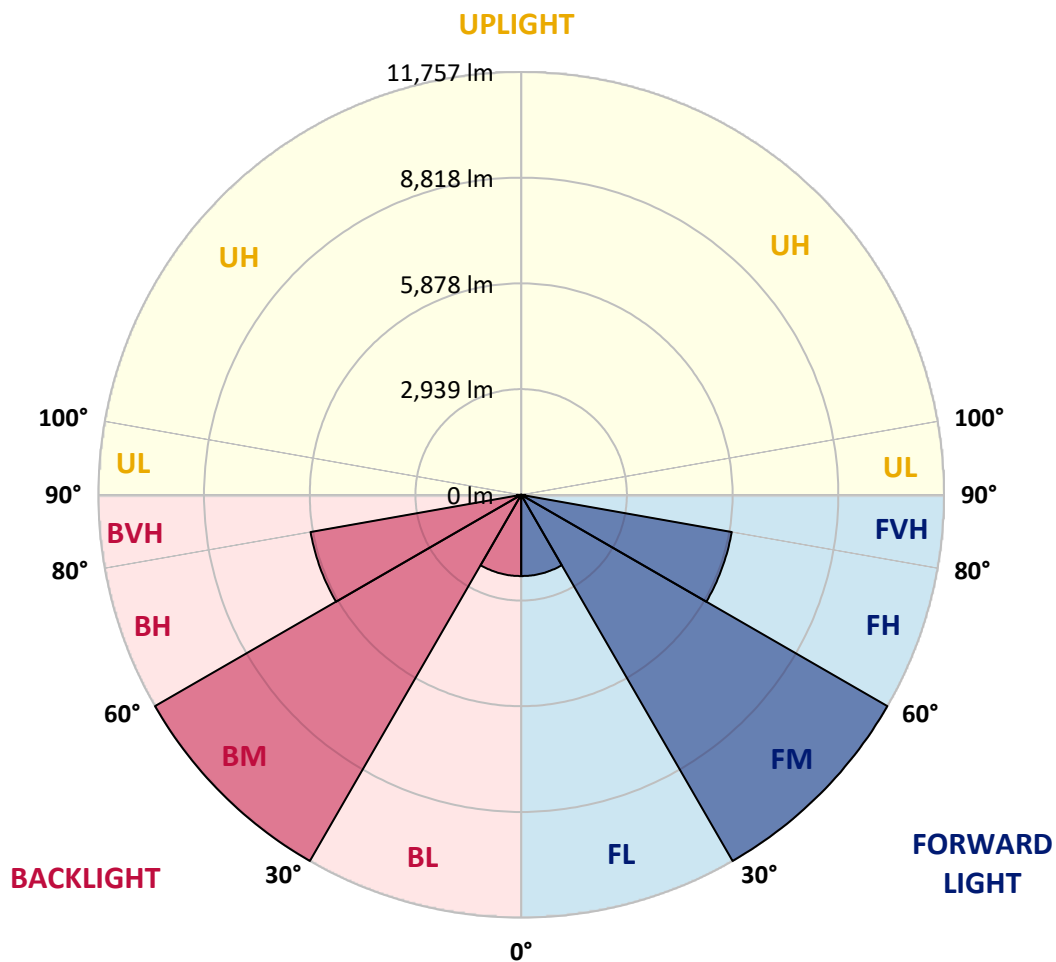
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 2259.4 | 5.6 | | | |
| FM | (30°-60°) | 11756.7 | 29.3 | | | |
| FH | (60°-80°) | 5946.0 | 14.8 | | | G3/7500 |
| FVH | (80°-90°) | 114.9 | 0.3 | | | G2/225 |
| BL | (0°-30°) | 2259.4 | 5.6 | B3/2500 | | |
| BM | (30°-60°) | 11756.7 | 29.3 | B5 | | |
| BH | (60°-80°) | 5946.0 | 14.8 | B5 | | G3/7500 |
| BVH | (80°-90°) | 114.9 | 0.3 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4543.4 | 4543.4 | 4543.4 | 4543.4 | 4543.4 | 4543.4 | 4543.4 | 4543.4 | 4543.4 | 4543.4 | 4543.4 |
| 2.5° | 4547.2 | 4551.0 | 4554.7 | 4551.0 | 4554.7 | 4549.1 | 4545.3 | 4551.0 | 4545.3 | 4539.7 | 4543.4 |
| 5° | 4586.7 | 4588.6 | 4588.6 | 4582.9 | 4588.6 | 4584.8 | 4579.2 | 4586.7 | 4581.1 | 4575.4 | 4579.2 |
| 7.5° | 4652.5 | 4660.0 | 4654.4 | 4648.8 | 4652.5 | 4648.8 | 4645.0 | 4646.9 | 4645.0 | 4639.4 | 4641.2 |
| 10° | 4740.9 | 4746.5 | 4742.8 | 4740.9 | 4744.7 | 4742.8 | 4739.0 | 4737.1 | 4739.0 | 4733.4 | 4733.4 |
| 12.5° | 4848.1 | 4846.2 | 4844.3 | 4846.2 | 4851.9 | 4851.9 | 4850.0 | 4851.9 | 4855.6 | 4857.5 | 4853.7 |
| 15° | 4953.4 | 4957.2 | 4957.2 | 4957.2 | 4968.5 | 4977.9 | 4983.5 | 4987.3 | 4994.8 | 4996.7 | 4989.1 |
| 17.5° | 5085.0 | 5085.0 | 5083.2 | 5085.0 | 5096.3 | 5111.4 | 5117.0 | 5124.5 | 5132.1 | 5137.7 | 5128.3 |
| 20° | 5231.7 | 5235.5 | 5235.5 | 5239.3 | 5254.3 | 5271.2 | 5271.2 | 5275.0 | 5271.2 | 5275.0 | 5269.3 |
| 22.5° | 5410.4 | 5421.7 | 5421.7 | 5423.6 | 5438.6 | 5459.3 | 5453.6 | 5459.3 | 5449.9 | 5457.4 | 5449.9 |
| 25° | 5643.6 | 5660.5 | 5656.7 | 5656.7 | 5668.0 | 5681.2 | 5683.1 | 5694.4 | 5692.5 | 5701.9 | 5696.2 |
| 27.5° | 5906.9 | 5933.2 | 5940.7 | 5938.8 | 5946.3 | 5959.5 | 5963.3 | 5976.4 | 5968.9 | 5976.4 | 5972.7 |
| 30° | 6222.8 | 6234.1 | 6249.1 | 6254.8 | 6264.2 | 6277.3 | 6277.3 | 6279.2 | 6269.8 | 6281.1 | 6286.7 |
| 32.5° | 6550.0 | 6570.7 | 6585.7 | 6619.6 | 6636.5 | 6645.9 | 6644.0 | 6647.8 | 6638.4 | 6653.4 | 6664.7 |
| 35° | 6982.5 | 6997.6 | 7022.0 | 7048.4 | 7070.9 | 7069.0 | 7063.4 | 7065.3 | 7065.3 | 7078.4 | 7089.7 |
| 37.5° | 7503.5 | 7507.2 | 7539.2 | 7576.8 | 7588.1 | 7576.8 | 7542.9 | 7535.4 | 7518.5 | 7535.4 | 7554.2 |
| 40° | 8054.5 | 8067.6 | 8131.6 | 8156.0 | 8161.7 | 8141.0 | 8092.1 | 8063.9 | 8026.3 | 8046.9 | 8073.3 |
| 42.5° | 8631.8 | 8658.1 | 8716.4 | 8759.7 | 8778.5 | 8765.3 | 8697.6 | 8654.4 | 8605.5 | 8616.8 | 8643.1 |
| 45° | 9271.2 | 9303.2 | 9385.9 | 9427.3 | 9463.0 | 9442.3 | 9376.5 | 9310.7 | 9233.6 | 9239.2 | 9280.6 |
| 47.5° | 9985.8 | 10017.8 | 10125.0 | 10194.5 | 10213.4 | 10209.6 | 10136.2 | 10046.0 | 9940.7 | 9936.9 | 9972.6 |
| 50° | 10786.9 | 10818.9 | 10952.4 | 11059.6 | 11114.1 | 11108.5 | 11022.0 | 10894.1 | 10766.2 | 10768.1 | 10813.3 |
| 52.5° | 11569.2 | 11608.7 | 11747.9 | 11932.2 | 12039.4 | 12116.5 | 12063.8 | 11943.5 | 11787.4 | 11791.1 | 11832.5 |
| 55° | 12302.7 | 12368.5 | 12528.3 | 12778.4 | 12977.8 | 13194.0 | 13256.1 | 13252.3 | 13158.3 | 13184.6 | 13226.0 |
| 57.5° | 12658.1 | 12755.9 | 13002.2 | 13397.1 | 13803.4 | 14243.4 | 14615.8 | 14894.1 | 15012.6 | 15191.2 | 15149.8 |
| 60° | 11984.8 | 12140.9 | 12503.9 | 13085.0 | 13888.0 | 14805.7 | 15789.2 | 16750.2 | 17570.1 | 18188.8 | 17833.4 |
| 62.5° | 9812.8 | 10015.9 | 10455.9 | 11200.6 | 12415.5 | 13884.2 | 15766.7 | 18038.4 | 20513.2 | 22006.4 | 20940.1 |
| 65° | 6140.0 | 6350.7 | 6798.2 | 7595.6 | 9017.3 | 10843.3 | 13397.1 | 17162.0 | 21786.4 | 24037.4 | 21867.2 |
| 67.5° | 2394.0 | 2508.7 | 2751.3 | 3260.9 | 4329.1 | 5953.9 | 8517.1 | 12789.7 | 18320.5 | 20293.2 | 17980.1 |
| 70° | 1199.8 | 1211.1 | 1256.2 | 1350.2 | 1579.7 | 2051.7 | 3121.7 | 5929.4 | 10506.7 | 12690.1 | 10128.7 |
| 72.5° | 866.9 | 868.8 | 891.4 | 932.8 | 1006.1 | 1111.4 | 1314.5 | 1814.7 | 3417.0 | 5222.3 | 3202.6 |
| 75° | 663.8 | 671.4 | 684.5 | 707.1 | 746.6 | 799.2 | 872.6 | 1045.6 | 1295.7 | 1502.6 | 1263.7 |
| 77.5° | 511.5 | 526.6 | 536.0 | 556.6 | 581.1 | 616.8 | 637.5 | 703.3 | 818.0 | 861.3 | 848.1 |
| 80° | 389.3 | 402.4 | 423.1 | 440.1 | 457.0 | 473.9 | 466.4 | 496.5 | 556.6 | 592.4 | 573.6 |
| 82.5° | 248.2 | 263.3 | 323.5 | 338.5 | 346.0 | 357.3 | 344.1 | 346.0 | 372.4 | 394.9 | 372.4 |
| 85° | 159.8 | 169.3 | 205.0 | 223.8 | 225.7 | 233.2 | 227.5 | 214.4 | 214.4 | 195.6 | 220.0 |
| 87.5° | 73.3 | 75.2 | 92.1 | 109.1 | 112.8 | 101.6 | 99.7 | 95.9 | 77.1 | 73.3 | 79.0 |
| 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° | 4543.4 | 4543.4 | 4543.4 | 4543.4 | 4543.4 | 4543.4 | 4543.4 | 4543.4 |
| 2.5° | 4541.6 | 4545.3 | 4547.2 | 4552.8 | 4554.7 | 4554.7 | 4556.6 | 4560.4 |
| 5° | 4577.3 | 4582.9 | 4584.8 | 4592.3 | 4594.2 | 4592.3 | 4596.1 | 4598.0 |
| 7.5° | 4641.2 | 4650.6 | 4654.4 | 4661.9 | 4656.3 | 4663.8 | 4665.7 | 4665.7 |
| 10° | 4735.3 | 4744.7 | 4746.5 | 4754.1 | 4750.3 | 4754.1 | 4754.1 | 4750.3 |
| 12.5° | 4859.4 | 4861.3 | 4855.6 | 4861.3 | 4853.7 | 4857.5 | 4851.9 | 4848.1 |
| 15° | 4996.7 | 4991.0 | 4977.9 | 4977.9 | 4966.6 | 4968.5 | 4966.6 | 4964.7 |
| 17.5° | 5130.2 | 5118.9 | 5109.5 | 5105.7 | 5096.3 | 5094.5 | 5088.8 | 5088.8 |
| 20° | 5276.9 | 5271.2 | 5265.6 | 5258.1 | 5248.7 | 5239.3 | 5237.4 | 5241.1 |
| 22.5° | 5453.6 | 5451.8 | 5451.8 | 5448.0 | 5434.8 | 5425.4 | 5419.8 | 5419.8 |
| 25° | 5690.6 | 5673.7 | 5673.7 | 5671.8 | 5666.1 | 5660.5 | 5649.2 | 5654.9 |
| 27.5° | 5957.6 | 5948.2 | 5955.8 | 5953.9 | 5948.2 | 5948.2 | 5940.7 | 5940.7 |
| 30° | 6286.7 | 6283.0 | 6294.3 | 6284.9 | 6266.0 | 6264.2 | 6256.6 | 6247.2 |
| 32.5° | 6666.6 | 6662.8 | 6679.8 | 6668.5 | 6638.4 | 6621.5 | 6606.4 | 6598.9 |
| 35° | 7089.7 | 7091.6 | 7112.3 | 7104.8 | 7070.9 | 7059.6 | 7033.3 | 7029.6 |
| 37.5° | 7552.4 | 7582.4 | 7618.2 | 7625.7 | 7597.5 | 7590.0 | 7561.8 | 7546.7 |
| 40° | 8095.8 | 8135.3 | 8189.9 | 8203.0 | 8172.9 | 8167.3 | 8127.8 | 8107.1 |
| 42.5° | 8675.0 | 8742.7 | 8810.5 | 8821.7 | 8791.6 | 8761.6 | 8723.9 | 8708.9 |
| 45° | 9322.0 | 9402.8 | 9491.2 | 9513.8 | 9468.6 | 9432.9 | 9384.0 | 9384.0 |
| 47.5° | 10047.9 | 10149.4 | 10249.1 | 10311.1 | 10269.8 | 10232.2 | 10173.9 | 10136.2 |
| 50° | 10905.4 | 11044.6 | 11174.3 | 11238.3 | 11172.4 | 11101.0 | 10999.4 | 10965.6 |
| 52.5° | 11981.1 | 12131.5 | 12244.4 | 12210.5 | 12109.0 | 12009.3 | 11898.3 | 11853.2 |
| 55° | 13353.9 | 13404.7 | 13404.7 | 13276.8 | 13073.7 | 12906.3 | 12731.4 | 12673.1 |
| 57.5° | 15070.9 | 14875.3 | 14574.4 | 14192.6 | 13713.1 | 13295.6 | 13013.5 | 12880.0 |
| 60° | 17088.7 | 16148.4 | 15085.9 | 14042.2 | 13184.6 | 12477.6 | 12058.2 | 11866.4 |
| 62.5° | 18433.3 | 15973.5 | 13844.7 | 12169.1 | 10935.5 | 10083.6 | 9504.4 | 9278.7 |
| 65° | 17227.9 | 13321.9 | 10471.0 | 8466.3 | 7121.7 | 6254.8 | 5681.2 | 5470.6 |
| 67.5° | 12618.6 | 8347.8 | 5575.9 | 3996.2 | 2928.0 | 2335.7 | 2100.6 | 2002.8 |
| 70° | 5664.3 | 2939.3 | 1801.6 | 1406.7 | 1213.0 | 1113.3 | 1070.0 | 1055.0 |
| 72.5° | 1707.6 | 1235.5 | 1041.8 | 940.3 | 863.2 | 814.3 | 778.6 | 774.8 |
| 75° | 1030.5 | 857.5 | 761.6 | 701.5 | 652.6 | 613.1 | 594.3 | 588.6 |
| 77.5° | 720.3 | 630.0 | 584.9 | 541.6 | 504.0 | 473.9 | 457.0 | 443.8 |
| 80° | 505.9 | 462.6 | 441.9 | 417.5 | 393.0 | 364.8 | 340.4 | 329.1 |
| 82.5° | 338.5 | 329.1 | 329.1 | 314.1 | 293.4 | 267.0 | 218.1 | 206.9 |
| 85° | 218.1 | 216.3 | 220.0 | 214.4 | 199.3 | 171.1 | 141.0 | 133.5 |
| 87.5° | 101.6 | 103.4 | 114.7 | 112.8 | 109.1 | 90.3 | 71.5 | 67.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)