

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: P191244

Luminaire Tested: **GLEON-AF-06-LED-E1-SL4-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191244
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24294)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-06-LED-E1-SL4-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27959.3 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G5

Input Watts (W): 249
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

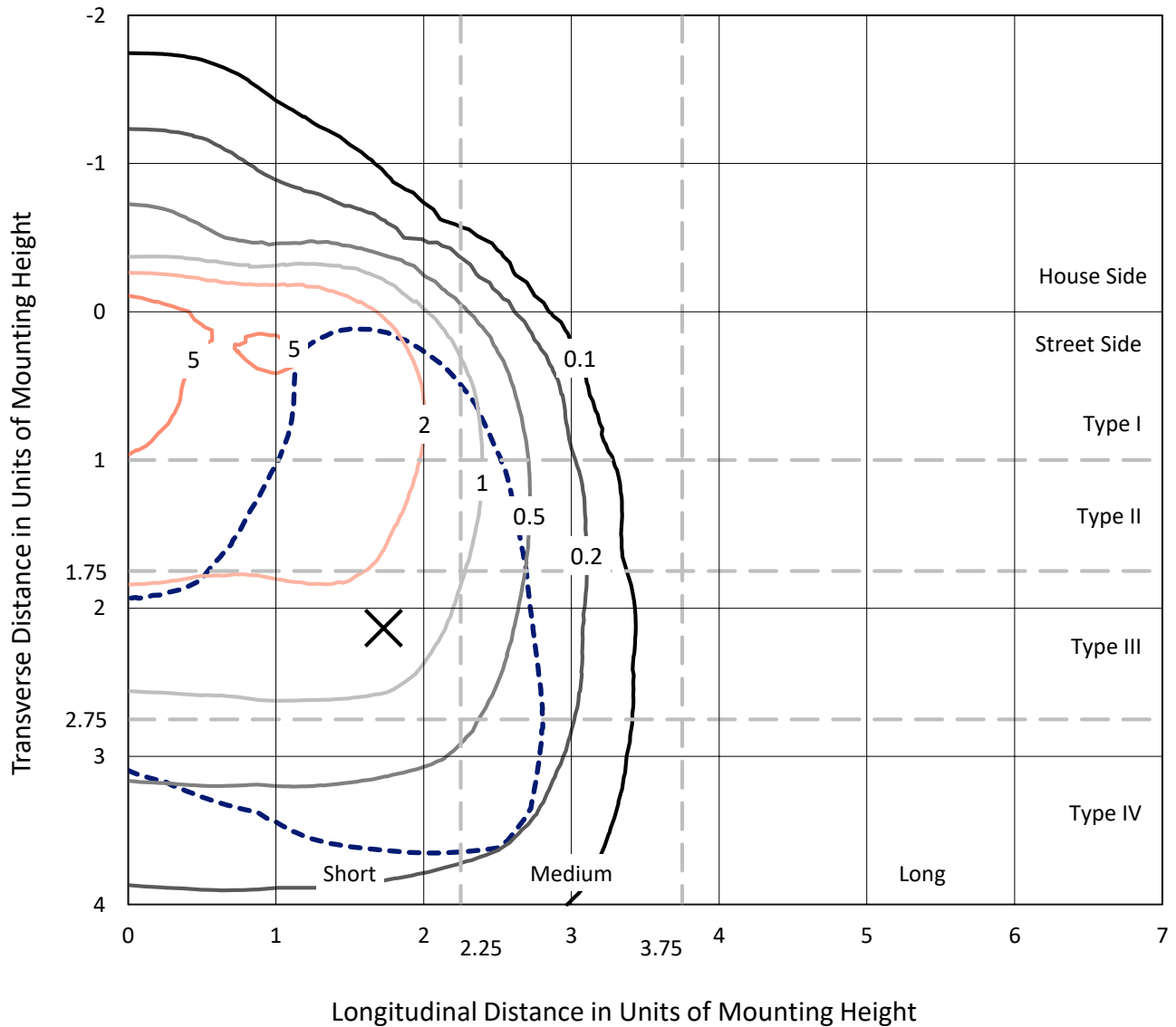


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

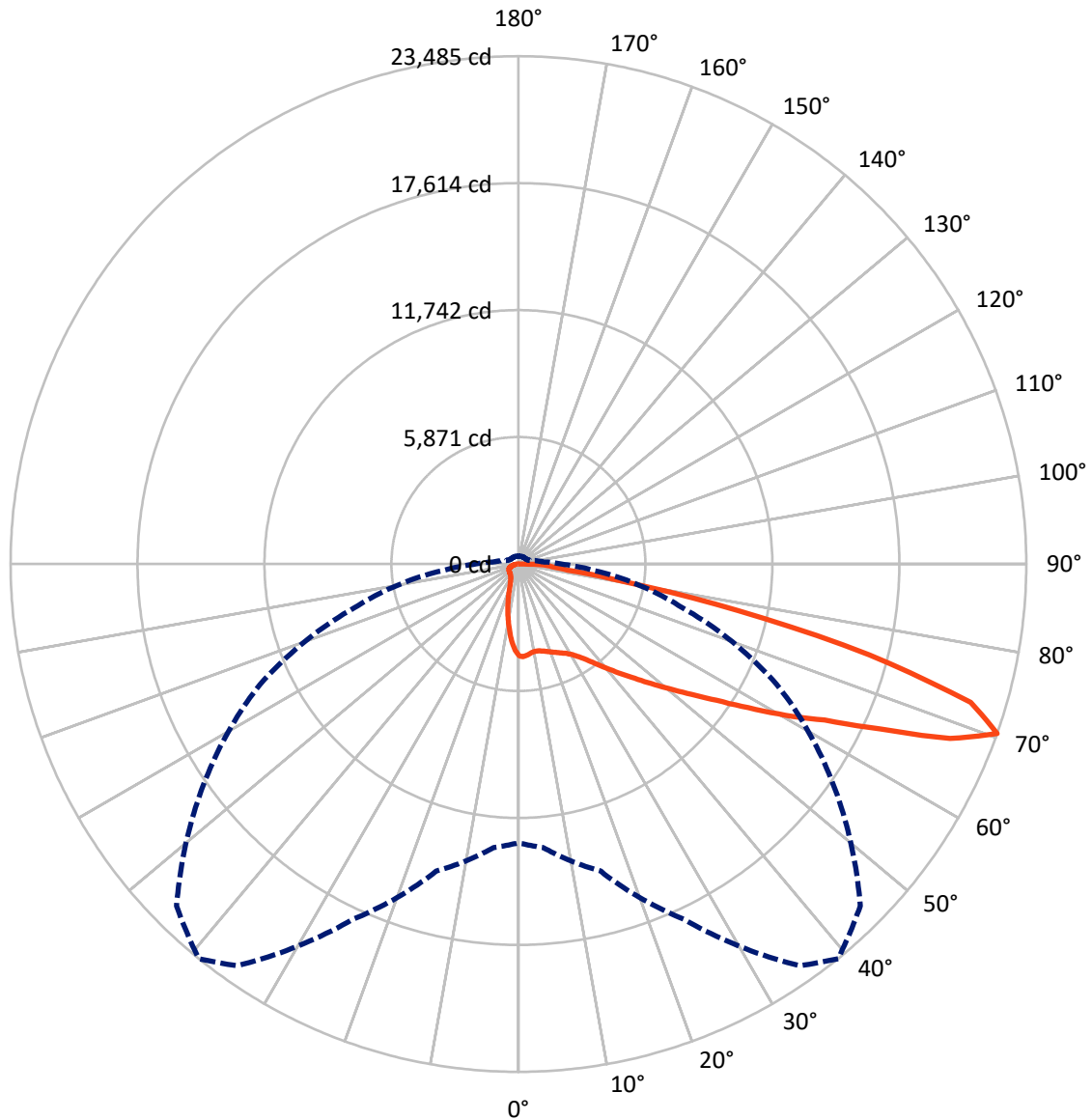


Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3179.9 | 0.0 | 3179.9 |
| | % Fixture | 11.4 | 0.0 | 11.4 |
| Street Side | Lumens | 24779.4 | 0.0 | 24779.4 |
| | % Fixture | 88.6 | 0.0 | 88.6 |
| Total | Lumens | 27959.3 | 0.0 | 27959.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 364.3 | 1.3 |
| 10°-20° | 910.5 | 3.3 |
| 20°-30° | 1417.7 | 5.1 |
| 30°-40° | 2208.6 | 7.9 |
| 40°-50° | 3707.8 | 13.3 |
| 50°-60° | 5890.2 | 21.1 |
| 60°-70° | 7856.9 | 28.1 |
| 70°-80° | 4744.6 | 17.0 |
| 80°-90° | 858.7 | 3.1 |
| 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° | 27959.3 | 100.0 |
| 0°-180° | 27959.3 | 100.0 |



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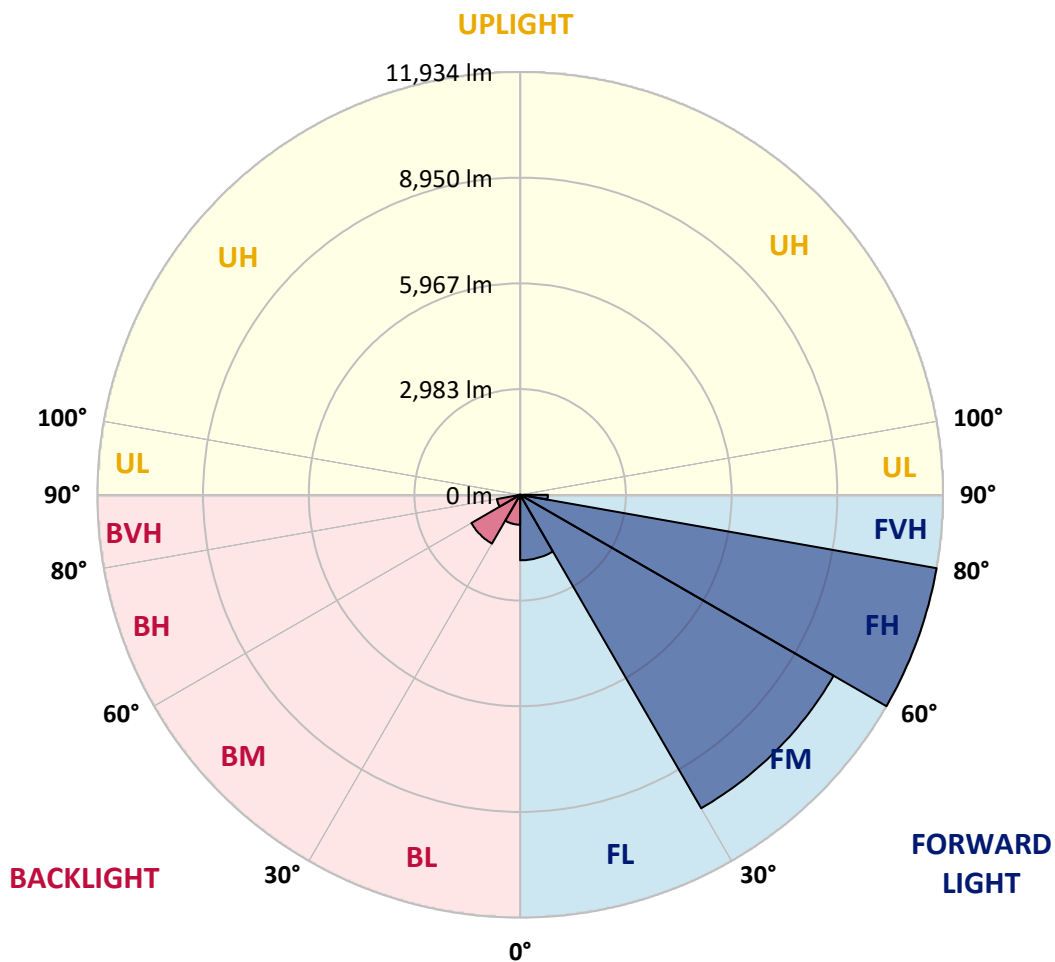
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 1849.0 | 6.6 | | | |
| FM | (30°-60°) | 10215.2 | 36.5 | | | |
| FH | (60°-80°) | 11933.8 | 42.7 | | | G4/12000 |
| FVH | (80°-90°) | 781.3 | 2.8 | | | G5 |
| BL | (0°-30°) | 843.6 | 3.0 | B2/1000 | | |
| BM | (30°-60°) | 1591.4 | 5.7 | B2/2500 | | |
| BH | (60°-80°) | 667.6 | 2.4 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 77.4 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 39° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 |
| 2.5° | 4327.1 | 4325.6 | 4314.3 | 4305.8 | 4298.6 | 4295.8 | 4301.5 | 4280.2 | 4261.7 | 4239.0 | 4214.8 |
| 5° | 4294.4 | 4293.0 | 4274.5 | 4257.4 | 4240.4 | 4234.7 | 4233.3 | 4194.9 | 4172.2 | 4138.0 | 4092.5 |
| 7.5° | 4258.9 | 4251.8 | 4227.5 | 4199.2 | 4169.3 | 4155.1 | 4140.9 | 4091.1 | 4065.5 | 4031.4 | 3978.9 |
| 10° | 4221.9 | 4213.3 | 4190.6 | 4162.2 | 4133.7 | 4112.5 | 4088.3 | 4039.9 | 4012.9 | 3987.4 | 3926.2 |
| 12.5° | 4183.6 | 4176.4 | 4170.8 | 4158.0 | 4138.0 | 4119.5 | 4101.1 | 4059.9 | 4031.4 | 4001.6 | 3930.5 |
| 15° | 4177.8 | 4175.0 | 4187.8 | 4196.3 | 4185.0 | 4173.5 | 4153.7 | 4118.1 | 4088.3 | 4058.5 | 3966.1 |
| 17.5° | 4223.4 | 4221.9 | 4254.6 | 4277.4 | 4271.6 | 4251.8 | 4224.8 | 4185.0 | 4160.8 | 4135.2 | 4020.1 |
| 20° | 4322.9 | 4329.9 | 4369.7 | 4399.6 | 4371.2 | 4342.7 | 4298.6 | 4243.2 | 4230.4 | 4219.1 | 4075.5 |
| 22.5° | 4510.5 | 4517.6 | 4546.0 | 4557.3 | 4483.5 | 4442.3 | 4381.1 | 4310.0 | 4301.5 | 4310.0 | 4142.3 |
| 25° | 4803.3 | 4796.2 | 4791.9 | 4749.3 | 4614.2 | 4550.3 | 4472.1 | 4398.2 | 4402.5 | 4440.8 | 4236.1 |
| 27.5° | 5191.4 | 5153.0 | 5093.3 | 4965.4 | 4750.7 | 4679.6 | 4584.4 | 4516.1 | 4543.1 | 4617.1 | 4376.9 |
| 30° | 5593.7 | 5551.0 | 5413.1 | 5204.2 | 4929.8 | 4851.7 | 4745.1 | 4668.2 | 4739.3 | 4855.9 | 4564.5 |
| 32.5° | 5966.2 | 5960.4 | 5758.6 | 5489.9 | 5177.2 | 5108.9 | 5002.3 | 4915.6 | 5030.8 | 5208.5 | 4845.9 |
| 35° | 6372.7 | 6385.5 | 6143.8 | 5821.1 | 5511.2 | 5440.2 | 5363.4 | 5298.0 | 5451.5 | 5696.0 | 5254.0 |
| 37.5° | 6807.6 | 6833.2 | 6547.5 | 6183.6 | 5892.2 | 5862.3 | 5816.8 | 5788.5 | 6025.8 | 6364.2 | 5824.0 |
| 40° | 7389.1 | 7363.5 | 6966.9 | 6593.0 | 6359.9 | 6358.5 | 6344.2 | 6378.3 | 6773.6 | 7237.0 | 6556.1 |
| 42.5° | 8011.6 | 7936.4 | 7411.8 | 7032.3 | 6873.0 | 6921.4 | 6949.8 | 7089.2 | 7673.4 | 8297.4 | 7448.7 |
| 45° | 8682.6 | 8513.5 | 7873.8 | 7497.1 | 7443.1 | 7545.4 | 7642.1 | 7944.8 | 8732.4 | 9504.2 | 8426.8 |
| 47.5° | 9218.5 | 9055.1 | 8351.4 | 7984.6 | 8102.7 | 8257.6 | 8443.8 | 8922.9 | 9917.9 | 10750.9 | 9392.0 |
| 50° | 9640.7 | 9534.1 | 8833.3 | 8553.3 | 8829.1 | 9067.8 | 9372.1 | 10030.2 | 11151.8 | 11964.9 | 10286.1 |
| 52.5° | 10050.2 | 9970.5 | 9319.5 | 9136.1 | 9681.9 | 10011.7 | 10425.4 | 11218.6 | 12417.0 | 13159.0 | 11038.0 |
| 55° | 10419.8 | 10362.9 | 9842.6 | 9862.5 | 10685.5 | 11114.9 | 11635.1 | 12571.9 | 13795.8 | 14223.7 | 11674.9 |
| 57.5° | 10836.2 | 10763.7 | 10439.6 | 10773.7 | 11974.9 | 12532.1 | 13208.8 | 14092.9 | 15089.4 | 15170.5 | 12159.7 |
| 60° | 11255.6 | 11193.0 | 11102.1 | 11825.6 | 13612.5 | 14198.1 | 14839.2 | 15567.1 | 16401.5 | 15905.4 | 12131.3 |
| 62.5° | 11619.5 | 11626.6 | 11787.3 | 12930.1 | 15215.9 | 15894.0 | 16675.8 | 17395.1 | 17588.4 | 16033.3 | 11234.3 |
| 65° | 12236.4 | 12348.8 | 12827.8 | 14493.8 | 17473.3 | 18380.3 | 19339.8 | 19224.6 | 17916.8 | 14837.8 | 9310.9 |
| 67.5° | 12969.9 | 13167.5 | 14138.4 | 16577.7 | 20326.3 | 21530.4 | 21901.4 | 19638.3 | 16601.9 | 12061.6 | 6637.1 |
| 70° | 12896.0 | 13167.5 | 14704.2 | 18131.5 | 22677.5 | 23484.9 | 22359.0 | 17773.3 | 13183.2 | 7879.5 | 3525.4 |
| 72.5° | 11451.7 | 11839.8 | 13551.3 | 17419.3 | 21936.9 | 21865.8 | 19410.8 | 13250.0 | 7832.5 | 3164.3 | 1377.4 |
| 75° | 8728.1 | 9120.4 | 10593.2 | 13761.8 | 17338.3 | 16741.2 | 13773.1 | 7319.4 | 2972.4 | 1256.6 | 868.6 |
| 77.5° | 5020.8 | 5325.0 | 6462.2 | 8439.5 | 10999.7 | 10387.0 | 7666.2 | 3255.2 | 1447.1 | 875.6 | 678.1 |
| 80° | 2803.2 | 2972.4 | 3663.3 | 4281.7 | 5390.4 | 4941.2 | 3430.2 | 2022.8 | 1080.3 | 635.5 | 523.1 |
| 82.5° | 2216.1 | 2366.8 | 2962.5 | 2700.9 | 2462.0 | 2271.6 | 1970.2 | 1801.1 | 862.9 | 400.9 | 312.7 |
| 85° | 1936.1 | 2079.7 | 2507.6 | 2126.6 | 1681.6 | 1542.3 | 1600.6 | 1772.7 | 671.0 | 241.6 | 267.2 |
| 87.5° | 1793.9 | 1985.9 | 2234.6 | 1639.0 | 1309.2 | 1159.9 | 1476.9 | 1943.2 | 216.0 | 150.7 | 108.0 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 | 4244.6 |
| 2.5° | 4193.5 | 4170.8 | 4133.7 | 4101.1 | 4049.9 | 4022.9 | 3993.1 | 3971.7 | 3954.6 | 3940.4 | 3963.2 |
| 5° | 4064.1 | 4021.5 | 3943.3 | 3859.4 | 3760.0 | 3681.7 | 3616.3 | 3555.3 | 3512.6 | 3484.2 | 3504.0 |
| 7.5° | 3941.8 | 3872.2 | 3749.9 | 3597.8 | 3427.3 | 3282.2 | 3162.9 | 3057.7 | 2985.2 | 2938.3 | 2956.7 |
| 10° | 3872.2 | 3785.5 | 3596.5 | 3357.6 | 3106.0 | 2880.0 | 2692.4 | 2530.3 | 2418.1 | 2354.0 | 2363.9 |
| 12.5° | 3855.2 | 3742.9 | 3481.3 | 3152.9 | 2808.9 | 2494.8 | 2230.3 | 2005.8 | 1848.0 | 1765.5 | 1768.4 |
| 15° | 3868.0 | 3724.4 | 3373.3 | 2956.7 | 2521.8 | 2125.2 | 1795.4 | 1522.5 | 1339.0 | 1245.2 | 1243.8 |
| 17.5° | 3889.3 | 3710.1 | 3259.5 | 2745.0 | 2230.3 | 1769.8 | 1401.6 | 1134.4 | 972.3 | 897.0 | 891.3 |
| 20° | 3912.0 | 3687.4 | 3131.6 | 2516.0 | 1927.5 | 1440.0 | 1097.4 | 888.4 | 786.1 | 744.9 | 742.0 |
| 22.5° | 3944.7 | 3667.5 | 2999.4 | 2274.4 | 1630.5 | 1172.7 | 902.7 | 761.9 | 707.9 | 686.6 | 683.7 |
| 25° | 3997.3 | 3657.6 | 2858.6 | 2022.8 | 1363.3 | 980.8 | 786.1 | 699.4 | 668.1 | 653.9 | 652.4 |
| 27.5° | 4085.5 | 3671.8 | 2726.5 | 1778.3 | 1145.7 | 851.5 | 720.7 | 668.1 | 645.4 | 632.6 | 631.2 |
| 30° | 4199.2 | 3715.9 | 2587.1 | 1546.6 | 976.6 | 763.3 | 680.9 | 646.8 | 628.3 | 615.5 | 615.5 |
| 32.5° | 4388.3 | 3789.7 | 2440.8 | 1346.2 | 855.8 | 702.3 | 651.0 | 628.3 | 612.6 | 602.7 | 601.3 |
| 35° | 4666.8 | 3929.1 | 2304.3 | 1179.9 | 769.1 | 658.2 | 625.4 | 608.5 | 597.0 | 591.4 | 591.4 |
| 37.5° | 5072.0 | 4149.4 | 2183.5 | 1060.5 | 716.5 | 628.3 | 601.3 | 588.5 | 581.4 | 581.4 | 581.4 |
| 40° | 5616.4 | 4453.6 | 2085.4 | 980.8 | 686.6 | 607.0 | 582.8 | 572.9 | 568.7 | 570.0 | 570.0 |
| 42.5° | 6288.8 | 4848.8 | 2020.0 | 925.4 | 672.4 | 594.2 | 570.0 | 561.5 | 557.2 | 555.8 | 557.2 |
| 45° | 7055.0 | 5298.0 | 2012.9 | 884.1 | 658.2 | 585.6 | 561.5 | 553.0 | 544.4 | 538.8 | 538.8 |
| 47.5° | 7799.9 | 5754.3 | 2071.2 | 870.0 | 642.5 | 575.7 | 554.4 | 545.8 | 533.1 | 520.3 | 520.3 |
| 50° | 8458.1 | 6142.4 | 2149.3 | 875.6 | 636.9 | 561.5 | 543.0 | 538.8 | 518.8 | 504.6 | 503.2 |
| 52.5° | 8981.2 | 6440.9 | 2213.3 | 892.7 | 642.5 | 551.6 | 528.8 | 530.2 | 508.9 | 493.3 | 491.8 |
| 55° | 9400.5 | 6637.1 | 2196.3 | 909.8 | 655.3 | 545.8 | 516.0 | 518.8 | 501.8 | 486.2 | 486.2 |
| 57.5° | 9583.9 | 6564.6 | 2007.2 | 895.6 | 665.2 | 547.3 | 506.1 | 517.4 | 503.2 | 489.0 | 489.0 |
| 60° | 9190.1 | 5920.6 | 1653.2 | 833.0 | 652.4 | 543.0 | 501.8 | 523.1 | 521.7 | 507.5 | 506.1 |
| 62.5° | 7998.9 | 4767.8 | 1282.2 | 740.6 | 608.5 | 521.7 | 490.4 | 521.7 | 537.4 | 533.1 | 531.6 |
| 65° | 6165.1 | 3396.0 | 979.5 | 641.1 | 548.7 | 486.2 | 460.5 | 489.0 | 510.4 | 516.0 | 514.5 |
| 67.5° | 4001.6 | 2081.1 | 754.8 | 547.3 | 481.9 | 445.0 | 422.2 | 435.0 | 439.3 | 439.3 | 436.4 |
| 70° | 1967.3 | 1120.1 | 601.3 | 460.5 | 413.7 | 400.9 | 388.1 | 380.9 | 373.9 | 368.2 | 368.2 |
| 72.5° | 970.9 | 732.1 | 494.7 | 389.5 | 356.8 | 351.1 | 348.3 | 339.7 | 334.1 | 326.9 | 324.1 |
| 75° | 717.9 | 595.7 | 420.7 | 328.4 | 307.1 | 301.4 | 307.1 | 299.9 | 298.5 | 292.9 | 290.0 |
| 77.5° | 589.9 | 507.5 | 362.5 | 281.4 | 263.0 | 253.1 | 261.6 | 263.0 | 264.4 | 255.8 | 253.1 |
| 80° | 479.0 | 429.3 | 302.8 | 233.1 | 216.0 | 209.0 | 214.6 | 226.1 | 228.8 | 216.0 | 210.4 |
| 82.5° | 345.5 | 351.1 | 244.5 | 182.0 | 167.8 | 162.0 | 173.4 | 187.6 | 190.5 | 172.0 | 167.8 |
| 85° | 290.0 | 292.9 | 187.6 | 129.4 | 115.2 | 106.6 | 125.1 | 139.3 | 149.2 | 130.7 | 126.5 |
| 87.5° | 120.8 | 172.0 | 108.0 | 72.5 | 63.9 | 55.4 | 66.8 | 74.0 | 89.5 | 82.4 | 81.0 |
| 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)