

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: P193747

Luminaire Tested: **GLEON-AF-09-LED-E1-SL4-8030-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193747
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-09-LED-E1-SL4-8030-800-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28474 lumens
Efficiency: N/A
Efficacy: 76.1 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G5

Input Watts (W): 374
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

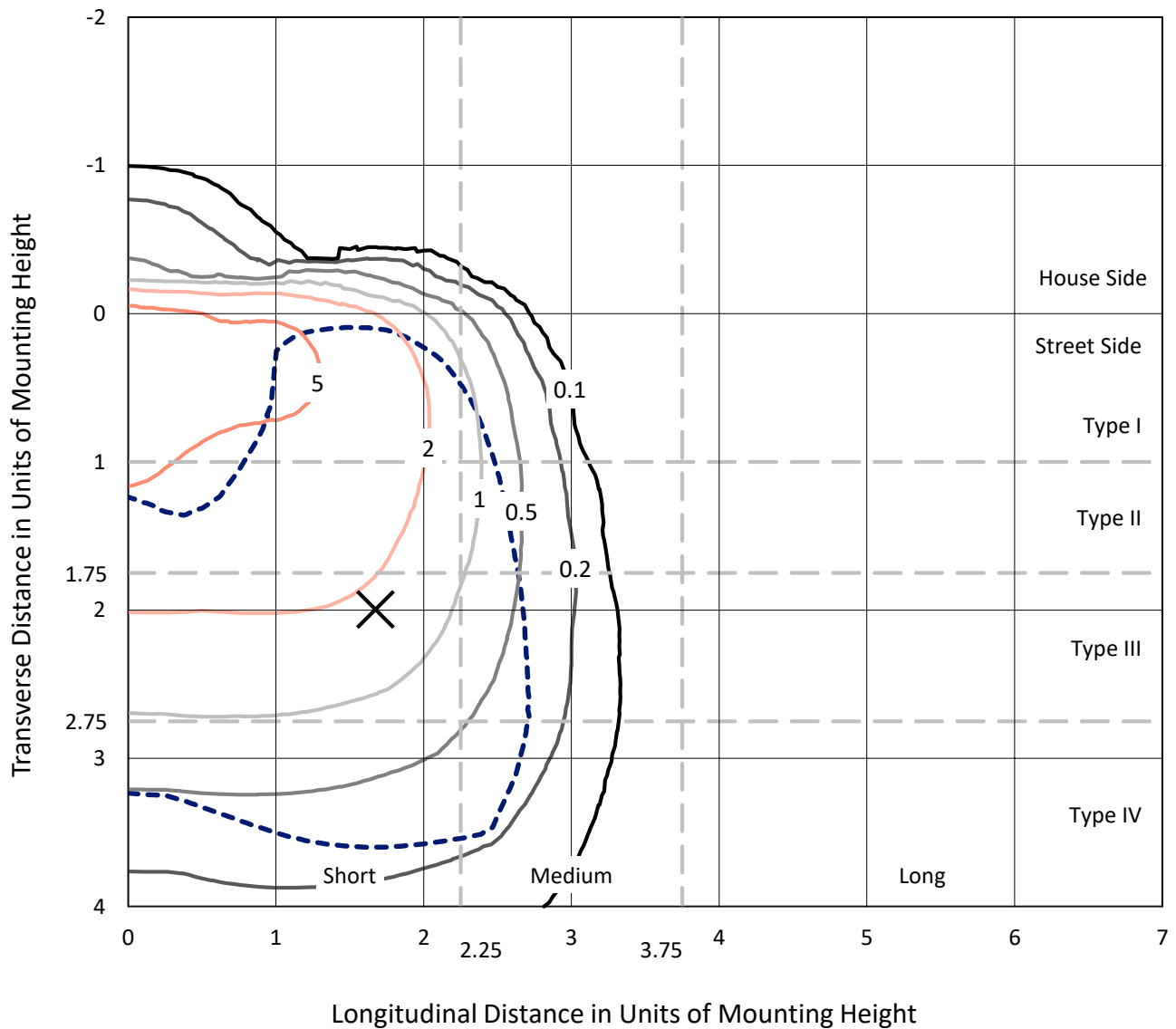


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

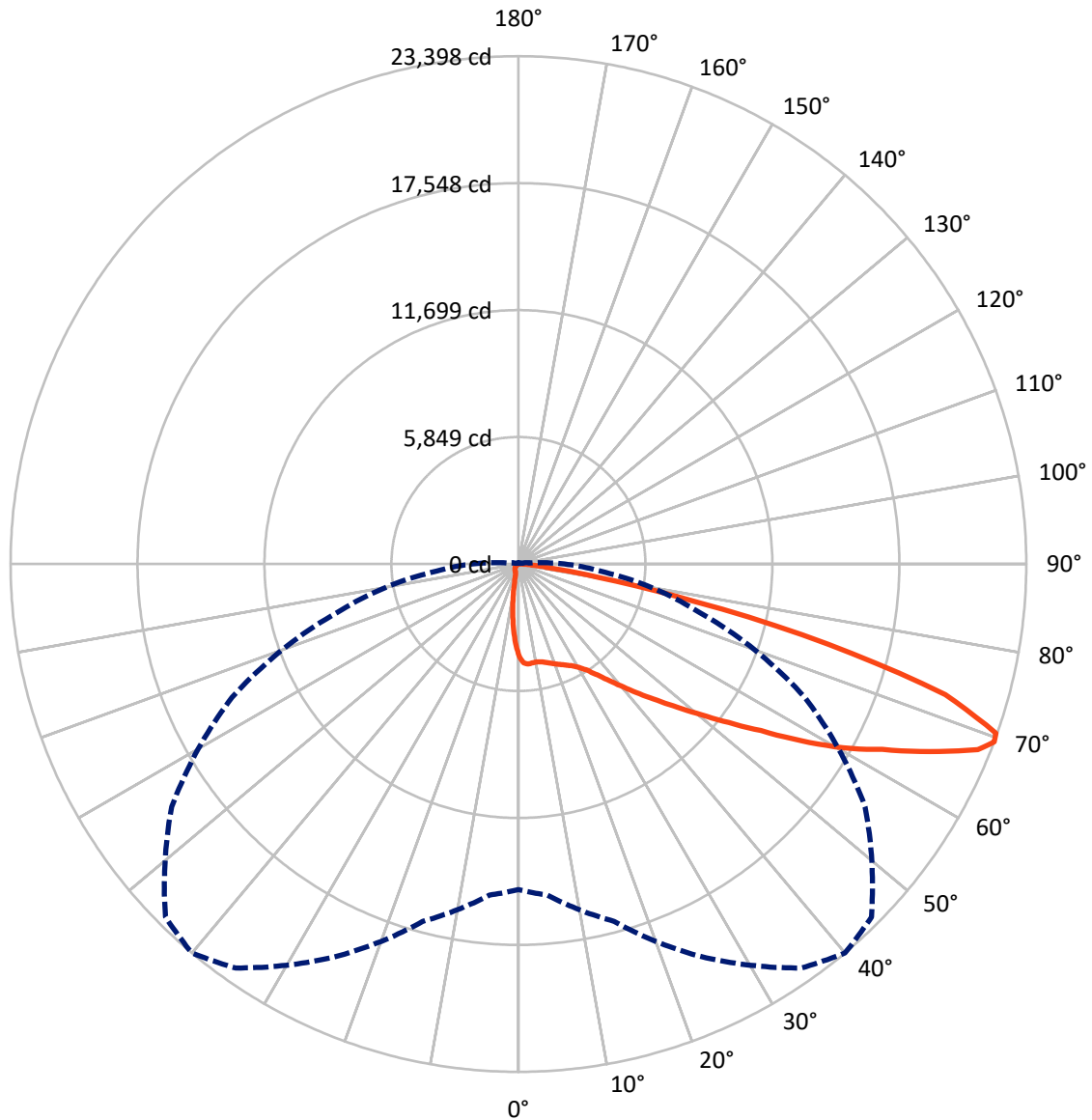


Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1665.9 | 0.0 | 1665.9 |
| | % Fixture | 5.9 | 0.0 | 5.9 |
| Street Side | Lumens | 26808.1 | 0.0 | 26808.1 |
| | % Fixture | 94.1 | 0.0 | 94.1 |
| Total | Lumens | 28474.0 | 0.0 | 28474.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 344.9 | 1.2 |
| 10°-20° | 848.2 | 3.0 |
| 20°-30° | 1428.7 | 5.0 |
| 30°-40° | 2338.9 | 8.2 |
| 40°-50° | 4049.7 | 14.2 |
| 50°-60° | 6378.7 | 22.4 |
| 60°-70° | 8330.3 | 29.3 |
| 70°-80° | 4290.5 | 15.1 |
| 80°-90° | 464.1 | 1.6 |
| 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° | 28474.0 | 100.0 |
| 0°-180° | 28474.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P193747

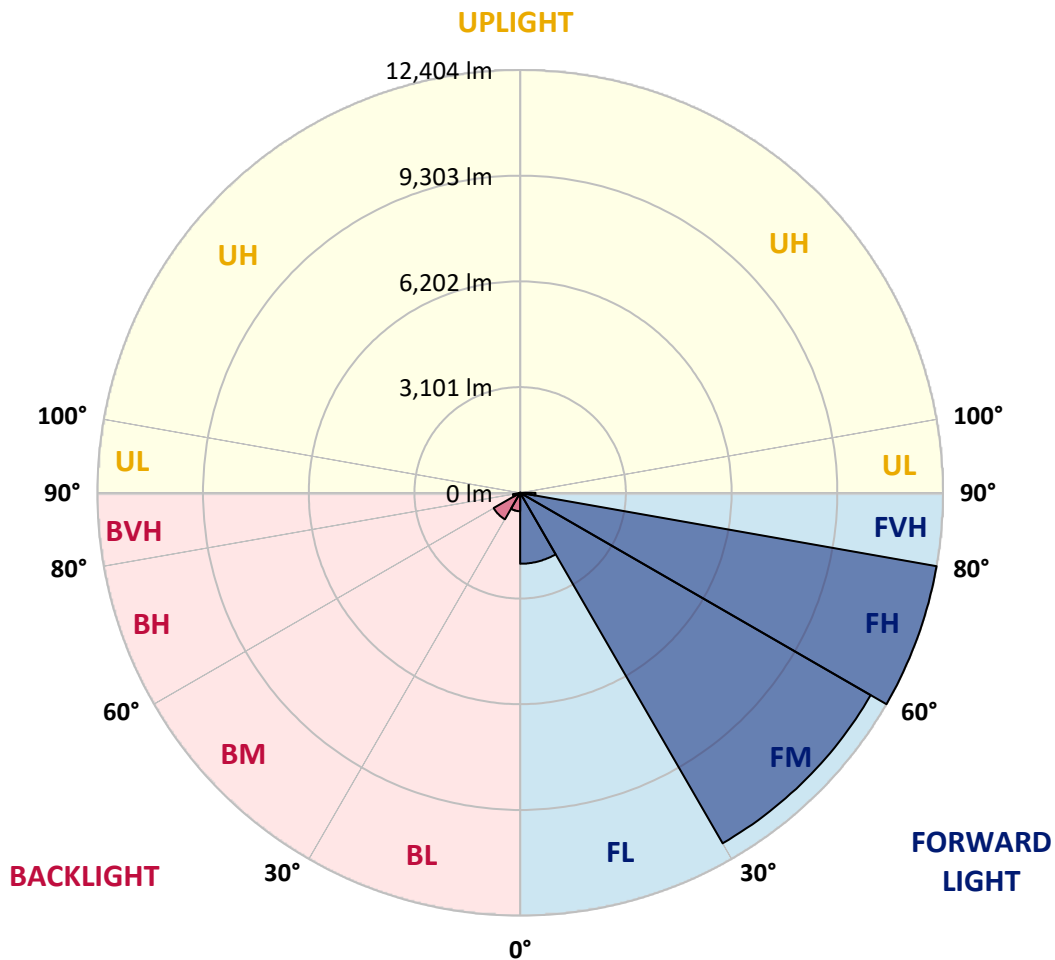
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|--------|
| | | | | B | U | G |
| FL | (0°-30°) | 2082.3 | 7.3 | | | |
| FM | (30°-60°) | 11871.9 | 41.7 | | | |
| FH | (60°-80°) | 12404.4 | 43.6 | | | G5 |
| FVH | (80°-90°) | 449.5 | 1.6 | | | G3/500 |
| BL | (0°-30°) | 539.6 | 1.9 | B2/1000 | | |
| BM | (30°-60°) | 895.4 | 3.1 | B1/1000 | | |
| BH | (60°-80°) | 216.3 | 0.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 14.6 | 0.1 | | | 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





REPORT NUMBER: P193747

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 |
| 2.5° | 4671.1 | 4645.7 | 4630.4 | 4610.1 | 4584.7 | 4562.6 | 4554.2 | 4491.4 | 4432.1 | 4350.8 | 4257.6 |
| 5° | 4757.5 | 4749.1 | 4722.0 | 4694.8 | 4664.3 | 4630.4 | 4611.8 | 4537.2 | 4452.5 | 4333.8 | 4171.1 |
| 7.5° | 4766.0 | 4755.8 | 4722.0 | 4684.7 | 4642.3 | 4601.6 | 4569.4 | 4494.8 | 4416.9 | 4296.5 | 4098.2 |
| 10° | 4752.5 | 4740.6 | 4715.2 | 4674.5 | 4622.0 | 4583.0 | 4550.8 | 4479.6 | 4413.5 | 4305.0 | 4084.7 |
| 12.5° | 4737.2 | 4725.3 | 4713.5 | 4693.1 | 4647.4 | 4620.3 | 4593.1 | 4525.3 | 4466.0 | 4374.5 | 4133.8 |
| 15° | 4752.5 | 4745.7 | 4759.2 | 4750.8 | 4725.3 | 4701.6 | 4674.5 | 4613.5 | 4559.2 | 4483.0 | 4223.7 |
| 17.5° | 4816.9 | 4816.9 | 4859.2 | 4864.3 | 4840.6 | 4806.7 | 4767.7 | 4706.7 | 4660.9 | 4596.5 | 4330.4 |
| 20° | 4967.7 | 4962.6 | 5016.9 | 5027.0 | 4969.4 | 4916.9 | 4859.2 | 4784.7 | 4749.1 | 4708.4 | 4435.5 |
| 22.5° | 5227.0 | 5203.3 | 5235.5 | 5225.3 | 5111.8 | 5030.4 | 4959.2 | 4867.7 | 4849.1 | 4830.4 | 4552.5 |
| 25° | 5564.3 | 5550.7 | 5572.8 | 5472.8 | 5272.8 | 5162.6 | 5077.9 | 4974.5 | 4974.5 | 4993.1 | 4684.7 |
| 27.5° | 6054.1 | 6003.3 | 5928.7 | 5752.4 | 5452.4 | 5311.8 | 5220.2 | 5110.1 | 5138.9 | 5208.4 | 4859.2 |
| 30° | 6555.8 | 6499.9 | 6328.7 | 6057.5 | 5671.1 | 5523.6 | 5416.9 | 5301.6 | 5369.4 | 5496.5 | 5093.1 |
| 32.5° | 7050.7 | 6988.0 | 6745.6 | 6403.3 | 5984.6 | 5837.2 | 5733.8 | 5606.7 | 5720.2 | 5933.8 | 5435.5 |
| 35° | 7530.4 | 7474.4 | 7194.8 | 6791.4 | 6401.6 | 6279.5 | 6184.6 | 6074.5 | 6220.2 | 6518.5 | 5918.5 |
| 37.5° | 8069.3 | 8008.3 | 7667.7 | 7230.4 | 6908.4 | 6820.2 | 6750.7 | 6640.6 | 6894.8 | 7332.1 | 6591.4 |
| 40° | 8732.0 | 8628.7 | 8169.3 | 7733.8 | 7494.8 | 7452.4 | 7405.0 | 7389.7 | 7784.6 | 8389.7 | 7488.0 |
| 42.5° | 9491.4 | 9321.9 | 8694.8 | 8264.3 | 8138.8 | 8169.3 | 8157.5 | 8225.3 | 8898.1 | 9704.9 | 8579.5 |
| 45° | 10250.7 | 10032.0 | 9279.5 | 8830.4 | 8847.3 | 8954.1 | 9020.2 | 9291.4 | 10293.0 | 11213.4 | 9754.1 |
| 47.5° | 10894.7 | 10679.5 | 9840.5 | 9442.2 | 9645.6 | 9855.8 | 10035.4 | 10549.0 | 11726.9 | 12698.1 | 10667.6 |
| 50° | 11445.6 | 11242.2 | 10435.4 | 10115.1 | 10572.7 | 10911.7 | 11203.2 | 11964.2 | 13269.3 | 13828.6 | 11308.3 |
| 52.5° | 11896.4 | 11760.8 | 11052.3 | 10886.2 | 11632.0 | 12128.6 | 12555.7 | 13467.6 | 14635.3 | 14747.2 | 11806.6 |
| 55° | 12335.4 | 12238.8 | 11715.0 | 11803.2 | 12876.0 | 13552.3 | 14093.0 | 15062.4 | 15811.6 | 15513.3 | 12284.5 |
| 57.5° | 12840.5 | 12752.3 | 12471.0 | 12965.9 | 14511.6 | 15362.4 | 15952.3 | 16476.0 | 16847.2 | 16296.3 | 12735.4 |
| 60° | 13355.7 | 13304.8 | 13311.6 | 14257.4 | 16389.5 | 17206.5 | 17531.9 | 17667.5 | 17864.1 | 17033.6 | 12760.8 |
| 62.5° | 13847.2 | 13943.8 | 14272.6 | 15694.6 | 18187.8 | 18814.9 | 18979.3 | 19113.2 | 18882.7 | 17150.5 | 11789.6 |
| 65° | 14679.4 | 14837.0 | 15621.8 | 17618.3 | 20165.7 | 20836.9 | 21006.4 | 20547.1 | 19043.7 | 15638.7 | 9589.7 |
| 67.5° | 15086.2 | 15374.3 | 16774.3 | 19411.5 | 22084.4 | 22830.1 | 22767.4 | 20640.3 | 17089.5 | 11925.2 | 6154.1 |
| 69° | 15001.4 | 15308.2 | 17040.4 | 19960.7 | 22721.6 | 23397.9 | 22999.6 | 19499.7 | 14559.1 | 8638.8 | 3777.9 |
| 70° | 14665.8 | 14976.0 | 16903.1 | 19940.3 | 22803.0 | 23338.6 | 22569.1 | 18091.2 | 12310.0 | 6316.8 | 2362.7 |
| 72.5° | 12247.2 | 12515.0 | 15006.5 | 18023.4 | 21006.4 | 20570.8 | 18881.0 | 12533.7 | 5998.2 | 1720.3 | 532.2 |
| 75° | 7538.8 | 7688.0 | 10767.6 | 13577.7 | 15865.8 | 14747.2 | 12579.4 | 6235.5 | 1788.1 | 486.4 | 294.9 |
| 77.5° | 3983.0 | 4050.8 | 5894.8 | 8003.2 | 10057.4 | 8321.9 | 6447.3 | 2432.2 | 823.7 | 305.1 | 213.6 |
| 80° | 2354.2 | 2405.0 | 3174.5 | 3659.3 | 4352.5 | 3635.5 | 2577.9 | 1493.2 | 589.8 | 191.5 | 189.8 |
| 82.5° | 1347.4 | 1379.6 | 2301.7 | 2033.9 | 1715.2 | 1464.4 | 1283.0 | 1415.2 | 354.2 | 128.8 | 196.6 |
| 85° | 494.9 | 501.7 | 1294.9 | 1547.4 | 1020.3 | 606.8 | 637.3 | 1172.9 | 94.9 | 81.4 | 154.2 |
| 87.5° | 230.5 | 225.4 | 666.1 | 947.4 | 596.6 | 384.7 | 496.6 | 257.6 | 37.3 | 52.5 | 42.4 |
| 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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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 | 4254.2 |
| 2.5° | 4203.3 | 4140.6 | 4027.0 | 3910.1 | 3791.5 | 3699.9 | 3610.1 | 3538.9 | 3515.2 | 3471.1 | 3474.5 |
| 5° | 4074.5 | 3959.3 | 3722.0 | 3481.3 | 3230.5 | 3023.7 | 2828.8 | 2671.1 | 2594.9 | 2516.9 | 2516.9 |
| 7.5° | 3962.6 | 3794.8 | 3423.7 | 3032.1 | 2627.1 | 2286.4 | 1979.6 | 1749.1 | 1622.0 | 1520.3 | 1518.6 |
| 10° | 3920.3 | 3693.2 | 3174.5 | 2613.5 | 2049.1 | 1584.7 | 1220.3 | 986.4 | 866.1 | 788.1 | 784.7 |
| 12.5° | 3938.9 | 3657.6 | 2983.0 | 2227.1 | 1518.6 | 1018.6 | 706.8 | 555.9 | 505.1 | 481.3 | 481.3 |
| 15° | 3993.1 | 3647.4 | 2791.5 | 1849.1 | 1072.9 | 637.3 | 469.5 | 428.8 | 425.4 | 425.4 | 425.4 |
| 17.5° | 4059.3 | 3650.8 | 2594.9 | 1481.3 | 730.5 | 455.9 | 405.1 | 400.0 | 403.4 | 403.4 | 403.4 |
| 20° | 4127.0 | 3652.5 | 2383.0 | 1140.7 | 515.2 | 396.6 | 381.3 | 379.7 | 383.0 | 383.0 | 384.7 |
| 22.5° | 4210.1 | 3661.0 | 2171.1 | 852.5 | 425.4 | 374.6 | 362.7 | 362.7 | 364.4 | 364.4 | 362.7 |
| 25° | 4305.0 | 3677.9 | 1950.8 | 632.2 | 388.1 | 359.3 | 349.1 | 347.5 | 349.1 | 347.5 | 345.8 |
| 27.5° | 4423.7 | 3701.6 | 1705.1 | 494.9 | 371.2 | 344.1 | 335.6 | 335.6 | 333.9 | 332.2 | 330.5 |
| 30° | 4572.8 | 3728.7 | 1428.8 | 420.3 | 354.2 | 330.5 | 322.0 | 320.3 | 318.6 | 315.2 | 315.2 |
| 32.5° | 4799.9 | 3788.1 | 1155.9 | 381.3 | 335.6 | 311.9 | 305.1 | 305.1 | 301.7 | 298.3 | 296.6 |
| 35° | 5149.1 | 3905.0 | 911.8 | 357.6 | 315.2 | 291.5 | 283.0 | 283.0 | 279.7 | 278.0 | 276.3 |
| 37.5° | 5632.1 | 4083.0 | 708.5 | 335.6 | 294.9 | 269.5 | 261.0 | 259.3 | 255.9 | 252.5 | 250.8 |
| 40° | 6274.5 | 4303.3 | 557.6 | 315.2 | 274.6 | 247.5 | 240.7 | 237.3 | 230.5 | 225.4 | 225.4 |
| 42.5° | 7081.2 | 4554.2 | 452.5 | 293.2 | 250.8 | 227.1 | 222.0 | 216.9 | 205.1 | 200.0 | 198.3 |
| 45° | 7925.3 | 4779.6 | 383.0 | 267.8 | 227.1 | 206.8 | 203.4 | 194.9 | 179.7 | 174.6 | 174.6 |
| 47.5° | 8533.7 | 4832.1 | 337.3 | 244.1 | 205.1 | 184.7 | 183.0 | 167.8 | 154.2 | 150.8 | 149.1 |
| 50° | 8913.4 | 4728.7 | 300.0 | 220.3 | 184.7 | 164.4 | 159.3 | 140.7 | 132.2 | 128.8 | 127.1 |
| 52.5° | 9169.3 | 4544.0 | 269.5 | 200.0 | 166.1 | 145.8 | 133.9 | 120.3 | 113.6 | 110.2 | 110.2 |
| 55° | 9374.4 | 4283.0 | 239.0 | 181.4 | 150.8 | 130.5 | 113.6 | 103.4 | 96.6 | 93.2 | 93.2 |
| 57.5° | 9432.0 | 3928.7 | 208.5 | 166.1 | 135.6 | 115.3 | 96.6 | 89.8 | 81.4 | 79.7 | 79.7 |
| 60° | 9013.4 | 3289.8 | 184.7 | 147.5 | 122.0 | 100.0 | 84.7 | 76.3 | 67.8 | 66.1 | 64.4 |
| 62.5° | 7910.0 | 2545.7 | 162.7 | 130.5 | 106.8 | 86.4 | 72.9 | 62.7 | 55.9 | 55.9 | 55.9 |
| 65° | 6033.8 | 1706.7 | 142.4 | 113.6 | 93.2 | 72.9 | 62.7 | 50.8 | 47.5 | 47.5 | 49.2 |
| 67.5° | 3611.8 | 928.8 | 122.0 | 96.6 | 79.7 | 61.0 | 52.5 | 44.1 | 42.4 | 44.1 | 44.1 |
| 69° | 2116.9 | 545.8 | 110.2 | 86.4 | 69.5 | 54.2 | 45.8 | 39.0 | 42.4 | 44.1 | 44.1 |
| 70° | 1306.8 | 367.8 | 101.7 | 78.0 | 62.7 | 49.2 | 42.4 | 37.3 | 40.7 | 42.4 | 42.4 |
| 72.5° | 364.4 | 189.8 | 81.4 | 61.0 | 50.8 | 40.7 | 33.9 | 33.9 | 39.0 | 40.7 | 40.7 |
| 75° | 237.3 | 140.7 | 62.7 | 45.8 | 39.0 | 32.2 | 28.8 | 32.2 | 37.3 | 39.0 | 39.0 |
| 77.5° | 196.6 | 115.3 | 50.8 | 37.3 | 32.2 | 30.5 | 27.1 | 28.8 | 33.9 | 35.6 | 35.6 |
| 80° | 179.7 | 81.4 | 40.7 | 33.9 | 28.8 | 27.1 | 25.4 | 23.7 | 30.5 | 32.2 | 32.2 |
| 82.5° | 171.2 | 64.4 | 35.6 | 30.5 | 27.1 | 23.7 | 22.0 | 23.7 | 27.1 | 28.8 | 30.5 |
| 85° | 106.8 | 42.4 | 32.2 | 28.8 | 23.7 | 22.0 | 22.0 | 22.0 | 25.4 | 27.1 | 27.1 |
| 87.5° | 39.0 | 33.9 | 28.8 | 23.7 | 20.3 | 20.3 | 20.3 | 20.3 | 22.0 | 25.4 | 25.4 |
| 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)