

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: P269238

Luminaire Tested: **GLEON-AF-04-LED-E1-SL3-7027-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P269238
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-04-LED-E1-SL3-7027-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22886.2 lumens
Efficiency: N/A
Efficacy: 88.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 258
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

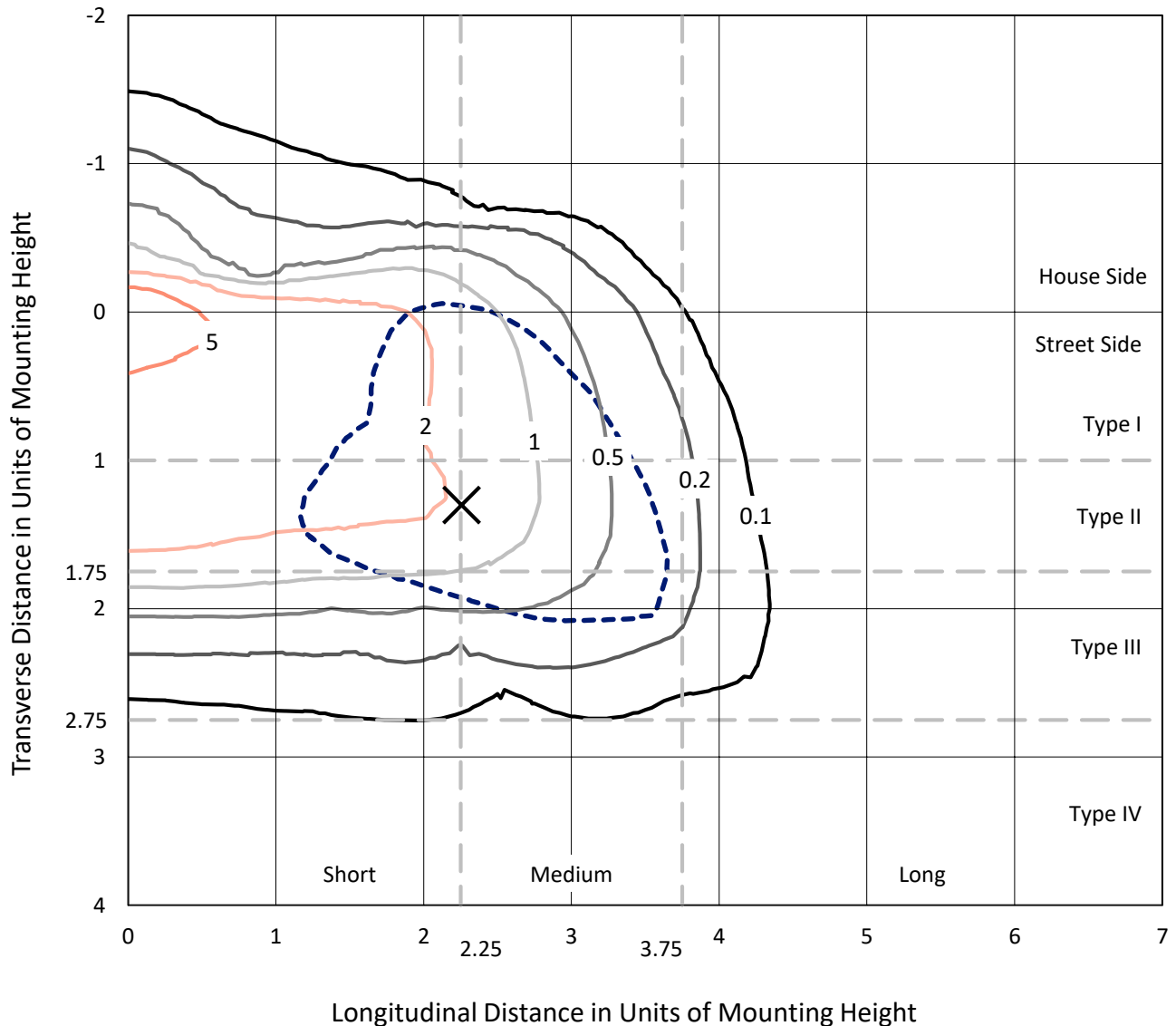


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

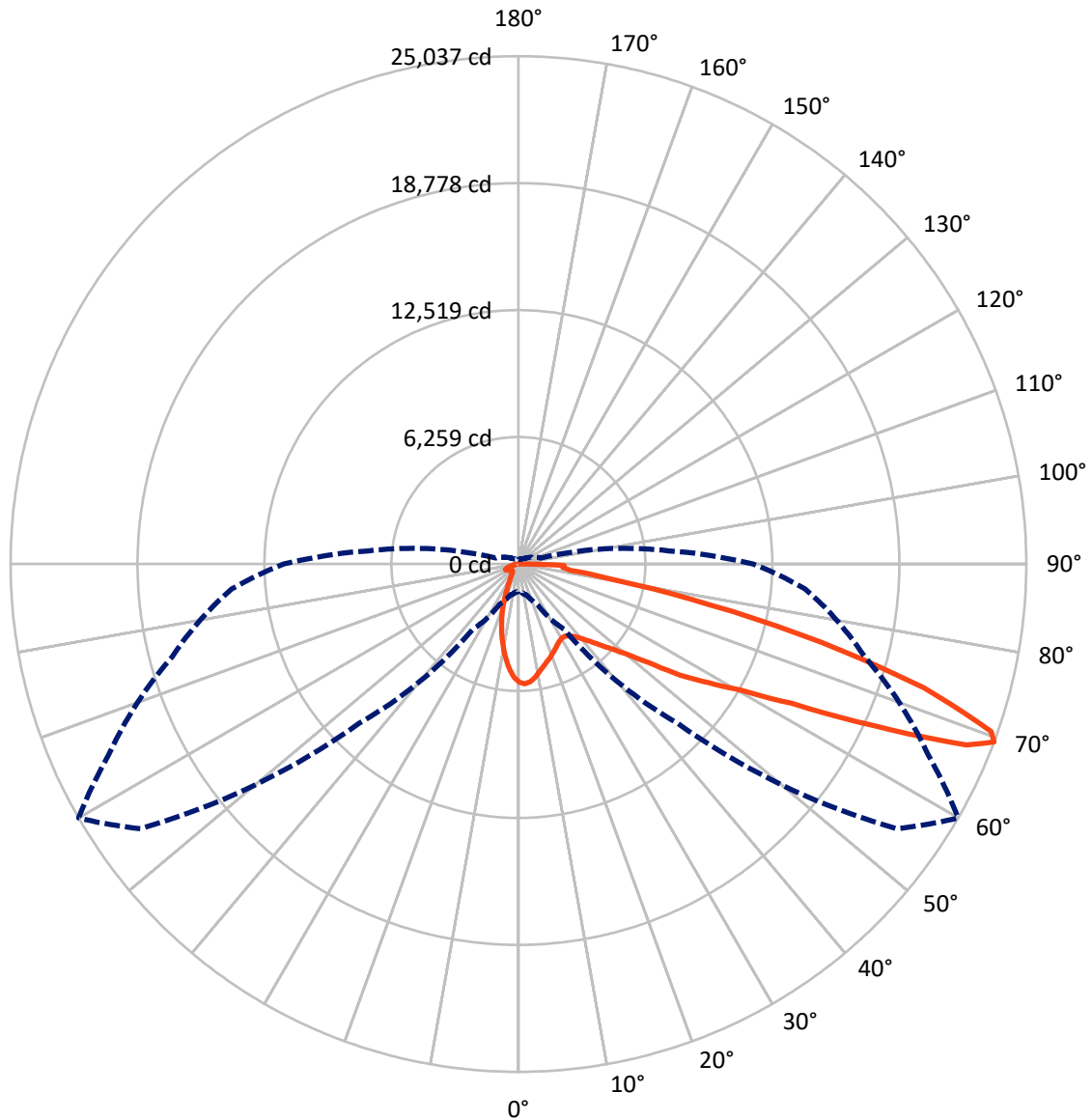


Based on 25 foot mounting height. Maximum calculated value = 9.3 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3256.0 | 0.0 | 3256.0 |
| | % Fixture | 14.2 | 0.0 | 14.2 |
| Street Side | Lumens | 19630.2 | 0.0 | 19630.2 |
| | % Fixture | 85.8 | 0.0 | 85.8 |
| Total | Lumens | 22886.2 | 0.0 | 22886.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 493.1 | 2.2 |
| 10°-20° | 1050.6 | 4.6 |
| 20°-30° | 1338.6 | 5.8 |
| 30°-40° | 1840.3 | 8.0 |
| 40°-50° | 2986.0 | 13.0 |
| 50°-60° | 4788.8 | 20.9 |
| 60°-70° | 6373.5 | 27.8 |
| 70°-80° | 3441.2 | 15.0 |
| 80°-90° | 574.2 | 2.5 |
| 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° | 22886.2 | 100.0 |
| 0°-180° | 22886.2 | 100.0 |

Coefficient of Utilization



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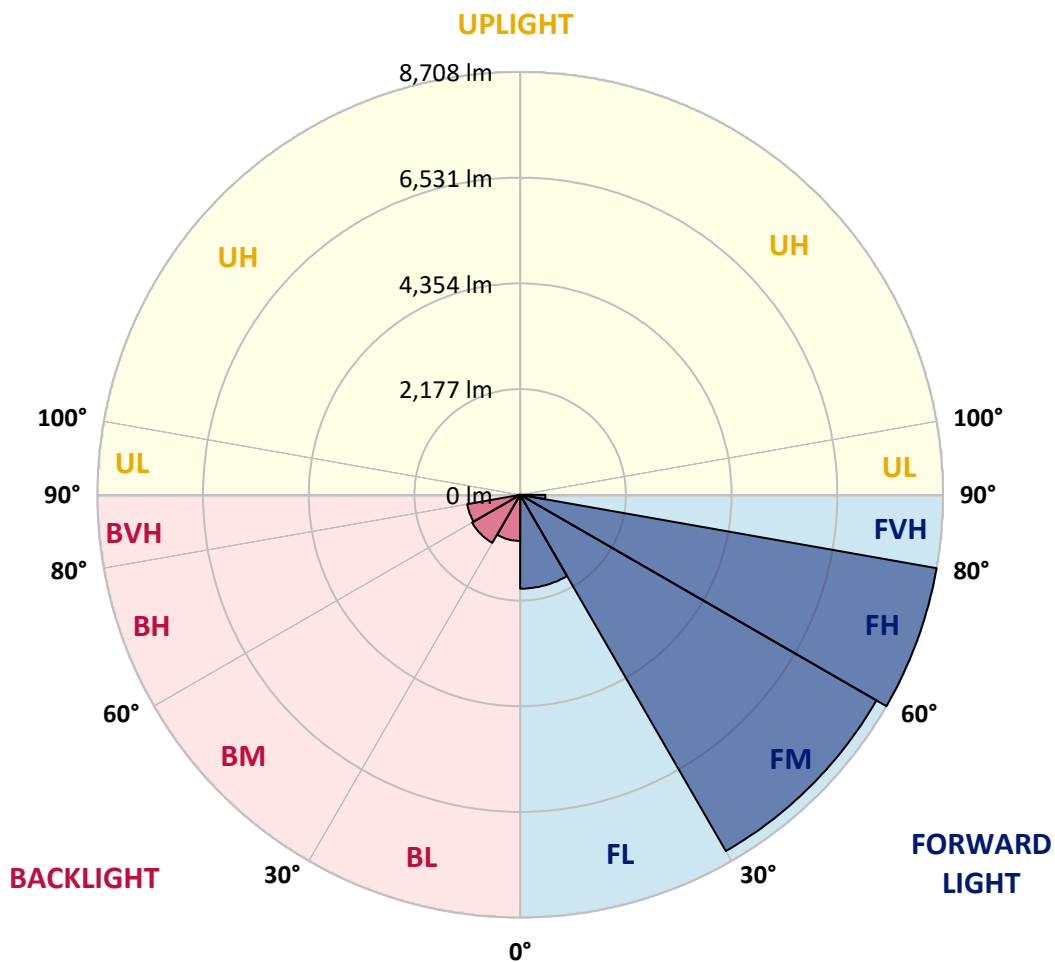
CATALOG NUMBER: GLEON-AF-04-LED-E1-SL3-7027-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1932.4 | 8.4 | | | |
| FM (30°-60°) | 8471.1 | 37.0 | | | |
| FH (60°-80°) | 8707.8 | 38.0 | | | G4/12000 |
| FVH (80°-90°) | 518.9 | 2.3 | | | G4/750 |
| BL (0°-30°) | 949.9 | 4.2 | B2/1000 | | |
| BM (30°-60°) | 1143.9 | 5.0 | B2/2500 | | |
| BH (60°-80°) | 1106.9 | 4.8 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 55.3 | 0.2 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 60° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 |
| 2.5° | 5951.1 | 5964.3 | 5958.8 | 5955.6 | 5965.6 | 5950.1 | 5917.9 | 5908.1 | 5892.5 | 5856.1 | 5794.2 |
| 5° | 5727.9 | 5767.6 | 5765.4 | 5795.2 | 5845.0 | 5858.2 | 5844.0 | 5846.1 | 5817.3 | 5772.1 | 5669.3 |
| 7.5° | 5342.0 | 5358.6 | 5367.5 | 5432.6 | 5523.3 | 5596.4 | 5658.2 | 5678.0 | 5664.8 | 5626.2 | 5493.4 |
| 10° | 4944.0 | 4957.2 | 4978.2 | 5054.6 | 5169.6 | 5270.1 | 5387.3 | 5454.8 | 5483.6 | 5476.8 | 5328.7 |
| 12.5° | 4602.3 | 4615.6 | 4643.2 | 4729.5 | 4866.6 | 4990.4 | 5160.8 | 5244.8 | 5313.3 | 5354.2 | 5195.0 |
| 15° | 4296.1 | 4324.9 | 4351.4 | 4450.9 | 4604.6 | 4767.1 | 4959.5 | 5065.6 | 5171.7 | 5263.4 | 5076.6 |
| 17.5° | 4057.4 | 4086.1 | 4101.7 | 4192.2 | 4355.8 | 4554.9 | 4780.4 | 4905.4 | 5038.0 | 5188.3 | 4959.5 |
| 20° | 3919.1 | 3932.4 | 3925.9 | 3976.6 | 4123.7 | 4334.9 | 4602.3 | 4747.3 | 4907.5 | 5117.6 | 4842.3 |
| 22.5° | 3880.5 | 3881.5 | 3857.2 | 3851.8 | 3946.9 | 4124.7 | 4412.3 | 4588.1 | 4784.8 | 5071.1 | 4741.7 |
| 25° | 3974.5 | 3971.0 | 3904.8 | 3850.7 | 3860.6 | 3964.5 | 4228.7 | 4433.2 | 4682.0 | 5061.2 | 4664.3 |
| 27.5° | 4183.3 | 4193.3 | 4095.0 | 3993.2 | 3892.6 | 3889.3 | 4089.4 | 4304.9 | 4598.0 | 5106.5 | 4631.1 |
| 30° | 4476.3 | 4493.0 | 4388.0 | 4258.5 | 4069.5 | 3913.6 | 4035.2 | 4228.7 | 4546.1 | 5200.5 | 4625.6 |
| 32.5° | 4796.9 | 4814.6 | 4735.1 | 4599.1 | 4351.4 | 4064.0 | 4072.8 | 4235.4 | 4543.7 | 5332.0 | 4663.2 |
| 35° | 5138.6 | 5158.4 | 5117.6 | 5002.7 | 4727.3 | 4341.5 | 4216.6 | 4342.5 | 4615.6 | 5533.3 | 4763.8 |
| 37.5° | 5519.9 | 5550.9 | 5561.9 | 5452.5 | 5158.4 | 4707.4 | 4452.0 | 4546.1 | 4778.2 | 5812.9 | 4948.5 |
| 40° | 6069.5 | 6112.5 | 6109.3 | 5952.3 | 5652.7 | 5201.5 | 4815.8 | 4840.1 | 5031.3 | 6186.6 | 5243.5 |
| 42.5° | 7121.9 | 7130.7 | 6855.4 | 6513.9 | 6196.6 | 5721.1 | 5244.8 | 5224.8 | 5380.7 | 6659.9 | 5678.0 |
| 45° | 8460.7 | 8424.2 | 7811.8 | 7151.8 | 6764.9 | 6318.1 | 5803.1 | 5705.8 | 5824.0 | 7236.8 | 6222.0 |
| 47.5° | 9571.8 | 9487.8 | 8713.9 | 7802.9 | 7366.2 | 6967.2 | 6458.6 | 6288.3 | 6353.5 | 7891.4 | 6925.2 |
| 50° | 9957.6 | 9894.7 | 9253.4 | 8344.6 | 7935.5 | 7758.8 | 7265.6 | 7024.7 | 7042.4 | 8671.9 | 7748.8 |
| 52.5° | 9874.7 | 9865.8 | 9438.0 | 8701.7 | 8468.5 | 8590.1 | 8408.8 | 8082.6 | 7910.1 | 9538.7 | 8637.7 |
| 55° | 9679.1 | 9697.8 | 9543.1 | 9117.4 | 9077.6 | 9392.7 | 9902.3 | 9661.4 | 9125.2 | 10413.2 | 9556.3 |
| 57.5° | 8999.1 | 9047.8 | 9388.2 | 9640.3 | 10058.2 | 10527.0 | 11105.1 | 11036.7 | 10433.0 | 11358.3 | 10648.6 |
| 60° | 7250.2 | 7362.9 | 8276.2 | 9538.7 | 11067.6 | 12533.5 | 12792.3 | 12633.0 | 11781.8 | 12531.4 | 12091.4 |
| 62.5° | 5079.9 | 5197.1 | 6282.8 | 8258.4 | 10901.8 | 14799.9 | 15808.2 | 15121.7 | 13718.6 | 14259.3 | 13958.7 |
| 65° | 2719.7 | 2776.0 | 3605.2 | 5730.1 | 9203.7 | 15267.6 | 20215.9 | 19171.3 | 16785.5 | 16389.7 | 15556.0 |
| 67.5° | 1500.2 | 1531.3 | 1848.4 | 2893.3 | 5894.8 | 13444.6 | 23024.1 | 23813.3 | 20618.3 | 17808.1 | 15265.3 |
| 69° | 1356.5 | 1385.2 | 1593.1 | 2191.1 | 3944.5 | 11116.3 | 22749.8 | 25037.3 | 22298.8 | 17667.8 | 14190.7 |
| 70° | 1326.6 | 1353.1 | 1540.1 | 2019.7 | 3192.8 | 9162.7 | 21831.1 | 24724.4 | 22699.0 | 17164.6 | 13253.2 |
| 72.5° | 1193.9 | 1222.8 | 1404.1 | 1814.1 | 2728.5 | 4568.2 | 17292.9 | 20904.7 | 20608.5 | 14882.8 | 10052.8 |
| 75° | 1113.3 | 1139.8 | 1447.2 | 1776.6 | 2612.5 | 2890.9 | 11400.4 | 15406.9 | 15149.2 | 10410.8 | 5420.6 |
| 77.5° | 476.6 | 474.2 | 671.0 | 1503.6 | 2651.1 | 2799.3 | 6125.8 | 9624.9 | 8781.3 | 4449.8 | 1556.7 |
| 80° | 318.4 | 312.9 | 318.4 | 442.2 | 2431.2 | 2814.7 | 3209.5 | 4885.4 | 3690.2 | 1134.3 | 767.2 |
| 82.5° | 274.2 | 269.8 | 279.7 | 269.8 | 854.6 | 3212.7 | 2728.5 | 2598.0 | 1754.5 | 644.5 | 380.3 |
| 85° | 184.6 | 176.8 | 241.0 | 242.2 | 403.5 | 2854.5 | 3073.5 | 2194.5 | 1419.5 | 382.5 | 187.9 |
| 87.5° | 88.5 | 86.2 | 140.4 | 171.3 | 236.7 | 1159.7 | 3448.2 | 2248.6 | 1431.7 | 195.7 | 89.6 |
| 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° | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 | 5831.7 |
| 2.5° | 5775.4 | 5730.1 | 5685.8 | 5632.7 | 5577.4 | 5515.6 | 5484.6 | 5453.7 | 5446.0 | 5437.1 | 5406.1 |
| 5° | 5616.2 | 5552.1 | 5441.6 | 5319.9 | 5191.7 | 5066.7 | 4971.6 | 4911.9 | 4866.6 | 4843.4 | 4802.5 |
| 7.5° | 5410.5 | 5316.6 | 5123.2 | 4913.0 | 4697.4 | 4500.7 | 4330.4 | 4223.2 | 4121.5 | 4074.0 | 4019.7 |
| 10° | 5214.8 | 5074.4 | 4773.8 | 4464.1 | 4154.7 | 3857.2 | 3577.5 | 3379.7 | 3203.9 | 3105.5 | 3035.8 |
| 12.5° | 5046.8 | 4854.4 | 4437.6 | 4018.7 | 3594.1 | 3170.7 | 2751.7 | 2422.3 | 2146.9 | 2002.1 | 1928.0 |
| 15° | 4883.1 | 4651.1 | 4118.2 | 3586.5 | 3041.3 | 2465.4 | 1914.7 | 1541.1 | 1313.4 | 1222.8 | 1191.8 |
| 17.5° | 4735.1 | 4437.6 | 3797.6 | 3150.9 | 2470.9 | 1774.4 | 1286.8 | 1081.2 | 993.9 | 964.1 | 954.1 |
| 20° | 4574.8 | 4222.0 | 3464.8 | 2695.4 | 1876.1 | 1240.4 | 1004.9 | 914.2 | 878.9 | 870.1 | 865.6 |
| 22.5° | 4420.0 | 4009.9 | 3146.4 | 2207.8 | 1347.6 | 957.5 | 863.5 | 825.8 | 820.3 | 828.1 | 828.1 |
| 25° | 4288.4 | 3819.7 | 2802.5 | 1698.2 | 989.5 | 805.9 | 772.8 | 763.9 | 784.8 | 813.7 | 819.3 |
| 27.5° | 4190.1 | 3663.7 | 2436.7 | 1253.7 | 788.3 | 700.9 | 699.8 | 714.2 | 766.2 | 821.4 | 832.5 |
| 30° | 4122.6 | 3515.6 | 2045.3 | 904.4 | 661.2 | 616.9 | 634.7 | 665.6 | 741.8 | 820.3 | 841.4 |
| 32.5° | 4088.2 | 3406.3 | 1637.3 | 699.8 | 566.0 | 541.7 | 571.6 | 609.1 | 684.2 | 757.4 | 784.8 |
| 35° | 4114.9 | 3325.4 | 1252.5 | 583.7 | 499.6 | 481.0 | 511.9 | 548.3 | 592.6 | 623.6 | 644.5 |
| 37.5° | 4214.4 | 3293.5 | 945.2 | 523.0 | 454.5 | 436.7 | 461.0 | 482.0 | 499.6 | 508.5 | 518.5 |
| 40° | 4428.9 | 3327.7 | 757.4 | 491.9 | 428.9 | 406.8 | 416.9 | 424.4 | 435.6 | 444.4 | 448.9 |
| 42.5° | 4744.9 | 3430.4 | 678.8 | 479.9 | 415.6 | 383.7 | 381.4 | 384.7 | 399.0 | 415.6 | 419.0 |
| 45° | 5187.3 | 3611.8 | 673.3 | 487.5 | 409.1 | 364.8 | 354.9 | 359.3 | 381.4 | 406.8 | 411.2 |
| 47.5° | 5752.1 | 3888.3 | 717.4 | 510.7 | 414.6 | 354.9 | 338.3 | 343.8 | 371.4 | 405.8 | 411.2 |
| 50° | 6436.4 | 4274.0 | 791.5 | 545.0 | 438.9 | 357.0 | 332.7 | 336.1 | 364.8 | 402.4 | 407.9 |
| 52.5° | 7244.7 | 4821.3 | 872.3 | 578.1 | 464.3 | 371.4 | 337.3 | 329.5 | 356.0 | 389.1 | 395.9 |
| 55° | 8143.5 | 5523.3 | 955.2 | 608.1 | 477.5 | 389.1 | 346.0 | 320.6 | 339.4 | 367.0 | 372.5 |
| 57.5° | 9246.8 | 6505.0 | 1098.8 | 636.8 | 486.4 | 401.4 | 354.9 | 311.7 | 318.4 | 338.3 | 342.8 |
| 60° | 10740.3 | 7893.5 | 1352.0 | 684.2 | 506.4 | 405.8 | 353.8 | 304.0 | 297.3 | 308.5 | 310.6 |
| 62.5° | 12530.3 | 9401.5 | 1563.2 | 744.1 | 539.5 | 409.1 | 347.1 | 298.4 | 279.7 | 279.7 | 281.9 |
| 65° | 13592.7 | 9805.1 | 1446.0 | 793.8 | 567.1 | 405.8 | 339.4 | 292.9 | 266.4 | 254.3 | 255.4 |
| 67.5° | 12691.7 | 8623.3 | 1239.3 | 803.8 | 566.0 | 390.3 | 327.3 | 283.1 | 253.1 | 234.4 | 233.3 |
| 69° | 11563.0 | 7440.3 | 1146.4 | 777.3 | 539.5 | 370.3 | 311.7 | 271.9 | 243.3 | 223.3 | 222.2 |
| 70° | 10653.0 | 6718.5 | 1085.6 | 748.5 | 510.7 | 356.0 | 299.7 | 262.0 | 235.4 | 216.8 | 214.4 |
| 72.5° | 7745.5 | 4402.2 | 927.6 | 643.5 | 421.2 | 298.4 | 258.7 | 230.0 | 210.1 | 199.1 | 196.8 |
| 75° | 3870.4 | 2099.3 | 752.9 | 521.8 | 322.9 | 238.8 | 212.3 | 192.3 | 182.4 | 180.2 | 179.1 |
| 77.5° | 1271.5 | 961.8 | 538.4 | 389.1 | 239.8 | 186.8 | 171.3 | 156.9 | 154.8 | 161.4 | 159.2 |
| 80° | 698.7 | 559.5 | 341.6 | 257.6 | 163.6 | 137.1 | 134.8 | 127.1 | 130.4 | 141.6 | 139.2 |
| 82.5° | 356.0 | 290.7 | 211.1 | 154.8 | 110.5 | 98.4 | 107.3 | 102.9 | 107.3 | 117.1 | 116.2 |
| 85° | 175.8 | 159.2 | 133.8 | 94.0 | 72.9 | 63.1 | 76.3 | 79.6 | 81.8 | 89.6 | 89.6 |
| 87.5° | 101.7 | 94.0 | 70.7 | 44.2 | 36.6 | 33.1 | 44.2 | 43.1 | 50.8 | 55.2 | 54.2 |
| 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)