

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: P191927

Luminaire Tested: **GLEON-AF-09-LED-E1-SL3-7050-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191927
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24289)
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-SL3-7050-800-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36730 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - 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

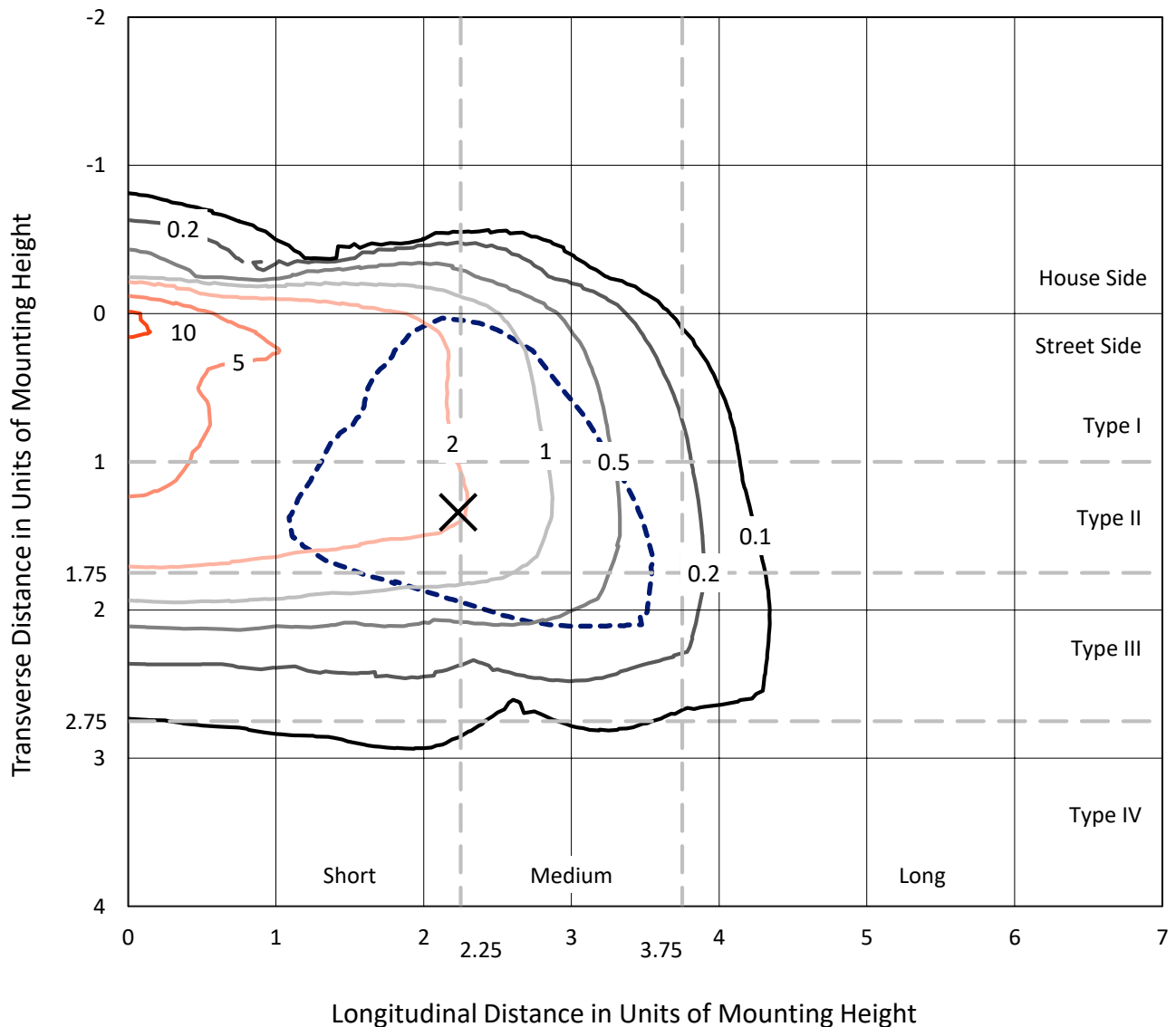


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

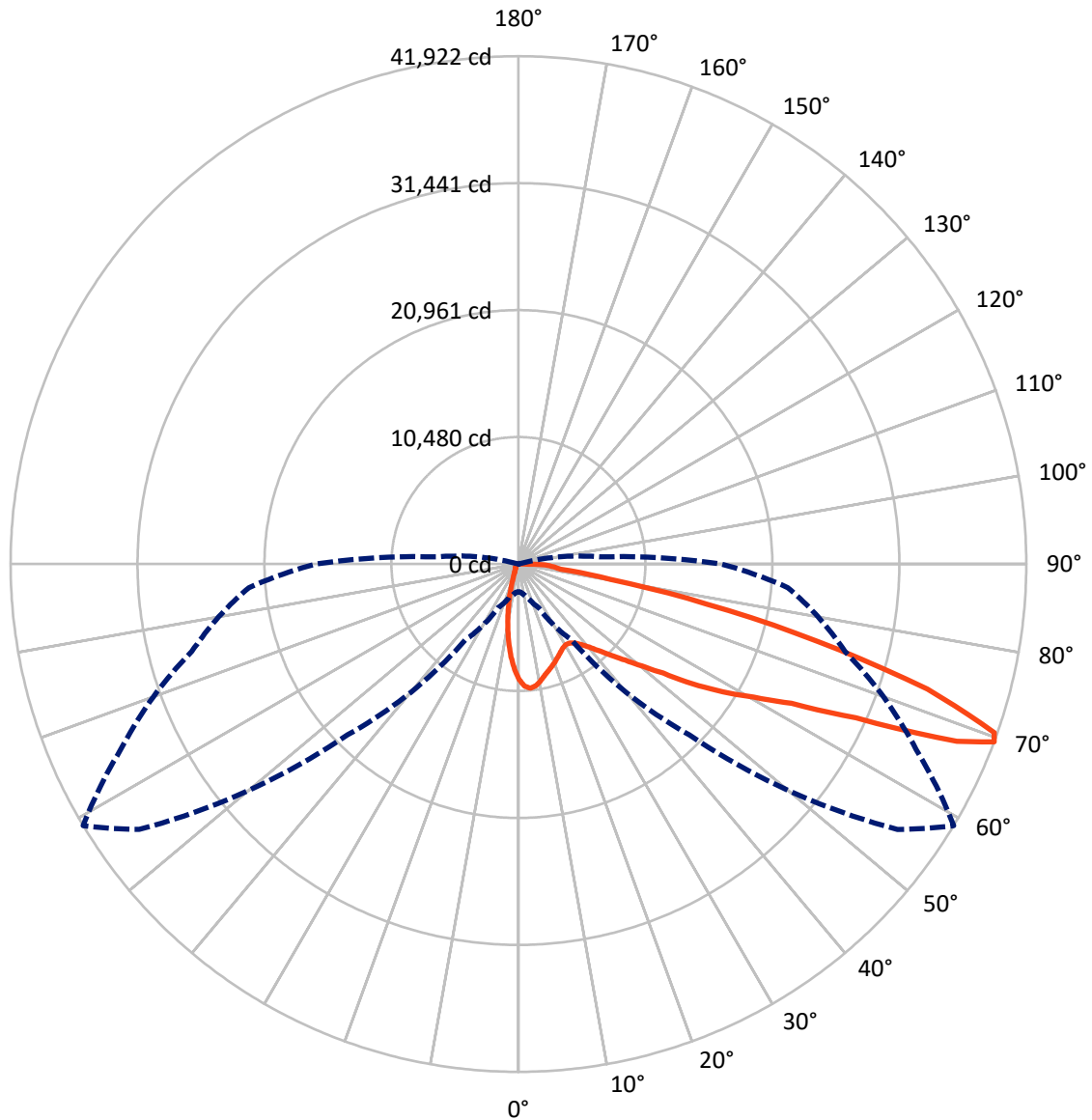


Based on 30 foot mounting height. Maximum calculated value = 10.7 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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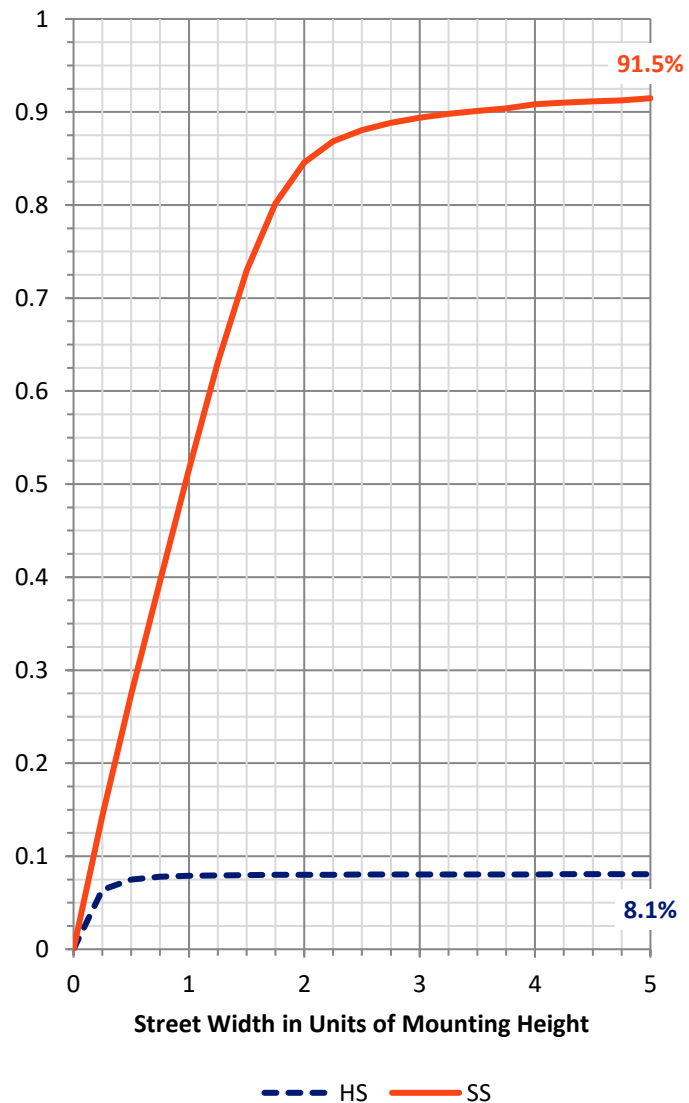
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2991.2 | 0.0 | 2991.2 |
| | % Fixture | 8.1 | 0.0 | 8.1 |
| Street Side | Lumens | 33738.8 | 0.0 | 33738.8 |
| | % Fixture | 91.9 | 0.0 | 91.9 |
| Total | Lumens | 36730.0 | 0.0 | 36730.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 776.0 | 2.1 |
| 10°-20° | 1603.5 | 4.4 |
| 20°-30° | 2157.7 | 5.9 |
| 30°-40° | 3132.8 | 8.5 |
| 40°-50° | 5216.3 | 14.2 |
| 50°-60° | 8137.4 | 22.2 |
| 60°-70° | 10069.4 | 27.4 |
| 70°-80° | 5103.0 | 13.9 |
| 80°-90° | 534.0 | 1.5 |
| 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° | 36730.0 | 100.0 |
| 0°-180° | 36730.0 | 100.0 |



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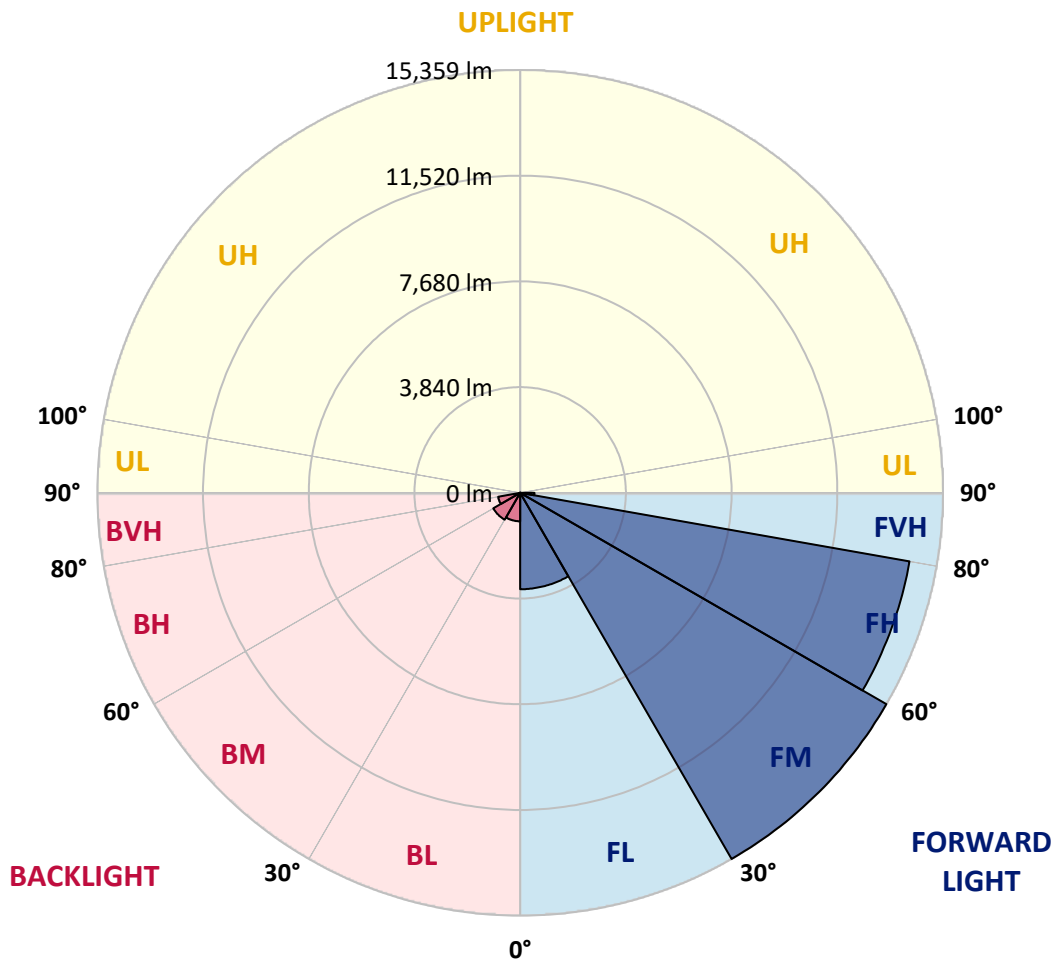
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 3501.8 | 9.5 | | | |
| FM | (30°-60°) | 15359.4 | 41.8 | | | |
| FH | (60°-80°) | 14360.1 | 39.1 | | | G5 |
| FVH | (80°-90°) | 517.5 | 1.4 | | | G4/750 |
| BL | (0°-30°) | 1035.3 | 2.8 | B3/2500 | | |
| BM | (30°-60°) | 1127.1 | 3.1 | B2/2500 | | |
| BH | (60°-80°) | 812.3 | 2.2 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 16.4 | 0.0 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 59° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 |
| 2.5° | 10478.3 | 10474.2 | 10428.5 | 10407.7 | 10370.3 | 10291.4 | 10168.9 | 10104.5 | 10000.6 | 9819.9 | 9576.9 |
| 5° | 10382.8 | 10432.6 | 10459.6 | 10461.7 | 10488.7 | 10459.6 | 10349.6 | 10295.6 | 10152.2 | 9861.5 | 9425.3 |
| 7.5° | 9734.8 | 9753.5 | 9830.3 | 9896.8 | 10025.6 | 10148.1 | 10187.6 | 10164.7 | 10079.6 | 9768.0 | 9188.5 |
| 10° | 9041.1 | 9059.8 | 9151.1 | 9238.4 | 9412.8 | 9601.9 | 9801.2 | 9842.8 | 9878.1 | 9635.1 | 8960.1 |
| 12.5° | 8442.9 | 8461.6 | 8555.1 | 8669.3 | 8872.8 | 9105.5 | 9414.9 | 9483.5 | 9639.2 | 9508.4 | 8777.3 |
| 15° | 7927.8 | 7936.1 | 8027.5 | 8168.7 | 8411.7 | 8710.8 | 9061.8 | 9171.9 | 9410.8 | 9419.1 | 8617.4 |
| 17.5° | 7489.6 | 7510.3 | 7566.4 | 7701.4 | 7967.3 | 8337.0 | 8746.1 | 8904.0 | 9184.4 | 9344.3 | 8461.6 |
| 20° | 7221.6 | 7242.4 | 7240.3 | 7315.1 | 7554.0 | 7948.6 | 8430.4 | 8619.4 | 8960.1 | 9267.5 | 8322.4 |
| 22.5° | 7169.7 | 7169.7 | 7115.7 | 7105.3 | 7246.6 | 7576.8 | 8102.3 | 8332.8 | 8758.6 | 9234.2 | 8224.8 |
| 25° | 7354.6 | 7346.3 | 7211.3 | 7101.2 | 7107.4 | 7304.7 | 7784.5 | 8058.7 | 8588.3 | 9257.1 | 8172.9 |
| 27.5° | 7745.0 | 7734.7 | 7564.3 | 7354.6 | 7186.3 | 7184.3 | 7543.6 | 7838.5 | 8453.3 | 9365.1 | 8193.7 |
| 30° | 8285.0 | 8280.9 | 8096.0 | 7832.3 | 7527.0 | 7246.6 | 7460.5 | 7728.4 | 8366.1 | 9560.3 | 8241.4 |
| 32.5° | 8874.9 | 8868.7 | 8729.5 | 8451.2 | 8064.9 | 7527.0 | 7547.7 | 7772.0 | 8391.0 | 9819.9 | 8357.7 |
| 35° | 9500.1 | 9489.7 | 9429.5 | 9186.5 | 8760.7 | 8044.1 | 7834.3 | 8008.8 | 8548.8 | 10208.3 | 8586.2 |
| 37.5° | 10177.2 | 10187.6 | 10231.2 | 9998.6 | 9552.0 | 8769.0 | 8314.1 | 8432.5 | 8866.6 | 10735.9 | 8958.0 |
| 40° | 11176.2 | 11174.1 | 11188.7 | 10883.3 | 10453.4 | 9655.9 | 8985.0 | 9022.4 | 9398.3 | 11435.8 | 9522.9 |
| 42.5° | 12989.4 | 12862.7 | 12478.5 | 11855.4 | 11423.4 | 10669.4 | 9830.3 | 9790.9 | 10048.4 | 12301.9 | 10314.3 |
| 45° | 15425.7 | 15155.7 | 14158.7 | 12964.5 | 12412.0 | 11811.8 | 10870.9 | 10744.2 | 10908.3 | 13342.5 | 11290.4 |
| 47.5° | 17521.4 | 17241.0 | 15830.7 | 14119.3 | 13460.9 | 12895.9 | 12090.1 | 11861.6 | 11915.6 | 14507.7 | 12528.3 |
| 50° | 18233.8 | 18096.7 | 16865.0 | 15124.5 | 14476.5 | 14260.5 | 13504.5 | 13226.2 | 13149.3 | 15855.6 | 13963.5 |
| 52.5° | 17986.6 | 17976.2 | 17155.8 | 15776.7 | 15407.0 | 15672.8 | 15284.5 | 14962.5 | 14680.1 | 17276.3 | 15423.6 |
| 55° | 17589.9 | 17641.8 | 17274.2 | 16347.9 | 16335.4 | 16962.6 | 17718.7 | 17450.7 | 16632.4 | 18819.5 | 16682.3 |
| 57.5° | 16495.3 | 16717.6 | 17207.7 | 17427.9 | 17938.8 | 18580.6 | 19745.8 | 19903.6 | 18935.8 | 20001.3 | 17727.0 |
| 60° | 13384.0 | 13872.1 | 15475.5 | 17583.7 | 20005.4 | 21604.7 | 22192.5 | 22327.5 | 20825.8 | 20983.7 | 19137.2 |
| 62.5° | 9500.1 | 9998.6 | 12031.9 | 15598.1 | 20036.6 | 25577.9 | 25837.6 | 25307.9 | 22906.9 | 22439.6 | 21569.4 |
| 65° | 5042.9 | 5427.1 | 7088.7 | 11259.3 | 17371.8 | 26500.1 | 32211.8 | 30633.3 | 26579.0 | 25303.8 | 24711.8 |
| 67.5° | 2579.6 | 2695.9 | 3356.4 | 5510.2 | 11942.6 | 23538.3 | 37925.5 | 39036.7 | 32907.6 | 28145.1 | 24560.2 |
| 69° | 2282.6 | 2351.1 | 2789.4 | 3983.6 | 7647.4 | 19936.9 | 38203.9 | 41921.6 | 36220.3 | 27908.3 | 22319.2 |
| 70° | 2209.9 | 2270.1 | 2668.9 | 3605.6 | 5977.5 | 16719.6 | 37138.4 | 41668.3 | 37067.8 | 27006.9 | 20645.1 |
| 72.5° | 1875.5 | 1927.4 | 2376.1 | 3186.1 | 4858.0 | 8299.6 | 30168.0 | 35308.6 | 33262.7 | 22497.8 | 14943.8 |
| 75° | 1254.5 | 1424.8 | 2280.5 | 2986.7 | 4519.5 | 4714.7 | 19889.1 | 25515.6 | 23702.4 | 15174.4 | 7784.5 |
| 77.5° | 301.2 | 324.0 | 643.9 | 2376.1 | 4133.2 | 4149.8 | 10229.1 | 15861.9 | 12937.5 | 5408.4 | 1840.2 |
| 80° | 162.0 | 155.8 | 180.7 | 471.5 | 3848.6 | 3894.3 | 4604.7 | 7699.3 | 4619.2 | 897.3 | 606.5 |
| 82.5° | 114.2 | 108.0 | 116.3 | 197.3 | 1210.9 | 3547.5 | 3331.5 | 3485.2 | 1915.0 | 344.8 | 272.1 |
| 85° | 41.5 | 39.5 | 64.4 | 178.6 | 380.1 | 2039.6 | 3422.9 | 2874.5 | 1551.5 | 157.9 | 199.4 |
| 87.5° | 14.5 | 12.5 | 24.9 | 97.6 | 116.3 | 868.2 | 2112.3 | 2172.5 | 610.6 | 95.5 | 93.5 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 | 9560.3 |
| 2.5° | 9475.2 | 9346.4 | 9109.6 | 8866.6 | 8642.3 | 8372.3 | 8237.3 | 8104.4 | 8048.3 | 8027.5 | 7929.9 |
| 5° | 9201.0 | 8982.9 | 8480.3 | 7975.6 | 7510.3 | 7016.0 | 6689.9 | 6428.2 | 6274.5 | 6199.8 | 6081.4 |
| 7.5° | 8850.0 | 8492.7 | 7730.5 | 6951.6 | 6226.8 | 5512.3 | 4982.7 | 4575.6 | 4295.2 | 4160.2 | 4037.6 |
| 10° | 8509.4 | 8033.7 | 6949.6 | 5888.2 | 4903.7 | 3956.6 | 3225.5 | 2695.9 | 2357.4 | 2201.6 | 2101.9 |
| 12.5° | 8204.0 | 7587.2 | 6195.6 | 4851.8 | 3616.0 | 2506.9 | 1763.4 | 1341.7 | 1132.0 | 1059.3 | 1023.9 |
| 15° | 7932.0 | 7175.9 | 5483.2 | 3867.3 | 2448.8 | 1433.1 | 963.7 | 820.4 | 787.2 | 787.2 | 783.0 |
| 17.5° | 7674.4 | 6773.0 | 4795.7 | 2943.1 | 1537.0 | 876.5 | 733.2 | 714.5 | 714.5 | 722.8 | 722.8 |
| 20° | 7427.3 | 6388.8 | 4131.1 | 2112.3 | 967.9 | 695.8 | 662.6 | 658.4 | 662.6 | 672.9 | 672.9 |
| 22.5° | 7215.4 | 6039.8 | 3510.1 | 1449.7 | 718.6 | 627.2 | 610.6 | 604.4 | 606.5 | 612.7 | 616.9 |
| 25° | 7057.6 | 5744.9 | 2924.4 | 982.4 | 618.9 | 571.2 | 552.5 | 542.1 | 533.8 | 533.8 | 537.9 |
| 27.5° | 6957.9 | 5495.7 | 2357.4 | 714.5 | 556.6 | 519.2 | 490.2 | 473.6 | 454.9 | 444.5 | 448.6 |
| 30° | 6885.2 | 5258.9 | 1825.7 | 583.6 | 498.5 | 461.1 | 423.7 | 396.7 | 369.7 | 357.2 | 361.4 |
| 32.5° | 6858.2 | 5067.8 | 1364.6 | 515.1 | 446.5 | 405.0 | 359.3 | 324.0 | 294.9 | 284.5 | 286.6 |
| 35° | 6930.9 | 4916.2 | 999.0 | 465.2 | 405.0 | 353.1 | 301.2 | 261.7 | 238.9 | 232.6 | 234.7 |
| 37.5° | 7121.9 | 4835.2 | 747.7 | 423.7 | 367.6 | 309.5 | 251.3 | 213.9 | 199.4 | 199.4 | 201.5 |
| 40° | 7483.3 | 4833.1 | 600.2 | 394.6 | 334.4 | 267.9 | 207.7 | 180.7 | 172.4 | 176.5 | 178.6 |
| 42.5° | 8010.9 | 4943.2 | 523.4 | 367.6 | 305.3 | 228.5 | 172.4 | 153.7 | 151.6 | 155.8 | 157.9 |
| 45° | 8731.6 | 5144.7 | 481.9 | 344.8 | 274.2 | 191.1 | 145.4 | 132.9 | 132.9 | 139.2 | 141.2 |
| 47.5° | 9614.3 | 5439.6 | 446.5 | 321.9 | 243.0 | 159.9 | 124.6 | 116.3 | 118.4 | 124.6 | 126.7 |
| 50° | 10677.7 | 5811.4 | 411.2 | 297.0 | 220.2 | 132.9 | 108.0 | 101.8 | 103.8 | 112.2 | 114.2 |
| 52.5° | 11888.6 | 6311.9 | 382.2 | 274.2 | 191.1 | 110.1 | 91.4 | 87.2 | 91.4 | 99.7 | 101.8 |
| 55° | 12927.1 | 6760.6 | 346.9 | 255.5 | 153.7 | 91.4 | 74.8 | 74.8 | 78.9 | 89.3 | 91.4 |
| 57.5° | 13926.1 | 7229.9 | 315.7 | 220.2 | 120.5 | 72.7 | 62.3 | 64.4 | 70.6 | 81.0 | 83.1 |
| 60° | 15392.5 | 8025.4 | 278.3 | 184.9 | 91.4 | 58.2 | 51.9 | 54.0 | 62.3 | 72.7 | 74.8 |
| 62.5° | 17882.7 | 9236.3 | 240.9 | 153.7 | 70.6 | 45.7 | 41.5 | 45.7 | 56.1 | 68.5 | 70.6 |
| 65° | 20130.0 | 9728.5 | 197.3 | 128.8 | 54.0 | 35.3 | 35.3 | 41.5 | 54.0 | 66.5 | 68.5 |
| 67.5° | 18877.6 | 8189.5 | 153.7 | 101.8 | 41.5 | 27.0 | 29.1 | 39.5 | 51.9 | 66.5 | 68.5 |
| 69° | 16694.7 | 6696.2 | 130.8 | 81.0 | 35.3 | 24.9 | 27.0 | 39.5 | 51.9 | 64.4 | 66.5 |
| 70° | 14993.7 | 5653.5 | 116.3 | 68.5 | 31.2 | 24.9 | 27.0 | 37.4 | 51.9 | 64.4 | 66.5 |
| 72.5° | 10042.2 | 3053.2 | 93.5 | 49.8 | 29.1 | 22.8 | 22.8 | 37.4 | 49.8 | 62.3 | 64.4 |
| 75° | 4316.0 | 843.3 | 74.8 | 35.3 | 24.9 | 20.8 | 20.8 | 35.3 | 47.8 | 60.2 | 64.4 |
| 77.5° | 789.3 | 213.9 | 60.2 | 31.2 | 24.9 | 20.8 | 18.7 | 33.2 | 45.7 | 58.2 | 60.2 |
| 80° | 313.6 | 105.9 | 47.8 | 27.0 | 22.8 | 18.7 | 16.6 | 31.2 | 43.6 | 56.1 | 58.2 |
| 82.5° | 189.0 | 60.2 | 39.5 | 24.9 | 22.8 | 16.6 | 14.5 | 27.0 | 41.5 | 54.0 | 56.1 |
| 85° | 153.7 | 41.5 | 31.2 | 24.9 | 20.8 | 16.6 | 12.5 | 24.9 | 37.4 | 51.9 | 54.0 |
| 87.5° | 74.8 | 29.1 | 29.1 | 22.8 | 20.8 | 16.6 | 12.5 | 22.8 | 35.3 | 49.8 | 51.9 |
| 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)