

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: P190934

Luminaire Tested: **GLEON-AF-06-LED-E1-AFL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190934
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)
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-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29812.9 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 333
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

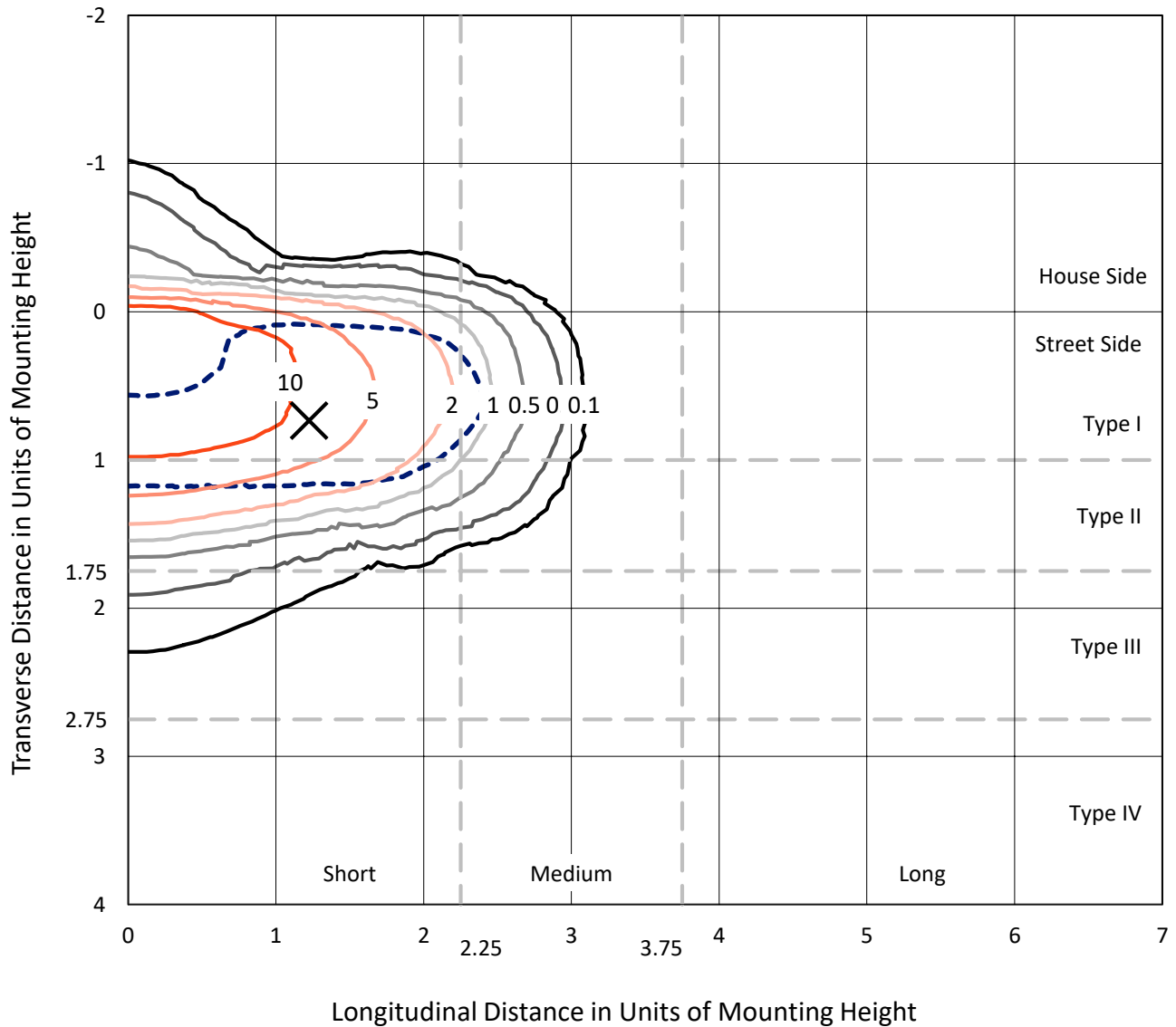


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

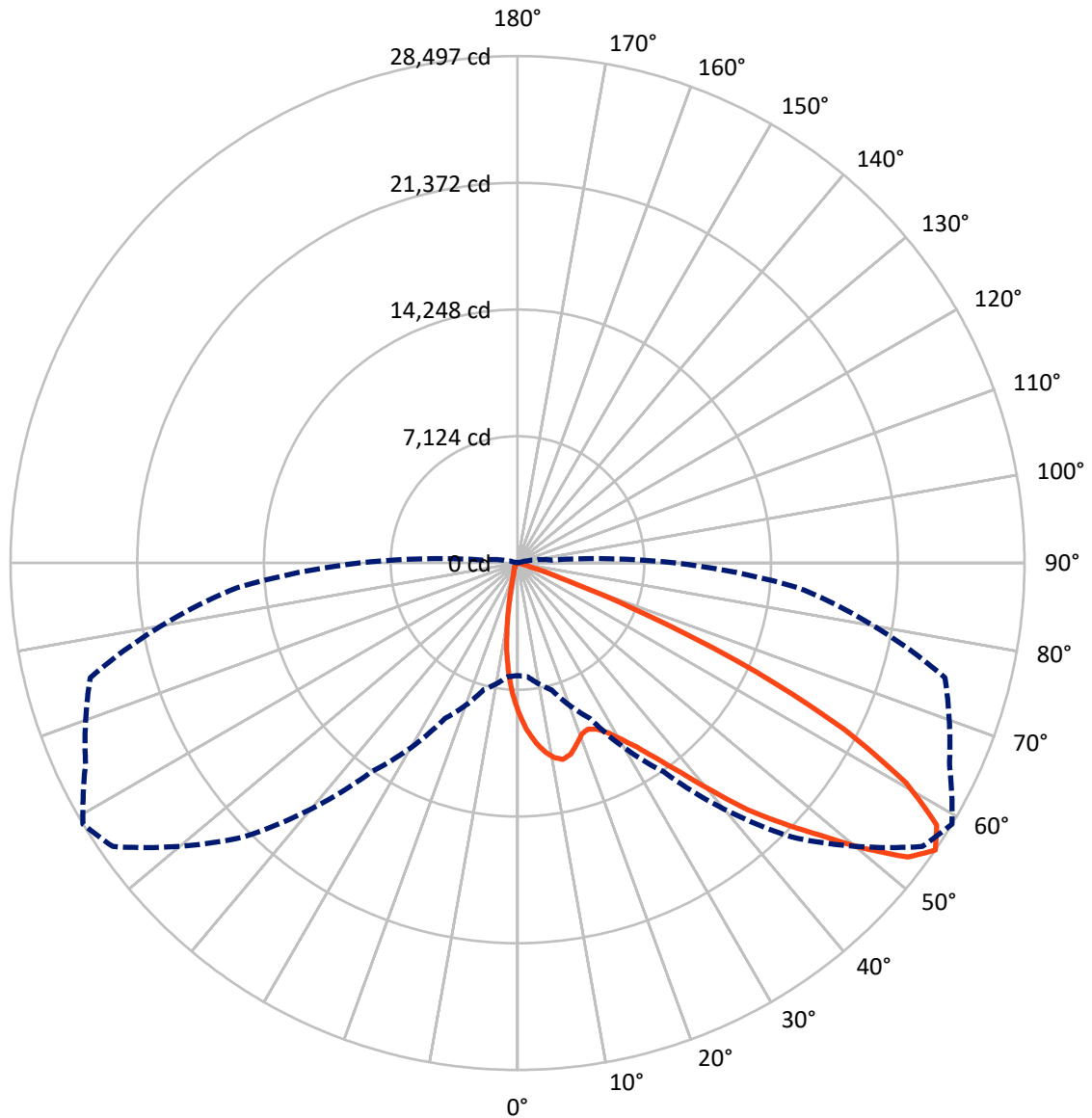


Based on 25 foot mounting height. Maximum calculated value = 16.7 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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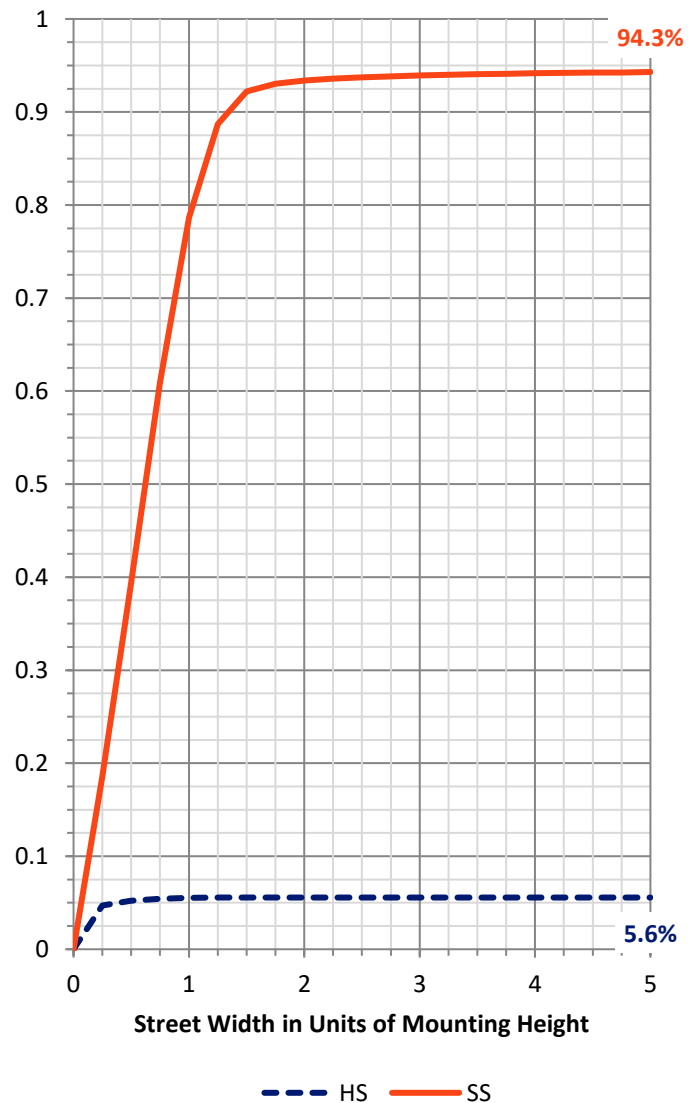
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1665.2 | 0.0 | 1665.2 |
| | % Fixture | 5.6 | 0.0 | 5.6 |
| Street Side | Lumens | 28147.7 | 0.0 | 28147.7 |
| | % Fixture | 94.4 | 0.0 | 94.4 |
| Total | Lumens | 29812.9 | 0.0 | 29812.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 702.9 | 2.4 |
| 10°-20° | 1683.0 | 5.6 |
| 20°-30° | 2863.9 | 9.6 |
| 30°-40° | 4925.2 | 16.5 |
| 40°-50° | 7604.0 | 25.5 |
| 50°-60° | 7644.5 | 25.6 |
| 60°-70° | 3920.1 | 13.1 |
| 70°-80° | 424.8 | 1.4 |
| 80°-90° | 44.4 | 0.1 |
| 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° | 29812.9 | 100.0 |
| 0°-180° | 29812.9 | 100.0 |



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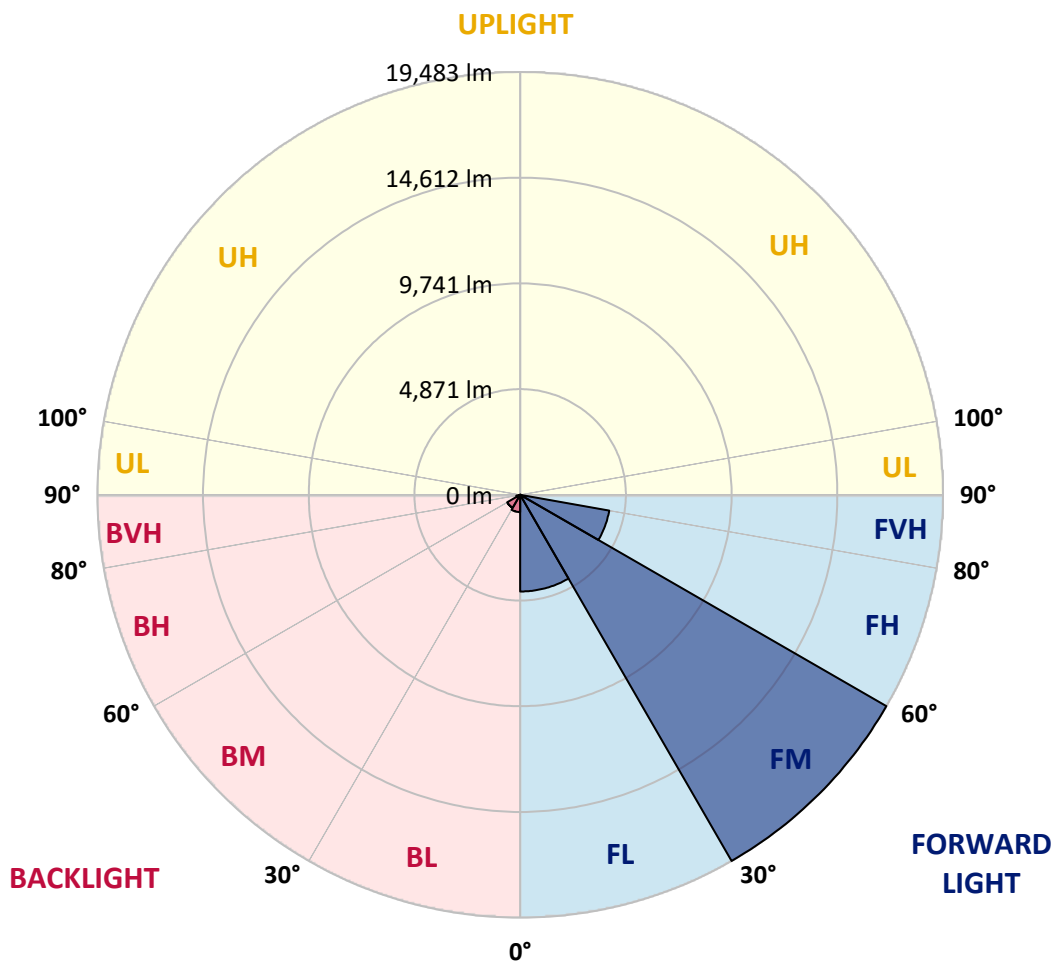
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 4455.0 | 14.9 | | | |
| FM | (30°-60°) | 19482.6 | 65.3 | | | |
| FH | (60°-80°) | 4166.6 | 14.0 | | | G2/5000 |
| FVH | (80°-90°) | 43.5 | 0.1 | | | G1/100 |
| BL | (0°-30°) | 794.8 | 2.7 | B2/1000 | | |
| BM | (30°-60°) | 691.1 | 2.3 | B1/1000 | | |
| BH | (60°-80°) | 178.4 | 0.6 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 0.9 | 0.0 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 59° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 |
| 2.5° | 9929.9 | 9824.3 | 9792.7 | 9771.5 | 9674.8 | 9553.4 | 9388.0 | 9310.6 | 9152.2 | 8897.1 | 8584.0 |
| 5° | 10839.5 | 10820.2 | 10749.8 | 10711.1 | 10607.3 | 10434.8 | 10171.0 | 10044.3 | 9792.7 | 9363.4 | 8802.2 |
| 7.5° | 10441.9 | 10563.3 | 10660.1 | 10821.9 | 11026.0 | 11018.9 | 10797.2 | 10665.3 | 10383.9 | 9817.4 | 9044.9 |
| 10° | 8905.9 | 9004.5 | 9162.8 | 9530.5 | 10280.0 | 10941.6 | 11201.9 | 11106.9 | 10881.7 | 10234.3 | 9279.0 |
| 12.5° | 8605.1 | 8594.5 | 8622.7 | 8730.1 | 9122.4 | 10065.4 | 11133.3 | 11325.1 | 11279.4 | 10616.1 | 9500.7 |
| 15° | 8765.2 | 8752.9 | 8749.4 | 8786.3 | 8881.4 | 9279.0 | 10617.8 | 11168.5 | 11522.1 | 10969.7 | 9688.9 |
| 17.5° | 9213.8 | 9161.0 | 9132.9 | 9103.0 | 9074.9 | 9173.4 | 9998.5 | 10730.4 | 11559.1 | 11279.4 | 9845.5 |
| 20° | 9982.7 | 9894.7 | 9791.0 | 9622.0 | 9463.7 | 9414.4 | 9738.2 | 10280.0 | 11427.2 | 11515.2 | 9947.5 |
| 22.5° | 10948.5 | 10836.0 | 10656.5 | 10348.7 | 10026.7 | 9840.2 | 9866.6 | 10137.5 | 11230.1 | 11772.0 | 9995.0 |
| 25° | 12034.1 | 11889.9 | 11650.6 | 11223.1 | 10749.8 | 10419.1 | 10246.6 | 10341.6 | 11140.3 | 12072.9 | 10049.6 |
| 27.5° | 13197.1 | 13037.0 | 12723.8 | 12141.4 | 11604.9 | 11157.9 | 10806.0 | 10793.8 | 11293.4 | 12466.9 | 10137.5 |
| 30° | 14349.4 | 14324.8 | 13916.6 | 13300.9 | 12590.1 | 12046.5 | 11539.7 | 11474.6 | 11721.0 | 13012.3 | 10311.7 |
| 32.5° | 15887.1 | 15702.4 | 15202.8 | 14569.4 | 13749.5 | 13096.7 | 12496.9 | 12345.5 | 12377.2 | 13647.5 | 10580.9 |
| 35° | 17825.9 | 17623.7 | 16919.9 | 16045.5 | 15128.8 | 14358.2 | 13695.0 | 13489.1 | 13411.7 | 14687.2 | 11034.8 |
| 37.5° | 19078.6 | 19075.2 | 18633.6 | 17743.3 | 16759.8 | 15910.1 | 15188.7 | 14947.7 | 14791.1 | 15943.4 | 11738.6 |
| 40° | 19112.1 | 19194.8 | 19252.9 | 19244.1 | 18543.8 | 17760.9 | 17120.5 | 16823.1 | 16459.0 | 17621.9 | 12648.2 |
| 42.5° | 18086.4 | 18299.3 | 18811.2 | 19680.3 | 20095.6 | 19784.2 | 19244.1 | 18952.0 | 18410.1 | 19418.3 | 13756.5 |
| 45° | 16700.0 | 16847.8 | 17743.3 | 19344.3 | 20936.5 | 21789.9 | 21378.1 | 20855.6 | 20141.3 | 21291.9 | 14750.6 |
| 47.5° | 16078.9 | 16105.3 | 16684.1 | 18441.8 | 20999.9 | 23433.1 | 23682.9 | 22833.2 | 21714.2 | 22801.5 | 15528.3 |
| 50° | 14222.8 | 14270.3 | 15069.1 | 16877.7 | 20257.4 | 24208.9 | 25998.3 | 25192.5 | 23429.6 | 23964.5 | 15811.5 |
| 52.5° | 10719.9 | 10786.7 | 11800.1 | 14307.2 | 18216.6 | 23878.2 | 27655.6 | 27460.3 | 25308.6 | 24532.7 | 15827.3 |
| 55° | 6324.9 | 6412.9 | 7380.6 | 9630.8 | 14328.4 | 21774.0 | 27778.7 | 28496.5 | 26791.8 | 24868.8 | 15802.7 |
| 57.5° | 2954.0 | 3015.6 | 3569.8 | 4961.4 | 8911.2 | 17208.5 | 25924.4 | 27785.8 | 27609.9 | 25046.4 | 15976.9 |
| 60° | 1569.4 | 1587.0 | 1720.7 | 2148.2 | 4027.3 | 10911.6 | 22305.3 | 25090.4 | 26863.9 | 25292.8 | 16189.7 |
| 62.5° | 1199.9 | 1205.1 | 1198.2 | 1249.1 | 1692.5 | 4843.6 | 16860.1 | 20626.9 | 23860.6 | 25108.0 | 15954.0 |
| 65° | 1039.8 | 1048.6 | 999.3 | 987.0 | 1085.6 | 1727.7 | 10016.1 | 14703.1 | 18749.7 | 22615.0 | 14347.7 |
| 67.5° | 932.4 | 936.0 | 876.2 | 825.1 | 842.7 | 934.3 | 3951.6 | 8049.1 | 12410.6 | 16576.8 | 10399.6 |
| 70° | 858.6 | 855.1 | 789.9 | 709.0 | 686.2 | 638.6 | 1256.2 | 2950.5 | 5930.9 | 8406.3 | 4836.5 |
| 72.5° | 760.1 | 761.8 | 730.2 | 624.6 | 570.0 | 446.9 | 582.4 | 860.3 | 1769.9 | 2290.7 | 1133.0 |
| 75° | 673.8 | 665.0 | 626.4 | 559.5 | 469.7 | 293.8 | 288.6 | 383.5 | 545.4 | 541.9 | 244.6 |
| 77.5° | 487.3 | 478.5 | 490.9 | 459.2 | 360.7 | 190.0 | 144.2 | 184.7 | 221.7 | 214.6 | 68.6 |
| 80° | 357.1 | 351.9 | 316.7 | 381.8 | 318.4 | 130.2 | 89.7 | 98.5 | 114.4 | 96.8 | 21.1 |
| 82.5° | 244.6 | 242.7 | 223.4 | 211.1 | 181.2 | 79.2 | 56.3 | 61.6 | 73.9 | 54.5 | 10.5 |
| 85° | 38.7 | 44.0 | 161.8 | 128.5 | 107.3 | 35.2 | 38.7 | 42.2 | 49.3 | 29.9 | 3.5 |
| 87.5° | 0.0 | 0.0 | 75.7 | 66.9 | 21.1 | 14.1 | 22.9 | 24.7 | 24.7 | 15.9 | 0.0 |
| 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° | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 | 8392.2 |
| 2.5° | 8423.9 | 8248.0 | 7922.4 | 7586.4 | 7275.0 | 6903.8 | 6648.7 | 6456.9 | 6235.2 | 6175.5 | 6305.6 |
| 5° | 8481.9 | 8149.4 | 7449.2 | 6687.3 | 5971.3 | 5177.9 | 4570.9 | 4090.6 | 3656.0 | 3508.2 | 3641.9 |
| 7.5° | 8573.5 | 8079.1 | 6937.2 | 5682.8 | 4437.2 | 3198.6 | 2350.5 | 1792.8 | 1437.5 | 1331.9 | 1388.1 |
| 10° | 8664.9 | 7977.0 | 6344.3 | 4493.4 | 2790.4 | 1557.0 | 1013.4 | 809.4 | 733.7 | 717.8 | 726.6 |
| 12.5° | 8740.6 | 7839.8 | 5621.2 | 3195.0 | 1492.0 | 833.9 | 663.3 | 629.8 | 619.3 | 619.3 | 622.8 |
| 15° | 8786.3 | 7632.1 | 4764.4 | 2032.1 | 858.6 | 629.8 | 578.8 | 568.2 | 568.2 | 570.0 | 573.6 |
| 17.5° | 8781.0 | 7368.2 | 3826.7 | 1229.8 | 642.2 | 557.7 | 527.8 | 519.0 | 517.3 | 520.8 | 522.5 |
| 20° | 8716.0 | 7023.4 | 2885.3 | 811.1 | 559.5 | 508.5 | 478.5 | 462.7 | 460.9 | 464.5 | 468.0 |
| 22.5° | 8592.8 | 6597.6 | 2063.7 | 624.6 | 504.9 | 460.9 | 424.0 | 409.9 | 409.9 | 413.5 | 417.0 |
| 25° | 8443.2 | 6076.8 | 1411.1 | 529.6 | 455.7 | 409.9 | 374.7 | 362.4 | 365.9 | 374.7 | 376.5 |
| 27.5° | 8256.7 | 5491.0 | 958.8 | 453.9 | 395.9 | 359.0 | 332.6 | 323.8 | 332.6 | 344.8 | 348.3 |
| 30° | 8096.7 | 4880.5 | 684.4 | 392.3 | 336.0 | 309.6 | 293.8 | 293.8 | 306.2 | 329.0 | 334.3 |
| 32.5° | 7973.5 | 4289.3 | 527.8 | 346.6 | 292.1 | 269.1 | 260.3 | 269.1 | 288.6 | 311.4 | 316.7 |
| 35° | 7957.6 | 3802.0 | 446.9 | 309.6 | 260.3 | 237.5 | 233.9 | 249.8 | 269.1 | 286.7 | 290.3 |
| 37.5° | 8079.1 | 3351.6 | 402.9 | 279.8 | 232.2 | 211.1 | 207.6 | 227.0 | 246.3 | 267.4 | 272.7 |
| 40° | 8309.5 | 2998.0 | 371.2 | 251.5 | 209.4 | 186.5 | 179.4 | 193.5 | 219.9 | 248.1 | 255.1 |
| 42.5° | 8608.6 | 2705.9 | 336.0 | 223.4 | 186.5 | 154.9 | 146.1 | 161.8 | 190.0 | 219.9 | 228.7 |
| 45° | 8893.6 | 2454.4 | 297.4 | 191.8 | 156.6 | 119.7 | 116.1 | 137.3 | 151.3 | 181.2 | 188.2 |
| 47.5° | 9050.3 | 2232.7 | 263.9 | 156.6 | 121.4 | 96.8 | 96.8 | 102.1 | 116.1 | 151.3 | 158.4 |
| 50° | 8997.5 | 2054.9 | 228.7 | 116.1 | 84.5 | 73.9 | 73.9 | 72.1 | 93.3 | 121.4 | 126.6 |
| 52.5° | 8891.9 | 1952.9 | 197.0 | 89.7 | 58.1 | 52.8 | 47.5 | 52.8 | 65.1 | 77.4 | 79.2 |
| 55° | 8876.0 | 1935.3 | 165.4 | 72.1 | 40.5 | 35.2 | 26.4 | 26.4 | 26.4 | 24.7 | 21.1 |
| 57.5° | 8999.2 | 1963.5 | 139.0 | 58.1 | 29.9 | 22.9 | 14.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 60° | 9125.8 | 1993.3 | 119.7 | 40.5 | 21.1 | 12.3 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 62.5° | 8914.7 | 1926.5 | 100.2 | 24.7 | 15.9 | 5.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 65° | 7831.0 | 1639.7 | 79.2 | 17.6 | 10.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 5570.2 | 1097.8 | 52.8 | 10.5 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 2542.3 | 459.2 | 33.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 543.6 | 142.5 | 22.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 110.9 | 103.8 | 8.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 35.2 | 163.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 21.1 | 117.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 3.5 | 17.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)