

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: P191665

Luminaire Tested: **GLEON-AF-07-LED-E1-5NQ-7050-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191665
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-07-LED-E1-5NQ-7050-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47641 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 448
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

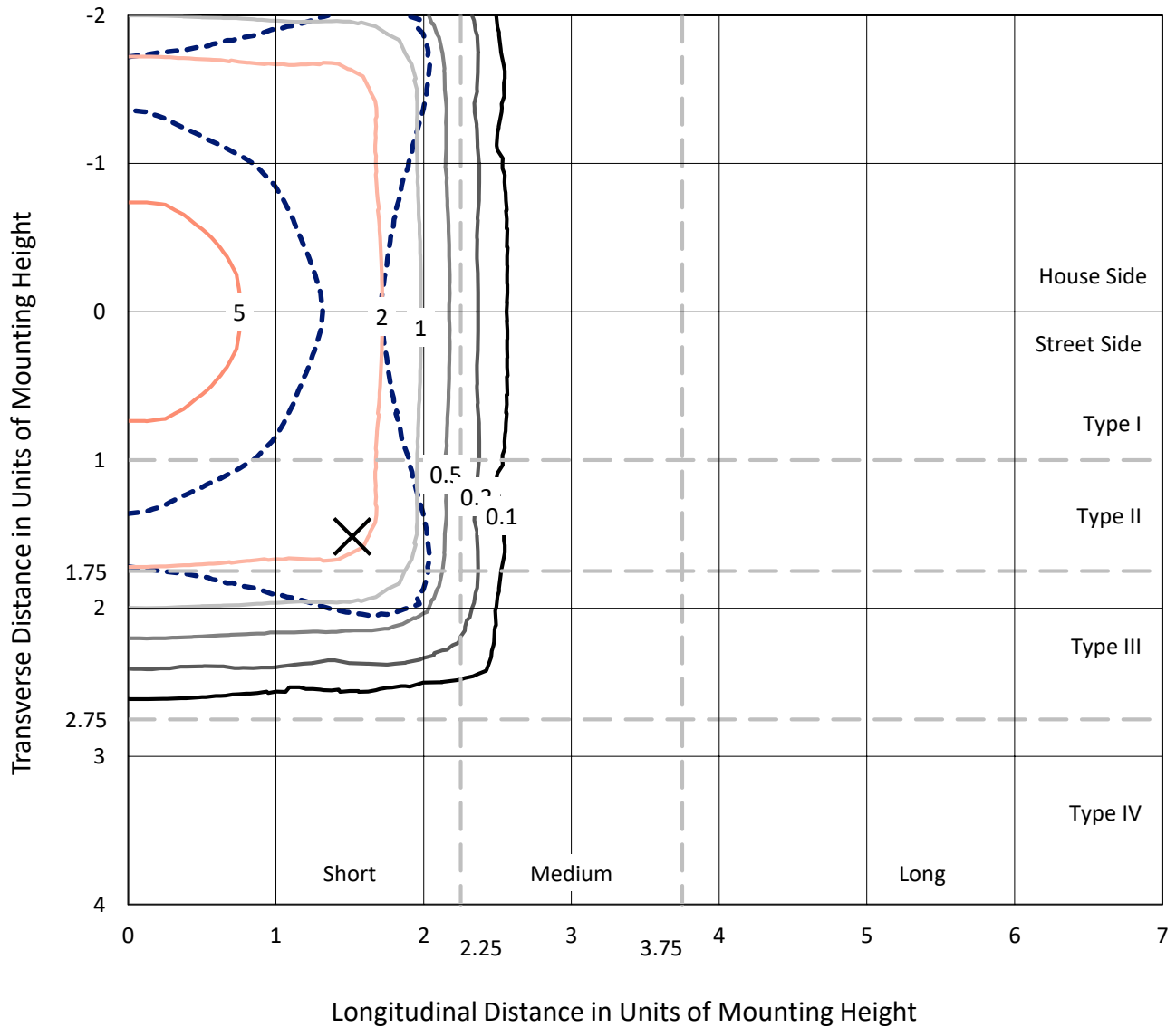


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

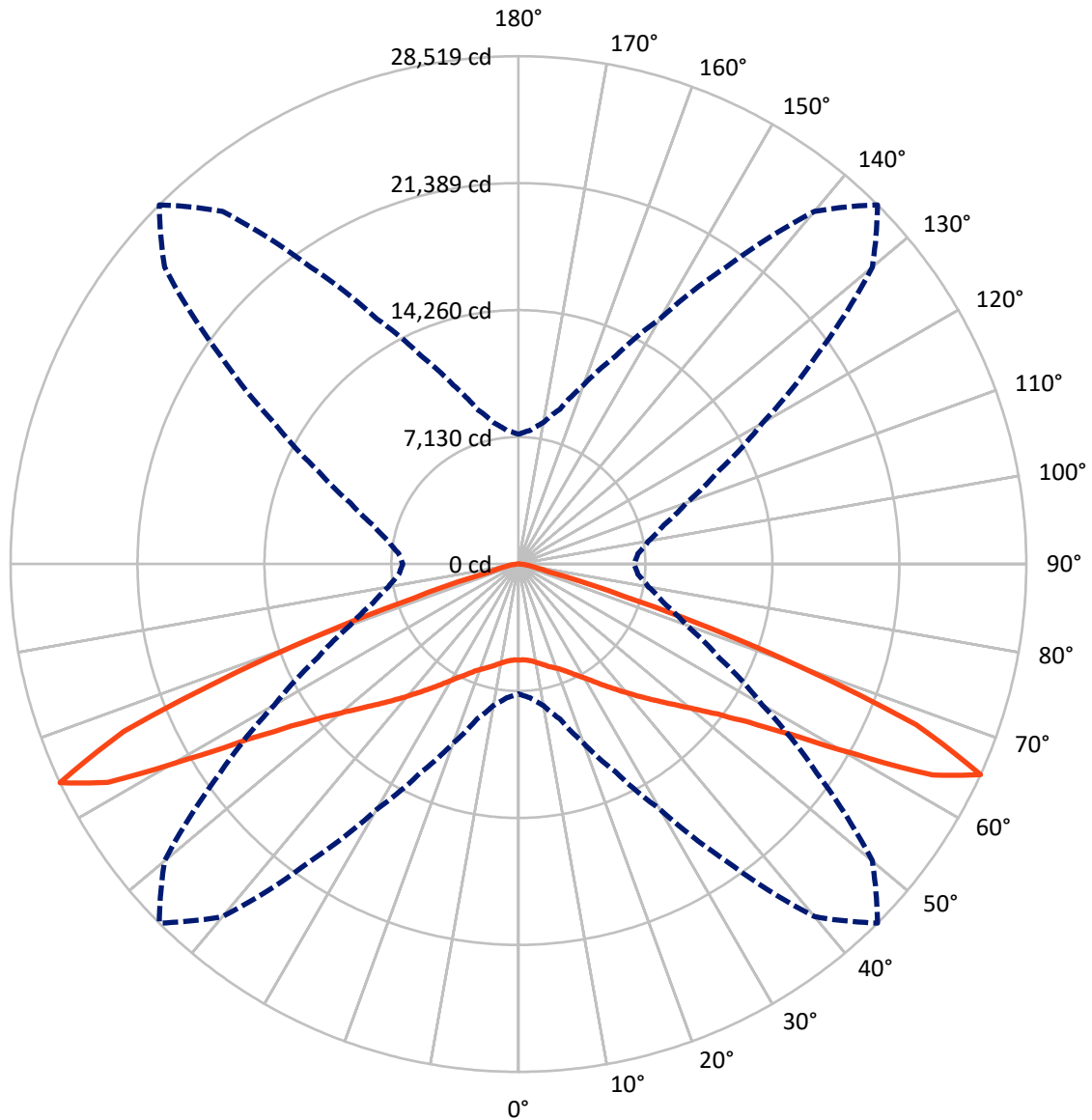


Based on 30 foot mounting height. Maximum calculated value = 6 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 23820.5 | 0.0 | 23820.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 23820.5 | 0.0 | 23820.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 47641.0 | 0.0 | 47641.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 525.4 | 1.1 |
| 10°-20° | 1685.1 | 3.5 |
| 20°-30° | 3150.8 | 6.6 |
| 30°-40° | 5328.9 | 11.2 |
| 40°-50° | 8713.3 | 18.3 |
| 50°-60° | 13855.5 | 29.1 |
| 60°-70° | 12524.4 | 26.3 |
| 70°-80° | 1585.0 | 3.3 |
| 80°-90° | 272.7 | 0.6 |
| 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° | 47641.0 | 100.0 |
| 0°-180° | 47641.0 | 100.0 |



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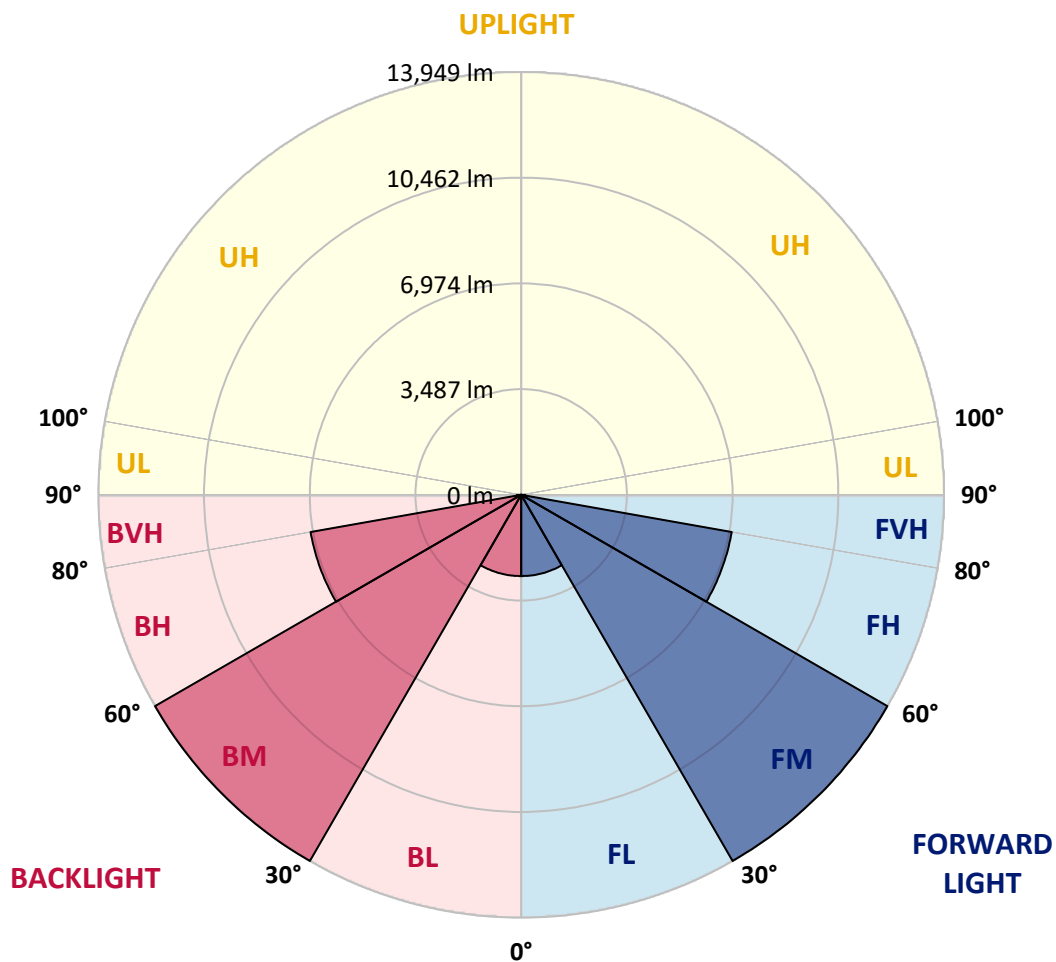
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 2680.6 | 5.6 | | | |
| FM | (30°-60°) | 13948.8 | 29.3 | | | |
| FH | (60°-80°) | 7054.7 | 14.8 | | | G3/7500 |
| FVH | (80°-90°) | 136.3 | 0.3 | | | G2/225 |
| BL | (0°-30°) | 2680.6 | 5.6 | B4/5000 | | |
| BM | (30°-60°) | 13948.8 | 29.3 | B5 | | |
| BH | (60°-80°) | 7054.7 | 14.8 | B5 | | G3/7500 |
| BVH | (80°-90°) | 136.3 | 0.3 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5390.6 | 5390.6 | 5390.6 | 5390.6 | 5390.6 | 5390.6 | 5390.6 | 5390.6 | 5390.6 | 5390.6 | 5390.6 |
| 2.5° | 5395.1 | 5399.5 | 5404.0 | 5399.5 | 5404.0 | 5397.3 | 5392.8 | 5399.5 | 5392.8 | 5386.1 | 5390.6 |
| 5° | 5441.9 | 5444.2 | 5444.2 | 5437.5 | 5444.2 | 5439.7 | 5433.0 | 5441.9 | 5435.2 | 5428.5 | 5433.0 |
| 7.5° | 5520.0 | 5528.9 | 5522.2 | 5515.6 | 5520.0 | 5515.6 | 5511.1 | 5513.3 | 5511.1 | 5504.4 | 5506.6 |
| 10° | 5624.9 | 5631.6 | 5627.1 | 5624.9 | 5629.3 | 5627.1 | 5622.7 | 5620.4 | 5622.7 | 5616.0 | 5616.0 |
| 12.5° | 5752.1 | 5749.8 | 5747.6 | 5749.8 | 5756.5 | 5756.5 | 5754.3 | 5756.5 | 5761.0 | 5763.2 | 5758.8 |
| 15° | 5877.0 | 5881.5 | 5881.5 | 5881.5 | 5894.9 | 5906.0 | 5912.7 | 5917.2 | 5926.1 | 5928.3 | 5919.4 |
| 17.5° | 6033.2 | 6033.2 | 6031.0 | 6033.2 | 6046.6 | 6064.4 | 6071.1 | 6080.0 | 6089.0 | 6095.7 | 6084.5 |
| 20° | 6207.2 | 6211.7 | 6211.7 | 6216.2 | 6234.0 | 6254.1 | 6254.1 | 6258.5 | 6254.1 | 6258.5 | 6251.9 |
| 22.5° | 6419.2 | 6432.6 | 6432.6 | 6434.8 | 6452.7 | 6477.2 | 6470.5 | 6477.2 | 6466.0 | 6475.0 | 6466.0 |
| 25° | 6695.9 | 6715.9 | 6711.5 | 6711.5 | 6724.9 | 6740.5 | 6742.7 | 6756.1 | 6753.9 | 6765.0 | 6758.3 |
| 27.5° | 7008.2 | 7039.5 | 7048.4 | 7046.2 | 7055.1 | 7070.7 | 7075.2 | 7090.8 | 7081.9 | 7090.8 | 7086.3 |
| 30° | 7383.1 | 7396.5 | 7414.3 | 7421.0 | 7432.2 | 7447.8 | 7447.8 | 7450.0 | 7438.9 | 7452.2 | 7458.9 |
| 32.5° | 7771.3 | 7795.8 | 7813.7 | 7853.9 | 7873.9 | 7885.1 | 7882.9 | 7887.3 | 7876.2 | 7894.0 | 7907.4 |
| 35° | 8284.5 | 8302.3 | 8331.3 | 8362.6 | 8389.4 | 8387.1 | 8380.4 | 8382.7 | 8382.7 | 8398.3 | 8411.7 |
| 37.5° | 8902.5 | 8907.0 | 8944.9 | 8989.5 | 9002.9 | 8989.5 | 8949.4 | 8940.5 | 8920.4 | 8940.5 | 8962.8 |
| 40° | 9556.3 | 9571.9 | 9647.8 | 9676.8 | 9683.5 | 9658.9 | 9600.9 | 9567.4 | 9522.8 | 9547.3 | 9578.6 |
| 42.5° | 10241.3 | 10272.5 | 10341.7 | 10393.0 | 10415.3 | 10399.7 | 10319.3 | 10268.0 | 10210.0 | 10223.4 | 10254.6 |
| 45° | 10999.9 | 11037.8 | 11136.0 | 11185.1 | 11227.5 | 11202.9 | 11124.8 | 11046.7 | 10955.2 | 10961.9 | 11011.0 |
| 47.5° | 11847.7 | 11885.7 | 12012.8 | 12095.4 | 12117.7 | 12113.2 | 12026.2 | 11919.1 | 11794.2 | 11789.7 | 11832.1 |
| 50° | 12798.2 | 12836.2 | 12994.6 | 13121.7 | 13186.5 | 13179.8 | 13077.1 | 12925.4 | 12773.7 | 12775.9 | 12829.5 |
| 52.5° | 13726.4 | 13773.3 | 13938.4 | 14157.0 | 14284.2 | 14375.7 | 14313.2 | 14170.4 | 13985.2 | 13989.7 | 14038.8 |
| 55° | 14596.6 | 14674.7 | 14864.3 | 15161.1 | 15397.6 | 15654.2 | 15727.8 | 15723.3 | 15611.8 | 15643.0 | 15692.1 |
| 57.5° | 15018.3 | 15134.3 | 15426.6 | 15895.1 | 16377.1 | 16899.2 | 17341.0 | 17671.2 | 17811.8 | 18023.7 | 17974.6 |
| 60° | 14219.5 | 14404.7 | 14835.3 | 15524.8 | 16477.5 | 17566.3 | 18733.2 | 19873.4 | 20846.2 | 21580.3 | 21158.6 |
| 62.5° | 11642.5 | 11883.4 | 12405.5 | 13289.1 | 14730.5 | 16473.0 | 18706.5 | 21401.8 | 24338.0 | 26109.6 | 24844.5 |
| 65° | 7284.9 | 7534.8 | 8065.8 | 9011.9 | 10698.7 | 12865.2 | 15895.1 | 20362.0 | 25848.6 | 28519.3 | 25944.5 |
| 67.5° | 2840.3 | 2976.4 | 3264.3 | 3868.9 | 5136.2 | 7064.0 | 10105.2 | 15174.5 | 21736.5 | 24077.0 | 21332.6 |
| 70° | 1423.5 | 1436.9 | 1490.4 | 1602.0 | 1874.2 | 2434.3 | 3703.8 | 7035.0 | 12465.8 | 15056.2 | 12017.3 |
| 72.5° | 1028.6 | 1030.8 | 1057.6 | 1106.7 | 1193.7 | 1318.6 | 1559.6 | 2153.1 | 4054.1 | 6196.1 | 3799.8 |
| 75° | 787.6 | 796.5 | 812.2 | 838.9 | 885.8 | 948.3 | 1035.3 | 1240.6 | 1537.3 | 1782.7 | 1499.4 |
| 77.5° | 606.9 | 624.7 | 635.9 | 660.4 | 689.4 | 731.8 | 756.4 | 834.5 | 970.6 | 1021.9 | 1006.3 |
| 80° | 461.9 | 477.5 | 502.0 | 522.1 | 542.2 | 562.3 | 553.3 | 589.0 | 660.4 | 702.8 | 680.5 |
| 82.5° | 294.5 | 312.4 | 383.8 | 401.6 | 410.5 | 423.9 | 408.3 | 410.5 | 441.8 | 468.6 | 441.8 |
| 85° | 189.7 | 200.8 | 243.2 | 265.5 | 267.7 | 276.7 | 270.0 | 254.4 | 254.4 | 232.0 | 261.1 |
| 87.5° | 87.0 | 89.2 | 109.3 | 129.4 | 133.9 | 120.5 | 118.3 | 113.8 | 91.5 | 87.0 | 93.7 |
| 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):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5390.6 | 5390.6 | 5390.6 | 5390.6 | 5390.6 | 5390.6 | 5390.6 | 5390.6 |
| 2.5° | 5388.4 | 5392.8 | 5395.1 | 5401.8 | 5404.0 | 5404.0 | 5406.2 | 5410.7 |
| 5° | 5430.8 | 5437.5 | 5439.7 | 5448.6 | 5450.8 | 5448.6 | 5453.1 | 5455.3 |
| 7.5° | 5506.6 | 5517.8 | 5522.2 | 5531.2 | 5524.5 | 5533.4 | 5535.6 | 5535.6 |
| 10° | 5618.2 | 5629.3 | 5631.6 | 5640.5 | 5636.0 | 5640.5 | 5640.5 | 5636.0 |
| 12.5° | 5765.4 | 5767.7 | 5761.0 | 5767.7 | 5758.8 | 5763.2 | 5756.5 | 5752.1 |
| 15° | 5928.3 | 5921.6 | 5906.0 | 5906.0 | 5892.6 | 5894.9 | 5892.6 | 5890.4 |
| 17.5° | 6086.7 | 6073.4 | 6062.2 | 6057.7 | 6046.6 | 6044.3 | 6037.7 | 6037.7 |
| 20° | 6260.8 | 6254.1 | 6247.4 | 6238.5 | 6227.3 | 6216.2 | 6213.9 | 6218.4 |
| 22.5° | 6470.5 | 6468.3 | 6468.3 | 6463.8 | 6448.2 | 6437.0 | 6430.3 | 6430.3 |
| 25° | 6751.6 | 6731.6 | 6731.6 | 6729.3 | 6722.6 | 6715.9 | 6702.6 | 6709.3 |
| 27.5° | 7068.5 | 7057.3 | 7066.2 | 7064.0 | 7057.3 | 7057.3 | 7048.4 | 7048.4 |
| 30° | 7458.9 | 7454.5 | 7467.9 | 7456.7 | 7434.4 | 7432.2 | 7423.2 | 7412.1 |
| 32.5° | 7909.6 | 7905.2 | 7925.3 | 7911.9 | 7876.2 | 7856.1 | 7838.2 | 7829.3 |
| 35° | 8411.7 | 8413.9 | 8438.4 | 8429.5 | 8389.4 | 8376.0 | 8344.7 | 8340.3 |
| 37.5° | 8960.5 | 8996.2 | 9038.6 | 9047.6 | 9014.1 | 9005.2 | 8971.7 | 8953.8 |
| 40° | 9605.4 | 9652.2 | 9716.9 | 9732.5 | 9696.8 | 9690.1 | 9643.3 | 9618.7 |
| 42.5° | 10292.6 | 10372.9 | 10453.2 | 10466.6 | 10430.9 | 10395.2 | 10350.6 | 10332.7 |
| 45° | 11060.1 | 11156.1 | 11260.9 | 11287.7 | 11234.1 | 11191.8 | 11133.7 | 11133.7 |
| 47.5° | 11921.4 | 12041.8 | 12160.1 | 12233.7 | 12184.6 | 12140.0 | 12070.8 | 12026.2 |
| 50° | 12938.8 | 13103.9 | 13257.9 | 13333.7 | 13255.6 | 13170.8 | 13050.4 | 13010.2 |
| 52.5° | 14215.0 | 14393.5 | 14527.4 | 14487.3 | 14366.8 | 14248.5 | 14116.9 | 14063.3 |
| 55° | 15843.8 | 15904.1 | 15904.1 | 15752.3 | 15511.4 | 15312.8 | 15105.3 | 15036.1 |
| 57.5° | 17880.9 | 17648.9 | 17291.9 | 16838.9 | 16270.0 | 15774.7 | 15440.0 | 15281.6 |
| 60° | 20275.0 | 19159.4 | 17898.8 | 16660.4 | 15643.0 | 14804.1 | 14306.5 | 14078.9 |
| 62.5° | 21870.3 | 18951.9 | 16426.2 | 14438.2 | 12974.5 | 11963.8 | 11276.5 | 11008.8 |
| 65° | 20440.1 | 15805.9 | 12423.4 | 10044.9 | 8449.6 | 7421.0 | 6740.5 | 6490.6 |
| 67.5° | 14971.4 | 9904.3 | 6615.5 | 4741.3 | 3474.0 | 2771.2 | 2492.3 | 2376.2 |
| 70° | 6720.4 | 3487.4 | 2137.5 | 1668.9 | 1439.1 | 1320.9 | 1269.6 | 1251.7 |
| 72.5° | 2025.9 | 1465.9 | 1236.1 | 1115.6 | 1024.1 | 966.1 | 923.7 | 919.3 |
| 75° | 1222.7 | 1017.4 | 903.6 | 832.2 | 774.2 | 727.4 | 705.1 | 698.4 |
| 77.5° | 854.6 | 747.5 | 693.9 | 642.6 | 598.0 | 562.3 | 542.2 | 526.6 |
| 80° | 600.2 | 548.9 | 524.3 | 495.3 | 466.3 | 432.9 | 403.8 | 390.5 |
| 82.5° | 401.6 | 390.5 | 390.5 | 372.6 | 348.1 | 316.8 | 258.8 | 245.4 |
| 85° | 258.8 | 256.6 | 261.1 | 254.4 | 236.5 | 203.0 | 167.3 | 158.4 |
| 87.5° | 120.5 | 122.7 | 136.1 | 133.9 | 129.4 | 107.1 | 84.8 | 80.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)