

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: P382702

Luminaire Tested: **GLEON-SA0D-735-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P382702  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA0D-735-U-T3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 52135.9 lumens  
Efficiency: N/A  
Efficacy: 81.5 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G5

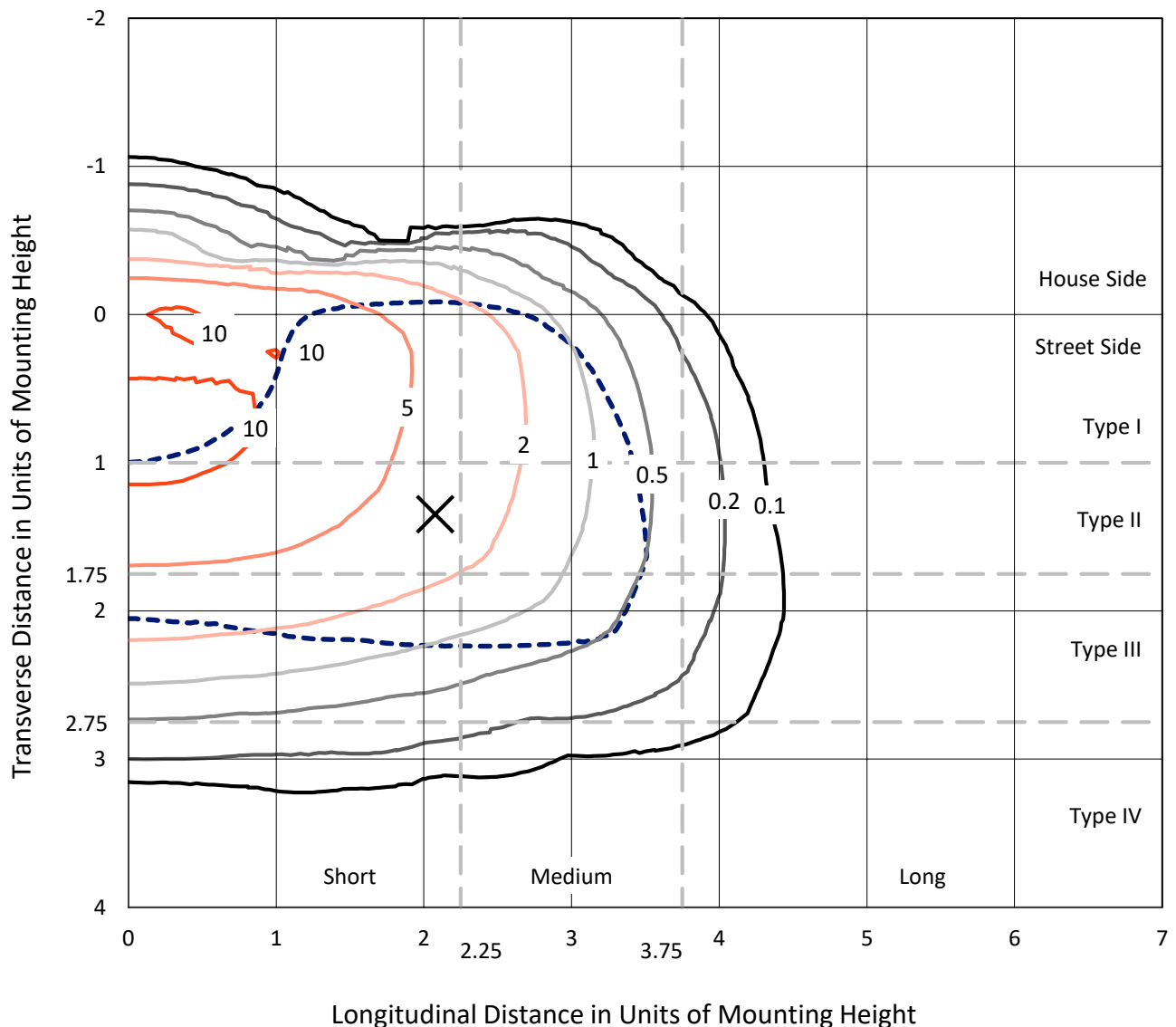
Input Watts (W): 640  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

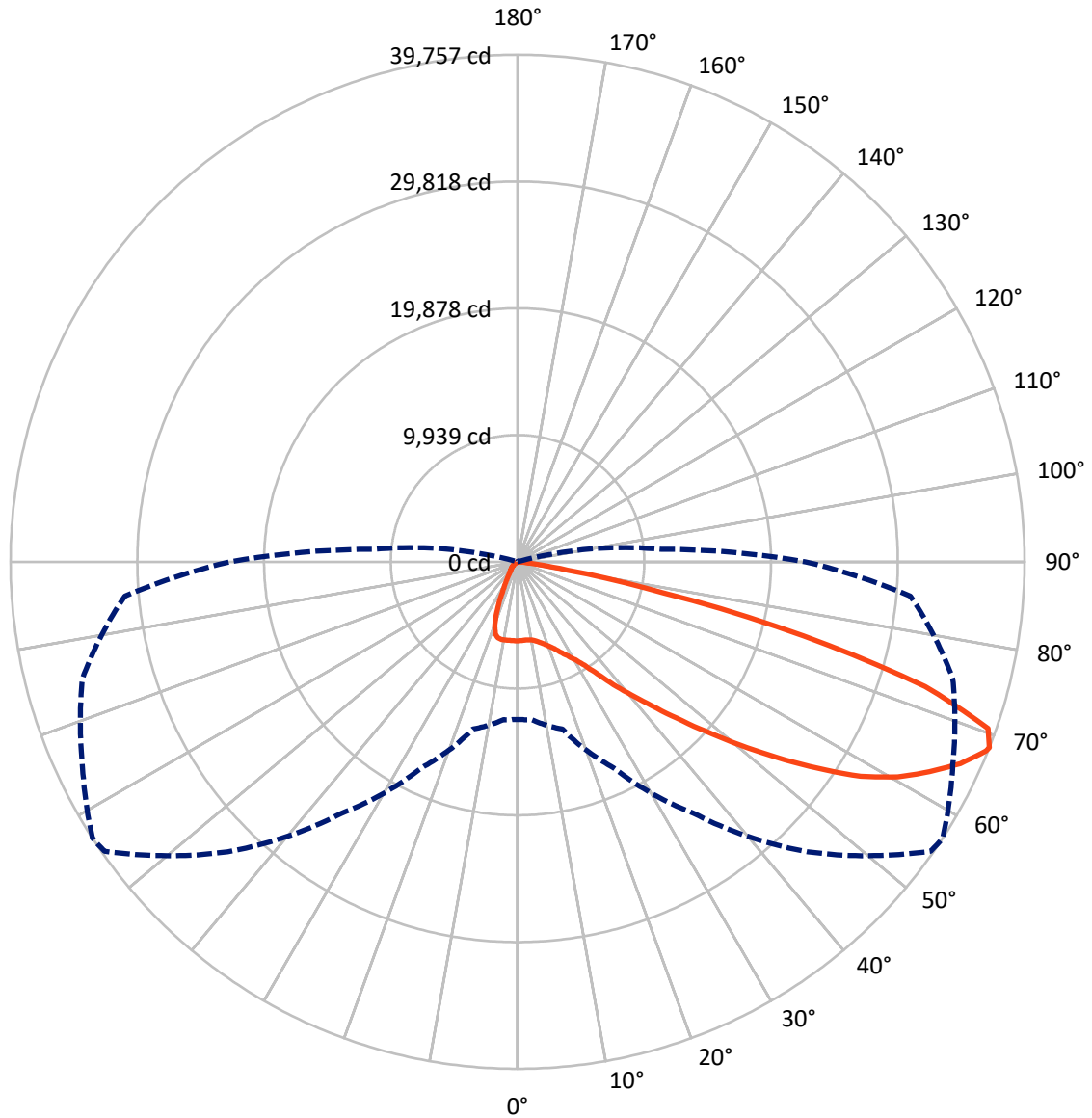
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5717.0   | 0.0    | 5717.0  |
|                    | % Fixture | 11.0     | 0.0    | 11.0    |
| <b>Street Side</b> | Lumens    | 46418.9  | 0.0    | 46418.9 |
|                    | % Fixture | 89.0     | 0.0    | 89.0    |
| <b>Total</b>       | Lumens    | 52135.9  | 0.0    | 52135.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 579.8   | 1.1       |
| 10°-20°   | 1606.6  | 3.1       |
| 20°-30°   | 2771.5  | 5.3       |
| 30°-40°   | 4783.5  | 9.2       |
| 40°-50°   | 8182.3  | 15.7      |
| 50°-60°   | 13090.9 | 25.1      |
| 60°-70°   | 15125.1 | 29.0      |
| 70°-80°   | 5779.5  | 11.1      |
| 80°-90°   | 216.7   | 0.4       |
| 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°    | 52135.9 | 100.0     |
| 0°-180°   | 52135.9 | 100.0     |

**Coefficient of Utilization**



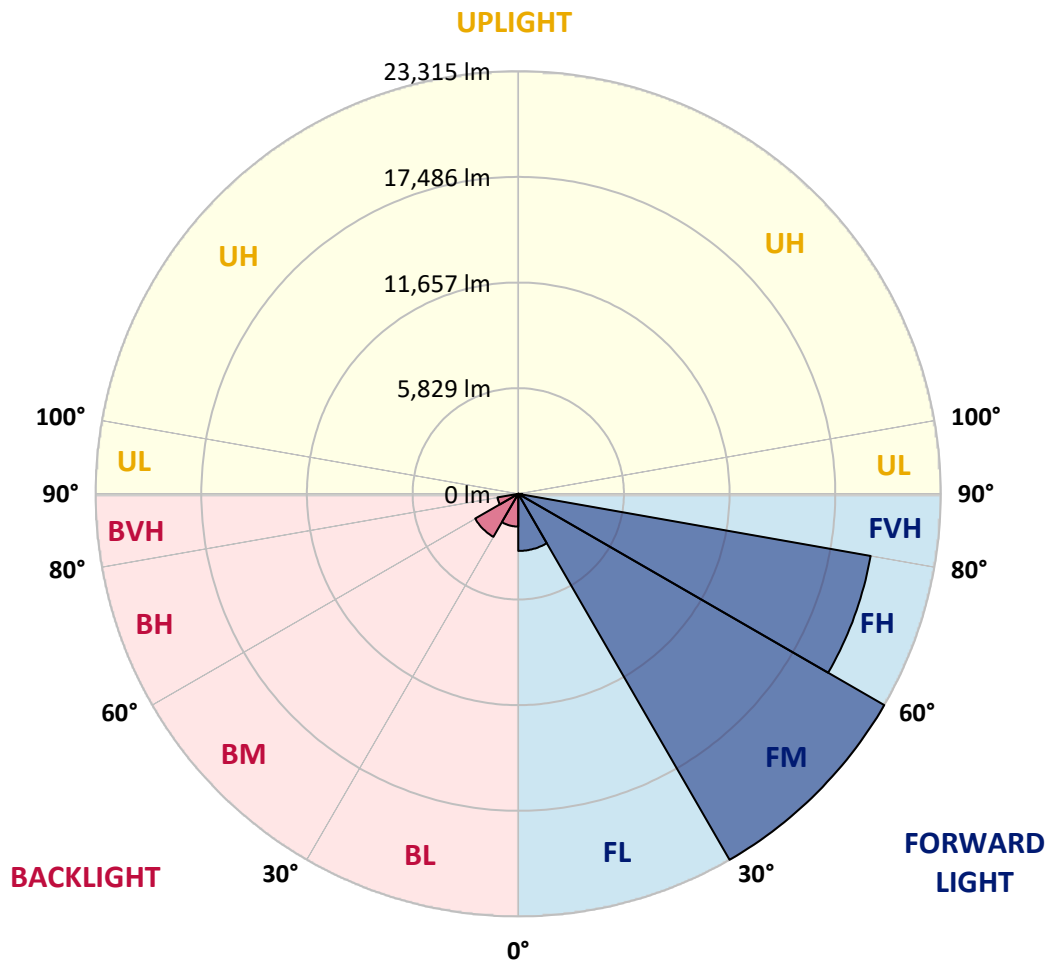
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 3151.1  | 6.0       |                         |      |         |
| FM (30°-60°)   | 23314.7 | 44.7      |                         |      |         |
| FH (60°-80°)   | 19740.3 | 37.9      |                         |      | G5      |
| FVH (80°-90°)  | 212.7   | 0.4       |                         |      | G2/225  |
| BL (0°-30°)    | 1806.8  | 3.5       | B3/2500                 |      |         |
| BM (30°-60°)   | 2742.0  | 5.3       | B3/5000                 |      |         |
| BH (60°-80°)   | 1164.3  | 2.2       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 4.0     | 0.0       |                         |      | G0/10   |
| 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°     | 57°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6195.2  | 6195.2  | 6195.2  | 6195.2  | 6195.2  | 6195.2  | 6195.2  | 6195.2  | 6195.2  | 6195.2  | 6195.2  |
| 2.5°  | 6049.7  | 6076.8  | 6096.5  | 6108.8  | 6123.6  | 6155.7  | 6165.5  | 6180.4  | 6187.7  | 6187.7  | 6204.9  |
| 5°    | 5810.5  | 5840.2  | 5882.1  | 5916.5  | 5985.6  | 6074.3  | 6138.4  | 6163.1  | 6207.5  | 6246.9  | 6269.0  |
| 7.5°  | 5588.6  | 5623.2  | 5672.5  | 5753.9  | 5872.2  | 6015.2  | 6148.3  | 6182.8  | 6269.0  | 6352.9  | 6394.8  |
| 10°   | 5445.7  | 5472.8  | 5536.9  | 5652.8  | 5808.1  | 6007.7  | 6195.2  | 6237.0  | 6384.9  | 6525.5  | 6604.4  |
| 12.5° | 5396.4  | 5421.0  | 5487.6  | 5618.3  | 5810.5  | 6044.7  | 6303.6  | 6365.3  | 6582.1  | 6786.8  | 6897.7  |
| 15°   | 5467.9  | 5472.8  | 5544.3  | 5667.5  | 5857.4  | 6135.9  | 6483.6  | 6557.5  | 6831.1  | 7097.4  | 7235.4  |
| 17.5° | 5744.0  | 5721.8  | 5758.7  | 5813.0  | 5963.4  | 6256.7  | 6673.4  | 6784.3  | 7149.2  | 7462.3  | 7593.0  |
| 20°   | 6434.3  | 6434.3  | 6350.5  | 6202.5  | 6204.9  | 6444.1  | 6929.8  | 7055.4  | 7501.7  | 7864.1  | 7982.4  |
| 22.5° | 7615.1  | 7593.0  | 7425.3  | 7062.9  | 6730.1  | 6767.0  | 7242.9  | 7405.5  | 7925.7  | 8312.8  | 8352.2  |
| 25°   | 9035.1  | 9008.0  | 8749.1  | 8238.8  | 7662.0  | 7289.6  | 7666.8  | 7854.3  | 8431.1  | 8773.8  | 8692.4  |
| 27.5° | 10538.9 | 10516.7 | 10260.3 | 9626.7  | 8805.8  | 8122.9  | 8172.3  | 8349.7  | 8946.3  | 9284.1  | 9025.2  |
| 30°   | 11995.8 | 12003.2 | 11749.3 | 11098.5 | 10169.1 | 9185.4  | 8813.2  | 8916.8  | 9446.7  | 9789.4  | 9419.6  |
| 32.5° | 13381.3 | 13391.1 | 13171.7 | 12444.5 | 11576.7 | 10420.6 | 9700.7  | 9673.6  | 10028.6 | 10366.3 | 9942.3  |
| 35°   | 14616.4 | 14641.0 | 14490.6 | 13926.1 | 13006.5 | 11796.1 | 10852.0 | 10787.9 | 10854.4 | 11236.5 | 10743.4 |
| 37.5° | 15807.1 | 15821.9 | 15708.4 | 15232.7 | 14463.5 | 13307.3 | 12306.4 | 12215.2 | 12072.2 | 12365.5 | 11801.0 |
| 40°   | 17111.1 | 17074.1 | 16943.5 | 16512.1 | 15851.4 | 14976.3 | 13869.3 | 13711.6 | 13462.6 | 13723.9 | 13191.5 |
| 42.5° | 18324.0 | 18282.2 | 18304.4 | 17816.2 | 17259.1 | 16692.0 | 15691.2 | 15420.0 | 15274.6 | 15575.3 | 14897.4 |
| 45°   | 19840.2 | 19818.0 | 19891.9 | 19467.9 | 19016.8 | 18605.1 | 17779.2 | 17483.4 | 17419.3 | 17771.9 | 16960.8 |
| 47.5° | 21336.5 | 21390.8 | 21620.1 | 21440.1 | 21257.6 | 20895.3 | 19990.5 | 19857.4 | 19896.8 | 20323.4 | 19137.6 |
| 50°   | 22584.0 | 22648.1 | 23276.7 | 23483.8 | 23747.6 | 23535.6 | 22628.3 | 22547.0 | 22702.3 | 23086.9 | 21479.5 |
| 52.5° | 23486.3 | 23616.9 | 24398.3 | 25352.4 | 26313.9 | 26456.9 | 25552.1 | 25478.1 | 25687.7 | 25746.9 | 23289.1 |
| 55°   | 24112.5 | 24228.2 | 25113.3 | 26858.7 | 28816.0 | 29432.3 | 28870.3 | 28584.4 | 28544.9 | 27960.7 | 25192.2 |
| 57.5° | 24223.3 | 24211.0 | 25483.0 | 27832.4 | 30778.4 | 32368.5 | 32013.5 | 31732.4 | 30923.8 | 30006.7 | 27373.9 |
| 60°   | 23597.2 | 23668.7 | 25145.4 | 28170.2 | 32011.0 | 34589.7 | 34616.8 | 34251.9 | 32992.2 | 31996.2 | 29489.1 |
| 62.5° | 21669.4 | 21960.3 | 23451.7 | 27285.1 | 31996.2 | 35484.5 | 36524.9 | 36246.2 | 34740.0 | 33625.7 | 31633.9 |
| 65°   | 18543.5 | 18647.0 | 20069.4 | 24252.9 | 29834.2 | 35109.8 | 38243.1 | 38139.6 | 36315.3 | 35208.4 | 32735.8 |
| 67.5° | 13541.5 | 13317.1 | 14811.1 | 19098.1 | 25258.7 | 32925.6 | 39475.7 | 39606.4 | 37530.7 | 35533.8 | 31562.3 |
| 68°   | 12358.2 | 12424.8 | 13588.4 | 17823.6 | 24060.7 | 32153.9 | 39557.1 | 39756.8 | 37651.5 | 35321.8 | 30921.4 |
| 70°   | 7366.1  | 7494.3  | 8532.1  | 12271.9 | 18304.4 | 27788.1 | 38679.4 | 39135.5 | 36931.6 | 33135.1 | 26745.3 |
| 72.5° | 1881.0  | 2033.8  | 3015.0  | 5492.5  | 10455.0 | 19578.9 | 32652.0 | 33423.6 | 32065.3 | 26880.8 | 18055.3 |
| 75°   | 774.1   | 813.5   | 1077.3  | 1809.4  | 3895.1  | 8820.6  | 21521.5 | 23173.2 | 22229.0 | 16093.0 | 8159.9  |
| 77.5° | 535.0   | 562.1   | 692.7   | 1003.4  | 1686.2  | 2990.4  | 10551.2 | 11744.4 | 10580.8 | 5492.5  | 1779.9  |
| 80°   | 384.5   | 406.8   | 495.5   | 668.1   | 968.8   | 1067.5  | 3439.0  | 3976.4  | 3157.9  | 1205.5  | 441.3   |
| 82.5° | 229.3   | 246.5   | 369.8   | 475.8   | 589.2   | 510.3   | 855.4   | 971.3   | 914.6   | 599.1   | 197.2   |
| 85°   | 113.4   | 133.1   | 249.0   | 340.2   | 318.0   | 214.4   | 261.3   | 290.9   | 359.9   | 364.9   | 106.0   |
| 87.5° | 7.4     | 14.8    | 145.4   | 204.6   | 88.8    | 49.3    | 76.4    | 93.7    | 128.2   | 180.0   | 44.3    |
| 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°    | 6195.2  | 6195.2  | 6195.2 | 6195.2 | 6195.2 | 6195.2 | 6195.2 | 6195.2 | 6195.2 | 6195.2 | 6195.2 |
| 2.5°  | 6212.4  | 6214.8  | 6197.6 | 6190.2 | 6195.2 | 6165.5 | 6153.2 | 6158.2 | 6158.2 | 6165.5 | 6153.2 |
| 5°    | 6274.0  | 6274.0  | 6244.4 | 6204.9 | 6182.8 | 6126.1 | 6089.2 | 6079.3 | 6071.8 | 6066.9 | 6057.1 |
| 7.5°  | 6407.1  | 6392.4  | 6340.6 | 6254.3 | 6180.4 | 6057.1 | 5963.4 | 5914.1 | 5889.4 | 5879.6 | 5872.2 |
| 10°   | 6621.6  | 6594.5  | 6508.2 | 6347.9 | 6177.8 | 5958.5 | 5753.9 | 5608.4 | 5487.6 | 5438.3 | 5408.8 |
| 12.5° | 6910.0  | 6870.6  | 6725.1 | 6458.9 | 6160.6 | 5756.3 | 5312.6 | 4886.1 | 4489.2 | 4326.5 | 4245.2 |
| 15°   | 7242.9  | 7186.1  | 6956.9 | 6552.6 | 6059.5 | 5300.2 | 4336.4 | 3589.3 | 3039.6 | 2832.6 | 2743.8 |
| 17.5° | 7580.6  | 7506.6  | 7159.0 | 6611.8 | 5756.3 | 4356.1 | 3042.1 | 2297.6 | 1930.3 | 1831.7 | 1797.1 |
| 20°   | 7920.8  | 7812.3  | 7334.1 | 6567.4 | 5071.0 | 3140.7 | 2006.7 | 1678.8 | 1572.8 | 1543.2 | 1533.3 |
| 22.5° | 8243.7  | 8076.1  | 7491.9 | 6394.8 | 4015.9 | 2107.8 | 1587.6 | 1484.0 | 1449.6 | 1432.3 | 1427.4 |
| 25°   | 8524.8  | 8290.6  | 7629.8 | 5862.3 | 2842.4 | 1592.6 | 1429.8 | 1395.4 | 1350.9 | 1318.9 | 1321.4 |
| 27.5° | 8788.5  | 8505.0  | 7713.7 | 4984.7 | 1895.8 | 1360.8 | 1323.8 | 1277.0 | 1195.6 | 1148.8 | 1148.8 |
| 30°   | 9106.5  | 8791.0  | 7775.3 | 3835.9 | 1395.4 | 1203.0 | 1173.5 | 1101.9 | 991.0  | 929.4  | 929.4  |
| 32.5° | 9584.8  | 9224.9  | 7735.9 | 2692.0 | 1156.2 | 1057.6 | 988.6  | 889.9  | 769.2  | 710.0  | 707.5  |
| 35°   | 10317.0 | 9895.5  | 7454.9 | 1765.1 | 1020.6 | 919.5  | 808.6  | 687.8  | 581.8  | 532.5  | 530.1  |
| 37.5° | 11303.1 | 10792.8 | 6823.8 | 1262.2 | 914.6  | 791.3  | 658.2  | 525.1  | 446.2  | 414.2  | 411.7  |
| 40°   | 12582.5 | 11835.6 | 5921.5 | 1023.0 | 816.0  | 668.1  | 507.9  | 406.8  | 352.5  | 327.9  | 330.3  |
| 42.5° | 14118.3 | 12952.3 | 4839.2 | 882.5  | 719.8  | 549.7  | 396.9  | 320.5  | 286.0  | 268.8  | 263.8  |
| 45°   | 15824.3 | 14054.3 | 3705.2 | 786.4  | 623.7  | 443.7  | 310.6  | 253.9  | 226.8  | 217.0  | 217.0  |
| 47.5° | 17700.3 | 15126.7 | 2711.7 | 702.6  | 520.2  | 342.6  | 249.0  | 207.1  | 184.9  | 177.5  | 175.0  |
| 50°   | 19403.9 | 15871.1 | 1954.9 | 613.8  | 426.5  | 271.2  | 202.1  | 172.5  | 157.8  | 147.9  | 147.9  |
| 52.5° | 20823.8 | 16105.3 | 1439.7 | 517.7  | 345.1  | 217.0  | 167.7  | 147.9  | 133.1  | 125.8  | 125.8  |
| 55°   | 22073.7 | 16009.2 | 1069.9 | 426.5  | 278.5  | 177.5  | 143.0  | 125.8  | 113.4  | 106.0  | 106.0  |
| 57.5° | 23271.7 | 15698.6 | 798.7  | 347.6  | 224.3  | 143.0  | 120.8  | 106.0  | 93.7   | 88.8   | 88.8   |
| 60°   | 24250.4 | 15180.9 | 594.1  | 281.0  | 180.0  | 115.9  | 101.1  | 86.3   | 76.4   | 69.0   | 69.0   |
| 62.5° | 25044.3 | 14609.0 | 436.3  | 231.8  | 143.0  | 91.2   | 78.9   | 71.4   | 56.7   | 49.3   | 49.3   |
| 65°   | 25049.2 | 13659.8 | 327.9  | 192.3  | 110.9  | 71.4   | 59.2   | 56.7   | 37.0   | 29.6   | 27.1   |
| 67.5° | 23237.3 | 11776.4 | 251.4  | 165.2  | 86.3   | 54.2   | 44.3   | 46.9   | 19.7   | 12.3   | 9.9    |
| 68°   | 22579.0 | 11298.2 | 236.7  | 162.7  | 81.3   | 51.8   | 41.9   | 46.9   | 17.2   | 9.9    | 7.4    |
| 70°   | 19036.5 | 8988.2  | 189.8  | 157.8  | 71.4   | 39.4   | 34.5   | 46.9   | 14.8   | 7.4    | 4.9    |
| 72.5° | 12175.8 | 5216.4  | 140.5  | 125.8  | 54.2   | 29.6   | 22.2   | 41.9   | 14.8   | 4.9    | 2.4    |
| 75°   | 5181.9  | 1617.2  | 96.1   | 88.8   | 32.0   | 22.2   | 14.8   | 27.1   | 9.9    | 2.4    | 0.0    |
| 77.5° | 1092.1  | 364.9   | 56.7   | 54.2   | 22.2   | 14.8   | 9.9    | 7.4    | 2.4    | 0.0    | 0.0    |
| 80°   | 281.0   | 106.0   | 29.6   | 27.1   | 12.3   | 7.4    | 4.9    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 88.8    | 41.9    | 17.2   | 12.3   | 4.9    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 44.3    | 24.7    | 9.9    | 4.9    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 24.7    | 7.4     | 2.4    | 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)