

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: P193478

Luminaire Tested: **GLEON-AF-10-LED-E1-AFL-8030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P193478  
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-10-LED-E1-AFL-8030-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(10) 80 CRI, 3000K, 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: 39356 lumens  
Efficiency: N/A  
Efficacy: 70.5 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 558  
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

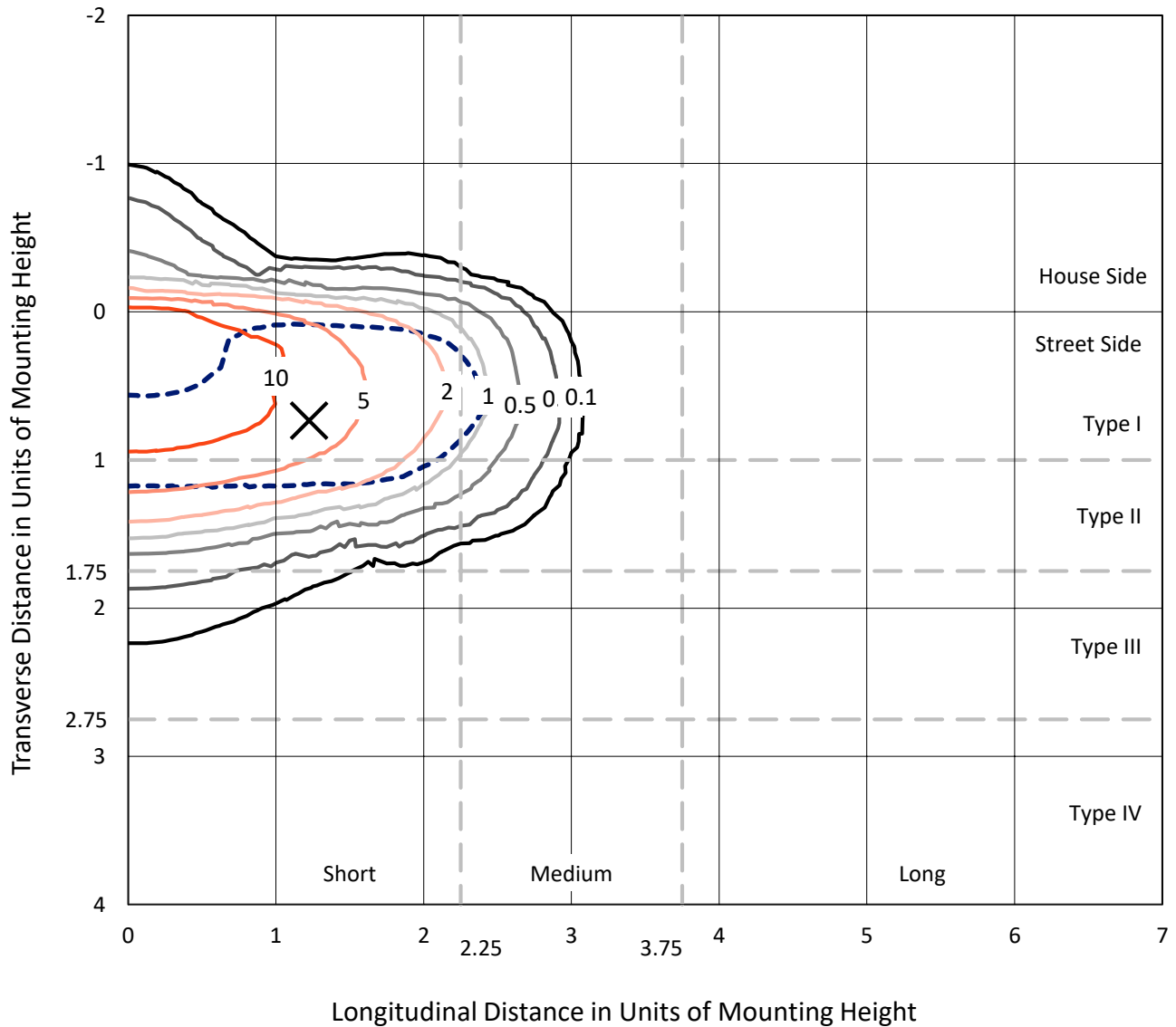


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

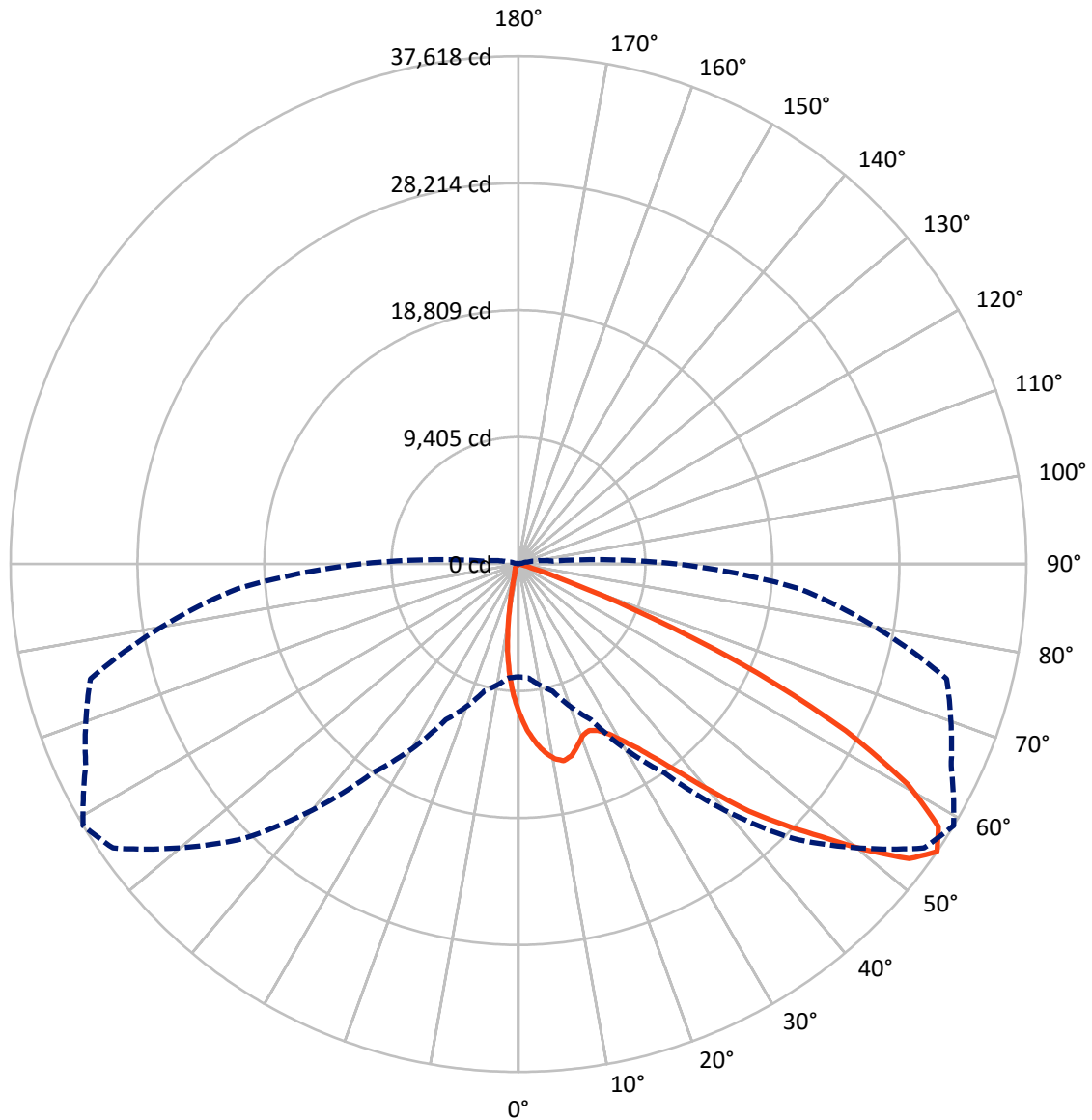


Based on 30 foot mounting height. Maximum calculated value = 15.3 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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

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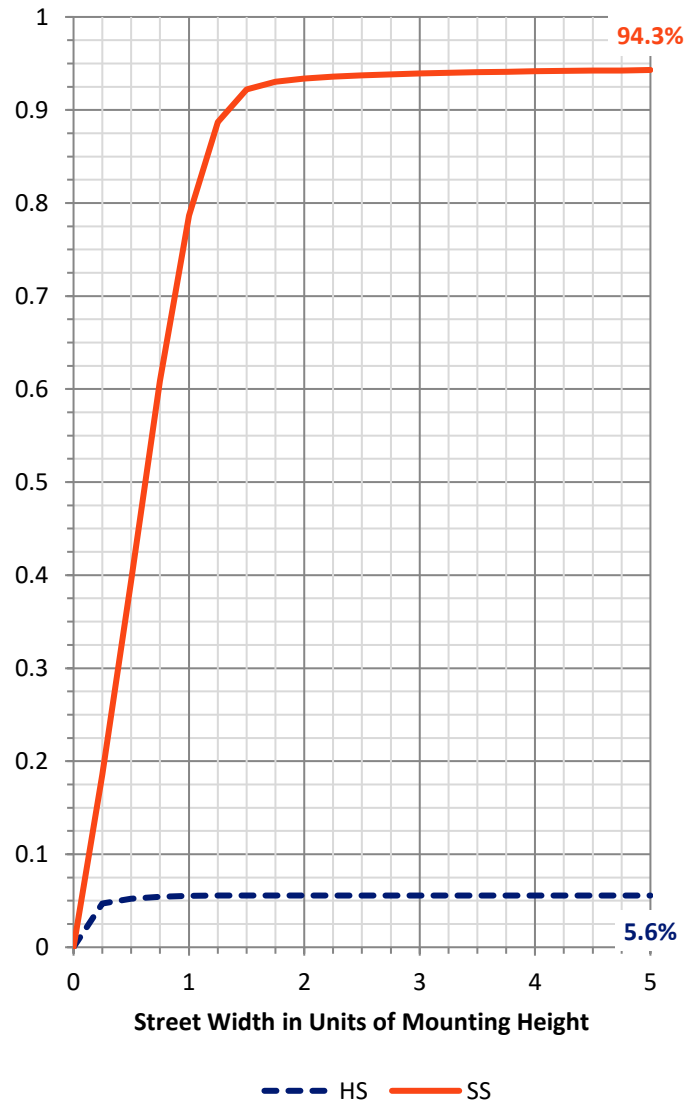
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2198.3   | 0.0    | 2198.3  |
|                    | % Fixture | 5.6      | 0.0    | 5.6     |
| <b>Street Side</b> | Lumens    | 37157.8  | 0.0    | 37157.8 |
|                    | % Fixture | 94.4     | 0.0    | 94.4    |
| <b>Total</b>       | Lumens    | 39356.0  | 0.0    | 39356.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 927.9   | 2.4       |
| 10°-20°   | 2221.8  | 5.6       |
| 20°-30°   | 3780.6  | 9.6       |
| 30°-40°   | 6501.8  | 16.5      |
| 40°-50°   | 10038.1 | 25.5      |
| 50°-60°   | 10091.4 | 25.6      |
| 60°-70°   | 5175.0  | 13.1      |
| 70°-80°   | 560.8   | 1.4       |
| 80°-90°   | 58.6    | 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°    | 39356.0 | 100.0     |
| 0°-180°   | 39356.0 | 100.0     |

**Coefficient of Utilization**



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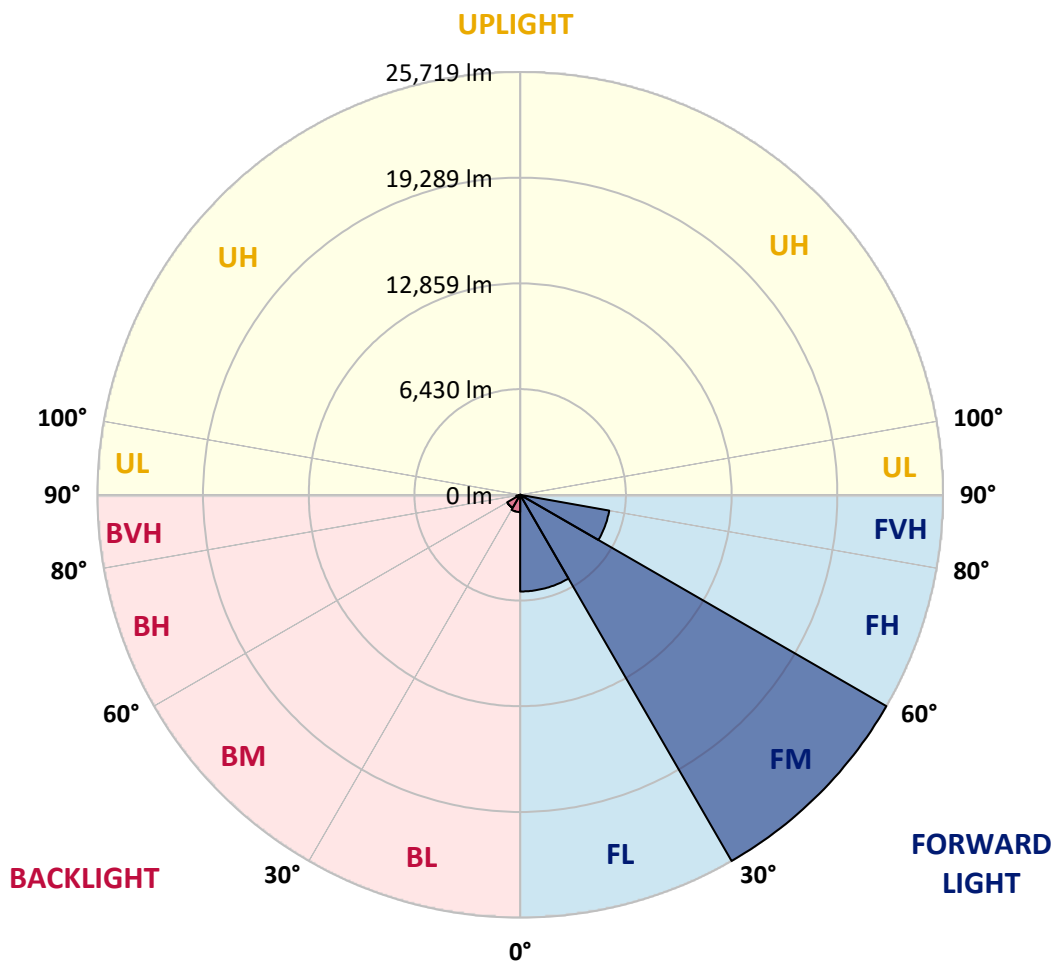
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 5881.1  | 14.9      |                         |      |         |
| FM (30°-60°)   | 25719.0 | 65.3      |                         |      |         |
| FH (60°-80°)   | 5500.3  | 14.0      |                         |      | G3/7500 |
| FVH (80°-90°)  | 57.4    | 0.1       |                         |      | G1/100  |
| BL (0°-30°)    | 1049.2  | 2.7       | B3/2500                 |      |         |
| BM (30°-60°)   | 912.3   | 2.3       | B1/1000                 |      |         |
| BH (60°-80°)   | 235.5   | 0.6       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 1.2     | 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-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 59°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 |
| 2.5°  | 13108.5 | 12969.1 | 12927.3 | 12899.5 | 12771.7 | 12611.5 | 12393.1 | 12290.9 | 12081.9 | 11745.1 | 11331.7 |
| 5°    | 14309.2 | 14283.7 | 14190.8 | 14139.7 | 14002.7 | 13775.1 | 13426.7 | 13259.4 | 12927.3 | 12360.6 | 11619.7 |
| 7.5°  | 13784.3 | 13944.6 | 14072.3 | 14286.0 | 14555.4 | 14546.1 | 14253.5 | 14079.3 | 13707.7 | 12959.8 | 11940.2 |
| 10°   | 11756.8 | 11886.8 | 12095.8 | 12581.3 | 13570.7 | 14443.9 | 14787.7 | 14662.3 | 14365.0 | 13510.3 | 12249.1 |
| 12.5° | 11359.6 | 11345.7 | 11382.8 | 11524.5 | 12042.4 | 13287.3 | 14697.1 | 14950.3 | 14889.9 | 14014.3 | 12541.8 |
| 15°   | 11571.0 | 11554.7 | 11550.0 | 11598.8 | 11724.2 | 12249.1 | 14016.6 | 14743.6 | 15210.4 | 14481.1 | 12790.3 |
| 17.5° | 12163.2 | 12093.5 | 12056.4 | 12016.9 | 11979.7 | 12109.8 | 13199.1 | 14165.2 | 15259.2 | 14889.9 | 12997.0 |
| 20°   | 13178.2 | 13062.0 | 12925.0 | 12702.0 | 12493.0 | 12428.0 | 12855.3 | 13570.7 | 15085.0 | 15201.1 | 13131.7 |
| 22.5° | 14453.2 | 14304.6 | 14067.7 | 13661.2 | 13236.2 | 12990.0 | 13024.9 | 13382.5 | 14824.8 | 15540.2 | 13194.4 |
| 25°   | 15886.3 | 15695.8 | 15379.9 | 14815.6 | 14190.8 | 13754.2 | 13526.5 | 13652.0 | 14706.4 | 15937.4 | 13266.4 |
| 27.5° | 17421.5 | 17210.1 | 16796.7 | 16027.9 | 15319.6 | 14729.6 | 14265.1 | 14248.9 | 14908.5 | 16457.6 | 13382.5 |
| 30°   | 18942.7 | 18910.2 | 18371.4 | 17558.5 | 16620.2 | 15902.5 | 15233.6 | 15147.7 | 15472.8 | 17177.6 | 13612.5 |
| 32.5° | 20972.6 | 20728.8 | 20069.2 | 19233.1 | 18150.7 | 17289.1 | 16497.1 | 16297.3 | 16339.2 | 18016.0 | 13967.8 |
| 35°   | 23532.1 | 23265.0 | 22336.0 | 21181.7 | 19971.6 | 18954.3 | 18078.7 | 17807.0 | 17704.8 | 19388.7 | 14567.0 |
| 37.5° | 25185.8 | 25181.1 | 24598.1 | 23422.9 | 22124.6 | 21002.8 | 20050.6 | 19732.4 | 19525.7 | 21047.0 | 15496.1 |
| 40°   | 25229.9 | 25339.0 | 25415.7 | 25404.1 | 24479.7 | 23446.2 | 22600.8 | 22208.2 | 21727.5 | 23262.7 | 16696.8 |
| 42.5° | 23875.8 | 24156.9 | 24832.7 | 25980.1 | 26528.2 | 26117.1 | 25404.1 | 25018.5 | 24303.2 | 25634.0 | 18160.0 |
| 45°   | 22045.7 | 22240.8 | 23422.9 | 25536.5 | 27638.4 | 28764.8 | 28221.3 | 27531.5 | 26588.6 | 28107.5 | 19472.3 |
| 47.5° | 21225.8 | 21260.6 | 22024.8 | 24345.0 | 27722.0 | 30934.1 | 31263.9 | 30142.1 | 28664.9 | 30100.3 | 20498.8 |
| 50°   | 18775.5 | 18838.2 | 19892.7 | 22280.2 | 26741.9 | 31958.3 | 34320.3 | 33256.6 | 30929.4 | 31635.5 | 20872.8 |
| 52.5° | 14151.3 | 14239.6 | 15577.4 | 18887.0 | 24047.7 | 31521.7 | 36508.2 | 36250.4 | 33409.9 | 32385.7 | 20893.7 |
| 55°   | 8349.6  | 8465.7  | 9743.1  | 12713.6 | 18914.9 | 28743.9 | 36670.8 | 37618.4 | 35367.8 | 32829.3 | 20861.2 |
| 57.5° | 3899.6  | 3980.9  | 4712.5  | 6549.6  | 11763.7 | 22716.9 | 34222.8 | 36680.1 | 36447.8 | 33063.8 | 21091.1 |
| 60°   | 2071.7  | 2094.9  | 2271.5  | 2835.8  | 5316.3  | 14404.5 | 29445.3 | 33121.9 | 35463.0 | 33389.0 | 21372.1 |
| 62.5° | 1584.0  | 1590.9  | 1581.7  | 1649.0  | 2234.3  | 6394.0  | 22257.0 | 27229.6 | 31498.4 | 33145.1 | 21060.9 |
| 65°   | 1372.6  | 1384.2  | 1319.2  | 1303.0  | 1433.0  | 2280.7  | 13222.3 | 19409.6 | 24751.4 | 29854.1 | 18940.4 |
| 67.5° | 1231.0  | 1235.6  | 1156.6  | 1089.3  | 1112.5  | 1233.3  | 5216.5  | 10625.7 | 16383.3 | 21883.1 | 13728.6 |
| 70°   | 1133.4  | 1128.8  | 1042.8  | 936.0   | 905.8   | 843.1   | 1658.3  | 3894.9  | 7829.3  | 11097.2 | 6384.7  |
| 72.5° | 1003.3  | 1005.7  | 963.9   | 824.5   | 752.5   | 589.9   | 768.8   | 1135.7  | 2336.5  | 3024.0  | 1495.7  |
| 75°   | 889.5   | 877.9   | 826.8   | 738.6   | 620.1   | 387.9   | 380.9   | 506.3   | 720.0   | 715.3   | 322.8   |
| 77.5° | 643.3   | 631.7   | 648.0   | 606.2   | 476.1   | 250.8   | 190.4   | 243.9   | 292.6   | 283.4   | 90.6    |
| 80°   | 471.5   | 464.5   | 418.1   | 504.0   | 420.4   | 171.9   | 118.5   | 130.1   | 151.0   | 127.7   | 27.9    |
| 82.5° | 322.8   | 320.5   | 295.0   | 278.7   | 239.2   | 104.5   | 74.3    | 81.3    | 97.5    | 72.0    | 13.9    |
| 85°   | 51.1    | 58.1    | 213.7   | 169.5   | 141.7   | 46.5    | 51.1    | 55.7    | 65.0    | 39.5    | 4.6     |
| 87.5° | 0.0     | 0.0     | 99.9    | 88.3    | 27.9    | 18.6    | 30.2    | 32.5    | 32.5    | 20.9    | 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°    | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 | 11078.6 |
| 2.5°  | 11120.4 | 10888.1 | 10458.5 | 10014.8 | 9603.8  | 9113.7  | 8776.9  | 8523.8  | 8231.1  | 8152.2  | 8324.0  |
| 5°    | 11197.0 | 10758.1 | 9833.7  | 8828.0  | 7882.7  | 6835.3  | 6034.0  | 5399.9  | 4826.3  | 4631.2  | 4807.7  |
| 7.5°  | 11317.8 | 10665.2 | 9157.8  | 7501.8  | 5857.5  | 4222.4  | 3102.9  | 2366.7  | 1897.5  | 1758.2  | 1832.5  |
| 10°   | 11438.6 | 10530.4 | 8375.1  | 5931.8  | 3683.6  | 2055.5  | 1337.8  | 1068.4  | 968.5   | 947.6   | 959.2   |
| 12.5° | 11538.4 | 10349.3 | 7420.6  | 4217.8  | 1969.5  | 1100.9  | 875.6   | 831.5   | 817.5   | 817.5   | 822.2   |
| 15°   | 11598.8 | 10075.2 | 6289.5  | 2682.5  | 1133.4  | 831.5   | 764.1   | 750.2   | 750.2   | 752.5   | 757.2   |
| 17.5° | 11591.9 | 9726.8  | 5051.6  | 1623.5  | 847.7   | 736.2   | 696.8   | 685.2   | 682.8   | 687.5   | 689.8   |
| 20°   | 11505.9 | 9271.6  | 3809.0  | 1070.7  | 738.6   | 671.2   | 631.7   | 610.8   | 608.5   | 613.2   | 617.8   |
| 22.5° | 11343.3 | 8709.6  | 2724.4  | 824.5   | 666.6   | 608.5   | 559.7   | 541.2   | 541.2   | 545.8   | 550.4   |
| 25°   | 11145.9 | 8022.1  | 1862.7  | 699.1   | 601.5   | 541.2   | 494.7   | 478.4   | 483.1   | 494.7   | 497.0   |
| 27.5° | 10899.7 | 7248.7  | 1265.8  | 599.2   | 522.6   | 473.8   | 439.0   | 427.3   | 439.0   | 455.2   | 459.9   |
| 30°   | 10688.4 | 6442.8  | 903.5   | 517.9   | 443.6   | 408.8   | 387.9   | 387.9   | 404.1   | 434.3   | 441.3   |
| 32.5° | 10525.8 | 5662.4  | 696.8   | 457.5   | 385.5   | 355.4   | 343.7   | 355.4   | 380.9   | 411.1   | 418.1   |
| 35°   | 10504.9 | 5019.0  | 589.9   | 408.8   | 343.7   | 313.5   | 308.9   | 329.8   | 355.4   | 378.6   | 383.2   |
| 37.5° | 10665.2 | 4424.5  | 531.9   | 369.3   | 306.6   | 278.7   | 274.1   | 299.6   | 325.2   | 353.0   | 360.0   |
| 40°   | 10969.4 | 3957.6  | 490.1   | 332.1   | 276.4   | 246.2   | 236.9   | 255.5   | 290.3   | 327.5   | 336.8   |
| 42.5° | 11364.2 | 3572.1  | 443.6   | 295.0   | 246.2   | 204.4   | 192.8   | 213.7   | 250.8   | 290.3   | 301.9   |
| 45°   | 11740.5 | 3240.0  | 392.5   | 253.2   | 206.7   | 157.9   | 153.3   | 181.2   | 199.7   | 239.2   | 248.5   |
| 47.5° | 11947.2 | 2947.3  | 348.4   | 206.7   | 160.3   | 127.7   | 127.7   | 134.7   | 153.3   | 199.7   | 209.0   |
| 50°   | 11877.5 | 2712.7  | 301.9   | 153.3   | 111.5   | 97.5    | 97.5    | 95.2    | 123.1   | 160.3   | 167.2   |
| 52.5° | 11738.2 | 2578.0  | 260.1   | 118.5   | 76.6    | 69.7    | 62.7    | 69.7    | 85.9    | 102.2   | 104.5   |
| 55°   | 11717.3 | 2554.8  | 218.3   | 95.2    | 53.4    | 46.5    | 34.8    | 34.8    | 34.8    | 32.5    | 27.9    |
| 57.5° | 11879.9 | 2592.0  | 183.5   | 76.6    | 39.5    | 30.2    | 18.6    | 0.0     | 0.0     | 0.0     | 0.0     |
| 60°   | 12047.1 | 2631.5  | 157.9   | 53.4    | 27.9    | 16.3    | 2.3     | 0.0     | 0.0     | 0.0     | 0.0     |
| 62.5° | 11768.4 | 2543.2  | 132.4   | 32.5    | 20.9    | 7.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 65°   | 10337.7 | 2164.6  | 104.5   | 23.2    | 13.9    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 67.5° | 7353.2  | 1449.3  | 69.7    | 13.9    | 2.3     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 70°   | 3356.1  | 606.2   | 44.1    | 4.6     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 72.5° | 717.7   | 188.1   | 30.2    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 75°   | 146.3   | 137.0   | 11.6    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 77.5° | 46.5    | 216.0   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 80°   | 27.9    | 155.6   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 82.5° | 4.6     | 23.2    | 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)