

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: P194517

Luminaire Tested: **GLEON-AF-09-LED-E1-SL3-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P194517  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)  
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-SL3-7060  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 5700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 53218 lumens  
Efficiency: N/A  
Efficacy: 106.2 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B4 - U0 - G5

Input Watts (W): 501  
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

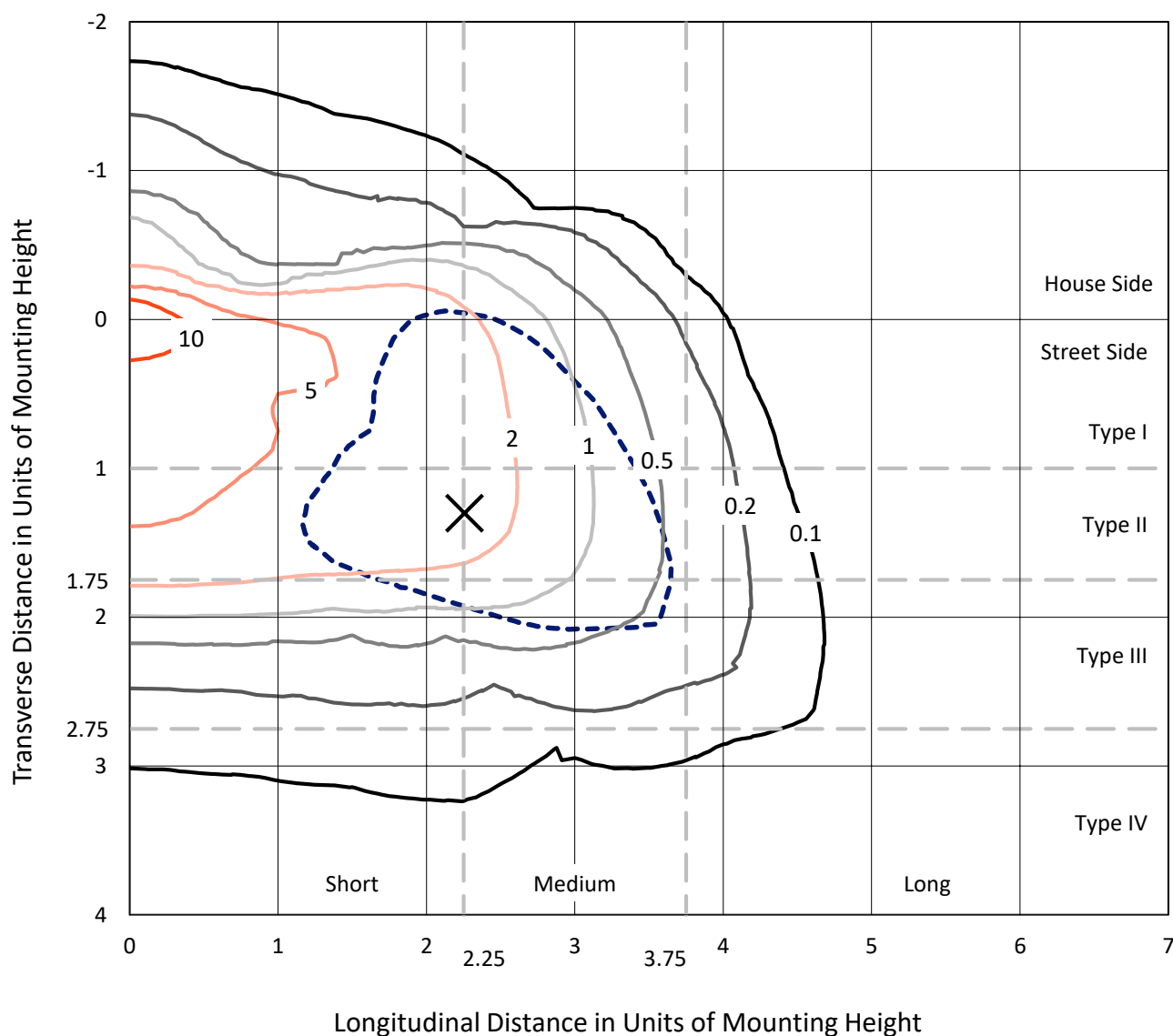


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

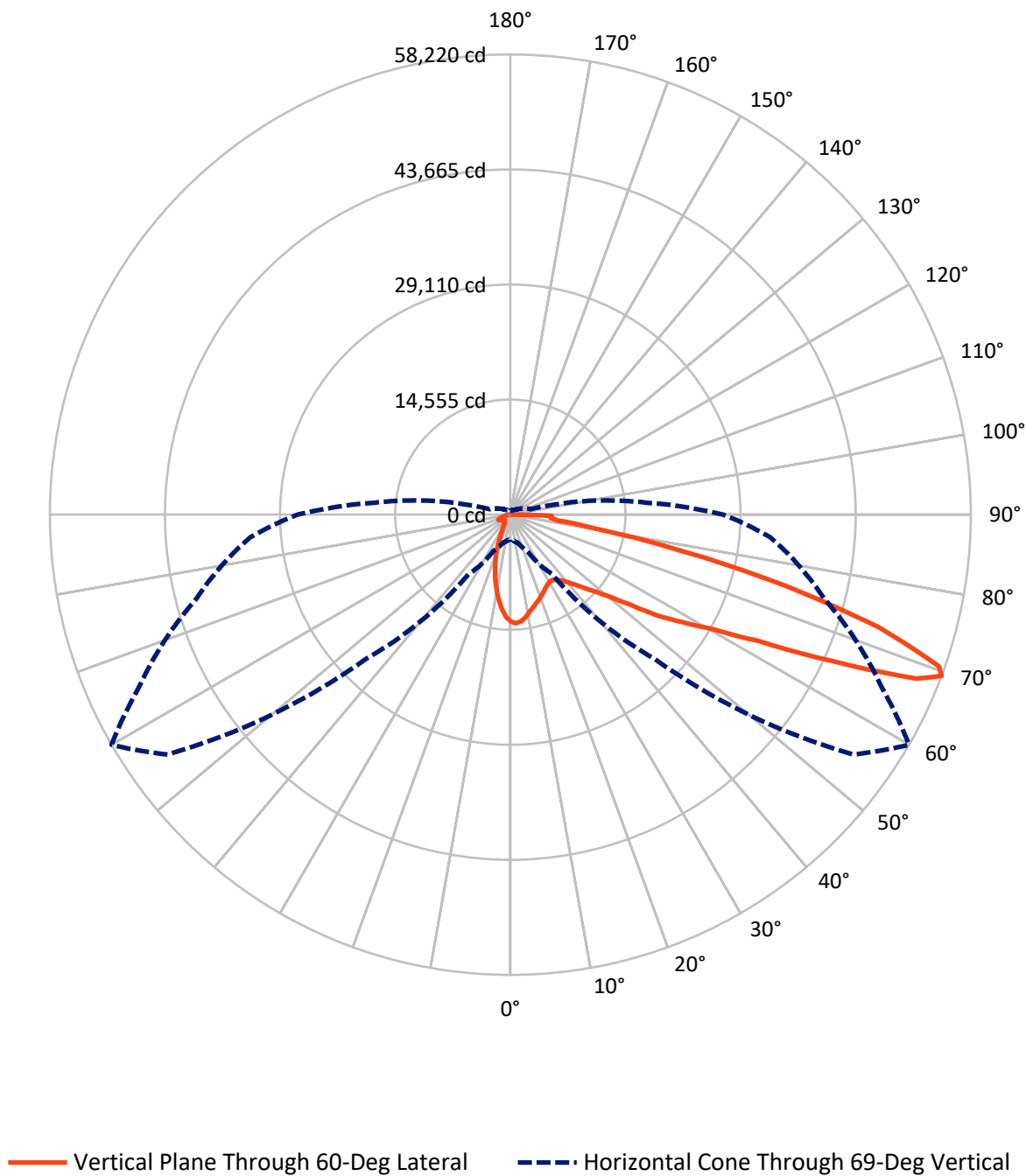


Based on 30 foot mounting height. Maximum calculated value = 15.1 fc  
 Type III - Medium - Non-Cutoff

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## Luminous Intensity Polar Plot



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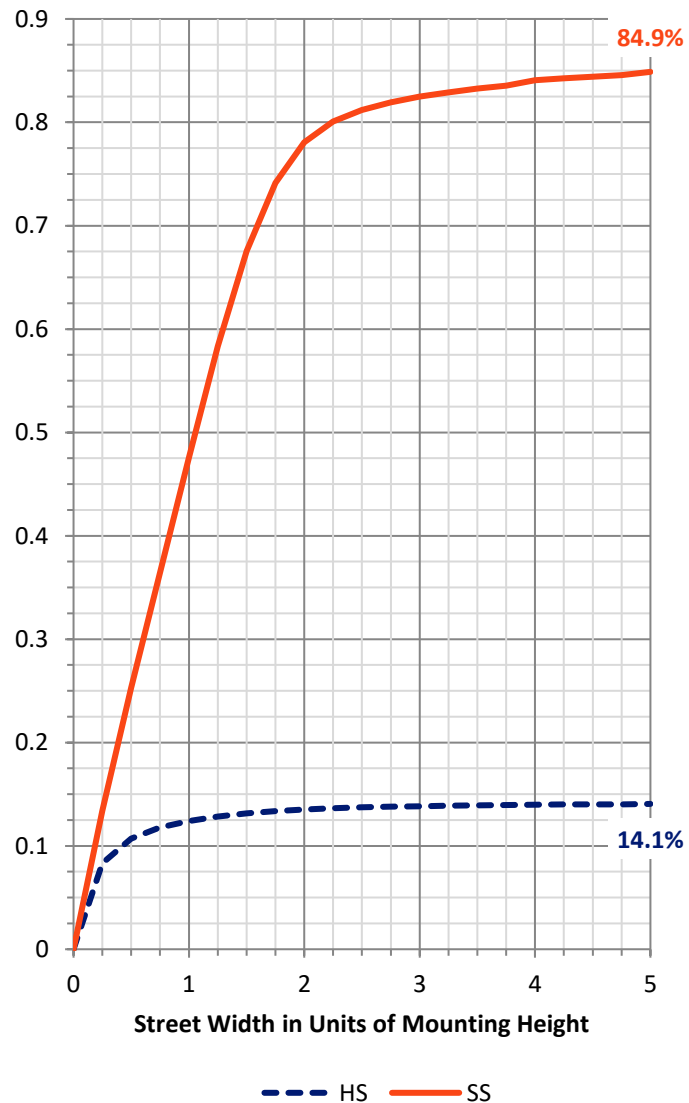
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7571.3   | 0.0    | 7571.3  |
|                    | % Fixture | 14.2     | 0.0    | 14.2    |
| <b>Street Side</b> | Lumens    | 45646.8  | 0.0    | 45646.8 |
|                    | % Fixture | 85.8     | 0.0    | 85.8    |
| <b>Total</b>       | Lumens    | 53218.0  | 0.0    | 53218.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1146.6  | 2.2       |
| 10°-20°   | 2442.9  | 4.6       |
| 20°-30°   | 3112.7  | 5.8       |
| 30°-40°   | 4279.2  | 8.0       |
| 40°-50°   | 6943.4  | 13.0      |
| 50°-60°   | 11135.5 | 20.9      |
| 60°-70°   | 14820.5 | 27.8      |
| 70°-80°   | 8001.9  | 15.0      |
| 80°-90°   | 1335.2  | 2.5       |
| 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°    | 53218.0 | 100.0     |
| 0°-180°   | 53218.0 | 100.0     |

**Coefficient of Utilization**



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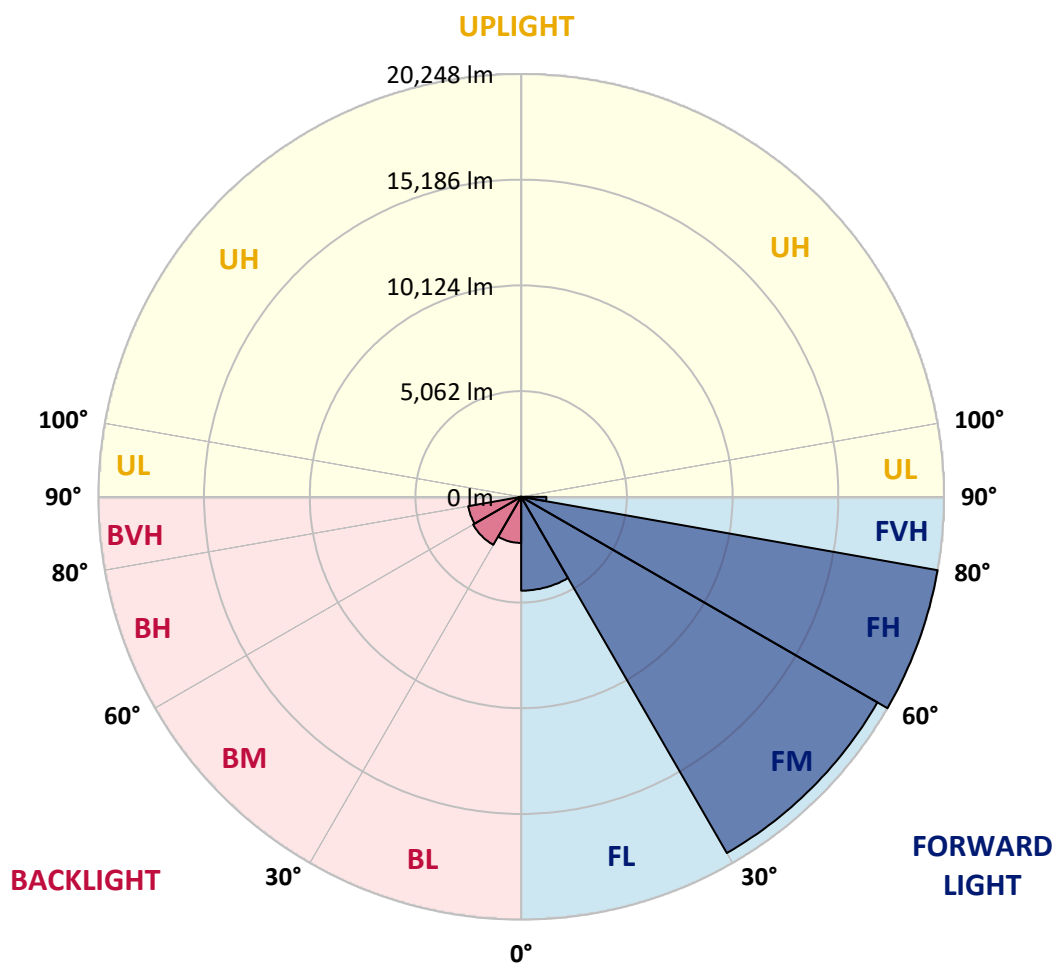
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 4493.5  | 8.4       |                         |      |         |
| FM   | (30°-60°)   | 19698.2 | 37.0      |                         |      |         |
| FH   | (60°-80°)   | 20248.4 | 38.0      |                         |      | G5      |
| FVH  | (80°-90°)   | 1206.6  | 2.3       |                         |      | G5      |
| BL   | (0°-30°)    | 2208.8  | 4.2       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 2659.9  | 5.0       | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2574.0  | 4.8       | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 128.6   | 0.2       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G5**

Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 60°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 |
| 2.5°  | 13838.4 | 13869.2 | 13856.4 | 13848.7 | 13871.8 | 13835.8 | 13761.3 | 13738.1 | 13702.1 | 13617.3 | 13473.3 |
| 5°    | 13319.1 | 13411.7 | 13406.5 | 13475.9 | 13591.6 | 13622.5 | 13589.0 | 13594.2 | 13527.3 | 13421.9 | 13182.9 |
| 7.5°  | 12421.9 | 12460.5 | 12481.0 | 12632.7 | 12843.5 | 13013.2 | 13157.1 | 13203.4 | 13172.6 | 13082.6 | 12774.1 |
| 10°   | 11496.4 | 11527.3 | 11576.1 | 11753.5 | 12020.9 | 12254.8 | 12527.3 | 12684.1 | 12751.0 | 12735.5 | 12391.1 |
| 12.5° | 10702.1 | 10732.9 | 10797.2 | 10997.7 | 11316.5 | 11604.4 | 12000.3 | 12195.7 | 12355.1 | 12450.2 | 12080.0 |
| 15°   | 9990.0  | 10056.8 | 10118.5 | 10349.9 | 10707.2 | 11085.1 | 11532.4 | 11779.2 | 12026.0 | 12239.4 | 11804.9 |
| 17.5° | 9434.7  | 9501.5  | 9537.5  | 9748.3  | 10128.8 | 10591.5 | 11116.0 | 11406.5 | 11714.9 | 12064.6 | 11532.4 |
| 20°   | 9113.3  | 9144.2  | 9128.8  | 9247.0  | 9588.9  | 10079.9 | 10702.1 | 11038.8 | 11411.6 | 11900.0 | 11259.9 |
| 22.5° | 9023.4  | 9025.9  | 8969.4  | 8956.5  | 9177.6  | 9591.5  | 10259.9 | 10668.7 | 11126.2 | 11792.1 | 11026.0 |
| 25°   | 9241.9  | 9234.2  | 9079.9  | 8954.0  | 8977.1  | 9218.7  | 9833.2  | 10308.7 | 10887.2 | 11768.9 | 10846.0 |
| 27.5° | 9727.8  | 9750.9  | 9522.1  | 9285.6  | 9051.6  | 9043.9  | 9509.2  | 10010.5 | 10691.8 | 11874.3 | 10768.9 |
| 30°   | 10409.0 | 10447.6 | 10203.3 | 9902.6  | 9463.0  | 9100.5  | 9383.3  | 9833.2  | 10571.0 | 12092.9 | 10756.1 |
| 32.5° | 11154.5 | 11195.7 | 11010.6 | 10694.4 | 10118.5 | 9450.1  | 9470.7  | 9848.6  | 10565.8 | 12398.8 | 10843.5 |
| 35°   | 11948.9 | 11995.2 | 11900.0 | 11632.7 | 10992.6 | 10095.4 | 9804.9  | 10097.9 | 10732.9 | 12866.6 | 11077.4 |
| 37.5° | 12835.8 | 12907.8 | 12933.5 | 12679.0 | 11995.2 | 10946.3 | 10352.4 | 10571.0 | 11110.8 | 13517.1 | 11506.7 |
| 40°   | 14113.5 | 14213.7 | 14206.0 | 13841.0 | 13144.3 | 12095.4 | 11198.2 | 11254.8 | 11699.5 | 14386.0 | 12193.1 |
| 42.5° | 16560.8 | 16581.4 | 15941.3 | 15146.9 | 14409.1 | 13303.7 | 12195.7 | 12149.4 | 12511.9 | 15486.3 | 13203.4 |
| 45°   | 19674.0 | 19589.2 | 18165.0 | 16630.2 | 15730.5 | 14691.9 | 13493.9 | 13267.7 | 13542.8 | 16828.2 | 14468.2 |
| 47.5° | 22257.6 | 22062.3 | 20262.7 | 18144.4 | 17129.0 | 16200.9 | 15018.4 | 14622.5 | 14774.2 | 18350.1 | 16103.2 |
| 50°   | 23154.8 | 23008.3 | 21517.3 | 19404.1 | 18452.9 | 18041.6 | 16895.0 | 16334.6 | 16375.7 | 20165.0 | 18018.5 |
| 52.5° | 22962.0 | 22941.5 | 21946.6 | 20234.4 | 19692.0 | 19974.8 | 19553.2 | 18794.8 | 18393.8 | 22180.5 | 20085.3 |
| 55°   | 22507.0 | 22550.7 | 22190.8 | 21201.1 | 21108.5 | 21841.2 | 23026.3 | 22465.9 | 21219.0 | 24214.0 | 22221.6 |
| 57.5° | 20926.0 | 21039.1 | 21830.9 | 22417.0 | 23388.8 | 24478.8 | 25823.3 | 25663.9 | 24260.3 | 26412.0 | 24761.6 |
| 60°   | 16859.0 | 17121.3 | 19244.7 | 22180.5 | 25735.9 | 29144.7 | 29746.3 | 29376.1 | 27396.6 | 29139.6 | 28116.4 |
| 62.5° | 11812.6 | 12085.1 | 14609.6 | 19203.6 | 25350.3 | 34414.8 | 36759.3 | 35162.8 | 31900.6 | 33157.7 | 32458.4 |
| 65°   | 6324.1  | 6455.2  | 8383.2  | 13324.2 | 21401.6 | 35502.2 | 47008.9 | 44579.5 | 39031.8 | 38111.5 | 36173.2 |
| 67.5° | 3488.5  | 3560.5  | 4298.3  | 6727.7  | 13707.3 | 31263.0 | 53538.6 | 55374.2 | 47944.7 | 41409.8 | 35497.0 |
| 69°   | 3154.3  | 3221.2  | 3704.5  | 5095.2  | 9172.5  | 25849.0 | 52901.1 | 58220.0 | 51852.2 | 41083.3 | 32998.3 |
| 70°   | 3084.9  | 3146.6  | 3581.1  | 4696.8  | 7424.4  | 21306.5 | 50764.8 | 57492.5 | 52782.8 | 39913.6 | 30818.3 |
| 72.5° | 2776.4  | 2843.3  | 3264.9  | 4218.6  | 6344.6  | 10622.4 | 40211.8 | 48610.5 | 47921.5 | 34607.6 | 23375.9 |
| 75°   | 2588.8  | 2650.5  | 3365.1  | 4131.2  | 6074.7  | 6722.5  | 26509.7 | 35826.1 | 35227.1 | 24208.8 | 12604.4 |
| 77.5° | 1108.0  | 1102.9  | 1560.5  | 3496.2  | 6164.7  | 6509.2  | 14244.6 | 22381.0 | 20419.5 | 10347.3 | 3619.6  |
| 80°   | 740.4   | 727.5   | 740.4   | 1028.3  | 5653.1  | 6545.2  | 7462.9  | 11360.2 | 8581.2  | 2637.6  | 1784.1  |
| 82.5° | 637.5   | 627.3   | 650.4   | 627.3   | 1987.2  | 7470.6  | 6344.6  | 6041.3  | 4079.8  | 1498.8  | 884.3   |
| 85°   | 429.3   | 411.3   | 560.4   | 563.0   | 938.3   | 6637.7  | 7146.7  | 5103.0  | 3300.9  | 889.5   | 437.0   |
| 87.5° | 205.7   | 200.5   | 326.5   | 398.5   | 550.1   | 2696.7  | 8018.2  | 5228.9  | 3329.1  | 455.0   | 208.2   |
| 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°    | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 | 13560.8 |
| 2.5°  | 13429.6 | 13324.2 | 13221.4 | 13098.0 | 12969.5 | 12825.5 | 12753.5 | 12681.6 | 12663.6 | 12643.0 | 12571.0 |
| 5°    | 13059.5 | 12910.4 | 12653.3 | 12370.5 | 12072.3 | 11781.8 | 11560.7 | 11421.9 | 11316.5 | 11262.5 | 11167.4 |
| 7.5°  | 12581.3 | 12362.8 | 11912.9 | 11424.5 | 10923.2 | 10465.6 | 10069.7 | 9820.3  | 9583.8  | 9473.2  | 9347.3  |
| 10°   | 12126.3 | 11799.8 | 11100.5 | 10380.7 | 9660.9  | 8969.4  | 8319.0  | 7858.8  | 7450.1  | 7221.3  | 7059.3  |
| 12.5° | 11735.5 | 11288.2 | 10319.0 | 9344.7  | 8357.5  | 7372.9  | 6398.6  | 5632.5  | 4992.4  | 4655.6  | 4483.4  |
| 15°   | 11355.0 | 10815.2 | 9576.1  | 8339.5  | 7072.2  | 5732.8  | 4452.6  | 3583.6  | 3054.1  | 2843.3  | 2771.3  |
| 17.5° | 11010.6 | 10319.0 | 8830.6  | 7326.7  | 5745.6  | 4126.1  | 2992.4  | 2514.2  | 2311.1  | 2241.7  | 2218.6  |
| 20°   | 10637.8 | 9817.7  | 8056.8  | 6267.5  | 4362.6  | 2884.4  | 2336.8  | 2126.0  | 2043.8  | 2023.2  | 2012.9  |
| 22.5° | 10277.9 | 9324.1  | 7316.4  | 5133.8  | 3133.8  | 2226.3  | 2007.8  | 1920.4  | 1907.5  | 1925.5  | 1925.5  |
| 25°   | 9972.0  | 8882.0  | 6516.9  | 3948.7  | 2300.8  | 1874.1  | 1797.0  | 1776.4  | 1825.2  | 1892.1  | 1904.9  |
| 27.5° | 9743.2  | 8519.5  | 5666.0  | 2915.2  | 1833.0  | 1629.9  | 1627.3  | 1660.7  | 1781.5  | 1910.1  | 1935.8  |
| 30°   | 9586.4  | 8175.0  | 4755.9  | 2102.9  | 1537.3  | 1434.5  | 1475.6  | 1547.6  | 1725.0  | 1907.5  | 1956.3  |
| 32.5° | 9506.7  | 7920.5  | 3807.3  | 1627.3  | 1316.2  | 1259.7  | 1329.1  | 1416.5  | 1591.3  | 1761.0  | 1825.2  |
| 35°   | 9568.4  | 7732.8  | 2912.7  | 1357.4  | 1162.0  | 1118.3  | 1190.3  | 1275.1  | 1377.9  | 1449.9  | 1498.8  |
| 37.5° | 9799.7  | 7658.3  | 2198.0  | 1216.0  | 1056.6  | 1015.4  | 1072.0  | 1120.9  | 1162.0  | 1182.5  | 1205.7  |
| 40°   | 10298.5 | 7738.0  | 1761.0  | 1144.0  | 997.5   | 946.0   | 969.2   | 987.2   | 1012.9  | 1033.4  | 1043.7  |
| 42.5° | 11033.7 | 7977.1  | 1578.4  | 1115.7  | 966.6   | 892.1   | 886.9   | 894.6   | 928.0   | 966.6   | 974.3   |
| 45°   | 12062.0 | 8398.7  | 1565.6  | 1133.7  | 951.2   | 848.4   | 825.2   | 835.5   | 886.9   | 946.0   | 956.3   |
| 47.5° | 13375.7 | 9041.4  | 1668.4  | 1187.7  | 964.0   | 825.2   | 786.7   | 799.5   | 863.8   | 943.5   | 956.3   |
| 50°   | 14967.0 | 9938.6  | 1840.7  | 1267.4  | 1020.6  | 830.4   | 773.8   | 781.5   | 848.4   | 935.8   | 948.6   |
| 52.5° | 16846.2 | 11211.1 | 2028.3  | 1344.5  | 1079.7  | 863.8   | 784.1   | 766.1   | 827.8   | 904.9   | 920.3   |
| 55°   | 18936.2 | 12843.5 | 2221.1  | 1413.9  | 1110.6  | 904.9   | 804.6   | 745.5   | 789.2   | 853.5   | 866.3   |
| 57.5° | 21501.8 | 15126.3 | 2555.3  | 1480.8  | 1131.1  | 933.2   | 825.2   | 725.0   | 740.4   | 786.7   | 796.9   |
| 60°   | 24974.9 | 18355.2 | 3144.0  | 1591.3  | 1177.4  | 943.5   | 822.6   | 707.0   | 691.5   | 717.2   | 722.4   |
| 62.5° | 29137.0 | 21861.7 | 3635.1  | 1730.1  | 1254.5  | 951.2   | 807.2   | 694.1   | 650.4   | 650.4   | 655.5   |
| 65°   | 31607.5 | 22800.1 | 3362.6  | 1845.8  | 1318.8  | 943.5   | 789.2   | 681.3   | 619.6   | 591.3   | 593.8   |
| 67.5° | 29512.3 | 20051.9 | 2881.8  | 1868.9  | 1316.2  | 907.5   | 760.9   | 658.1   | 588.7   | 545.0   | 542.4   |
| 69°   | 26887.6 | 17301.2 | 2665.9  | 1807.2  | 1254.5  | 861.2   | 725.0   | 632.4   | 565.6   | 519.3   | 516.7   |
| 70°   | 24771.8 | 15622.5 | 2524.5  | 1740.4  | 1187.7  | 827.8   | 696.7   | 609.3   | 547.6   | 503.9   | 498.7   |
| 72.5° | 18010.7 | 10236.8 | 2156.9  | 1496.2  | 979.5   | 694.1   | 601.6   | 534.7   | 488.4   | 462.7   | 457.6   |
| 75°   | 9000.2  | 4881.9  | 1750.7  | 1213.4  | 750.7   | 555.3   | 493.6   | 447.3   | 424.2   | 419.0   | 416.5   |
| 77.5° | 2956.4  | 2236.6  | 1252.0  | 904.9   | 557.9   | 434.5   | 398.5   | 365.0   | 359.9   | 375.3   | 370.2   |
| 80°   | 1624.7  | 1300.8  | 794.4   | 599.0   | 380.5   | 318.8   | 313.6   | 295.6   | 303.3   | 329.1   | 323.9   |
| 82.5° | 827.8   | 676.1   | 491.0   | 359.9   | 257.1   | 228.8   | 249.4   | 239.1   | 249.4   | 272.5   | 269.9   |
| 85°   | 408.8   | 370.2   | 311.1   | 218.5   | 169.7   | 146.5   | 177.4   | 185.1   | 190.2   | 208.2   | 208.2   |
| 87.5° | 236.5   | 218.5   | 164.5   | 102.8   | 84.8    | 77.1    | 102.8   | 100.3   | 118.3   | 128.5   | 126.0   |
| 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)