

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: P299130

Luminaire Tested: **GLNA-AF-06-LED-E1-T3-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299130  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-06-LED-E1-T3-7060  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 5700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35486.6 lumens  
Efficiency: N/A  
Efficacy: 106.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G5

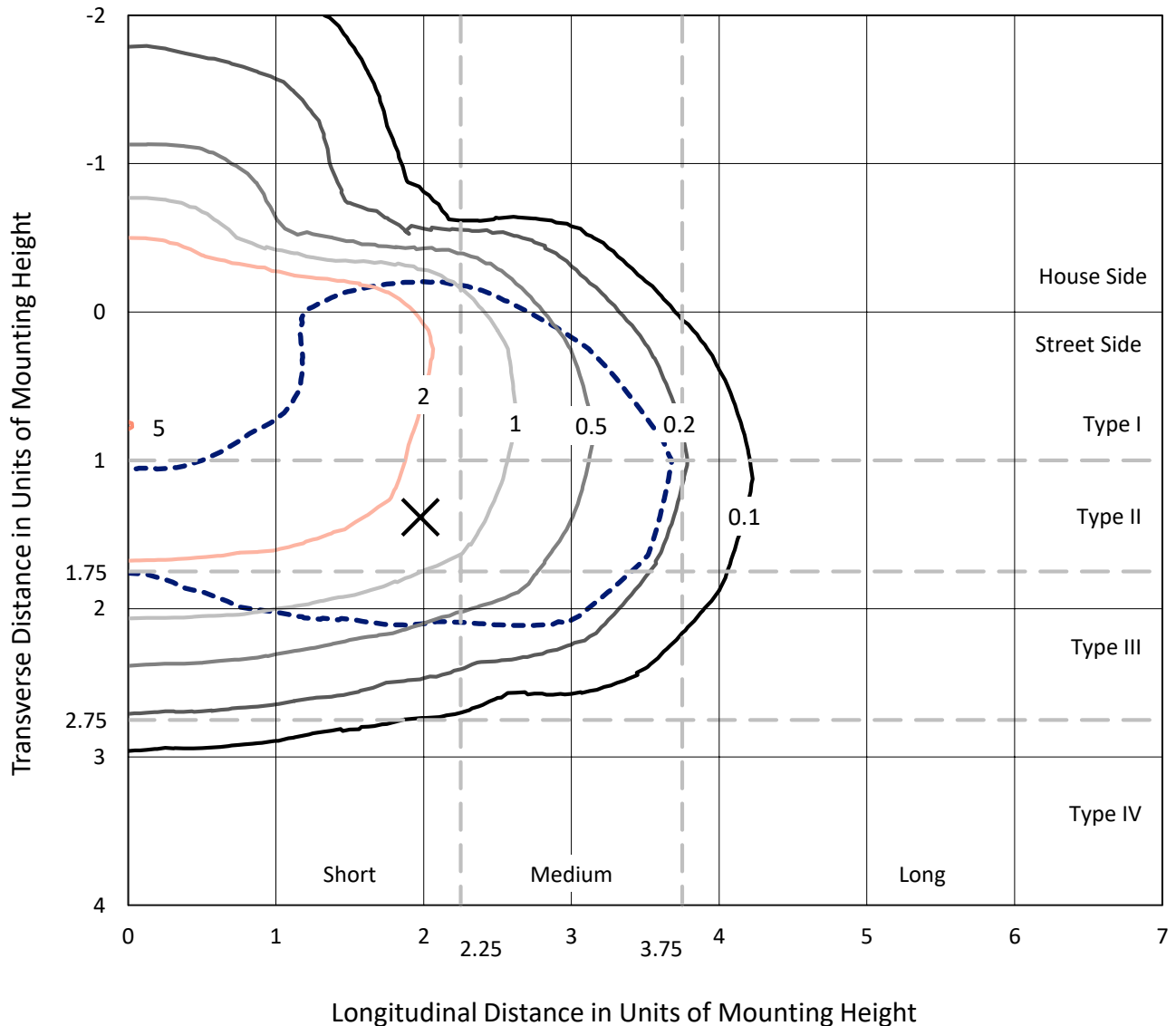
Input Watts (W): 333  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

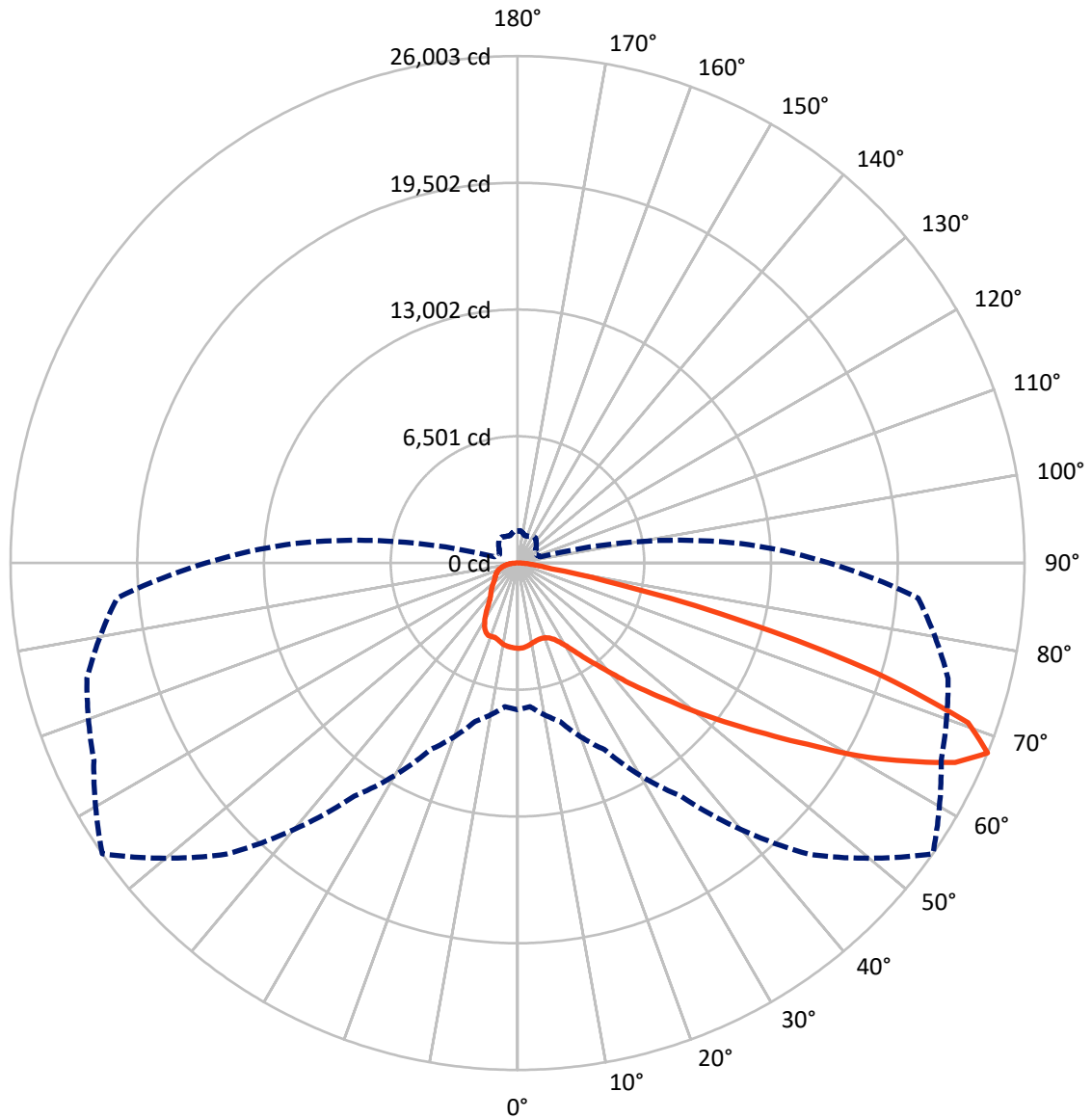
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7665.9   | 0.0    | 7665.9  |
|                    | % Fixture | 21.6     | 0.0    | 21.6    |
| <b>Street Side</b> | Lumens    | 27820.7  | 0.0    | 27820.7 |
|                    | % Fixture | 78.4     | 0.0    | 78.4    |
| <b>Total</b>       | Lumens    | 35486.6  | 0.0    | 35486.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 408.4   | 1.2       |
| 10°-20°   | 1156.8  | 3.3       |
| 20°-30°   | 1937.7  | 5.5       |
| 30°-40°   | 3186.5  | 9.0       |
| 40°-50°   | 5363.8  | 15.1      |
| 50°-60°   | 8442.2  | 23.8      |
| 60°-70°   | 10074.9 | 28.4      |
| 70°-80°   | 4326.4  | 12.2      |
| 80°-90°   | 589.9   | 1.7       |
| 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°    | 35486.6 | 100.0     |
| 0°-180°   | 35486.6 | 100.0     |



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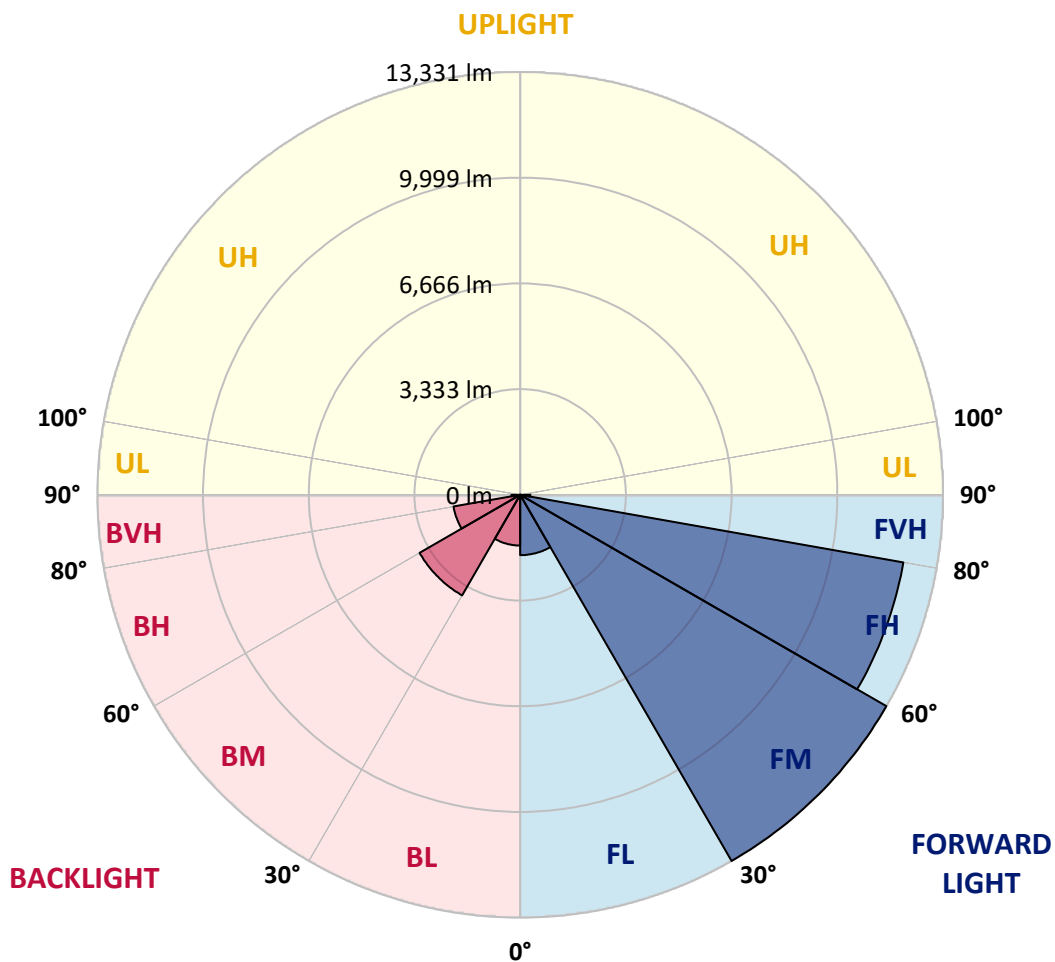
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1902.2  | 5.4       |                         |      |         |
| FM   | (30°-60°)   | 13331.4 | 37.6      |                         |      |         |
| FH   | (60°-80°)   | 12267.9 | 34.6      |                         |      | G5      |
| FVH  | (80°-90°)   | 319.3   | 0.9       |                         |      | G3/500  |
| BL   | (0°-30°)    | 1600.8  | 4.5       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3661.1  | 10.3      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2133.4  | 6.0       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 270.6   | 0.8       |                         |      | G3/500  |
| 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°     | 65°     | 75°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4375.9  | 4375.9  | 4375.9  | 4375.9  | 4375.9  | 4375.9  | 4375.9  | 4375.9  | 4375.9  | 4375.9  | 4375.9  |
| 2.5°  | 4338.2  | 4339.9  | 4343.3  | 4357.0  | 4369.0  | 4365.6  | 4367.3  | 4360.5  | 4358.7  | 4348.5  | 4358.7  |
| 5°    | 4283.3  | 4288.5  | 4290.2  | 4312.5  | 4326.2  | 4329.6  | 4324.5  | 4315.9  | 4305.6  | 4295.3  | 4300.5  |
| 7.5°  | 4158.2  | 4171.9  | 4173.6  | 4204.5  | 4226.8  | 4255.9  | 4257.6  | 4259.3  | 4254.2  | 4247.3  | 4257.6  |
| 10°   | 4079.4  | 4082.8  | 4081.1  | 4103.3  | 4120.5  | 4153.1  | 4171.9  | 4204.5  | 4218.2  | 4221.6  | 4228.5  |
| 12.5° | 4074.2  | 4070.8  | 4065.6  | 4065.6  | 4060.5  | 4074.2  | 4108.5  | 4154.8  | 4187.3  | 4197.6  | 4206.2  |
| 15°   | 4129.1  | 4127.3  | 4110.2  | 4084.5  | 4051.9  | 4041.6  | 4070.8  | 4122.2  | 4165.1  | 4187.3  | 4195.9  |
| 17.5° | 4252.5  | 4242.2  | 4214.8  | 4156.5  | 4086.2  | 4058.8  | 4062.2  | 4105.1  | 4154.8  | 4183.9  | 4192.5  |
| 20°   | 4478.7  | 4478.7  | 4420.4  | 4310.7  | 4185.6  | 4120.5  | 4089.6  | 4115.3  | 4163.3  | 4202.8  | 4214.8  |
| 22.5° | 4869.5  | 4872.9  | 4775.2  | 4595.3  | 4384.4  | 4245.6  | 4168.5  | 4163.3  | 4219.9  | 4264.5  | 4278.2  |
| 25°   | 5423.1  | 5409.4  | 5272.3  | 5015.2  | 4694.7  | 4465.0  | 4331.3  | 4300.5  | 4348.5  | 4398.2  | 4415.3  |
| 27.5° | 6067.6  | 6017.9  | 5855.1  | 5544.8  | 5130.0  | 4794.1  | 4588.4  | 4538.7  | 4585.0  | 4641.6  | 4658.7  |
| 30°   | 6705.2  | 6653.8  | 6460.1  | 6120.7  | 5659.7  | 5234.6  | 4939.8  | 4859.2  | 4924.4  | 5004.9  | 5015.2  |
| 32.5° | 7342.8  | 7342.8  | 7126.9  | 6730.9  | 6228.7  | 5760.8  | 5407.7  | 5311.7  | 5419.7  | 5517.4  | 5539.7  |
| 35°   | 8105.6  | 8109.0  | 7899.9  | 7423.4  | 6883.5  | 6388.1  | 5999.0  | 5928.8  | 6091.6  | 6160.2  | 6213.3  |
| 37.5° | 9043.1  | 9062.0  | 8792.9  | 8217.0  | 7625.6  | 7104.6  | 6641.8  | 6545.8  | 6708.7  | 6895.5  | 7066.9  |
| 40°   | 10056.1 | 10080.1 | 9783.6  | 9074.0  | 8482.7  | 7937.6  | 7437.1  | 7264.0  | 7534.8  | 7891.3  | 8112.4  |
| 42.5° | 11022.8 | 11146.2 | 10860.0 | 10129.8 | 9493.9  | 8930.0  | 8422.7  | 8170.7  | 8510.1  | 9048.3  | 9240.3  |
| 45°   | 12419.7 | 12508.9 | 12010.1 | 11348.5 | 10750.3 | 10119.5 | 9447.6  | 9182.0  | 9656.8  | 10335.5 | 10374.9 |
| 47.5° | 13350.5 | 13283.6 | 13029.9 | 12618.6 | 12239.8 | 11650.2 | 10638.9 | 10347.5 | 10978.3 | 11777.0 | 11555.9 |
| 50°   | 13845.8 | 13866.4 | 13832.1 | 13856.1 | 13869.8 | 13499.6 | 12099.2 | 11699.9 | 12452.3 | 13417.3 | 12908.2 |
| 52.5° | 14308.6 | 14171.5 | 14284.6 | 14846.8 | 15525.5 | 15388.4 | 13688.1 | 13271.6 | 14032.6 | 15237.6 | 14337.7 |
| 55°   | 14298.3 | 14089.2 | 14457.7 | 15450.1 | 16922.5 | 17080.2 | 15472.4 | 14992.5 | 15703.8 | 17189.8 | 15852.9 |
| 57.5° | 13792.7 | 13803.0 | 14370.3 | 15669.5 | 17896.0 | 18670.8 | 17542.9 | 16823.0 | 17476.1 | 19167.8 | 17236.1 |
| 60°   | 13096.8 | 13191.1 | 14008.6 | 15633.5 | 18675.9 | 19975.1 | 20083.1 | 18795.9 | 19212.4 | 20965.8 | 18381.1 |
| 62.5° | 11974.1 | 12073.5 | 13201.3 | 15259.9 | 18557.6 | 21231.5 | 22379.9 | 21034.4 | 21027.5 | 22055.9 | 18717.0 |
| 65°   | 10203.5 | 10174.4 | 11358.8 | 13862.9 | 17565.2 | 22160.5 | 24661.2 | 22969.5 | 22395.3 | 22073.1 | 18041.7 |
| 67.5° | 7524.5  | 7394.3  | 8410.7  | 10558.3 | 14600.0 | 21120.1 | 26003.3 | 23977.3 | 22861.5 | 20621.3 | 15978.0 |
| 70°   | 3904.5  | 3774.3  | 4597.0  | 6165.3  | 9601.9  | 16483.7 | 24517.3 | 23456.3 | 21831.4 | 17285.8 | 12517.4 |
| 72.5° | 1669.4  | 1647.2  | 1981.4  | 2704.7  | 4645.0  | 9507.6  | 19224.4 | 20302.5 | 18732.5 | 12879.1 | 8606.1  |
| 75°   | 1122.7  | 1115.8  | 1240.9  | 1474.1  | 2089.4  | 3858.2  | 12030.7 | 14411.4 | 13705.3 | 7985.6  | 4840.4  |
| 77.5° | 881.0   | 872.4   | 946.1   | 1059.3  | 1354.1  | 1522.0  | 5339.2  | 7737.1  | 7161.2  | 3476.0  | 2118.5  |
| 80°   | 689.0   | 682.2   | 728.5   | 790.2   | 973.6   | 959.8   | 1756.9  | 3078.4  | 2382.5  | 1331.8  | 1030.1  |
| 82.5° | 543.3   | 543.3   | 581.1   | 582.8   | 690.7   | 654.8   | 917.0   | 1355.8  | 1189.5  | 776.4   | 630.8   |
| 85°   | 497.1   | 497.1   | 536.5   | 435.4   | 450.8   | 413.1   | 569.1   | 803.9   | 754.2   | 318.8   | 274.2   |
| 87.5° | 250.2   | 243.4   | 450.8   | 385.7   | 245.1   | 219.4   | 277.7   | 389.1   | 418.2   | 176.5   | 137.1   |
| 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):**

|       | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4375.9  | 4375.9 | 4375.9 | 4375.9 | 4375.9 | 4375.9 | 4375.9 | 4375.9 | 4375.9 | 4375.9 |
| 2.5°  | 4355.3  | 4353.6 | 4357.0 | 4358.7 | 4372.5 | 4391.3 | 4399.9 | 4411.9 | 4418.7 | 4415.3 |
| 5°    | 4303.9  | 4307.3 | 4321.0 | 4331.3 | 4355.3 | 4386.2 | 4403.3 | 4417.0 | 4429.0 | 4423.9 |
| 7.5°  | 4261.0  | 4269.6 | 4290.2 | 4298.7 | 4312.5 | 4321.0 | 4319.3 | 4324.5 | 4334.7 | 4322.7 |
| 10°   | 4237.0  | 4247.3 | 4262.8 | 4250.8 | 4218.2 | 4171.9 | 4129.1 | 4106.8 | 4113.6 | 4105.1 |
| 12.5° | 4213.0  | 4226.8 | 4214.8 | 4158.2 | 4067.4 | 4007.4 | 3974.8 | 3978.2 | 3993.7 | 3997.1 |
| 15°   | 4199.3  | 4204.5 | 4153.1 | 4046.8 | 3954.2 | 3945.7 | 3962.8 | 3959.4 | 3961.1 | 3961.1 |
| 17.5° | 4199.3  | 4185.6 | 4089.6 | 3983.4 | 3943.9 | 3928.5 | 3875.4 | 3808.5 | 3779.4 | 3769.1 |
| 20°   | 4221.6  | 4185.6 | 4069.1 | 3998.8 | 3913.1 | 3781.1 | 3640.6 | 3517.2 | 3462.3 | 3446.9 |
| 22.5° | 4288.5  | 4226.8 | 4127.3 | 4005.7 | 3762.3 | 3541.2 | 3318.3 | 3170.9 | 3071.5 | 3054.4 |
| 25°   | 4423.9  | 4355.3 | 4242.2 | 3914.8 | 3522.3 | 3206.9 | 2953.2 | 2788.7 | 2689.3 | 2675.6 |
| 27.5° | 4660.4  | 4615.8 | 4303.9 | 3714.3 | 3203.5 | 2865.8 | 2631.0 | 2504.2 | 2430.5 | 2425.3 |
| 30°   | 5016.9  | 4994.6 | 4273.0 | 3417.7 | 2811.0 | 2535.0 | 2421.9 | 2348.2 | 2293.4 | 2291.6 |
| 32.5° | 5586.0  | 5406.0 | 4171.9 | 3056.1 | 2452.8 | 2300.2 | 2253.9 | 2209.4 | 2166.5 | 2166.5 |
| 35°   | 6317.9  | 5738.5 | 3979.9 | 2668.7 | 2235.1 | 2169.9 | 2111.7 | 2041.4 | 1984.8 | 1981.4 |
| 37.5° | 7178.3  | 5944.2 | 3635.4 | 2356.8 | 2132.2 | 2082.5 | 1996.8 | 1892.3 | 1792.9 | 1775.7 |
| 40°   | 8047.3  | 6005.9 | 3150.4 | 2164.8 | 2067.1 | 1995.1 | 1890.6 | 1767.1 | 1671.2 | 1666.0 |
| 42.5° | 8844.3  | 5887.6 | 2636.2 | 2032.8 | 2002.0 | 1906.0 | 1796.3 | 1686.6 | 1611.2 | 1609.5 |
| 45°   | 9512.8  | 5580.8 | 2204.2 | 1907.7 | 1933.4 | 1825.4 | 1727.7 | 1638.6 | 1580.3 | 1568.3 |
| 47.5° | 10141.8 | 5147.2 | 1900.8 | 1775.7 | 1864.8 | 1780.9 | 1698.6 | 1614.6 | 1558.0 | 1549.5 |
| 50°   | 10872.0 | 4679.3 | 1688.3 | 1647.2 | 1804.9 | 1765.4 | 1722.6 | 1635.2 | 1540.9 | 1530.6 |
| 52.5° | 11756.4 | 4274.8 | 1522.0 | 1534.0 | 1758.6 | 1786.0 | 1784.3 | 1693.4 | 1528.9 | 1515.2 |
| 55°   | 12743.7 | 3825.7 | 1396.9 | 1441.5 | 1739.7 | 1823.7 | 1799.7 | 1748.3 | 1539.2 | 1518.6 |
| 57.5° | 13715.5 | 3301.2 | 1309.5 | 1371.2 | 1712.3 | 1820.3 | 1726.0 | 1652.3 | 1563.2 | 1534.0 |
| 60°   | 14444.0 | 2596.7 | 1242.7 | 1309.5 | 1652.3 | 1763.7 | 1645.5 | 1547.8 | 1558.0 | 1535.8 |
| 62.5° | 14492.0 | 2007.1 | 1162.1 | 1256.4 | 1561.5 | 1707.2 | 1592.3 | 1501.5 | 1580.3 | 1559.8 |
| 65°   | 13640.1 | 1516.9 | 1085.0 | 1193.0 | 1463.8 | 1671.2 | 1540.9 | 1475.8 | 1626.6 | 1604.3 |
| 67.5° | 11483.9 | 1220.4 | 1019.8 | 1127.8 | 1366.1 | 1595.7 | 1494.6 | 1451.8 | 1667.7 | 1628.3 |
| 70°   | 8290.7  | 1040.4 | 956.4  | 1049.0 | 1278.7 | 1510.0 | 1453.5 | 1408.9 | 1556.3 | 1494.6 |
| 72.5° | 5104.3  | 901.6  | 884.4  | 944.4  | 1211.8 | 1420.9 | 1391.8 | 1328.4 | 1402.1 | 1352.4 |
| 75°   | 2548.7  | 781.6  | 803.9  | 841.6  | 1117.5 | 1319.8 | 1288.9 | 1225.5 | 1235.8 | 1225.5 |
| 77.5° | 1220.4  | 668.5  | 709.6  | 738.7  | 995.8  | 1205.0 | 1172.4 | 1107.3 | 1095.3 | 1097.0 |
| 80°   | 773.0   | 558.8  | 598.2  | 618.8  | 889.6  | 1071.3 | 1038.7 | 973.6  | 1110.7 | 1030.1 |
| 82.5° | 483.4   | 454.2  | 464.5  | 502.2  | 774.7  | 932.4  | 889.6  | 831.3  | 1001.0 | 791.9  |
| 85°   | 267.4   | 317.1  | 330.8  | 363.4  | 596.5  | 779.9  | 737.0  | 663.3  | 594.8  | 584.5  |
| 87.5° | 159.4   | 188.5  | 193.7  | 217.7  | 401.1  | 563.9  | 498.8  | 473.1  | 392.5  | 390.8  |
| 90°   | 0.0     | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)