

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: P194777

Luminaire Tested: **GLEON-AF-09-LED-E1-T3-7060-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P194777  
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: GLEON-AF-09-LED-E1-T3-7060-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 5700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35068 lumens  
Efficiency: N/A  
Efficacy: 120.9 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G5

Input Watts (W): 290  
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

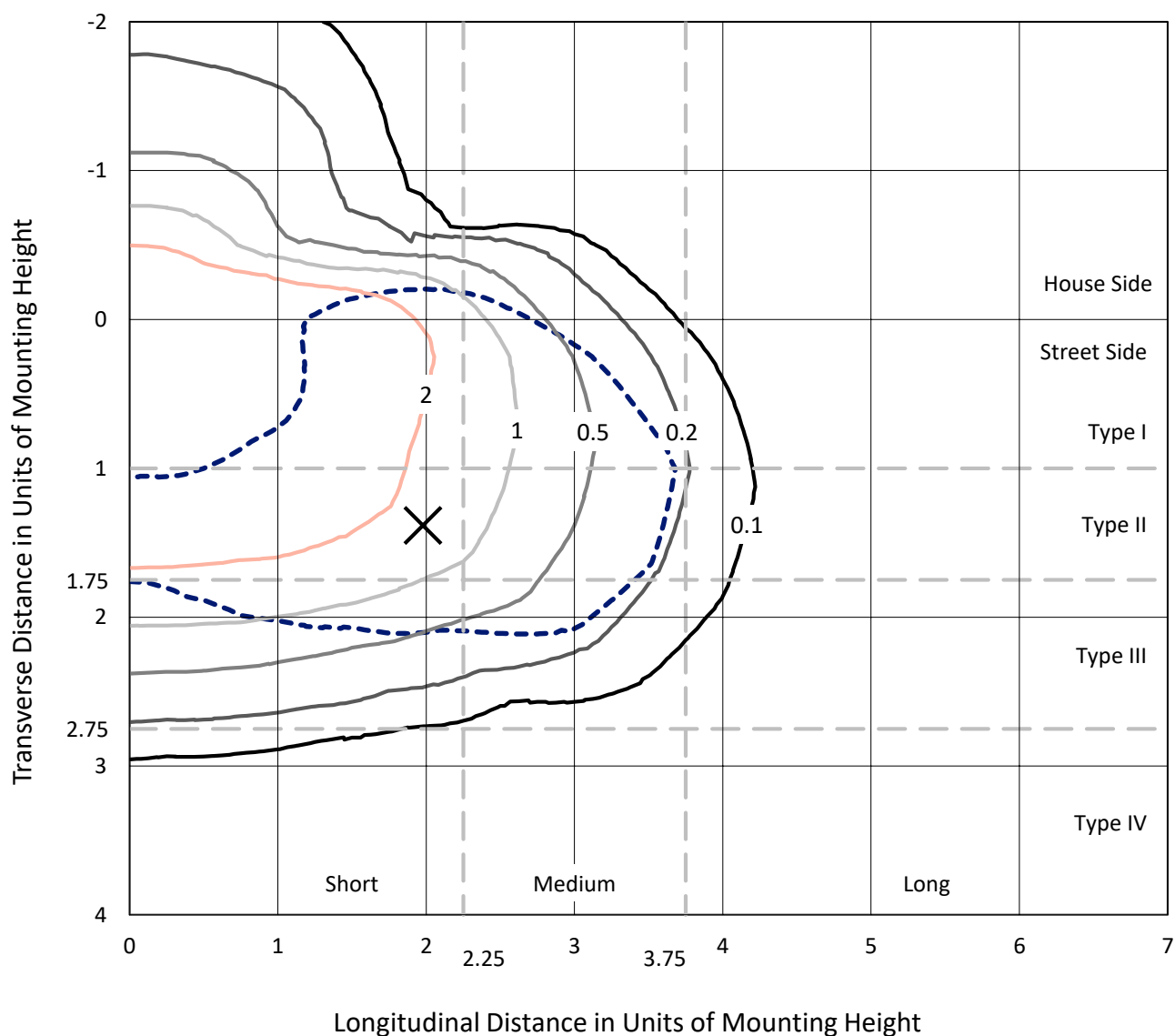


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

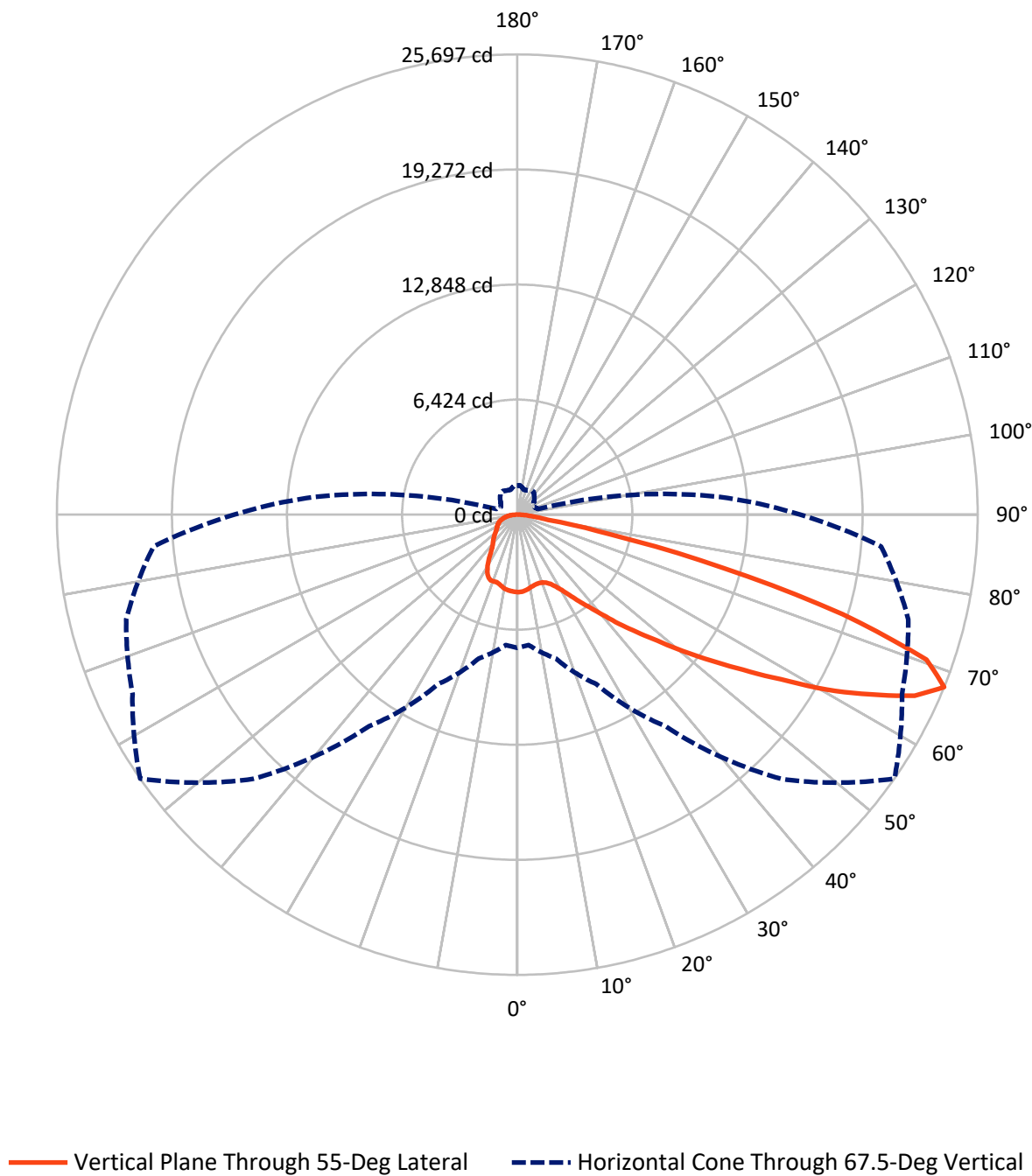


Based on 30 foot mounting height. Maximum calculated value = 5 fc  
Type III - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7575.4   | 0.0    | 7575.4  |
|                    | % Fixture | 21.6     | 0.0    | 21.6    |
| <b>Street Side</b> | Lumens    | 27492.6  | 0.0    | 27492.6 |
|                    | % Fixture | 78.4     | 0.0    | 78.4    |
| <b>Total</b>       | Lumens    | 35068.0  | 0.0    | 35068.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 403.6   | 1.2       |
| 10°-20°   | 1143.1  | 3.3       |
| 20°-30°   | 1914.9  | 5.5       |
| 30°-40°   | 3148.9  | 9.0       |
| 40°-50°   | 5300.5  | 15.1      |
| 50°-60°   | 8342.7  | 23.8      |
| 60°-70°   | 9956.1  | 28.4      |
| 70°-80°   | 4275.3  | 12.2      |
| 80°-90°   | 582.9   | 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°    | 35068.0 | 100.0     |
| 0°-180°   | 35068.0 | 100.0     |

**Coefficient of Utilization**



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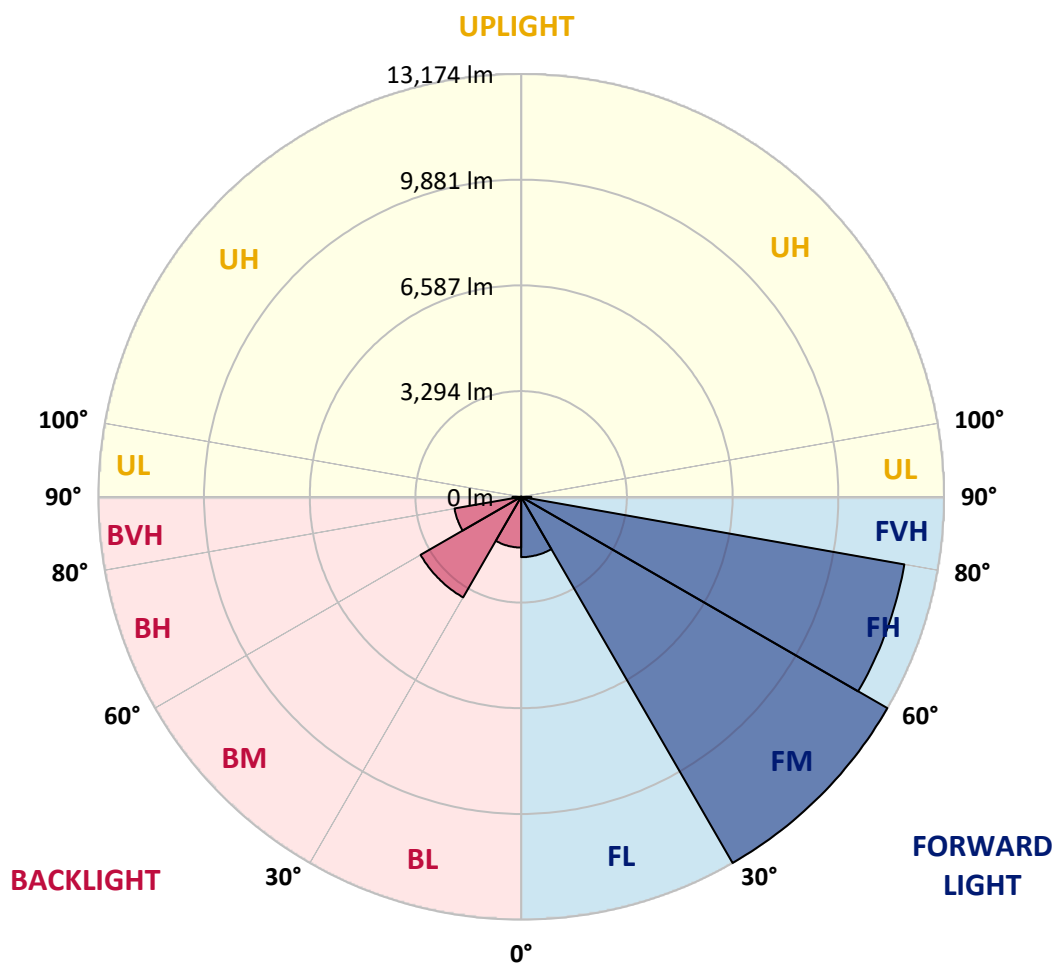
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1879.7  | 5.4       |                         |      |         |
| FM   | (30°-60°)   | 13174.1 | 37.6      |                         |      |         |
| FH   | (60°-80°)   | 12123.2 | 34.6      |                         |      | G5      |
| FVH  | (80°-90°)   | 315.5   | 0.9       |                         |      | G3/500  |
| BL   | (0°-30°)    | 1581.9  | 4.5       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3618.0  | 10.3      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2108.2  | 6.0       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 267.4   | 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°    | 4324.3  | 4324.3  | 4324.3  | 4324.3  | 4324.3  | 4324.3  | 4324.3  | 4324.3  | 4324.3  | 4324.3  | 4324.3  |
| 2.5°  | 4287.0  | 4288.7  | 4292.1  | 4305.6  | 4317.5  | 4314.1  | 4315.8  | 4309.0  | 4307.3  | 4297.2  | 4307.3  |
| 5°    | 4232.8  | 4237.9  | 4239.6  | 4261.6  | 4275.1  | 4278.5  | 4273.5  | 4265.0  | 4254.8  | 4244.7  | 4249.7  |
| 7.5°  | 4109.2  | 4122.7  | 4124.4  | 4154.9  | 4176.9  | 4205.7  | 4207.4  | 4209.1  | 4204.0  | 4197.2  | 4207.4  |
| 10°   | 4031.2  | 4034.6  | 4032.9  | 4055.0  | 4071.9  | 4104.1  | 4122.7  | 4154.9  | 4168.4  | 4171.8  | 4178.6  |
| 12.5° | 4026.2  | 4022.8  | 4017.7  | 4017.7  | 4012.6  | 4026.2  | 4060.0  | 4105.8  | 4137.9  | 4148.1  | 4156.6  |
| 15°   | 4080.4  | 4078.7  | 4061.7  | 4036.3  | 4004.1  | 3994.0  | 4022.8  | 4073.6  | 4115.9  | 4137.9  | 4146.4  |
| 17.5° | 4202.3  | 4192.2  | 4165.1  | 4107.5  | 4038.0  | 4010.9  | 4014.3  | 4056.6  | 4105.8  | 4134.6  | 4143.0  |
| 20°   | 4425.9  | 4425.9  | 4368.3  | 4259.9  | 4136.3  | 4071.9  | 4041.4  | 4066.8  | 4114.2  | 4153.2  | 4165.1  |
| 22.5° | 4812.1  | 4815.5  | 4718.9  | 4541.1  | 4332.7  | 4195.5  | 4119.3  | 4114.2  | 4170.1  | 4214.2  | 4227.7  |
| 25°   | 5359.2  | 5345.6  | 5210.1  | 4956.1  | 4639.3  | 4412.3  | 4280.2  | 4249.7  | 4297.2  | 4346.3  | 4363.2  |
| 27.5° | 5996.0  | 5946.9  | 5786.0  | 5479.4  | 5069.5  | 4737.6  | 4534.3  | 4485.2  | 4530.9  | 4586.8  | 4603.7  |
| 30°   | 6626.1  | 6575.3  | 6383.9  | 6048.6  | 5592.9  | 5172.9  | 4881.5  | 4801.9  | 4866.3  | 4945.9  | 4956.1  |
| 32.5° | 7256.2  | 7256.2  | 7042.8  | 6651.5  | 6155.3  | 5692.9  | 5343.9  | 5249.1  | 5355.8  | 5452.3  | 5474.4  |
| 35°   | 8010.0  | 8013.4  | 7806.7  | 7335.8  | 6802.3  | 6312.8  | 5928.3  | 5858.8  | 6019.8  | 6087.5  | 6140.0  |
| 37.5° | 8936.5  | 8955.1  | 8689.2  | 8120.1  | 7535.7  | 7020.8  | 6563.5  | 6468.6  | 6629.5  | 6814.2  | 6983.5  |
| 40°   | 9937.5  | 9961.2  | 9668.2  | 8967.0  | 8382.6  | 7844.0  | 7349.4  | 7178.3  | 7445.9  | 7798.2  | 8016.7  |
| 42.5° | 10892.8 | 11014.8 | 10731.9 | 10010.3 | 9381.9  | 8824.7  | 8323.3  | 8074.3  | 8409.7  | 8941.6  | 9131.3  |
| 45°   | 12273.3 | 12361.3 | 11868.4 | 11214.6 | 10623.5 | 10000.2 | 9336.2  | 9073.7  | 9542.9  | 10213.6 | 10252.6 |
| 47.5° | 13193.0 | 13126.9 | 12876.3 | 12469.7 | 12095.4 | 11512.7 | 10513.4 | 10225.5 | 10848.8 | 11638.1 | 11419.6 |
| 50°   | 13682.5 | 13702.8 | 13669.0 | 13692.7 | 13706.2 | 13340.4 | 11956.5 | 11561.9 | 12305.4 | 13259.1 | 12756.0 |
| 52.5° | 14139.8 | 14004.3 | 14116.1 | 14671.7 | 15342.4 | 15206.9 | 13526.7 | 13115.1 | 13867.1 | 15057.9 | 14168.6 |
| 55°   | 14129.7 | 13923.0 | 14287.2 | 15267.9 | 16722.9 | 16878.7 | 15289.9 | 14815.7 | 15518.6 | 16987.1 | 15665.9 |
| 57.5° | 13630.0 | 13640.2 | 14200.8 | 15484.7 | 17684.9 | 18450.5 | 17336.0 | 16624.6 | 17270.0 | 18941.7 | 17032.8 |
| 60°   | 12942.3 | 13035.5 | 13843.4 | 15449.1 | 18455.6 | 19739.5 | 19846.2 | 18574.2 | 18985.8 | 20718.5 | 18164.3 |
| 62.5° | 11832.9 | 11931.1 | 13045.6 | 15079.9 | 18338.8 | 20981.1 | 22115.9 | 20786.3 | 20779.5 | 21795.8 | 18496.3 |
| 65°   | 10083.2 | 10054.4 | 11224.8 | 13699.4 | 17358.0 | 21899.1 | 24370.4 | 22698.6 | 22131.2 | 21812.7 | 17828.9 |
| 67.5° | 7435.8  | 7307.0  | 8311.5  | 10433.8 | 14427.8 | 20871.0 | 25696.6 | 23694.5 | 22591.9 | 20378.1 | 15789.6 |
| 70°   | 3858.5  | 3729.7  | 4542.8  | 6092.6  | 9488.7  | 16289.3 | 24228.1 | 23179.6 | 21573.9 | 17082.0 | 12369.8 |
| 72.5° | 1649.8  | 1627.7  | 1958.0  | 2672.8  | 4590.2  | 9395.5  | 18997.6 | 20063.0 | 18511.5 | 12727.2 | 8504.6  |
| 75°   | 1109.4  | 1102.7  | 1226.3  | 1456.7  | 2064.7  | 3812.7  | 11888.8 | 14241.5 | 13543.6 | 7891.4  | 4783.3  |
| 77.5° | 870.6   | 862.1   | 935.0   | 1046.8  | 1338.1  | 1504.1  | 5276.2  | 7645.8  | 7076.7  | 3435.0  | 2093.5  |
| 80°   | 680.9   | 674.1   | 719.9   | 780.8   | 962.1   | 948.5   | 1736.1  | 3042.1  | 2354.4  | 1316.1  | 1018.0  |
| 82.5° | 536.9   | 536.9   | 574.2   | 575.9   | 682.6   | 647.0   | 906.2   | 1339.8  | 1175.5  | 767.3   | 623.3   |
| 85°   | 491.2   | 491.2   | 530.2   | 430.2   | 445.5   | 408.2   | 562.3   | 794.4   | 745.3   | 315.0   | 271.0   |
| 87.5° | 247.3   | 240.5   | 445.5   | 381.1   | 242.2   | 216.8   | 274.4   | 384.5   | 413.3   | 174.5   | 135.5   |
| 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°    | 4324.3  | 4324.3 | 4324.3 | 4324.3 | 4324.3 | 4324.3 | 4324.3 | 4324.3 | 4324.3 | 4324.3 |
| 2.5°  | 4303.9  | 4302.2 | 4305.6 | 4307.3 | 4320.9 | 4339.5 | 4348.0 | 4359.8 | 4366.6 | 4363.2 |
| 5°    | 4253.1  | 4256.5 | 4270.1 | 4280.2 | 4303.9 | 4334.4 | 4351.4 | 4364.9 | 4376.8 | 4371.7 |
| 7.5°  | 4210.8  | 4219.3 | 4239.6 | 4248.0 | 4261.6 | 4270.1 | 4268.4 | 4273.5 | 4283.6 | 4271.8 |
| 10°   | 4187.1  | 4197.2 | 4212.5 | 4200.6 | 4168.4 | 4122.7 | 4080.4 | 4058.3 | 4065.1 | 4056.6 |
| 12.5° | 4163.4  | 4176.9 | 4165.1 | 4109.2 | 4019.4 | 3960.1 | 3927.9 | 3931.3 | 3946.6 | 3949.9 |
| 15°   | 4149.8  | 4154.9 | 4104.1 | 3999.1 | 3907.6 | 3899.1 | 3916.1 | 3912.7 | 3914.4 | 3914.4 |
| 17.5° | 4149.8  | 4136.3 | 4041.4 | 3936.4 | 3897.4 | 3882.2 | 3829.7 | 3763.6 | 3734.8 | 3724.7 |
| 20°   | 4171.8  | 4136.3 | 4021.1 | 3951.6 | 3866.9 | 3736.5 | 3597.6 | 3475.7 | 3421.5 | 3406.2 |
| 22.5° | 4237.9  | 4176.9 | 4078.7 | 3958.4 | 3717.9 | 3499.4 | 3279.2 | 3133.5 | 3035.3 | 3018.3 |
| 25°   | 4371.7  | 4303.9 | 4192.2 | 3868.6 | 3480.8 | 3169.1 | 2918.4 | 2755.8 | 2657.6 | 2644.0 |
| 27.5° | 4605.4  | 4561.4 | 4253.1 | 3670.5 | 3165.7 | 2832.0 | 2600.0 | 2474.6 | 2401.8 | 2396.7 |
| 30°   | 4957.7  | 4935.7 | 4222.6 | 3377.4 | 2777.8 | 2505.1 | 2393.3 | 2320.5 | 2266.3 | 2264.6 |
| 32.5° | 5520.1  | 5342.2 | 4122.7 | 3020.0 | 2423.8 | 2273.1 | 2227.3 | 2183.3 | 2141.0 | 2141.0 |
| 35°   | 6243.3  | 5670.8 | 3933.0 | 2637.2 | 2208.7 | 2144.3 | 2086.8 | 2017.3 | 1961.4 | 1958.0 |
| 37.5° | 7093.6  | 5874.1 | 3592.5 | 2329.0 | 2107.1 | 2058.0 | 1973.3 | 1870.0 | 1771.7 | 1754.8 |
| 40°   | 7952.4  | 5935.1 | 3113.2 | 2139.3 | 2042.7 | 1971.6 | 1868.3 | 1746.3 | 1651.5 | 1646.4 |
| 42.5° | 8740.0  | 5818.2 | 2605.1 | 2008.8 | 1978.4 | 1883.5 | 1775.1 | 1666.7 | 1592.2 | 1590.5 |
| 45°   | 9400.6  | 5515.0 | 2178.2 | 1885.2 | 1910.6 | 1803.9 | 1707.3 | 1619.3 | 1561.7 | 1549.8 |
| 47.5° | 10022.2 | 5086.5 | 1878.4 | 1754.8 | 1842.9 | 1759.9 | 1678.6 | 1595.6 | 1539.7 | 1531.2 |
| 50°   | 10743.8 | 4624.1 | 1668.4 | 1627.7 | 1783.6 | 1744.6 | 1702.3 | 1615.9 | 1522.7 | 1512.6 |
| 52.5° | 11617.8 | 4224.3 | 1504.1 | 1515.9 | 1737.8 | 1764.9 | 1763.2 | 1673.5 | 1510.9 | 1497.3 |
| 55°   | 12593.4 | 3780.6 | 1380.4 | 1424.5 | 1719.2 | 1802.2 | 1778.5 | 1727.7 | 1521.0 | 1500.7 |
| 57.5° | 13553.8 | 3262.3 | 1294.1 | 1355.0 | 1692.1 | 1798.8 | 1705.7 | 1632.8 | 1544.7 | 1515.9 |
| 60°   | 14273.6 | 2566.1 | 1228.0 | 1294.1 | 1632.8 | 1742.9 | 1626.0 | 1529.5 | 1539.7 | 1517.6 |
| 62.5° | 14321.1 | 1983.4 | 1148.4 | 1241.6 | 1543.1 | 1687.0 | 1573.5 | 1483.8 | 1561.7 | 1541.4 |
| 65°   | 13479.2 | 1499.0 | 1072.2 | 1178.9 | 1446.5 | 1651.5 | 1522.7 | 1458.4 | 1607.4 | 1585.4 |
| 67.5° | 11348.4 | 1206.0 | 1007.8 | 1114.5 | 1350.0 | 1576.9 | 1477.0 | 1434.6 | 1648.1 | 1609.1 |
| 70°   | 8192.9  | 1028.1 | 945.1  | 1036.6 | 1263.6 | 1492.2 | 1436.3 | 1392.3 | 1538.0 | 1477.0 |
| 72.5° | 5044.1  | 890.9  | 874.0  | 933.3  | 1197.5 | 1404.2 | 1375.4 | 1312.7 | 1385.5 | 1336.4 |
| 75°   | 2518.7  | 772.4  | 794.4  | 831.7  | 1104.4 | 1304.2 | 1273.7 | 1211.1 | 1221.2 | 1211.1 |
| 77.5° | 1206.0  | 660.6  | 701.2  | 730.0  | 984.1  | 1190.7 | 1158.6 | 1094.2 | 1082.3 | 1084.0 |
| 80°   | 763.9   | 552.2  | 591.1  | 611.5  | 879.1  | 1058.6 | 1026.4 | 962.1  | 1097.6 | 1018.0 |
| 82.5° | 477.7   | 448.9  | 459.0  | 496.3  | 765.6  | 921.4  | 879.1  | 821.5  | 989.2  | 782.5  |
| 85°   | 264.2   | 313.4  | 326.9  | 359.1  | 589.4  | 770.7  | 728.3  | 655.5  | 587.7  | 577.6  |
| 87.5° | 157.5   | 186.3  | 191.4  | 215.1  | 396.3  | 557.3  | 492.9  | 467.5  | 387.9  | 386.2  |
| 90°   | 0.0     | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)