

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: P194843

Luminaire Tested: **GLEON-AF-05-LED-E1-T3R-7060-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P194843  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P40129)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-05-LED-E1-T3R-7060-1200  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 5700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 33368 lumens  
Efficiency: N/A  
Efficacy: 104.3 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): 320  
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



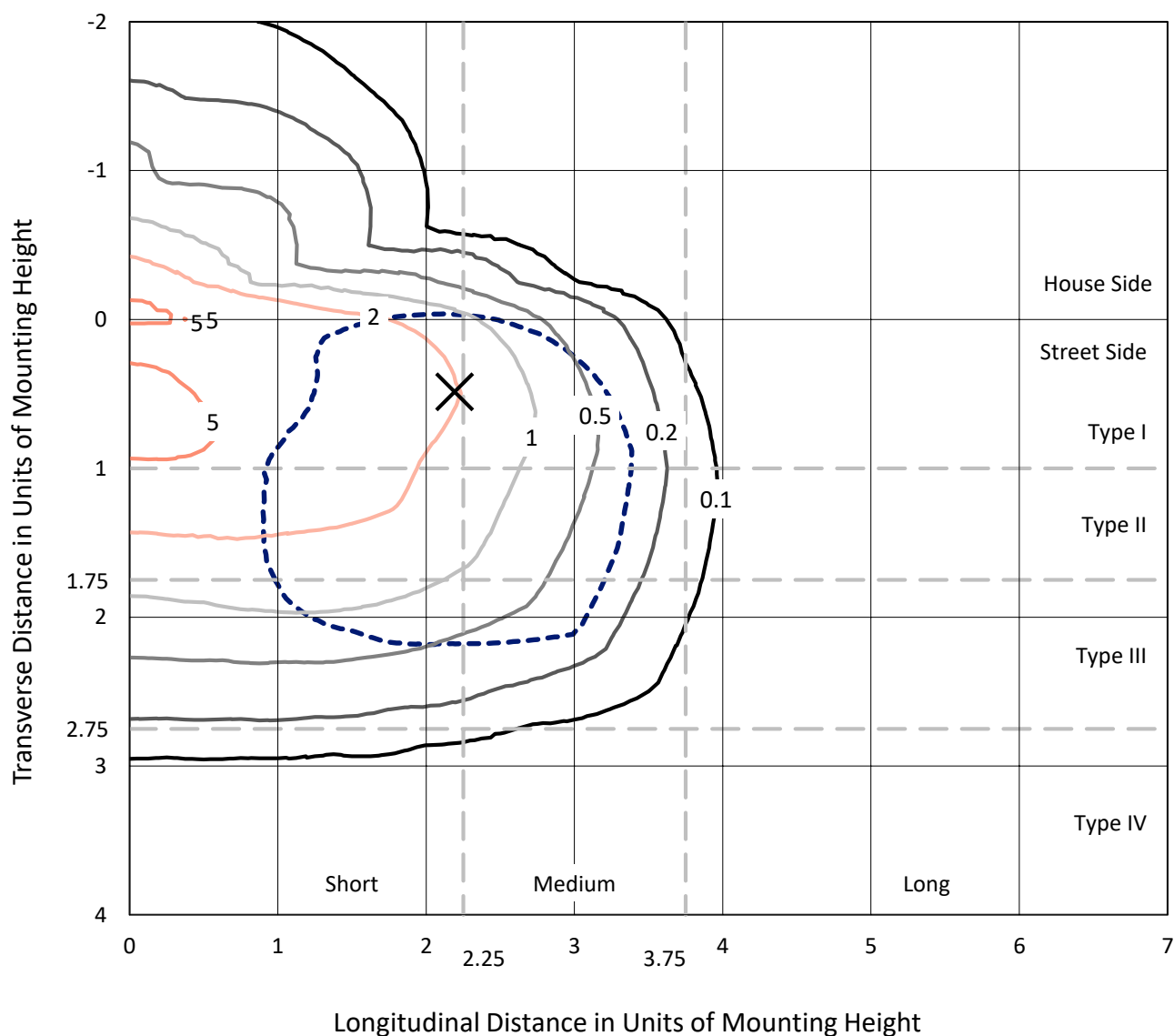
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

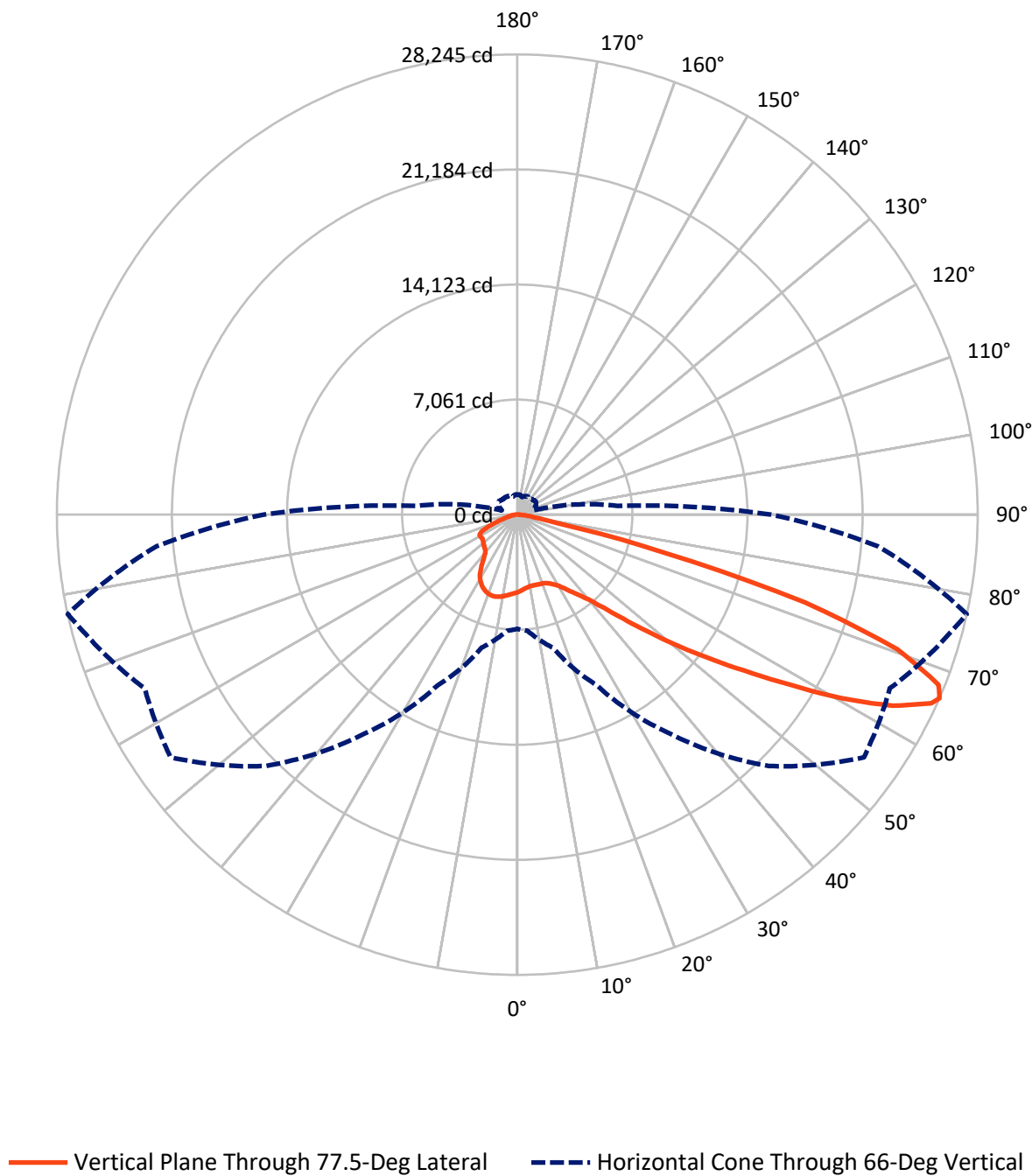


Based on 30 foot mounting height. Maximum calculated value = 6.5 fc  
 Type III - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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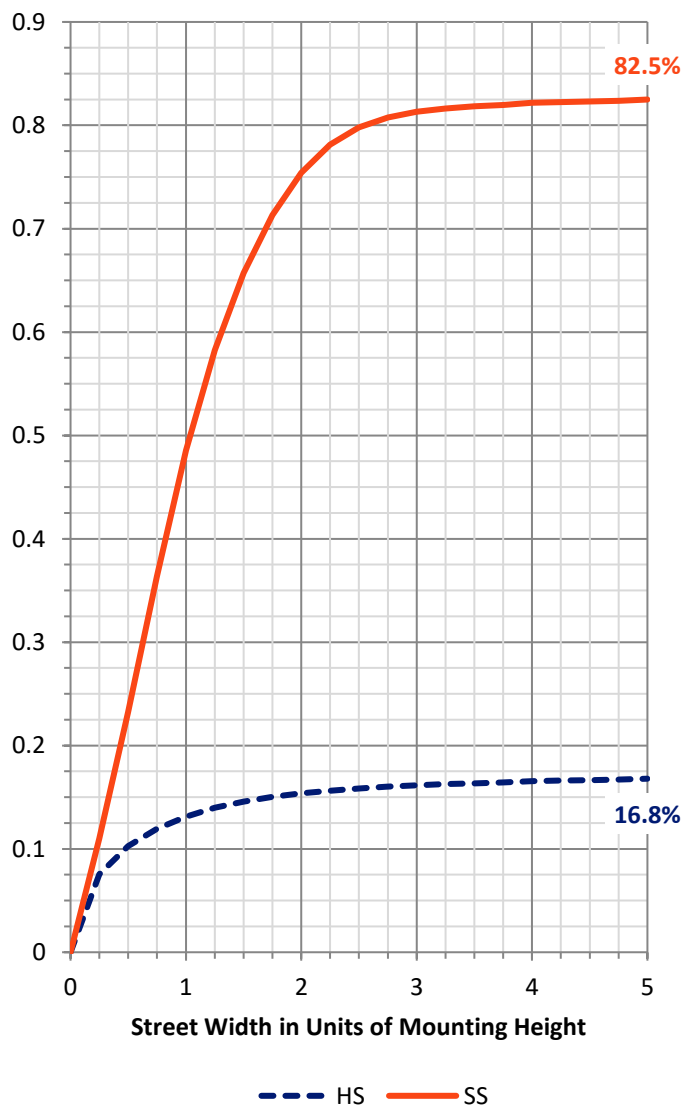
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5700.7   | 0.0    | 5700.7  |
|                    | % Fixture | 17.1     | 0.0    | 17.1    |
| <b>Street Side</b> | Lumens    | 27667.3  | 0.0    | 27667.3 |
|                    | % Fixture | 82.9     | 0.0    | 82.9    |
| <b>Total</b>       | Lumens    | 33368.0  | 0.0    | 33368.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 424.8   | 1.3       |
| 10°-20°   | 1198.5  | 3.6       |
| 20°-30°   | 2045.4  | 6.1       |
| 30°-40°   | 3274.4  | 9.8       |
| 40°-50°   | 5058.6  | 15.2      |
| 50°-60°   | 7174.9  | 21.5      |
| 60°-70°   | 9598.0  | 28.8      |
| 70°-80°   | 4168.2  | 12.5      |
| 80°-90°   | 425.0   | 1.3       |
| 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°    | 33368.0 | 100.0     |
| 0°-180°   | 33368.0 | 100.0     |

**Coefficient of Utilization**



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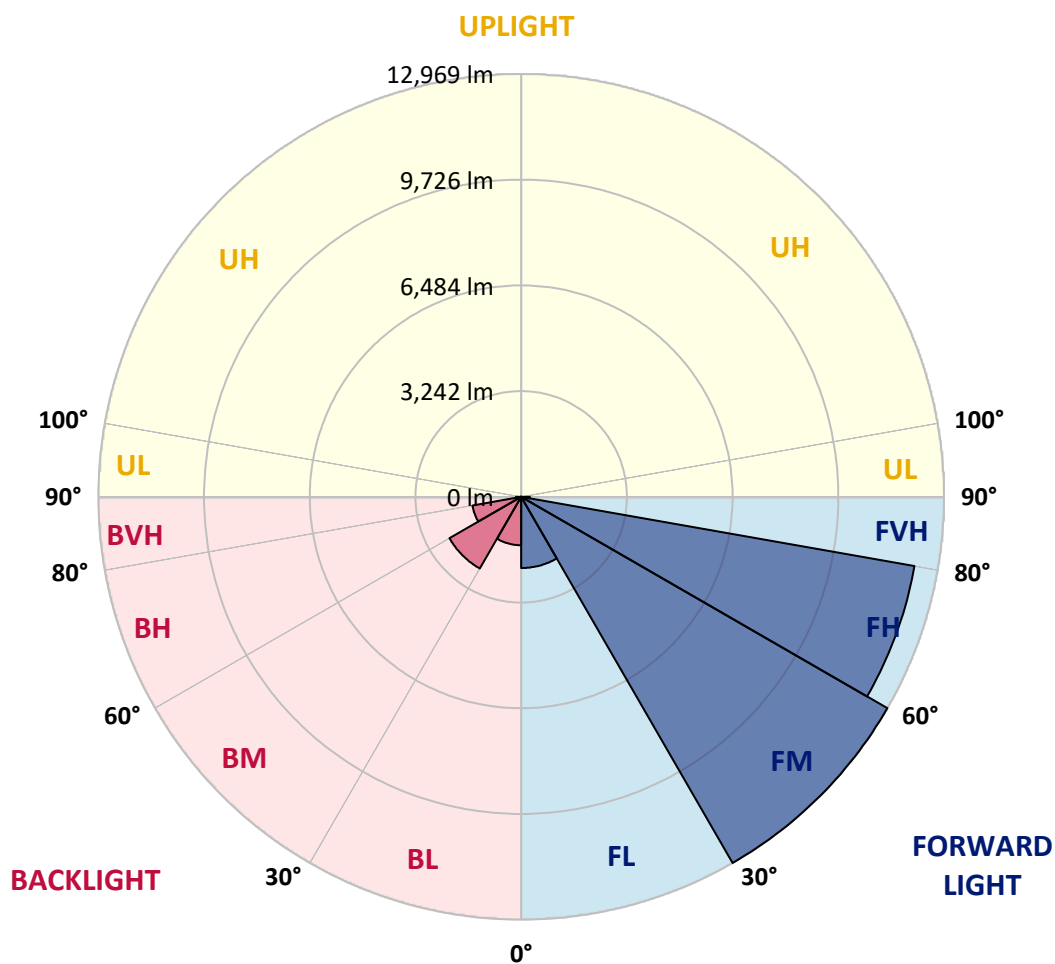
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2184.1  | 6.5       |                         |      |         |
| FM   | (30°-60°)   | 12968.6 | 38.9      |                         |      |         |
| FH   | (60°-80°)   | 12248.1 | 36.7      |                         |      | G5      |
| FVH  | (80°-90°)   | 266.6   | 0.8       |                         |      | G3/500  |
| BL   | (0°-30°)    | 1484.7  | 4.4       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 2539.3  | 7.6       | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1518.2  | 4.5       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 158.5   | 0.5       |                         |      | G2/225  |
| 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°     | 77.5°   | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4755.1  | 4755.1  | 4755.1  | 4755.1  | 4755.1  | 4755.1  | 4755.1  | 4755.1  | 4755.1  | 4755.1  | 4755.1  |
| 2.5°  | 4206.4  | 4234.8  | 4258.5  | 4280.5  | 4324.7  | 4397.2  | 4480.8  | 4548.6  | 4646.3  | 4665.2  | 4717.3  |
| 5°    | 3820.2  | 3820.2  | 3839.1  | 3872.2  | 3932.1  | 4040.9  | 4154.4  | 4305.8  | 4518.6  | 4569.1  | 4707.8  |
| 7.5°  | 3632.5  | 3634.1  | 3645.2  | 3673.5  | 3725.6  | 3824.9  | 3949.4  | 4127.6  | 4416.1  | 4499.7  | 4736.2  |
| 10°   | 3701.9  | 3686.1  | 3662.5  | 3648.3  | 3656.2  | 3714.5  | 3832.8  | 4031.4  | 4353.1  | 4460.3  | 4799.2  |
| 12.5° | 4089.8  | 4059.8  | 3977.8  | 3869.0  | 3765.0  | 3722.4  | 3791.8  | 3985.7  | 4326.3  | 4450.8  | 4882.8  |
| 15°   | 4723.6  | 4711.0  | 4558.0  | 4332.6  | 4080.3  | 3869.0  | 3821.7  | 3968.4  | 4329.4  | 4461.8  | 4982.1  |
| 17.5° | 5518.2  | 5500.8  | 5299.0  | 4971.1  | 4559.6  | 4148.1  | 3927.4  | 3982.6  | 4340.4  | 4480.8  | 5078.3  |
| 20°   | 6320.7  | 6267.1  | 6049.5  | 5658.5  | 5130.3  | 4528.1  | 4102.4  | 4018.8  | 4354.6  | 4501.3  | 5179.2  |
| 22.5° | 6919.8  | 6875.7  | 6680.2  | 6300.2  | 5691.6  | 4967.9  | 4337.3  | 4081.9  | 4400.4  | 4561.2  | 5303.8  |
| 25°   | 7446.4  | 7449.5  | 7255.6  | 6888.3  | 6259.2  | 5434.6  | 4640.0  | 4250.6  | 4517.0  | 4684.2  | 5474.0  |
| 27.5° | 8097.5  | 8059.7  | 7878.4  | 7514.2  | 6820.5  | 5906.0  | 5005.8  | 4482.3  | 4690.5  | 4859.2  | 5697.9  |
| 30°   | 8876.4  | 8849.6  | 8639.9  | 8226.8  | 7443.2  | 6412.1  | 5423.6  | 4751.9  | 4914.3  | 5089.3  | 5991.2  |
| 32.5° | 9792.4  | 9779.8  | 9562.2  | 9030.9  | 8162.2  | 7008.1  | 5913.9  | 5108.3  | 5248.6  | 5429.9  | 6412.1  |
| 35°   | 10867.7 | 10869.2 | 10612.3 | 9973.7  | 8948.9  | 7701.8  | 6470.5  | 5567.1  | 5655.4  | 5844.5  | 6913.5  |
| 37.5° | 11529.9 | 11610.3 | 11514.1 | 10862.9 | 9839.7  | 8477.5  | 7192.6  | 6175.6  | 6118.9  | 6309.7  | 7451.1  |
| 40°   | 11671.7 | 11769.5 | 12073.8 | 11742.7 | 10836.1 | 9332.0  | 7832.7  | 6760.6  | 6689.6  | 6923.0  | 8143.3  |
| 42.5° | 11473.1 | 11608.7 | 12251.9 | 12485.3 | 11894.1 | 10385.2 | 8693.5  | 7629.3  | 7539.4  | 7853.2  | 9004.1  |
| 45°   | 11354.8 | 11455.8 | 12199.9 | 12871.6 | 12811.6 | 11575.6 | 9789.3  | 8720.3  | 8687.2  | 9098.7  | 9997.4  |
| 47.5° | 11149.9 | 11241.3 | 11957.1 | 12961.4 | 13350.9 | 12666.6 | 11105.7 | 10054.1 | 10118.8 | 10658.0 | 11118.4 |
| 50°   | 11260.3 | 11298.1 | 11685.9 | 12732.8 | 13506.9 | 13465.9 | 12576.7 | 11599.2 | 11820.0 | 12493.2 | 12387.5 |
| 52.5° | 11244.5 | 11342.2 | 11654.4 | 12357.6 | 13527.4 | 13959.4 | 14025.6 | 13322.5 | 13787.6 | 14560.1 | 13795.5 |
| 55°   | 9090.8  | 9270.6  | 11283.9 | 12263.0 | 13600.0 | 14443.5 | 15315.3 | 15138.7 | 16005.9 | 16906.1 | 15384.7 |
| 57.5° | 8680.9  | 8794.4  | 9910.7  | 12461.6 | 13984.7 | 15367.4 | 16750.1 | 17137.9 | 18588.4 | 19633.7 | 17320.8 |
| 60°   | 8600.5  | 8740.8  | 9896.5  | 12704.4 | 14765.1 | 16873.0 | 18876.9 | 19558.0 | 21730.6 | 22875.2 | 19565.9 |
| 62.5° | 8349.8  | 8501.2  | 9803.4  | 12672.9 | 15873.5 | 18955.8 | 21599.8 | 22131.1 | 24710.4 | 25823.5 | 21443.7 |
| 65°   | 7555.2  | 7697.1  | 9045.1  | 12163.7 | 16620.8 | 21178.8 | 24822.4 | 24489.7 | 27062.8 | 27899.9 | 22380.2 |
| 66°   | 7011.2  | 7150.0  | 8447.6  | 11564.5 | 16447.3 | 21809.4 | 25963.8 | 25219.7 | 27589.3 | 28245.2 | 22197.3 |
| 67.5° | 6016.4  | 6125.2  | 7287.2  | 10222.8 | 15525.0 | 21986.0 | 26924.0 | 25768.3 | 27644.5 | 27876.3 | 21152.0 |
| 70°   | 3801.2  | 3832.8  | 4736.2  | 7057.0  | 11752.2 | 19067.7 | 25462.5 | 24406.1 | 25364.7 | 24737.2 | 17732.3 |
| 72.5° | 1649.1  | 1638.1  | 2273.5  | 3590.0  | 6653.4  | 12794.3 | 20597.0 | 20138.2 | 19897.0 | 18465.4 | 12412.8 |
| 75°   | 917.6   | 930.2   | 1180.9  | 1666.5  | 2703.9  | 6284.4  | 13473.8 | 12893.6 | 10886.6 | 9289.5  | 5628.5  |
| 77.5° | 736.3   | 753.6   | 979.1   | 1182.5  | 1214.0  | 2191.5  | 6304.9  | 5130.3  | 3088.6  | 2478.5  | 1564.0  |
| 80°   | 581.8   | 613.3   | 854.5   | 920.7   | 818.3   | 903.4   | 2037.0  | 1628.7  | 1221.9  | 1121.0  | 810.4   |
| 82.5° | 460.4   | 482.4   | 733.1   | 696.9   | 572.3   | 608.6   | 975.9   | 950.7   | 794.6   | 723.7   | 468.3   |
| 85°   | 331.1   | 372.1   | 602.3   | 525.0   | 375.2   | 409.9   | 648.0   | 621.2   | 455.6   | 372.1   | 206.5   |
| 87.5° | 135.6   | 176.6   | 425.7   | 348.4   | 209.7   | 190.8   | 323.2   | 304.3   | 216.0   | 157.7   | 102.5   |
| 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):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4755.1  | 4755.1 | 4755.1 | 4755.1 | 4755.1 | 4755.1 | 4755.1 | 4755.1 | 4755.1 | 4755.1 | 4755.1 |
| 2.5°  | 4750.4  | 4788.2 | 4837.1 | 4867.0 | 4882.8 | 4893.8 | 4911.2 | 4909.6 | 4914.3 | 4915.9 | 4922.2 |
| 5°    | 4781.9  | 4845.0 | 4915.9 | 4934.8 | 4934.8 | 4917.5 | 4900.1 | 4871.8 | 4860.7 | 4857.6 | 4860.7 |
| 7.5°  | 4863.9  | 4933.3 | 4994.7 | 4972.7 | 4925.4 | 4856.0 | 4766.1 | 4687.3 | 4644.7 | 4630.5 | 4627.4 |
| 10°   | 4967.9  | 5051.5 | 5076.7 | 4993.2 | 4854.4 | 4687.3 | 4509.1 | 4379.9 | 4305.8 | 4285.3 | 4279.0 |
| 12.5° | 5094.1  | 5172.9 | 5138.2 | 4961.6 | 4704.6 | 4435.0 | 4189.1 | 3982.6 | 3828.0 | 3779.2 | 3776.0 |
| 15°   | 5232.8  | 5294.3 | 5172.9 | 4863.9 | 4480.8 | 4083.5 | 3645.2 | 3288.8 | 3096.5 | 3035.0 | 3030.3 |
| 17.5° | 5362.1  | 5393.6 | 5152.4 | 4693.6 | 4151.3 | 3508.0 | 2926.2 | 2651.9 | 2585.7 | 2601.4 | 2604.6 |
| 20°   | 5472.5  | 5472.5 | 5083.0 | 4449.2 | 3632.5 | 2749.6 | 2382.3 | 2377.5 | 2424.8 | 2472.1 | 2481.6 |
| 22.5° | 5593.9  | 5521.3 | 4961.6 | 4104.0 | 2897.8 | 2249.8 | 2196.2 | 2240.4 | 2294.0 | 2346.0 | 2353.9 |
| 25°   | 5743.6  | 5560.8 | 4792.9 | 3580.5 | 2278.2 | 2043.3 | 2063.8 | 2100.1 | 2126.9 | 2160.0 | 2164.7 |
| 27.5° | 5910.8  | 5611.2 | 4570.6 | 2860.0 | 1977.1 | 1914.0 | 1929.8 | 1942.4 | 1939.2 | 1951.9 | 1955.0 |
| 30°   | 6111.0  | 5669.5 | 4266.3 | 2235.7 | 1852.5 | 1803.7 | 1775.3 | 1764.2 | 1764.2 | 1784.7 | 1792.6 |
| 32.5° | 6379.0  | 5756.3 | 3829.6 | 1915.6 | 1792.6 | 1724.8 | 1633.4 | 1592.4 | 1608.2 | 1677.5 | 1693.3 |
| 35°   | 6673.9  | 5849.3 | 3238.4 | 1806.8 | 1780.0 | 1688.6 | 1546.7 | 1471.0 | 1472.6 | 1537.2 | 1557.7 |
| 37.5° | 6995.5  | 5967.5 | 2590.4 | 1786.3 | 1808.4 | 1690.1 | 1500.9 | 1396.9 | 1354.3 | 1354.3 | 1362.2 |
| 40°   | 7407.0  | 6088.9 | 2096.9 | 1800.5 | 1868.3 | 1709.1 | 1477.3 | 1338.6 | 1218.7 | 1221.9 | 1228.2 |
| 42.5° | 7943.0  | 6193.0 | 1832.0 | 1830.5 | 1940.8 | 1734.3 | 1475.7 | 1261.3 | 1157.2 | 1228.2 | 1292.8 |
| 45°   | 8539.0  | 6245.0 | 1715.4 | 1857.3 | 1999.2 | 1750.1 | 1450.5 | 1248.7 | 1165.1 | 1376.4 | 1499.4 |
| 47.5° | 9224.8  | 6215.1 | 1650.7 | 1866.7 | 2013.3 | 1750.1 | 1422.1 | 1278.6 | 1220.3 | 1594.0 | 1737.4 |
| 50°   | 9976.9  | 6128.3 | 1587.7 | 1847.8 | 2008.6 | 1746.9 | 1448.9 | 1308.6 | 1240.8 | 1631.8 | 1731.1 |
| 52.5° | 10861.4 | 6055.8 | 1521.4 | 1806.8 | 1975.5 | 1729.6 | 1480.5 | 1296.0 | 1176.2 | 1483.6 | 1553.0 |
| 55°   | 11870.4 | 6076.3 | 1447.3 | 1748.5 | 1923.5 | 1696.4 | 1469.4 | 1245.5 | 1108.4 | 1307.0 | 1349.6 |
| 57.5° | 13160.1 | 6320.7 | 1359.1 | 1674.4 | 1852.5 | 1641.3 | 1430.0 | 1221.9 | 1087.9 | 1185.6 | 1210.8 |
| 60°   | 14599.5 | 6746.4 | 1248.7 | 1600.3 | 1764.2 | 1553.0 | 1400.0 | 1232.9 | 1097.3 | 1176.2 | 1188.8 |
| 62.5° | 15655.9 | 6993.9 | 1154.1 | 1491.5 | 1644.4 | 1455.2 | 1362.2 | 1247.1 | 1122.6 | 1209.3 | 1206.1 |
| 65°   | 15942.8 | 6587.1 | 1035.8 | 1332.2 | 1482.0 | 1352.7 | 1314.9 | 1262.9 | 1133.6 | 1236.1 | 1221.9 |
| 66°   | 15540.8 | 6148.8 | 983.8  | 1258.1 | 1400.0 | 1302.3 | 1291.3 | 1261.3 | 1128.9 | 1239.2 | 1215.6 |
| 67.5° | 14564.9 | 5250.2 | 893.9  | 1149.4 | 1269.2 | 1226.6 | 1253.4 | 1247.1 | 1116.2 | 1236.1 | 1203.0 |
| 70°   | 11878.3 | 3582.1 | 764.7  | 957.0  | 1056.3 | 1080.0 | 1180.9 | 1196.7 | 1075.3 | 1180.9 | 1108.4 |
| 72.5° | 8299.3  | 2182.0 | 676.4  | 742.6  | 854.5  | 920.7  | 1081.6 | 1127.3 | 1020.1 | 1031.1 | 961.7  |
| 75°   | 4010.9  | 1158.8 | 613.3  | 575.5  | 663.8  | 769.4  | 961.7  | 1032.7 | 933.4  | 862.4  | 837.2  |
| 77.5° | 1250.3  | 707.9  | 520.3  | 463.5  | 520.3  | 621.2  | 804.1  | 905.0  | 830.9  | 722.1  | 712.6  |
| 80°   | 671.6   | 520.3  | 400.5  | 372.1  | 411.5  | 487.2  | 632.2  | 755.2  | 714.2  | 648.0  | 578.6  |
| 82.5° | 443.0   | 337.4  | 296.4  | 288.5  | 313.7  | 372.1  | 469.8  | 625.9  | 625.9  | 555.0  | 403.6  |
| 85°   | 228.6   | 206.5  | 203.4  | 203.4  | 219.2  | 247.5  | 320.1  | 482.4  | 514.0  | 293.3  | 242.8  |
| 87.5° | 113.5   | 118.2  | 110.4  | 115.1  | 123.0  | 121.4  | 152.9  | 242.8  | 290.1  | 178.2  | 148.2  |
| 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)