

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: P192680

Luminaire Tested: **GLEON-AF-02-LED-E1-AFL-7030-1200-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192680  
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-02-LED-E1-AFL-7030-1200-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 3000K, 1200mA 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: 10577.4 lumens  
Efficiency: N/A  
Efficacy: 82.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 129  
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



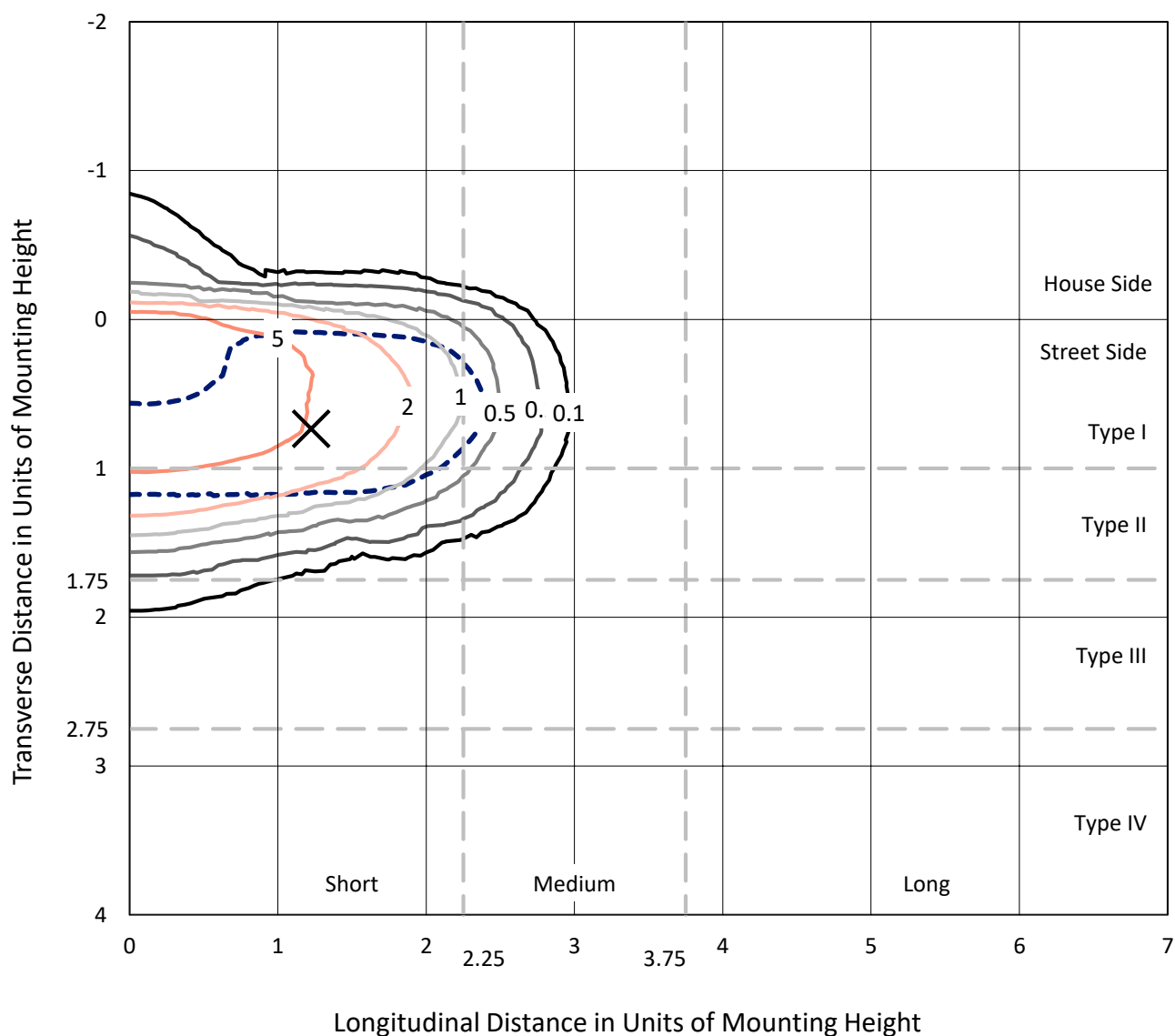
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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

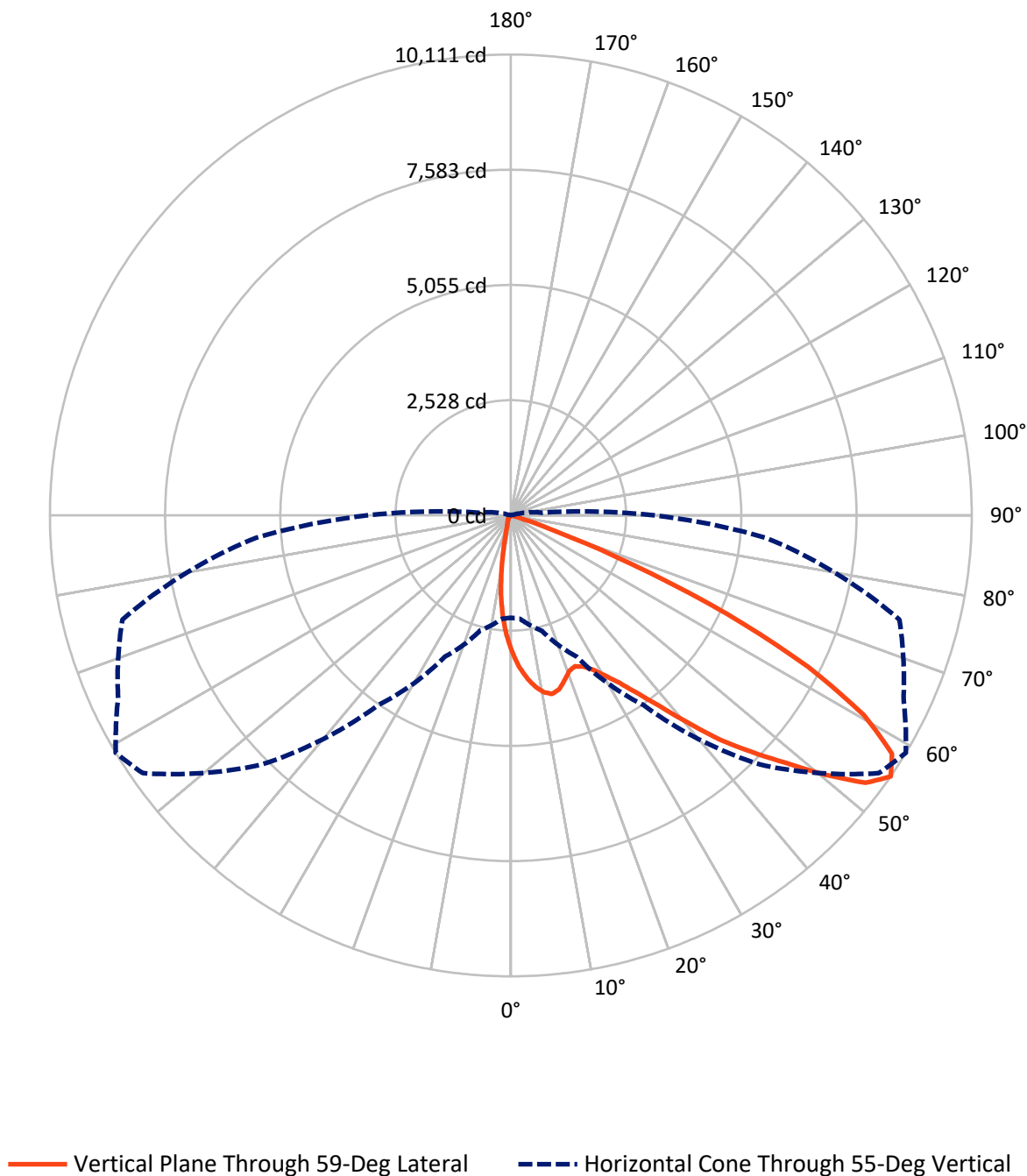


Based on 20 foot mounting height. Maximum calculated value = 9.3 fc  
 Type II - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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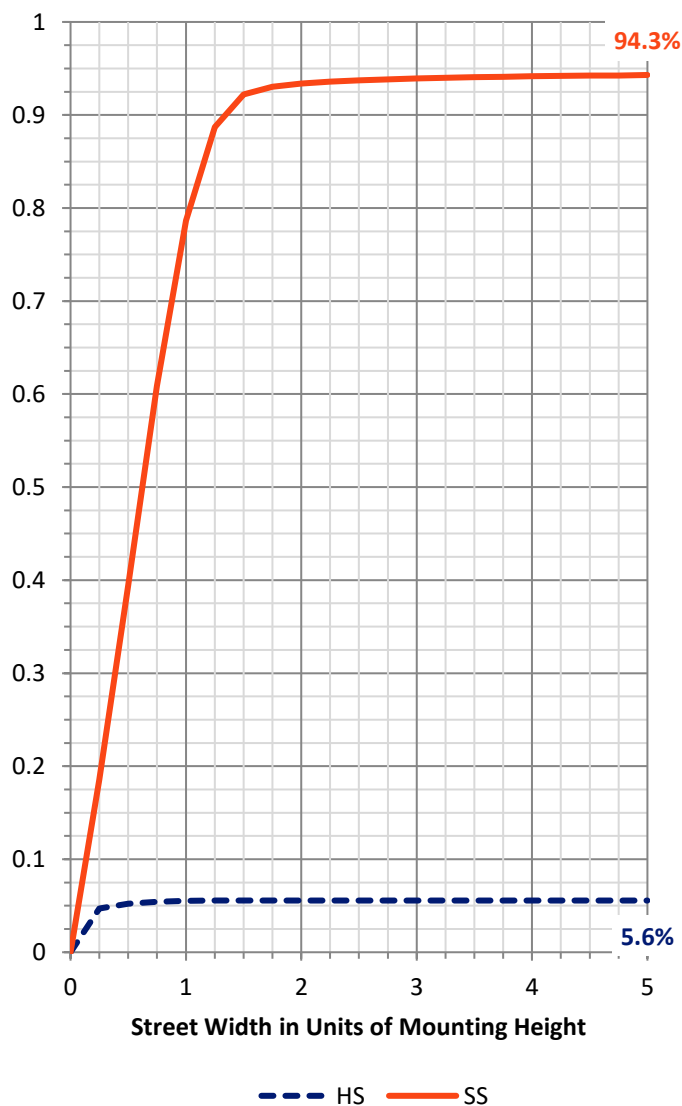
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 590.8    | 0.0    | 590.8   |
|                    | % Fixture | 5.6      | 0.0    | 5.6     |
| <b>Street Side</b> | Lumens    | 9986.6   | 0.0    | 9986.6  |
|                    | % Fixture | 94.4     | 0.0    | 94.4    |
| <b>Total</b>       | Lumens    | 10577.4  | 0.0    | 10577.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 249.4   | 2.4       |
| 10°-20°   | 597.1   | 5.6       |
| 20°-30°   | 1016.1  | 9.6       |
| 30°-40°   | 1747.4  | 16.5      |
| 40°-50°   | 2697.8  | 25.5      |
| 50°-60°   | 2712.2  | 25.6      |
| 60°-70°   | 1390.8  | 13.1      |
| 70°-80°   | 150.7   | 1.4       |
| 80°-90°   | 15.8    | 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°    | 10577.4 | 100.0     |
| 0°-180°   | 10577.4 | 100.0     |

**Coefficient of Utilization**



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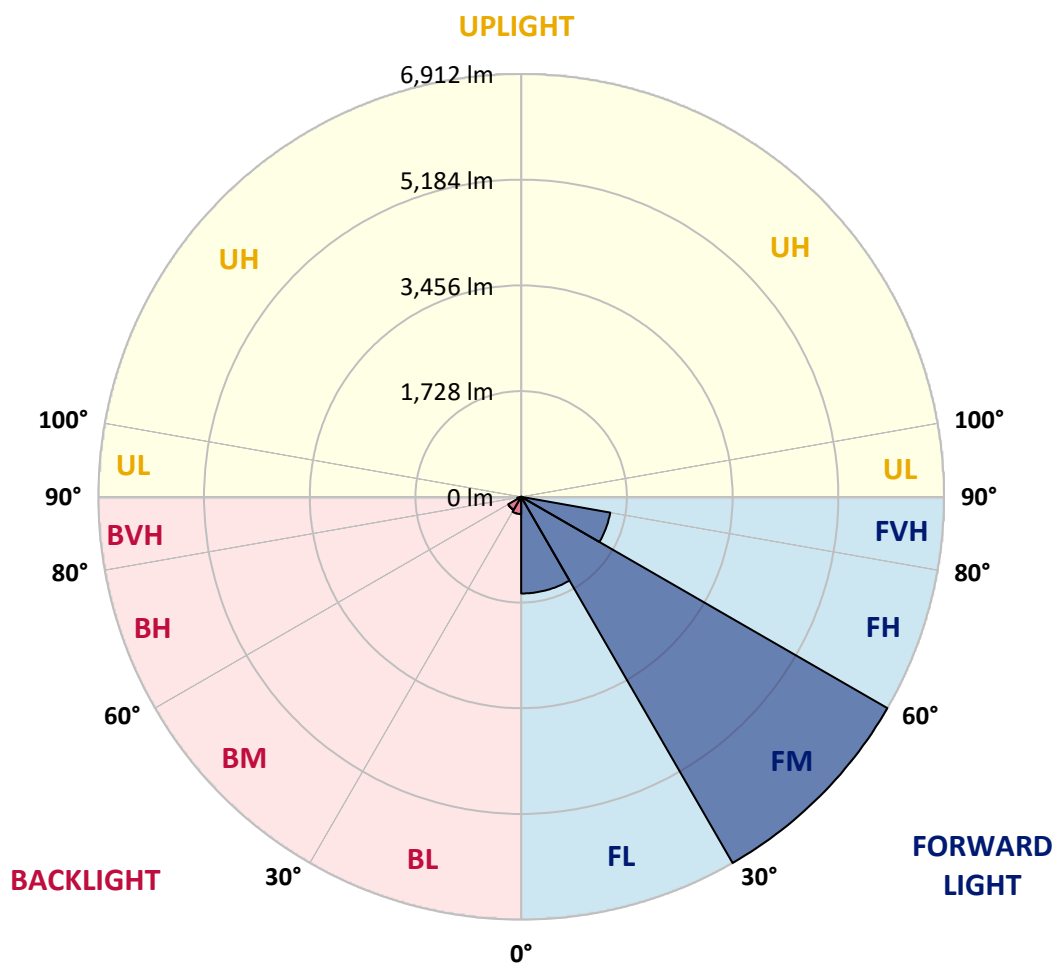
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1580.6 | 14.9      |                         |      |         |
| FM   | (30°-60°)   | 6912.3 | 65.3      |                         |      |         |
| FH   | (60°-80°)   | 1478.3 | 14.0      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 15.4   | 0.1       |                         |      | G1/100  |
| BL   | (0°-30°)    | 282.0  | 2.7       | B1/500                  |      |         |
| BM   | (30°-60°)   | 245.2  | 2.3       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 63.3   | 0.6       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.3    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 59°     | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|
| 0°    | 2977.6 | 2977.6 | 2977.6 | 2977.6 | 2977.6 | 2977.6 | 2977.6 | 2977.6  | 2977.6 | 2977.6 | 2977.6 |
| 2.5°  | 3523.1 | 3485.6 | 3474.3 | 3466.9 | 3432.6 | 3389.4 | 3330.8 | 3303.4  | 3247.1 | 3156.6 | 3045.5 |
| 5°    | 3845.8 | 3839.0 | 3813.9 | 3800.2 | 3763.4 | 3702.2 | 3608.7 | 3563.6  | 3474.3 | 3322.0 | 3122.9 |
| 7.5°  | 3704.7 | 3747.8 | 3782.1 | 3839.6 | 3911.9 | 3909.4 | 3830.8 | 3783.9  | 3684.1 | 3483.0 | 3209.1 |
| 10°   | 3159.8 | 3194.7 | 3250.9 | 3381.3 | 3647.3 | 3882.0 | 3974.5 | 3940.7  | 3860.7 | 3631.0 | 3292.1 |
| 12.5° | 3053.0 | 3049.3 | 3059.3 | 3097.4 | 3236.6 | 3571.1 | 3950.0 | 4018.0  | 4001.8 | 3766.5 | 3370.7 |
| 15°   | 3109.8 | 3105.4 | 3104.2 | 3117.2 | 3151.0 | 3292.1 | 3767.2 | 3962.5  | 4087.9 | 3892.0 | 3437.6 |
| 17.5° | 3269.0 | 3250.3 | 3240.3 | 3229.7 | 3219.7 | 3254.7 | 3547.4 | 3807.0  | 4101.0 | 4001.8 | 3493.1 |
| 20°   | 3541.7 | 3510.6 | 3473.8 | 3413.8 | 3357.6 | 3340.2 | 3455.0 | 3647.3  | 4054.3 | 4085.4 | 3529.3 |
| 22.5° | 3884.5 | 3844.5 | 3780.8 | 3671.6 | 3557.4 | 3491.3 | 3500.5 | 3596.7  | 3984.3 | 4176.7 | 3546.1 |
| 25°   | 4269.7 | 4218.4 | 4133.5 | 3981.9 | 3813.9 | 3696.6 | 3635.4 | 3669.2  | 3952.6 | 4283.4 | 3565.4 |
| 27.5° | 4682.2 | 4625.4 | 4514.3 | 4307.6 | 4117.3 | 3958.8 | 3833.9 | 3829.5  | 4006.9 | 4423.2 | 3596.7 |
| 30°   | 5091.1 | 5082.3 | 4937.5 | 4719.0 | 4466.8 | 4274.0 | 4094.2 | 4071.1  | 4158.5 | 4616.6 | 3658.5 |
| 32.5° | 5636.6 | 5571.1 | 5393.8 | 5169.0 | 4878.2 | 4646.7 | 4433.7 | 4380.1  | 4391.3 | 4842.1 | 3754.0 |
| 35°   | 6324.6 | 6252.7 | 6003.0 | 5692.9 | 5367.6 | 5094.2 | 4858.9 | 4785.9  | 4758.3 | 5210.9 | 3915.1 |
| 37.5° | 6768.9 | 6767.7 | 6611.1 | 6295.2 | 5946.2 | 5644.8 | 5388.8 | 5303.3  | 5247.7 | 5656.6 | 4164.8 |
| 40°   | 6780.8 | 6810.1 | 6830.8 | 6827.6 | 6579.1 | 6301.4 | 6074.3 | 5968.8  | 5839.5 | 6252.2 | 4487.5 |
| 42.5° | 6416.9 | 6492.4 | 6674.1 | 6982.4 | 7129.7 | 7019.3 | 6827.6 | 6724.1  | 6531.7 | 6889.5 | 4880.7 |
| 45°   | 5925.0 | 5977.5 | 6295.2 | 6863.2 | 7428.1 | 7730.8 | 7584.8 | 7399.5  | 7146.0 | 7554.1 | 5233.4 |
| 47.5° | 5704.7 | 5714.0 | 5919.4 | 6543.0 | 7450.6 | 8313.9 | 8402.6 | 8101.0  | 7704.1 | 8089.8 | 5509.3 |
| 50°   | 5046.1 | 5063.0 | 5346.4 | 5988.1 | 7187.2 | 8589.2 | 9224.0 | 8938.1  | 8312.7 | 8502.4 | 5609.8 |
| 52.5° | 3803.4 | 3827.1 | 4186.6 | 5076.0 | 6463.1 | 8471.9 | 9812.0 | 9742.7  | 8979.3 | 8704.0 | 5615.4 |
| 55°   | 2244.0 | 2275.3 | 2618.6 | 3417.0 | 5083.7 | 7725.2 | 9855.7 | 10110.5 | 9505.5 | 8823.2 | 5606.6 |
| 57.5° | 1048.1 | 1069.8 | 1266.6 | 1760.2 | 3161.6 | 6105.4 | 9197.8 | 9858.3  | 9795.7 | 8886.3 | 5668.5 |
| 60°   | 556.7  | 563.0  | 610.4  | 762.2  | 1428.8 | 3871.4 | 7913.7 | 8901.9  | 9531.1 | 8973.7 | 5744.0 |
| 62.5° | 425.7  | 427.5  | 425.1  | 443.1  | 600.5  | 1718.4 | 5981.8 | 7318.3  | 8465.6 | 8908.1 | 5660.4 |
| 65°   | 368.9  | 372.0  | 354.5  | 350.1  | 385.1  | 613.0  | 3553.6 | 5216.6  | 6652.2 | 8023.7 | 5090.5 |
| 67.5° | 330.8  | 332.0  | 310.9  | 292.7  | 299.1  | 331.5  | 1402.1 | 2855.8  | 4403.1 | 5881.3 | 3689.6 |
| 70°   | 304.7  | 303.4  | 280.2  | 251.6  | 243.4  | 226.6  | 445.7  | 1046.8  | 2104.3 | 2982.4 | 1715.9 |
| 72.5° | 269.7  | 270.3  | 259.1  | 221.6  | 202.2  | 158.5  | 206.6  | 305.3   | 627.9  | 812.8  | 402.0  |
| 75°   | 239.1  | 236.0  | 222.3  | 198.6  | 166.6  | 104.3  | 102.3  | 136.0   | 193.5  | 192.3  | 86.8   |
| 77.5° | 172.9  | 169.8  | 174.2  | 162.9  | 128.0  | 67.4   | 51.2   | 65.5    | 78.6   | 76.2   | 24.4   |
| 80°   | 126.7  | 124.9  | 112.3  | 135.5  | 113.0  | 46.2   | 31.8   | 35.0    | 40.5   | 34.3   | 7.5    |
| 82.5° | 86.8   | 86.1   | 79.3   | 75.0   | 64.3   | 28.1   | 20.0   | 21.9    | 26.2   | 19.3   | 3.8    |
| 85°   | 13.7   | 15.7   | 57.5   | 45.6   | 38.1   | 12.4   | 13.7   | 15.0    | 17.5   | 10.6   | 1.2    |
| 87.5° | 0.0    | 0.0    | 26.9   | 23.7   | 7.5    | 5.0    | 8.0    | 8.7     | 8.7    | 5.6    | 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°    | 2977.6 | 2977.6 | 2977.6 | 2977.6 | 2977.6 | 2977.6 | 2977.6 | 2977.6 | 2977.6 | 2977.6 | 2977.6 |
| 2.5°  | 2988.8 | 2926.3 | 2810.8 | 2691.6 | 2581.1 | 2449.4 | 2358.9 | 2290.8 | 2212.2 | 2190.9 | 2237.2 |
| 5°    | 3009.3 | 2891.3 | 2642.9 | 2372.7 | 2118.5 | 1837.0 | 1621.7 | 1451.3 | 1297.1 | 1244.7 | 1292.1 |
| 7.5°  | 3041.8 | 2866.4 | 2461.3 | 2016.2 | 1574.3 | 1134.7 | 833.9  | 636.1  | 510.0  | 472.5  | 492.5  |
| 10°   | 3074.2 | 2830.2 | 2251.0 | 1594.2 | 990.0  | 552.5  | 359.6  | 287.2  | 260.2  | 254.7  | 257.9  |
| 12.5° | 3101.1 | 2781.5 | 1994.3 | 1133.6 | 529.4  | 295.9  | 235.4  | 223.4  | 219.7  | 219.7  | 220.9  |
| 15°   | 3117.2 | 2707.9 | 1690.4 | 721.0  | 304.7  | 223.4  | 205.4  | 201.6  | 201.6  | 202.2  | 203.4  |
| 17.5° | 3115.4 | 2614.2 | 1357.6 | 436.3  | 227.8  | 197.9  | 187.3  | 184.1  | 183.5  | 184.7  | 185.4  |
| 20°   | 3092.4 | 2491.8 | 1023.8 | 287.8  | 198.6  | 180.4  | 169.8  | 164.2  | 163.6  | 164.8  | 166.1  |
| 22.5° | 3048.7 | 2340.8 | 732.2  | 221.6  | 179.1  | 163.6  | 150.4  | 145.5  | 145.5  | 146.7  | 147.9  |
| 25°   | 2995.6 | 2156.0 | 500.6  | 187.9  | 161.7  | 145.5  | 133.0  | 128.6  | 129.8  | 133.0  | 133.7  |
| 27.5° | 2929.5 | 1948.2 | 340.3  | 161.0  | 140.4  | 127.3  | 118.0  | 114.8  | 118.0  | 122.4  | 123.6  |
| 30°   | 2872.7 | 1731.5 | 242.8  | 139.2  | 119.2  | 110.0  | 104.3  | 104.3  | 108.6  | 116.7  | 118.5  |
| 32.5° | 2828.9 | 1521.9 | 187.3  | 122.9  | 103.6  | 95.5   | 92.5   | 95.5   | 102.3  | 110.5  | 112.3  |
| 35°   | 2823.4 | 1349.0 | 158.5  | 110.0  | 92.5   | 84.2   | 83.0   | 88.6   | 95.5   | 101.7  | 103.0  |
| 37.5° | 2866.4 | 1189.2 | 142.9  | 99.2   | 82.4   | 75.0   | 73.6   | 80.6   | 87.4   | 94.8   | 96.8   |
| 40°   | 2948.2 | 1063.6 | 131.6  | 89.3   | 74.3   | 66.2   | 63.7   | 68.7   | 78.0   | 88.1   | 90.4   |
| 42.5° | 3054.3 | 960.1  | 119.2  | 79.3   | 66.2   | 54.9   | 51.8   | 57.5   | 67.4   | 78.0   | 81.2   |
| 45°   | 3155.4 | 870.8  | 105.6  | 68.1   | 55.5   | 42.4   | 41.2   | 48.7   | 53.6   | 64.3   | 66.7   |
| 47.5° | 3210.9 | 792.1  | 93.6   | 55.5   | 43.0   | 34.3   | 34.3   | 36.2   | 41.2   | 53.6   | 56.2   |
| 50°   | 3192.2 | 729.1  | 81.2   | 41.2   | 29.9   | 26.2   | 26.2   | 25.5   | 33.1   | 43.0   | 44.9   |
| 52.5° | 3154.8 | 692.9  | 69.9   | 31.8   | 20.6   | 18.7   | 16.8   | 18.7   | 23.1   | 27.5   | 28.1   |
| 55°   | 3149.2 | 686.5  | 58.7   | 25.5   | 14.3   | 12.4   | 9.4    | 9.4    | 9.4    | 8.7    | 7.5    |
| 57.5° | 3192.9 | 696.6  | 49.2   | 20.6   | 10.6   | 8.0    | 5.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 60°   | 3237.8 | 707.2  | 42.4   | 14.3   | 7.5    | 4.4    | 0.6    | 0.0    | 0.0    | 0.0    | 0.0    |
| 62.5° | 3162.8 | 683.5  | 35.6   | 8.7    | 5.6    | 1.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 65°   | 2778.4 | 581.8  | 28.1   | 6.2    | 3.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 67.5° | 1976.3 | 389.5  | 18.7   | 3.8    | 0.6    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 70°   | 901.9  | 162.9  | 11.9   | 1.2    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 72.5° | 192.9  | 50.6   | 8.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 39.4   | 36.8   | 3.2    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 12.4   | 58.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 7.5    | 41.8   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 1.2    | 6.2    | 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)