

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: P194398

Luminaire Tested: **GLEON-AF-10-LED-E1-SL2-7060-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P194398  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-10-LED-E1-SL2-7060-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 5700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 48800 lumens  
Efficiency: N/A  
Efficacy: 87.5 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G5

Input Watts (W): 558  
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

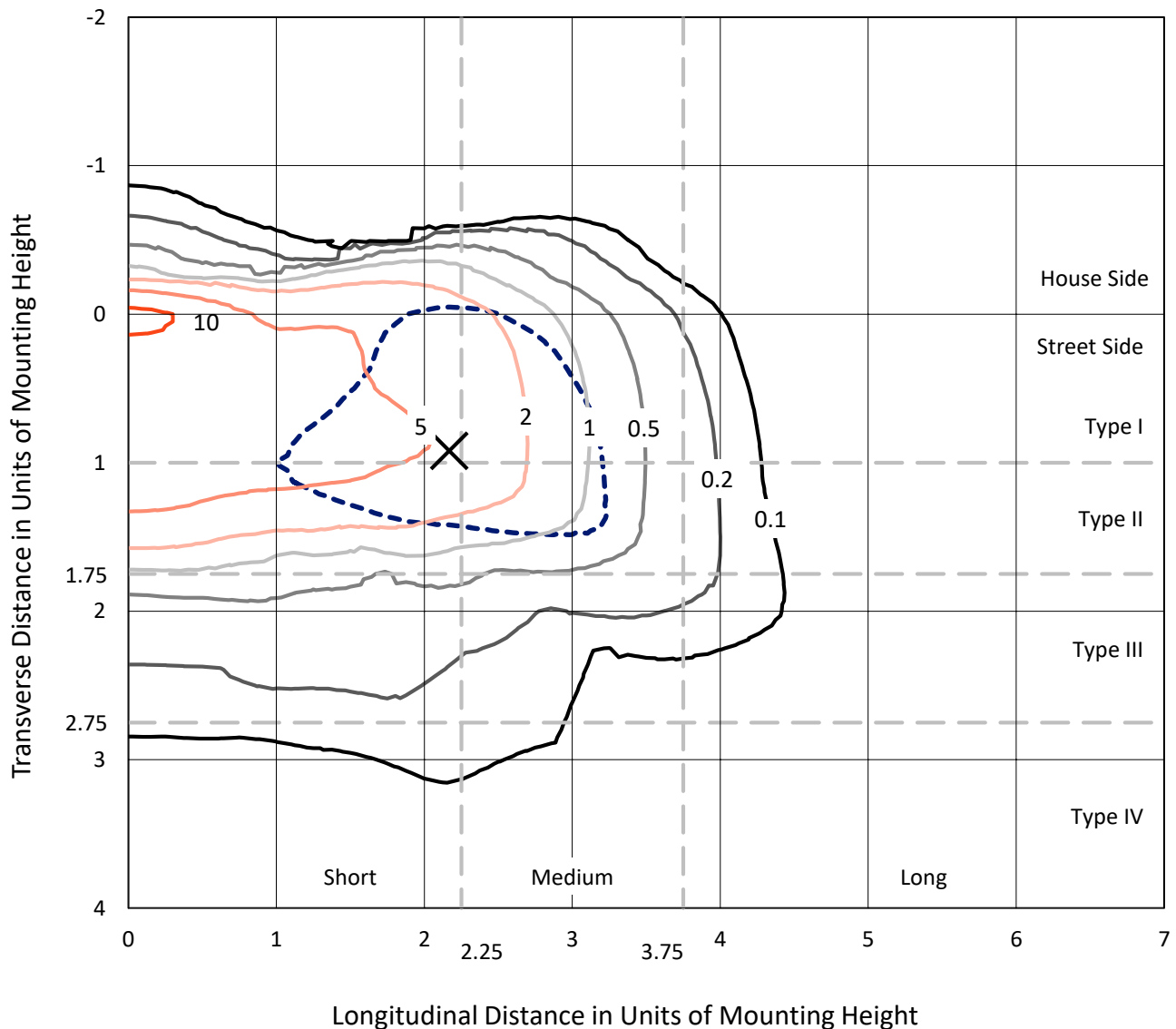


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

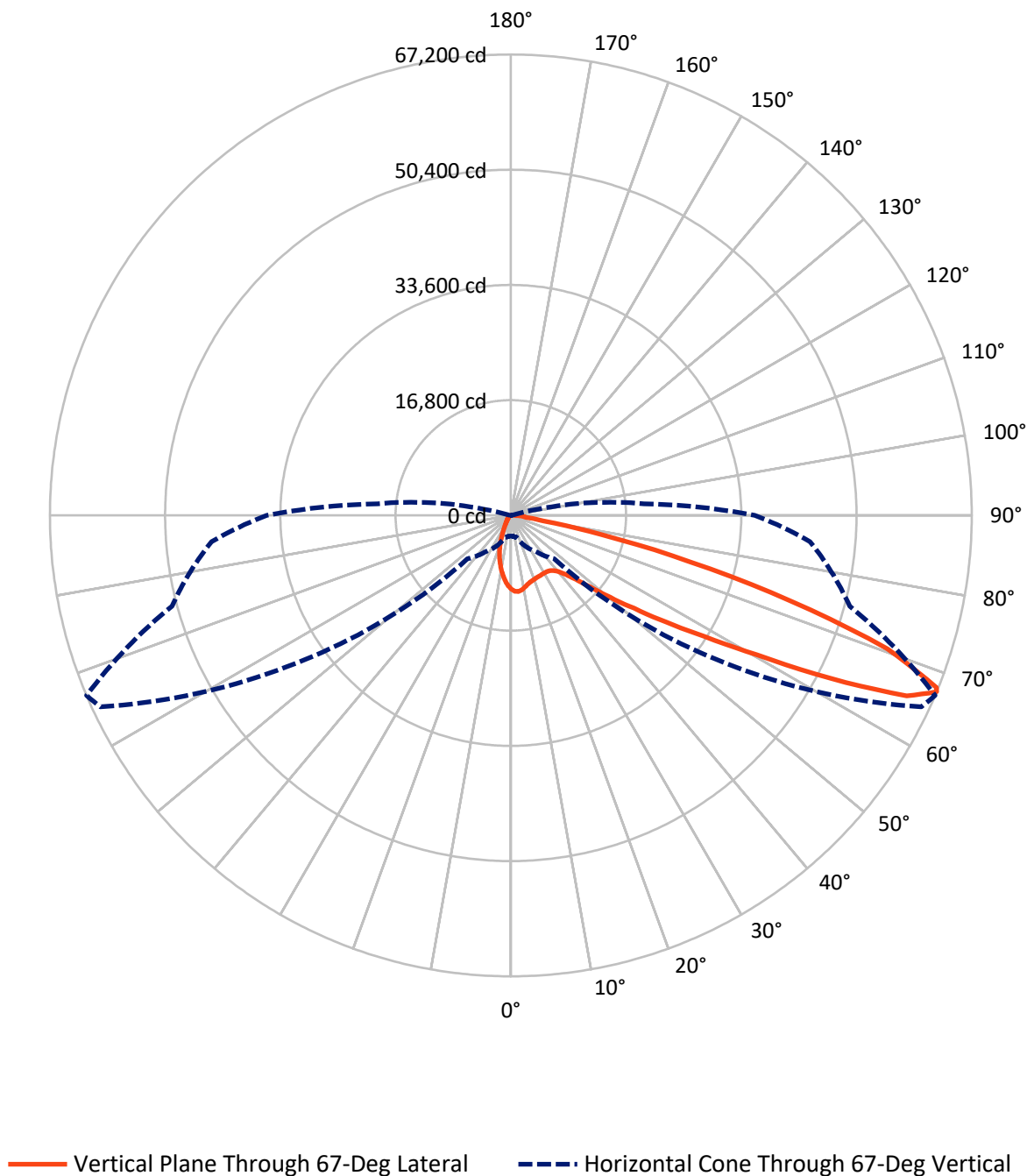


Based on 30 foot mounting height. Maximum calculated value = 12 fc  
Type II - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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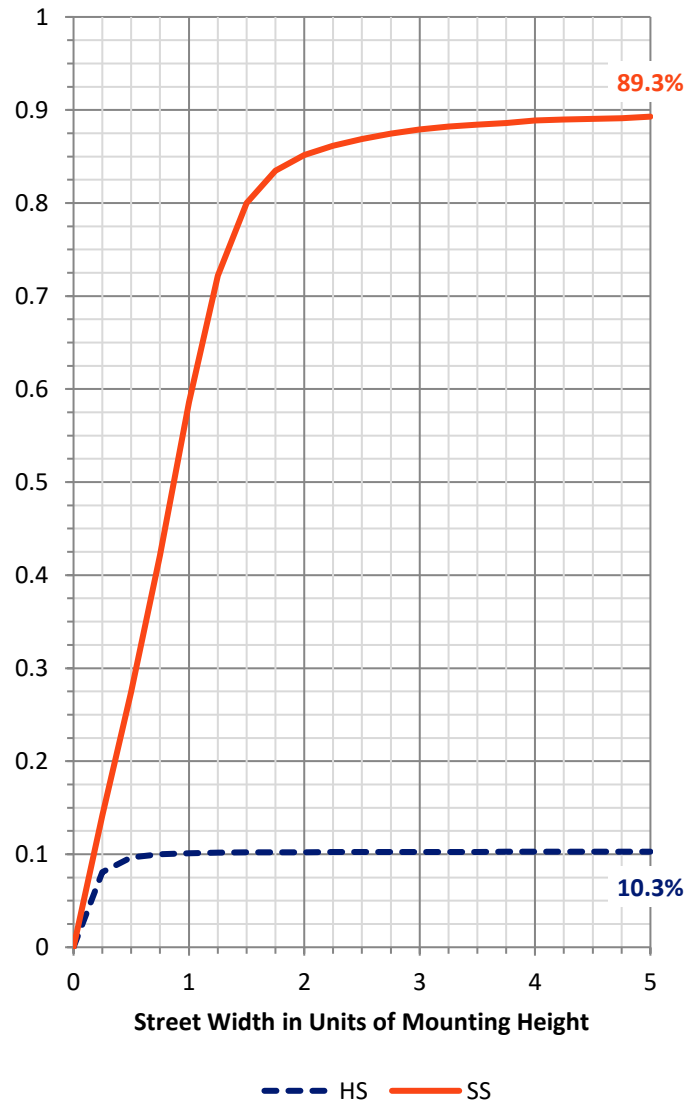
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5066.9   | 0.0    | 5066.9  |
|                    | % Fixture | 10.4     | 0.0    | 10.4    |
| <b>Street Side</b> | Lumens    | 43733.1  | 0.0    | 43733.1 |
|                    | % Fixture | 89.6     | 0.0    | 89.6    |
| <b>Total</b>       | Lumens    | 48800.0  | 0.0    | 48800.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 875.7   | 1.8       |
| 10°-20°   | 1863.8  | 3.8       |
| 20°-30°   | 2709.9  | 5.6       |
| 30°-40°   | 4227.5  | 8.7       |
| 40°-50°   | 7488.8  | 15.3      |
| 50°-60°   | 11850.2 | 24.3      |
| 60°-70°   | 13572.8 | 27.8      |
| 70°-80°   | 5629.9  | 11.5      |
| 80°-90°   | 581.5   | 1.2       |
| 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°    | 48800.0 | 100.0     |
| 0°-180°   | 48800.0 | 100.0     |

**Coefficient of Utilization**



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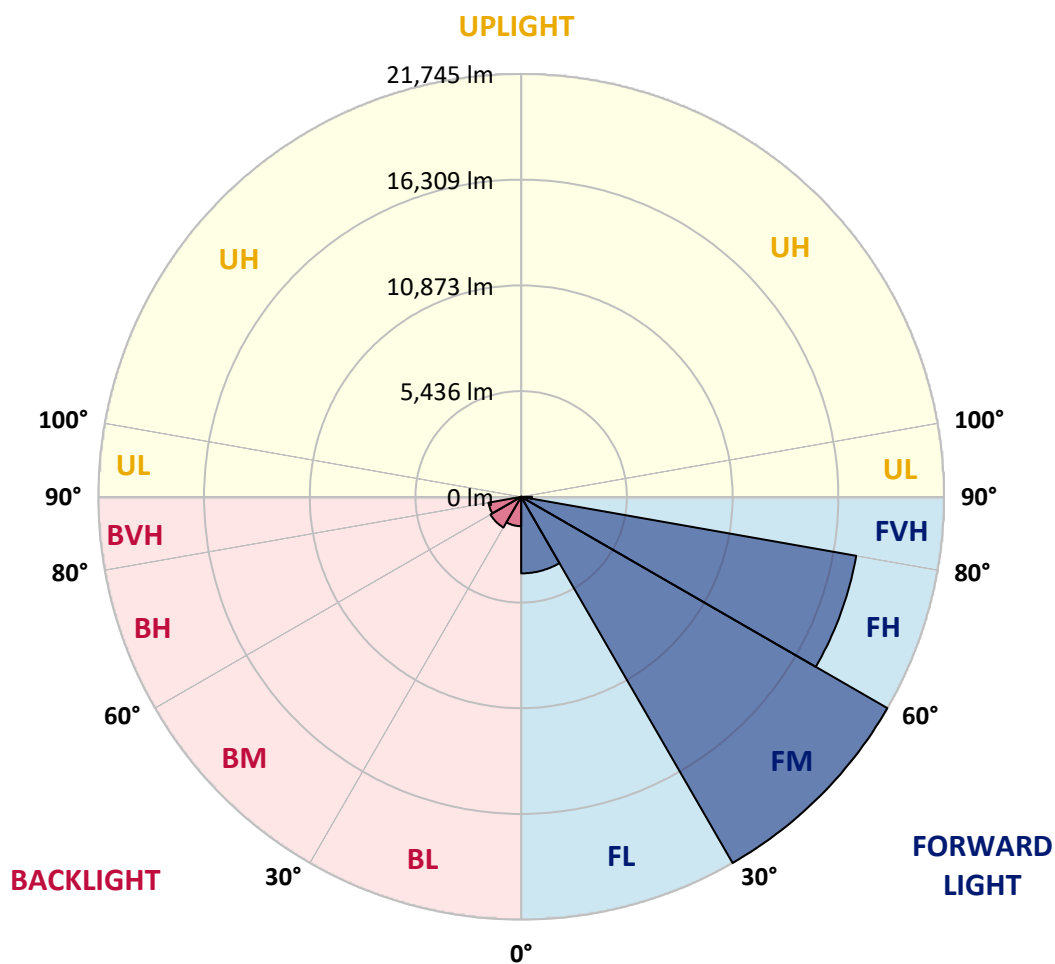
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3937.4  | 8.1       |                         |      |         |
| FM   | (30°-60°)   | 21745.4 | 44.6      |                         |      |         |
| FH   | (60°-80°)   | 17494.9 | 35.9      |                         |      | G5      |
| FVH  | (80°-90°)   | 555.4   | 1.1       |                         |      | G4/750  |
| BL   | (0°-30°)    | 1512.0  | 3.1       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 1821.0  | 3.7       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1707.7  | 3.5       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 26.2    | 0.1       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G5**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 67°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 |
| 2.5°  | 11126.5 | 11149.3 | 11146.5 | 11163.5 | 11203.4 | 11206.2 | 11166.4 | 11089.5 | 11072.5 | 10972.8 | 10799.2 |
| 5°    | 10261.2 | 10326.7 | 10366.6 | 10528.8 | 10711.0 | 10930.1 | 11095.2 | 11155.0 | 11146.5 | 11075.3 | 10813.4 |
| 7.5°  | 9273.5  | 9339.0  | 9384.5  | 9575.3  | 9817.2  | 10192.9 | 10622.7 | 10975.7 | 11007.0 | 11083.8 | 10802.1 |
| 10°   | 8616.0  | 8627.4  | 8690.0  | 8872.2  | 9125.5  | 9509.8  | 10022.1 | 10639.8 | 10733.7 | 11015.5 | 10773.6 |
| 12.5° | 8075.2  | 8083.7  | 8166.3  | 8362.7  | 8633.1  | 9020.2  | 9558.2  | 10272.6 | 10417.8 | 10930.1 | 10767.9 |
| 15°   | 7690.9  | 7722.3  | 7796.3  | 8001.2  | 8288.7  | 8673.0  | 9225.2  | 10002.2 | 10175.8 | 10898.8 | 10819.1 |
| 17.5° | 7562.9  | 7597.0  | 7619.8  | 7767.8  | 8029.7  | 8405.4  | 8971.8  | 9825.7  | 10022.1 | 10915.9 | 10918.8 |
| 20°   | 7696.6  | 7722.3  | 7671.0  | 7708.0  | 7870.3  | 8206.1  | 8758.3  | 9674.9  | 9908.3  | 10935.8 | 11046.8 |
| 22.5° | 8194.8  | 8206.1  | 8066.7  | 7904.4  | 7876.0  | 8061.0  | 8590.4  | 9555.3  | 9805.8  | 10989.9 | 11197.7 |
| 25°   | 9048.7  | 9028.8  | 8801.0  | 8450.9  | 8120.8  | 8035.4  | 8490.8  | 9481.3  | 9754.6  | 11046.8 | 11354.3 |
| 27.5° | 10079.1 | 10107.5 | 9794.4  | 9284.9  | 8655.9  | 8206.1  | 8476.6  | 9450.0  | 9731.8  | 11086.7 | 11490.9 |
| 30°   | 11331.5 | 11371.3 | 11012.7 | 10372.2 | 9469.9  | 8627.4  | 8607.5  | 9444.3  | 9717.6  | 11061.1 | 11502.3 |
| 32.5° | 12609.5 | 12657.9 | 12376.1 | 11715.7 | 10557.3 | 9333.3  | 8903.5  | 9506.9  | 9746.0  | 10972.8 | 11436.8 |
| 35°   | 13947.3 | 14015.6 | 13827.8 | 13261.3 | 12031.7 | 10352.3 | 9424.4  | 9697.7  | 9879.8  | 10964.3 | 11371.3 |
| 37.5° | 15794.6 | 15857.2 | 15504.3 | 14903.7 | 13816.4 | 11718.6 | 10261.2 | 10056.3 | 10195.8 | 11100.9 | 11388.4 |
| 40°   | 18552.8 | 18544.2 | 17633.4 | 16714.0 | 15777.5 | 13454.9 | 11436.8 | 10705.3 | 10776.4 | 11513.6 | 11599.0 |
| 42.5° | 21558.6 | 21544.3 | 20198.0 | 18800.4 | 17955.0 | 15592.5 | 12982.4 | 11826.8 | 11778.4 | 12273.6 | 12145.5 |
| 45°   | 23875.5 | 23872.7 | 22774.0 | 21199.9 | 20576.6 | 18046.1 | 14980.6 | 13386.6 | 13312.6 | 13509.0 | 13153.2 |
| 47.5° | 24863.2 | 24880.3 | 24328.1 | 23220.9 | 23482.7 | 21365.0 | 17499.6 | 15646.6 | 15535.6 | 15455.9 | 14915.1 |
| 50°   | 24094.7 | 24128.9 | 24174.4 | 23958.1 | 25614.7 | 25825.3 | 20878.3 | 18831.7 | 18777.6 | 18421.8 | 17576.5 |
| 52.5° | 21584.2 | 21757.8 | 22292.9 | 22978.9 | 26354.7 | 30106.3 | 26175.4 | 22788.2 | 22497.9 | 22119.3 | 21188.5 |
| 55°   | 17354.4 | 17545.2 | 18561.3 | 20226.5 | 25253.2 | 32918.5 | 33598.8 | 27888.9 | 27405.0 | 26275.0 | 24931.5 |
| 57.5° | 11485.2 | 11781.2 | 13255.6 | 15373.4 | 22053.8 | 33371.1 | 41005.1 | 34967.9 | 33282.8 | 30188.8 | 28674.5 |
| 60°   | 6327.5  | 6612.2  | 8211.8  | 10130.3 | 15928.4 | 31133.8 | 45986.3 | 44184.5 | 41207.2 | 34563.7 | 33220.2 |
| 62.5° | 3896.7  | 4050.4  | 5231.7  | 7016.4  | 9552.5  | 24572.9 | 47016.7 | 55766.5 | 52319.5 | 40196.7 | 38710.9 |
| 65°   | 3102.6  | 3168.0  | 3745.8  | 5735.5  | 6848.4  | 14616.2 | 43689.2 | 64596.0 | 63446.0 | 47016.7 | 43626.6 |
| 67°   | 3011.5  | 3037.1  | 3310.4  | 4924.3  | 6455.6  | 8960.4  | 36601.7 | 66033.4 | 67200.4 | 51143.9 | 43780.3 |
| 67.5° | 3031.4  | 3059.9  | 3318.9  | 4699.4  | 6444.2  | 8234.6  | 34159.5 | 65467.0 | 66941.4 | 51471.3 | 43100.0 |
| 70°   | 2923.2  | 3011.5  | 3799.9  | 4696.5  | 6128.3  | 6842.7  | 20457.0 | 56722.9 | 58257.1 | 47825.1 | 36570.4 |
| 72.5° | 1036.1  | 1041.8  | 1642.4  | 3799.9  | 6663.4  | 6916.7  | 10272.6 | 41582.9 | 42718.6 | 36584.7 | 26366.1 |
| 75°   | 614.8   | 523.7   | 546.5   | 1081.6  | 6367.4  | 6717.5  | 5926.2  | 26571.1 | 26995.2 | 20963.7 | 13352.4 |
| 77.5° | 424.1   | 370.0   | 381.4   | 478.2   | 2425.1  | 6623.6  | 4707.9  | 13856.2 | 13403.7 | 7352.2  | 2843.5  |
| 80°   | 241.9   | 213.5   | 227.7   | 418.4   | 882.4   | 6179.5  | 4440.4  | 5618.8  | 4790.5  | 1246.7  | 785.6   |
| 82.5° | 128.1   | 108.2   | 130.9   | 344.4   | 614.8   | 3851.2  | 4448.9  | 2715.5  | 2151.9  | 421.3   | 535.1   |
| 85°   | 45.5    | 37.0    | 62.6    | 236.3   | 409.9   | 1181.3  | 4124.4  | 2282.8  | 1793.2  | 204.9   | 407.0   |
| 87.5° | 8.5     | 8.5     | 25.6    | 96.8    | 165.1   | 361.5   | 2439.4  | 1354.9  | 908.0   | 122.4   | 278.9   |
| 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°    | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 | 10762.2 |
| 2.5°  | 10728.0 | 10605.7 | 10440.6 | 10238.5 | 9999.4  | 9788.7  | 9632.2  | 9469.9  | 9435.8  | 9378.9  | 9370.3  |
| 5°    | 10656.9 | 10446.3 | 10036.4 | 9566.7  | 9065.8  | 8613.2  | 8246.0  | 7918.7  | 7773.5  | 7648.3  | 7634.0  |
| 7.5°  | 10551.6 | 10235.6 | 9538.3  | 8781.1  | 7998.4  | 7286.8  | 6683.3  | 6256.4  | 5863.6  | 5675.7  | 5647.2  |
| 10°   | 10429.2 | 9976.6  | 8977.5  | 7927.2  | 6845.6  | 5840.8  | 4944.2  | 4192.7  | 3737.3  | 3466.9  | 3432.7  |
| 12.5° | 10315.3 | 9723.3  | 8405.4  | 7042.0  | 5604.5  | 4261.0  | 3108.3  | 2391.0  | 1912.8  | 1719.2  | 1696.4  |
| 15°   | 10261.2 | 9518.3  | 7870.3  | 6136.8  | 4306.6  | 2712.6  | 1699.3  | 1315.0  | 1158.5  | 1112.9  | 1110.1  |
| 17.5° | 10255.5 | 9344.7  | 7346.5  | 5200.4  | 3017.2  | 1576.9  | 1107.2  | 1010.5  | 979.2   | 967.8   | 967.8   |
| 20°   | 10252.7 | 9179.6  | 6822.8  | 4229.7  | 1915.6  | 1050.3  | 922.2   | 899.5   | 876.7   | 862.5   | 862.5   |
| 22.5° | 10284.0 | 9031.6  | 6276.3  | 3239.2  | 1206.9  | 851.1   | 811.2   | 788.5   | 760.0   | 740.1   | 737.2   |
| 25°   | 10315.3 | 8917.7  | 5718.4  | 2305.6  | 873.8   | 740.1   | 700.2   | 668.9   | 629.1   | 603.4   | 600.6   |
| 27.5° | 10321.0 | 8775.4  | 5120.7  | 1542.7  | 731.5   | 646.1   | 594.9   | 546.5   | 501.0   | 475.3   | 472.5   |
| 30°   | 10235.6 | 8536.3  | 4457.4  | 1041.8  | 646.1   | 560.7   | 492.4   | 441.2   | 398.5   | 378.6   | 378.6   |
| 32.5° | 10067.7 | 8240.3  | 3728.8  | 785.6   | 575.0   | 481.0   | 407.0   | 358.6   | 330.2   | 321.6   | 318.8   |
| 35°   | 9916.8  | 7921.5  | 2980.2  | 666.1   | 515.2   | 407.0   | 333.0   | 301.7   | 284.6   | 281.8   | 278.9   |
| 37.5° | 9828.6  | 7665.3  | 2277.1  | 603.4   | 458.3   | 341.6   | 281.8   | 259.0   | 250.5   | 244.8   | 247.6   |
| 40°   | 9896.9  | 7451.9  | 1682.2  | 552.2   | 401.3   | 284.6   | 239.1   | 227.7   | 219.2   | 216.3   | 216.3   |
| 42.5° | 10195.8 | 7414.8  | 1249.6  | 506.7   | 347.3   | 236.3   | 207.8   | 199.2   | 193.6   | 190.7   | 193.6   |
| 45°   | 10981.4 | 7642.6  | 970.6   | 464.0   | 293.2   | 199.2   | 176.5   | 173.6   | 170.8   | 170.8   | 170.8   |
| 47.5° | 12162.6 | 8112.2  | 808.4   | 415.6   | 244.8   | 170.8   | 153.7   | 150.9   | 148.0   | 150.9   | 150.9   |
| 50°   | 14163.6 | 8971.8  | 723.0   | 367.2   | 202.1   | 145.2   | 130.9   | 130.9   | 130.9   | 130.9   | 133.8   |
| 52.5° | 17206.4 | 10662.6 | 666.1   | 318.8   | 165.1   | 122.4   | 111.0   | 111.0   | 113.9   | 113.9   | 116.7   |
| 55°   | 20596.5 | 12905.5 | 614.8   | 270.4   | 139.5   | 102.5   | 91.1    | 93.9    | 96.8    | 99.6    | 99.6    |
| 57.5° | 24274.0 | 15390.4 | 572.1   | 222.0   | 119.5   | 82.5    | 76.9    | 79.7    | 82.5    | 88.2    | 88.2    |
| 60°   | 28711.5 | 18080.3 | 509.5   | 173.6   | 99.6    | 65.5    | 59.8    | 65.5    | 74.0    | 79.7    | 82.5    |
| 62.5° | 33584.6 | 20681.9 | 429.8   | 136.6   | 82.5    | 51.2    | 48.4    | 59.8    | 71.2    | 76.9    | 79.7    |
| 65°   | 36914.8 | 21498.8 | 330.2   | 111.0   | 62.6    | 37.0    | 39.8    | 54.1    | 68.3    | 76.9    | 76.9    |
| 67°   | 35565.6 | 19492.1 | 270.4   | 93.9    | 51.2    | 28.5    | 37.0    | 54.1    | 68.3    | 74.0    | 76.9    |
| 67.5° | 34629.2 | 18706.5 | 259.0   | 91.1    | 48.4    | 28.5    | 37.0    | 54.1    | 68.3    | 76.9    | 76.9    |
| 70°   | 28176.4 | 14052.6 | 216.3   | 68.3    | 39.8    | 25.6    | 31.3    | 51.2    | 65.5    | 74.0    | 74.0    |
| 72.5° | 19577.5 | 8664.4  | 193.6   | 48.4    | 34.2    | 22.8    | 28.5    | 48.4    | 62.6    | 71.2    | 74.0    |
| 75°   | 9307.7  | 3136.7  | 165.1   | 37.0    | 31.3    | 19.9    | 25.6    | 48.4    | 62.6    | 71.2    | 71.2    |
| 77.5° | 1898.5  | 728.7   | 133.8   | 31.3    | 25.6    | 19.9    | 22.8    | 45.5    | 59.8    | 68.3    | 68.3    |
| 80°   | 623.4   | 281.8   | 99.6    | 28.5    | 25.6    | 19.9    | 22.8    | 42.7    | 59.8    | 65.5    | 68.3    |
| 82.5° | 449.7   | 142.3   | 65.5    | 28.5    | 25.6    | 19.9    | 19.9    | 42.7    | 56.9    | 65.5    | 65.5    |
| 85°   | 344.4   | 99.6    | 42.7    | 28.5    | 25.6    | 19.9    | 19.9    | 39.8    | 54.1    | 62.6    | 62.6    |
| 87.5° | 227.7   | 39.8    | 34.2    | 28.5    | 25.6    | 19.9    | 19.9    | 39.8    | 51.2    | 59.8    | 62.6    |
| 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)