

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: P648370

Luminaire Tested: **GALN-SA4B-835-U-SL2-GRSWH**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P648370  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4B-835-U-SL2-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS WITH WHITE GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14938.9 lumens  
Efficiency: N/A  
Efficacy: 91.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G2

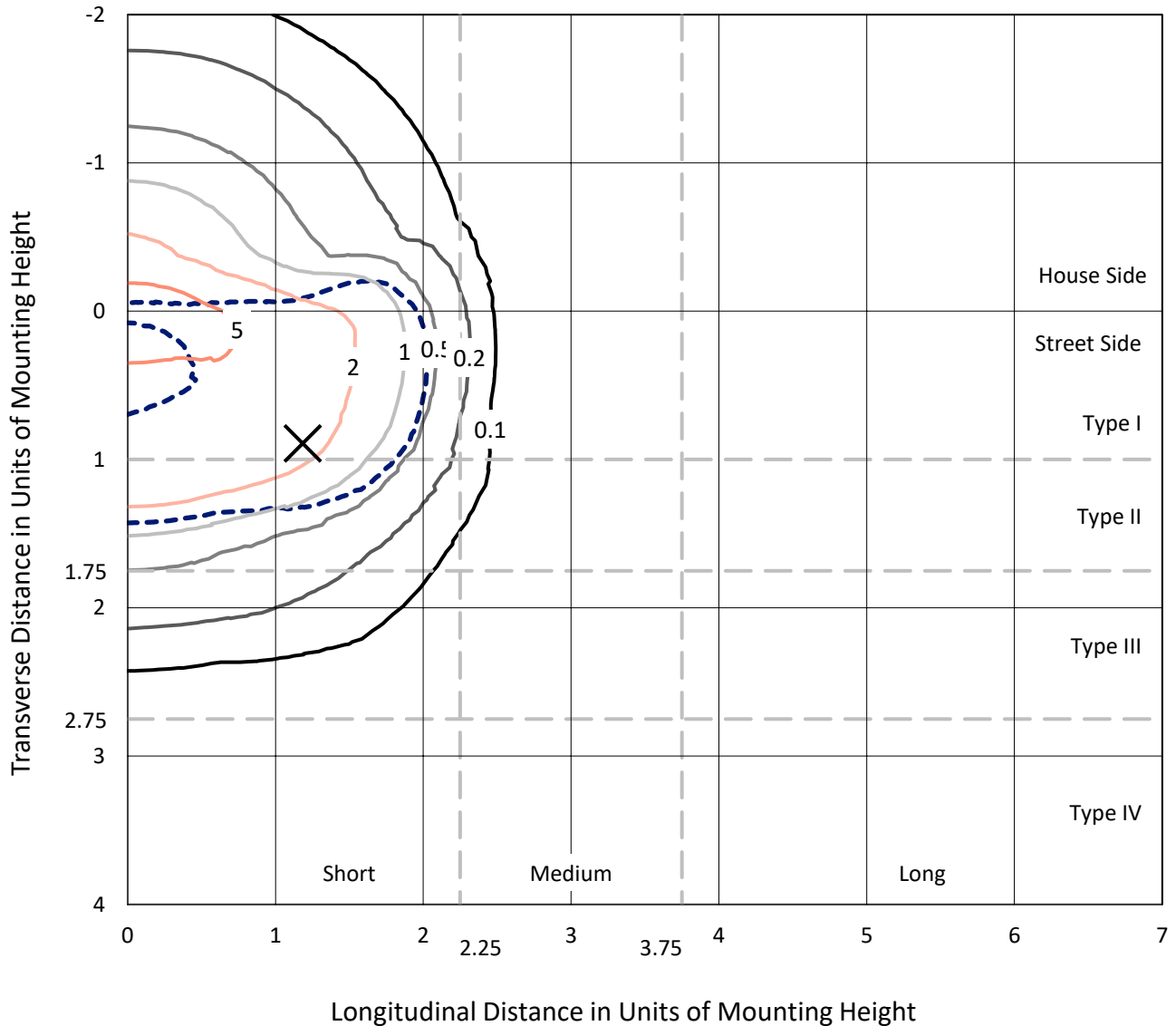
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

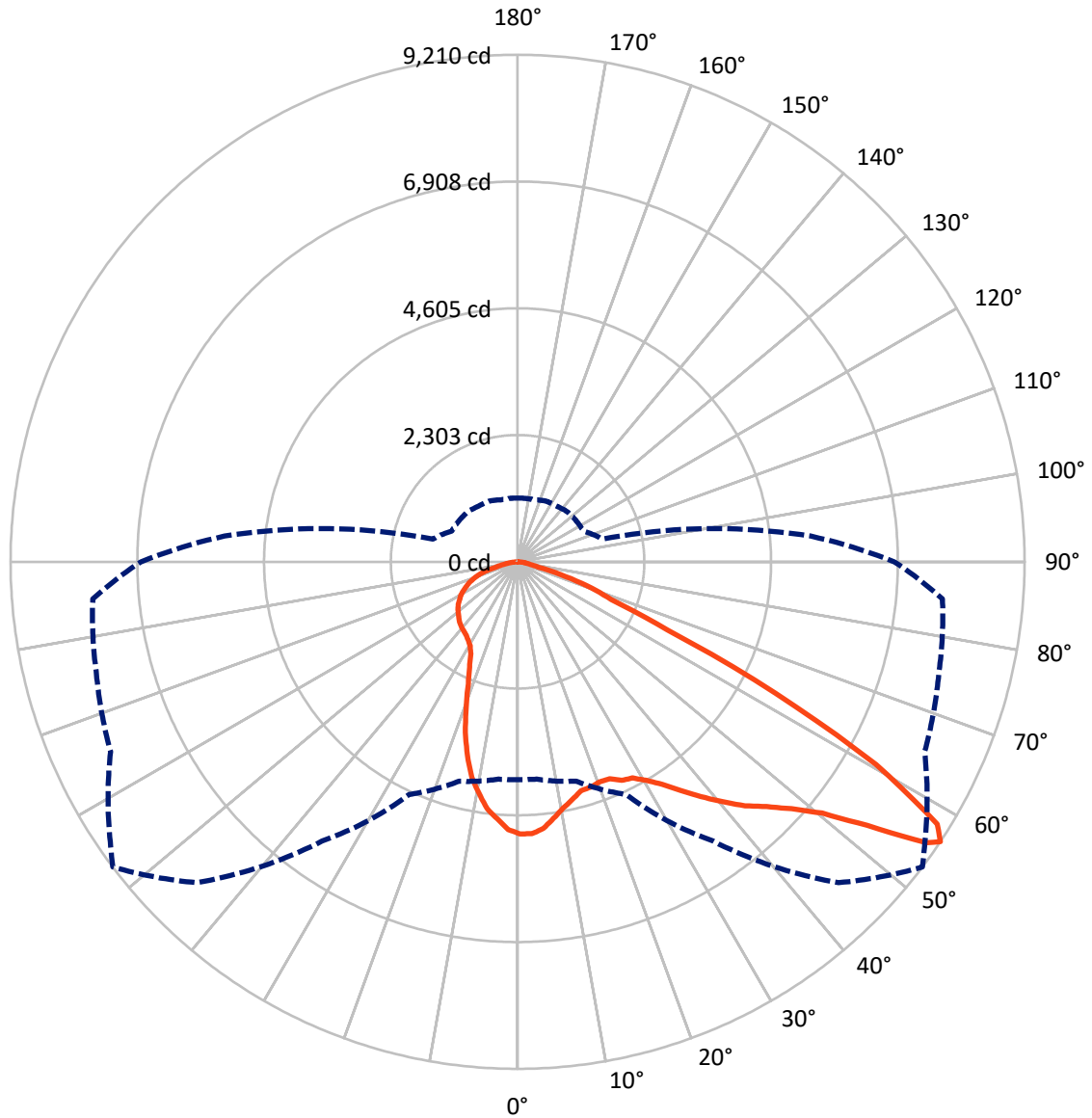
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 53-Deg Lateral      - - - Horizontal Cone Through 56-Deg Vertical

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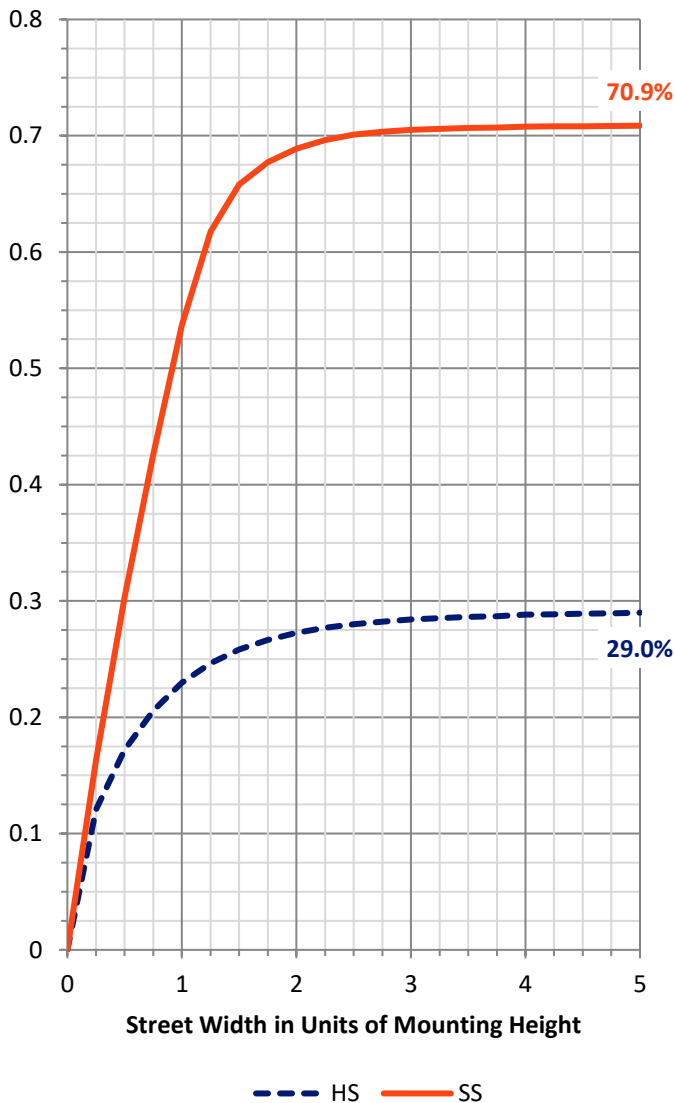
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4359.5   | 0.0    | 4359.5  |
|                    | % Fixture | 29.2     | 0.0    | 29.2    |
| <b>Street Side</b> | Lumens    | 10579.4  | 0.0    | 10579.4 |
|                    | % Fixture | 70.8     | 0.0    | 70.8    |
| <b>Total</b>       | Lumens    | 14938.9  | 0.0    | 14938.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 437.5   | 2.9       |
| 10°-20°   | 1092.8  | 7.3       |
| 20°-30°   | 1611.4  | 10.8      |
| 30°-40°   | 2302.4  | 15.4      |
| 40°-50°   | 3168.9  | 21.2      |
| 50°-60°   | 3744.8  | 25.1      |
| 60°-70°   | 1995.7  | 13.4      |
| 70°-80°   | 506.3   | 3.4       |
| 80°-90°   | 78.9    | 0.5       |
| 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°    | 14938.9 | 100.0     |
| 0°-180°   | 14938.9 | 100.0     |

**Coefficient of Utilization**

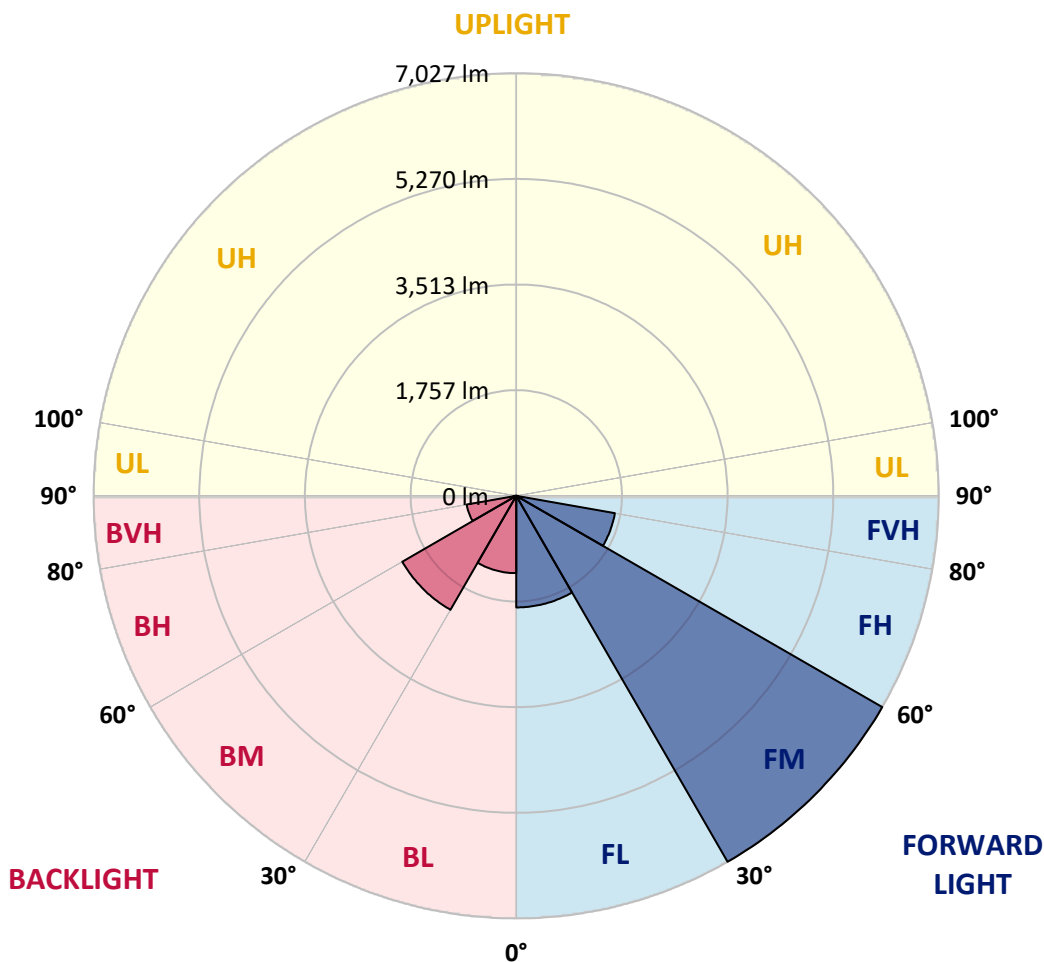


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1855.9 | 12.4      |                         |      |         |
| FM (30°-60°)   | 7027.0 | 47.0      |                         |      |         |
| FH (60°-80°)   | 1664.8 | 11.1      |                         |      | G1/1800 |
| FVH (80°-90°)  | 31.7   | 0.2       |                         |      | G1/100  |
| BL (0°-30°)    | 1285.8 | 8.6       | B3/2500                 |      |         |
| BM (30°-60°)   | 2189.2 | 14.7      | B2/2500                 |      |         |
| BH (60°-80°)   | 837.3  | 5.6       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 47.2   | 0.3       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G2**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 53°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 |
| 2.5°  | 4881.1 | 4838.9 | 4863.8 | 4854.2 | 4932.7 | 4955.8 | 4944.3 | 4953.9 | 4998.0 | 4976.8 | 4932.7 |
| 5°    | 4561.0 | 4620.4 | 4631.9 | 4660.7 | 4706.6 | 4796.7 | 4867.6 | 4886.8 | 4907.8 | 5005.6 | 4996.0 |
| 7.5°  | 4269.7 | 4309.9 | 4288.9 | 4373.2 | 4472.8 | 4618.5 | 4704.7 | 4720.1 | 4913.6 | 4967.3 | 5007.5 |
| 10°   | 4085.8 | 4045.5 | 4141.3 | 4164.3 | 4277.4 | 4444.1 | 4547.6 | 4610.9 | 4787.1 | 4999.8 | 5024.7 |
| 12.5° | 3915.2 | 3901.8 | 3959.2 | 4024.4 | 4150.9 | 4323.3 | 4428.8 | 4453.7 | 4725.8 | 4950.0 | 5066.9 |
| 15°   | 3788.7 | 3773.4 | 3830.8 | 3878.7 | 4026.3 | 4179.7 | 4313.8 | 4384.7 | 4658.8 | 4921.3 | 5030.5 |
| 17.5° | 3689.0 | 3687.1 | 3719.7 | 3805.9 | 3957.4 | 4085.8 | 4302.3 | 4306.1 | 4624.2 | 4965.4 | 5061.2 |
| 20°   | 3683.3 | 3681.4 | 3687.1 | 3783.0 | 3921.0 | 4078.1 | 4265.9 | 4300.4 | 4624.2 | 4934.7 | 5063.1 |
| 22.5° | 3731.2 | 3700.5 | 3735.1 | 3796.4 | 3896.1 | 4091.5 | 4279.3 | 4356.0 | 4735.4 | 5086.1 | 5149.3 |
| 25°   | 3807.9 | 3815.6 | 3834.7 | 3855.8 | 3913.3 | 4122.2 | 4398.1 | 4461.4 | 4865.7 | 5216.4 | 5268.2 |
| 27.5° | 3947.7 | 3943.9 | 3951.6 | 3963.1 | 4013.0 | 4150.9 | 4446.0 | 4608.9 | 5137.8 | 5448.3 | 5396.5 |
| 30°   | 4152.8 | 4139.4 | 4170.0 | 4210.3 | 4164.3 | 4242.9 | 4605.1 | 4727.8 | 5390.8 | 5682.1 | 5540.3 |
| 32.5° | 4338.7 | 4388.6 | 4446.0 | 4463.3 | 4407.7 | 4423.0 | 4815.9 | 4940.4 | 5601.6 | 5969.5 | 5716.6 |
| 35°   | 4570.6 | 4610.9 | 4687.5 | 4741.1 | 4731.6 | 4685.6 | 5103.4 | 5268.2 | 5906.3 | 6180.4 | 5902.5 |
| 37.5° | 4796.7 | 4844.7 | 4971.1 | 5130.1 | 5042.1 | 5020.9 | 5410.0 | 5546.0 | 6000.2 | 6293.4 | 6038.6 |
| 40°   | 5160.8 | 5159.0 | 5377.4 | 5459.8 | 5538.4 | 5502.0 | 5728.1 | 5774.1 | 6050.0 | 6268.5 | 6042.3 |
| 42.5° | 5588.2 | 5561.3 | 5783.6 | 5912.0 | 6013.6 | 6017.4 | 6059.6 | 6044.3 | 6073.0 | 6142.0 | 6002.1 |
| 45°   | 5994.5 | 6052.0 | 6276.1 | 6506.1 | 6607.7 | 6619.2 | 6339.4 | 6310.7 | 6113.3 | 6105.6 | 5925.4 |
| 47.5° | 6490.8 | 6504.2 | 6688.2 | 6991.0 | 7226.7 | 7146.2 | 6701.6 | 6638.4 | 6289.6 | 6349.0 | 6053.8 |
| 50°   | 6519.6 | 6619.2 | 6784.0 | 7140.5 | 7864.8 | 7843.8 | 7171.1 | 7052.3 | 6573.2 | 6693.9 | 6412.2 |
| 52.5° | 5917.8 | 5894.8 | 6090.3 | 6672.9 | 7816.9 | 8537.5 | 7949.2 | 7665.6 | 7182.6 | 7090.6 | 6992.9 |
| 55°   | 4509.3 | 4562.9 | 4735.4 | 5323.7 | 6787.8 | 8547.1 | 9009.0 | 8777.0 | 7834.2 | 7677.1 | 7564.0 |
| 56°   | 3955.4 | 3963.1 | 4126.0 | 4662.6 | 6193.8 | 8242.4 | 9210.2 | 9022.4 | 8158.1 | 7918.5 | 7746.1 |
| 57.5° | 3279.0 | 3234.9 | 3319.2 | 3612.4 | 5227.9 | 7598.5 | 8989.8 | 9173.8 | 8537.5 | 8179.1 | 7939.6 |
| 60°   | 2581.4 | 2571.8 | 2537.3 | 2590.9 | 3303.9 | 5724.3 | 7483.5 | 7897.4 | 8499.2 | 7933.8 | 7604.3 |
| 62.5° | 2108.0 | 2060.2 | 2129.1 | 2205.8 | 2295.8 | 3551.1 | 5258.5 | 5502.0 | 6747.6 | 6333.7 | 5712.8 |
| 65°   | 1634.7 | 1611.6 | 1697.9 | 1947.1 | 2000.7 | 2255.6 | 2995.3 | 3183.1 | 3984.1 | 3913.3 | 3445.7 |
| 67.5° | 1124.9 | 1128.8 | 1203.5 | 1582.9 | 1855.1 | 1832.1 | 1834.0 | 1931.7 | 2079.3 | 1544.6 | 1345.3 |
| 70°   | 712.9  | 711.0  | 751.2  | 1019.5 | 1492.9 | 1508.2 | 1431.6 | 1402.8 | 1330.0 | 804.8  | 852.8  |
| 72.5° | 458.1  | 444.6  | 465.7  | 563.4  | 772.3  | 893.0  | 919.9  | 937.1  | 770.4  | 632.4  | 686.1  |
| 75°   | 258.7  | 245.3  | 237.6  | 262.5  | 304.7  | 352.6  | 387.1  | 398.6  | 446.5  | 479.1  | 507.9  |
| 77.5° | 78.5   | 70.9   | 86.2   | 114.9  | 151.4  | 203.1  | 247.2  | 254.9  | 300.9  | 339.2  | 367.9  |
| 80°   | 34.5   | 38.3   | 53.6   | 76.7   | 107.3  | 143.8  | 174.4  | 185.9  | 216.6  | 245.3  | 253.0  |
| 82.5° | 21.1   | 23.0   | 36.4   | 51.8   | 74.8   | 101.6  | 124.6  | 128.4  | 159.0  | 182.0  | 187.8  |
| 85°   | 7.7    | 9.6    | 19.2   | 30.7   | 47.9   | 65.1   | 65.1   | 70.9   | 65.1   | 65.1   | 70.9   |
| 87.5° | 0.0    | 0.0    | 1.9    | 3.8    | 3.8    | 5.7    | 7.7    | 7.7    | 9.6    | 11.5   | 13.4   |
| 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°    | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 | 4942.4 |
| 2.5°  | 4955.8 | 4946.2 | 4930.9 | 4875.3 | 4869.6 | 4852.3 | 4756.5 | 4741.1 | 4756.5 | 4710.4 | 4714.3 |
| 5°    | 4946.2 | 4974.9 | 4859.9 | 4804.4 | 4700.9 | 4626.1 | 4539.9 | 4495.8 | 4417.3 | 4367.4 | 4423.0 |
| 7.5°  | 4988.3 | 4976.8 | 4833.1 | 4712.4 | 4557.1 | 4367.4 | 4216.1 | 4129.8 | 3991.8 | 3953.5 | 3982.3 |
| 10°   | 4973.0 | 4911.7 | 4743.0 | 4584.0 | 4290.8 | 4124.1 | 3878.7 | 3641.1 | 3510.8 | 3443.7 | 3434.2 |
| 12.5° | 4951.9 | 4934.7 | 4653.0 | 4378.9 | 4070.4 | 3719.7 | 3374.7 | 3150.6 | 2937.8 | 2845.8 | 2859.3 |
| 15°   | 4976.8 | 4831.2 | 4484.3 | 4137.5 | 3727.4 | 3267.5 | 2895.7 | 2606.3 | 2458.7 | 2399.3 | 2399.3 |
| 17.5° | 4965.4 | 4781.4 | 4403.8 | 3867.2 | 3348.0 | 2803.7 | 2395.5 | 2221.1 | 2159.7 | 2159.7 | 2177.1 |
| 20°   | 4971.1 | 4814.0 | 4241.0 | 3597.0 | 2899.5 | 2361.0 | 2064.0 | 2000.7 | 2027.5 | 2037.1 | 2046.7 |
| 22.5° | 5003.7 | 4706.6 | 4081.9 | 3300.0 | 2483.7 | 2019.9 | 1874.2 | 1876.1 | 1924.1 | 1975.8 | 1966.2 |
| 25°   | 5043.9 | 4664.5 | 3888.4 | 3004.9 | 2165.5 | 1853.1 | 1807.2 | 1801.4 | 1837.8 | 1864.6 | 1868.5 |
| 27.5° | 5009.4 | 4591.7 | 3691.0 | 2637.0 | 1904.9 | 1742.0 | 1732.4 | 1736.2 | 1747.7 | 1801.4 | 1784.1 |
| 30°   | 5122.5 | 4612.7 | 3443.7 | 2328.4 | 1761.1 | 1705.6 | 1694.1 | 1688.3 | 1705.6 | 1720.9 | 1707.5 |
| 32.5° | 5262.4 | 4538.0 | 3259.8 | 2031.3 | 1690.3 | 1678.8 | 1655.7 | 1648.1 | 1657.7 | 1642.3 | 1650.0 |
| 35°   | 5323.7 | 4524.6 | 3020.2 | 1818.7 | 1634.7 | 1625.1 | 1611.6 | 1609.8 | 1611.6 | 1598.3 | 1586.7 |
| 37.5° | 5358.2 | 4587.8 | 2746.2 | 1720.9 | 1600.2 | 1609.8 | 1579.1 | 1575.2 | 1540.8 | 1548.5 | 1554.2 |
| 40°   | 5417.7 | 4490.1 | 2523.8 | 1627.0 | 1579.1 | 1560.0 | 1533.1 | 1527.4 | 1504.4 | 1490.9 | 1504.4 |
| 42.5° | 5331.4 | 4461.4 | 2305.4 | 1586.7 | 1548.5 | 1527.4 | 1508.2 | 1475.6 | 1468.0 | 1456.5 | 1448.8 |
| 45°   | 5262.4 | 4296.6 | 2110.0 | 1537.0 | 1512.1 | 1500.5 | 1464.1 | 1429.6 | 1400.9 | 1412.4 | 1395.1 |
| 47.5° | 5314.1 | 4239.1 | 1916.4 | 1494.7 | 1462.2 | 1448.8 | 1412.4 | 1385.5 | 1356.8 | 1343.4 | 1339.6 |
| 50°   | 5521.1 | 4346.4 | 1753.5 | 1464.1 | 1420.0 | 1412.4 | 1364.5 | 1333.8 | 1307.0 | 1297.4 | 1301.2 |
| 52.5° | 6015.6 | 4639.6 | 1642.3 | 1400.9 | 1379.8 | 1345.3 | 1318.5 | 1280.1 | 1262.9 | 1232.2 | 1251.4 |
| 55°   | 6642.2 | 5116.7 | 1613.6 | 1341.4 | 1330.0 | 1299.3 | 1262.9 | 1234.2 | 1201.6 | 1176.7 | 1170.9 |
| 56°   | 6843.4 | 5344.8 | 1590.6 | 1318.5 | 1299.3 | 1282.1 | 1234.2 | 1216.9 | 1165.2 | 1159.4 | 1155.6 |
| 57.5° | 7006.3 | 5546.0 | 1594.4 | 1274.4 | 1255.2 | 1239.9 | 1211.1 | 1169.0 | 1134.5 | 1113.4 | 1123.0 |
| 60°   | 6638.4 | 5191.5 | 1521.6 | 1207.3 | 1203.5 | 1174.7 | 1134.5 | 1115.3 | 1073.2 | 1048.3 | 1042.5 |
| 62.5° | 4934.7 | 3524.2 | 1234.2 | 1121.1 | 1119.1 | 1088.5 | 1042.5 | 1021.4 | 1013.8 | 979.3  | 979.3  |
| 65°   | 2842.0 | 2209.6 | 1067.5 | 1050.2 | 1034.8 | 1004.2 | 958.2  | 940.9  | 921.7  | 910.3  | 900.7  |
| 67.5° | 1213.1 | 1146.0 | 969.7  | 967.8  | 950.6  | 912.2  | 866.2  | 839.4  | 814.5  | 791.5  | 803.0  |
| 70°   | 879.6  | 893.0  | 875.8  | 866.2  | 845.1  | 797.3  | 757.0  | 724.4  | 686.1  | 670.7  | 682.2  |
| 72.5° | 697.6  | 726.3  | 751.2  | 753.2  | 728.2  | 672.7  | 628.6  | 584.5  | 542.3  | 521.2  | 530.9  |
| 75°   | 528.9  | 548.1  | 573.0  | 578.7  | 542.3  | 504.0  | 461.8  | 415.9  | 383.3  | 358.4  | 362.2  |
| 77.5° | 381.4  | 377.6  | 400.5  | 396.7  | 379.4  | 352.6  | 314.3  | 272.1  | 235.7  | 212.7  | 214.6  |
| 80°   | 260.7  | 266.4  | 279.8  | 277.9  | 256.8  | 239.5  | 210.8  | 176.3  | 149.5  | 130.3  | 126.5  |
| 82.5° | 182.0  | 191.6  | 203.1  | 193.6  | 176.3  | 159.0  | 138.0  | 113.1  | 92.0   | 76.7   | 72.8   |
| 85°   | 65.1   | 74.8   | 86.2   | 92.0   | 97.7   | 93.9   | 78.5   | 63.3   | 46.0   | 38.3   | 36.4   |
| 87.5° | 13.4   | 15.3   | 17.2   | 17.2   | 17.2   | 15.3   | 13.4   | 13.4   | 11.5   | 5.7    | 5.7    |
| 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)