

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: P648667

Luminaire Tested: **GALN-SA9B-835-U-T2R-GRSWH**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P648667  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA9B-835-U-T2R-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH WHITE GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35493.4 lumens  
Efficiency: N/A  
Efficacy: 97.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

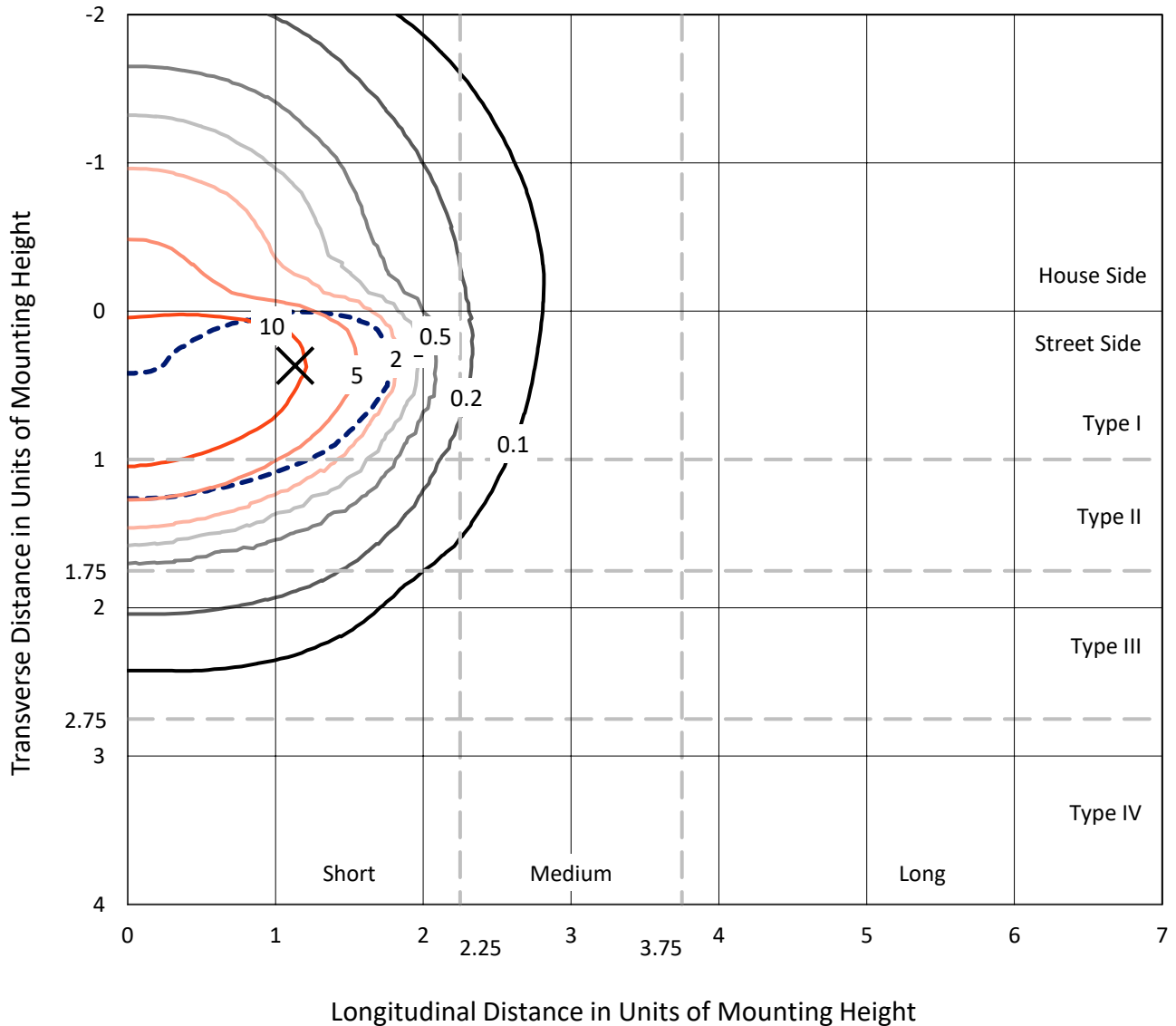
Input Watts (W): 364  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

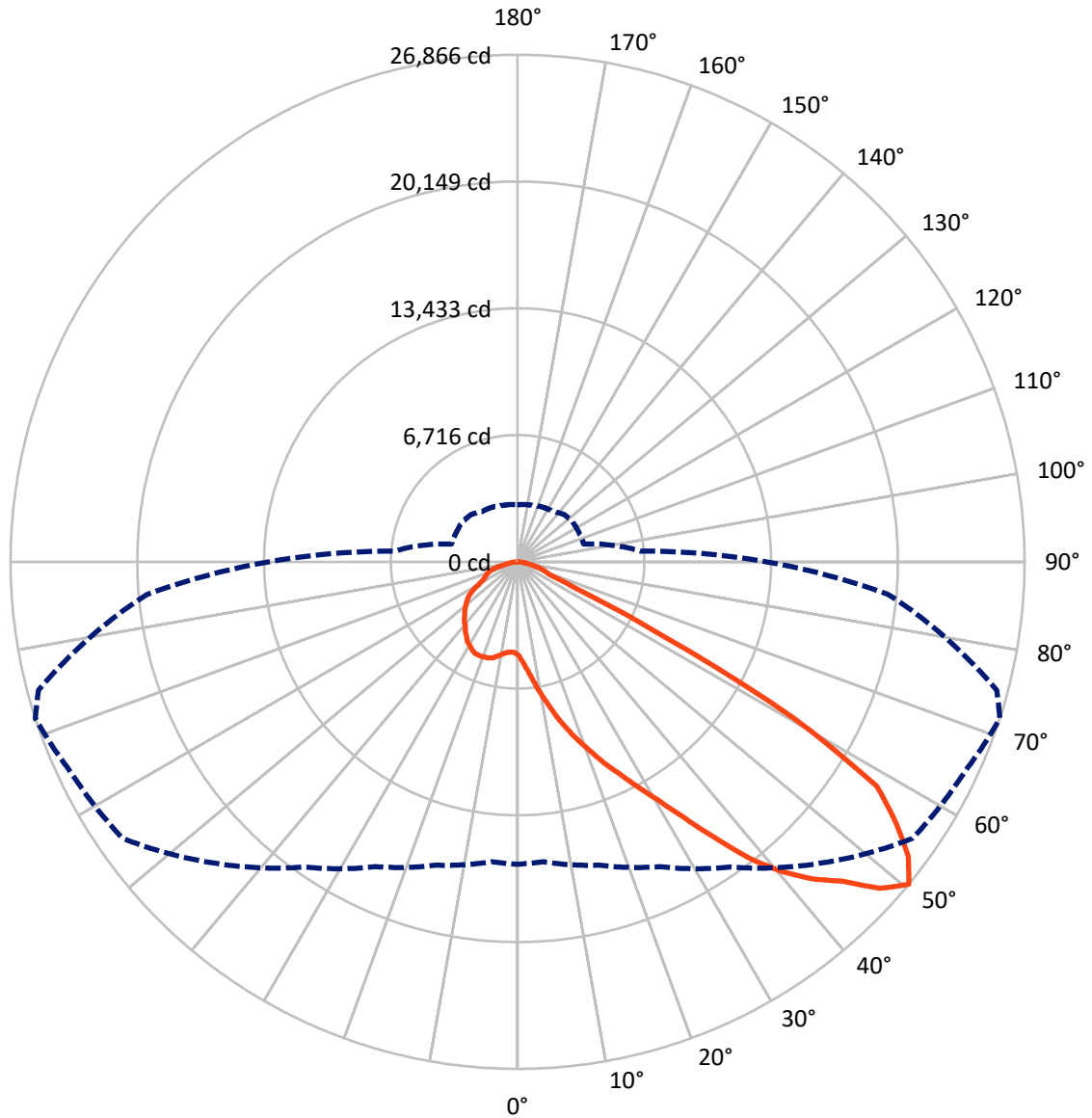
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 72-Deg Lateral      - - - Horizontal Cone Through 50-Deg Vertical

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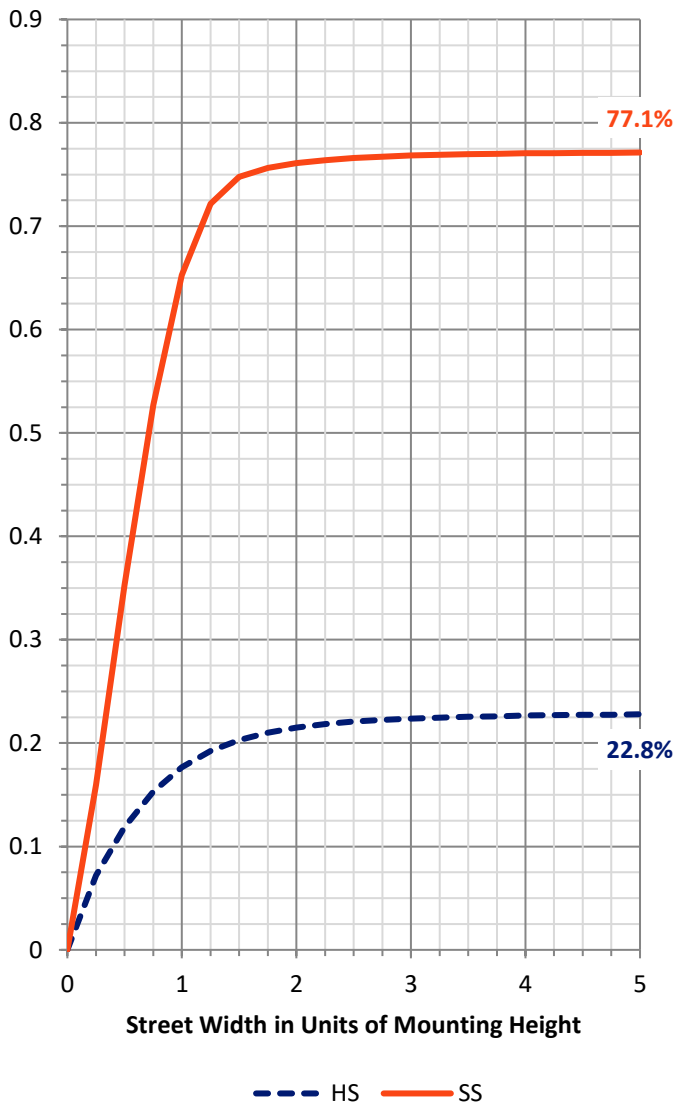
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 8131.8   | 0.0    | 8131.8  |
|                    | % Fixture | 22.9     | 0.0    | 22.9    |
| <b>Street Side</b> | Lumens    | 27361.6  | 0.0    | 27361.6 |
|                    | % Fixture | 77.1     | 0.0    | 77.1    |
| <b>Total</b>       | Lumens    | 35493.4  | 0.0    | 35493.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 581.2   | 1.6       |
| 10°-20°   | 2172.7  | 6.1       |
| 20°-30°   | 4212.6  | 11.9      |
| 30°-40°   | 6978.9  | 19.7      |
| 40°-50°   | 9765.0  | 27.5      |
| 50°-60°   | 8238.0  | 23.2      |
| 60°-70°   | 2510.9  | 7.1       |
| 70°-80°   | 880.9   | 2.5       |
| 80°-90°   | 153.2   | 0.4       |
| 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°    | 35493.4 | 100.0     |
| 0°-180°   | 35493.4 | 100.0     |



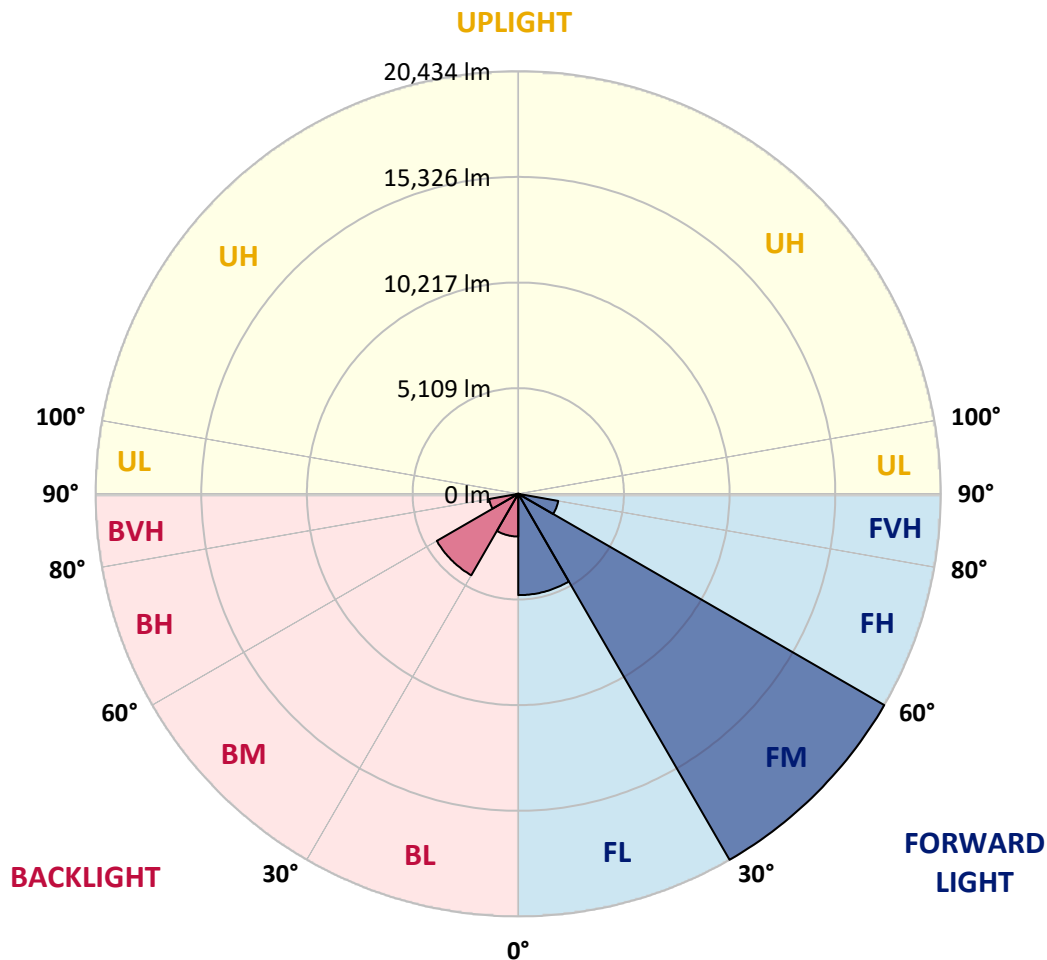
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 4899.4  | 13.8      |                         |      |         |
| FM (30°-60°)   | 20434.5 | 57.6      |                         |      |         |
| FH (60°-80°)   | 1959.2  | 5.5       |                         |      | G2/5000 |
| FVH (80°-90°)  | 68.6    | 0.2       |                         |      | G1/100  |
| BL (0°-30°)    | 2067.1  | 5.8       | B3/2500                 |      |         |
| BM (30°-60°)   | 4547.4  | 12.8      | B3/5000                 |      |         |
| BH (60°-80°)   | 1432.7  | 4.0       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 84.6    | 0.2       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 72°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4941.0  | 4941.0  | 4941.0  | 4941.0  | 4941.0  | 4941.0  | 4941.0  | 4941.0  | 4941.0  | 4941.0  | 4941.0  |
| 2.5°  | 6355.2  | 6315.7  | 6197.1  | 6157.6  | 6017.0  | 5762.3  | 5674.5  | 5415.3  | 5305.5  | 5204.5  | 5085.9  |
| 5°    | 8037.3  | 7852.9  | 7839.7  | 7615.7  | 7290.7  | 7101.8  | 6539.7  | 6162.0  | 5814.9  | 5639.3  | 5314.3  |
| 7.5°  | 9109.0  | 9113.3  | 9113.3  | 8928.9  | 8669.8  | 8191.0  | 7686.0  | 7005.2  | 6482.5  | 6223.4  | 5670.0  |
| 10°   | 10127.9 | 10040.1 | 9991.8  | 9974.2  | 9798.5  | 9333.0  | 8792.8  | 7949.5  | 7233.6  | 6930.6  | 5938.0  |
| 12.5° | 10848.2 | 10773.5 | 10883.3 | 10826.2 | 10698.9 | 10395.8 | 9886.4  | 8924.5  | 8028.6  | 7620.1  | 6368.4  |
| 15°   | 11190.8 | 11243.5 | 11331.3 | 11489.4 | 11432.3 | 11318.1 | 10756.0 | 9925.9  | 8885.0  | 8423.8  | 6750.5  |
| 17.5° | 11717.8 | 11572.9 | 11678.3 | 11875.9 | 12034.0 | 11981.3 | 11660.7 | 10650.6 | 9732.6  | 9166.0  | 7264.4  |
| 20°   | 12086.8 | 12003.3 | 12056.0 | 12284.4 | 12403.0 | 12701.6 | 12534.7 | 11599.2 | 10545.1 | 9947.9  | 7870.4  |
| 22.5° | 13140.9 | 13017.8 | 12846.5 | 12881.7 | 12925.6 | 13136.4 | 13175.9 | 12640.1 | 11489.4 | 10857.0 | 8445.8  |
| 25°   | 14440.9 | 14326.6 | 14124.6 | 13918.2 | 13790.8 | 13751.3 | 13887.4 | 13457.0 | 12394.2 | 11739.8 | 9065.0  |
| 27.5° | 15872.7 | 15679.4 | 15552.0 | 15126.0 | 14783.4 | 14730.7 | 14664.8 | 14432.1 | 13465.8 | 12758.8 | 9763.4  |
| 30°   | 17264.9 | 17111.1 | 16939.9 | 16259.2 | 15903.4 | 15846.3 | 15521.3 | 15587.2 | 14629.7 | 13843.5 | 10553.9 |
| 32.5° | 18319.0 | 18332.1 | 17941.3 | 17427.4 | 17093.6 | 16790.6 | 16671.9 | 16860.8 | 16123.0 | 15490.6 | 11436.7 |
| 35°   | 19171.1 | 19210.5 | 18837.3 | 18371.7 | 18011.5 | 18222.4 | 18169.7 | 18257.4 | 17906.1 | 17133.1 | 12464.4 |
| 37.5° | 20001.1 | 19803.5 | 19403.8 | 19179.8 | 18991.0 | 19337.9 | 19785.9 | 19860.6 | 19926.4 | 19017.3 | 13659.0 |
| 40°   | 20137.3 | 20154.8 | 19922.0 | 20080.2 | 19843.0 | 20365.6 | 21406.5 | 21309.9 | 21577.8 | 20782.9 | 14954.7 |
| 42.5° | 19944.0 | 19983.5 | 20075.7 | 20299.7 | 20870.7 | 21498.8 | 23044.7 | 22649.4 | 22974.5 | 22267.3 | 16215.2 |
| 45°   | 19627.8 | 19465.3 | 19579.5 | 20431.5 | 21419.7 | 22816.4 | 24542.4 | 24234.9 | 24129.6 | 23536.7 | 17717.3 |
| 47.5° | 18116.9 | 18283.8 | 18639.5 | 19689.2 | 21173.7 | 23044.7 | 25605.3 | 25535.0 | 25851.2 | 25434.0 | 19083.2 |
| 50°   | 16022.0 | 15956.1 | 16641.3 | 17822.6 | 19737.6 | 22596.8 | 25548.2 | 26185.0 | 26865.7 | 26286.0 | 19693.6 |
| 52.5° | 11998.9 | 12350.3 | 12938.8 | 14405.7 | 17137.5 | 20154.8 | 24300.9 | 25363.7 | 25917.1 | 25794.1 | 19201.7 |
| 55°   | 7584.9  | 7690.4  | 8046.1  | 9789.8  | 12249.3 | 16175.7 | 20831.2 | 23295.1 | 24283.3 | 24744.4 | 18749.4 |
| 57.5° | 3684.9  | 3487.2  | 3922.0  | 5323.1  | 7075.5  | 10878.9 | 16065.9 | 20291.0 | 22438.7 | 23273.1 | 17765.6 |
| 60°   | 1923.7  | 1998.4  | 2169.6  | 2670.3  | 3658.5  | 5648.1  | 10013.7 | 13523.0 | 16803.7 | 18086.2 | 13465.8 |
| 62.5° | 1594.3  | 1620.7  | 1734.8  | 1985.1  | 2433.2  | 3250.1  | 5112.3  | 6592.4  | 8568.8  | 9723.8  | 7659.6  |
| 65°   | 1352.7  | 1365.9  | 1488.9  | 1655.8  | 1941.3  | 2288.2  | 2630.8  | 2753.8  | 3333.5  | 3421.3  | 2723.0  |
| 67.5° | 1128.8  | 1141.9  | 1273.7  | 1431.8  | 1616.3  | 1708.5  | 1796.4  | 1787.5  | 1853.4  | 1827.1  | 1822.7  |
| 70°   | 869.6   | 882.8   | 1018.9  | 1185.9  | 1278.1  | 1225.4  | 1497.6  | 1559.2  | 1585.5  | 1607.5  | 1642.6  |
| 72.5° | 628.0   | 654.4   | 759.8   | 878.4   | 830.1   | 953.1   | 1234.2  | 1326.4  | 1361.5  | 1374.7  | 1418.6  |
| 75°   | 456.8   | 465.6   | 491.9   | 456.8   | 527.0   | 663.2   | 869.6   | 983.8   | 1027.7  | 1040.9  | 1106.8  |
| 77.5° | 202.0   | 206.4   | 210.8   | 263.6   | 338.2   | 412.9   | 518.3   | 610.5   | 672.0   | 689.5   | 707.1   |
| 80°   | 105.4   | 109.8   | 136.2   | 180.1   | 241.6   | 303.0   | 377.7   | 430.4   | 470.0   | 474.3   | 491.9   |
| 82.5° | 65.9    | 70.2    | 96.6    | 127.4   | 171.3   | 224.0   | 276.7   | 320.6   | 351.3   | 355.7   | 360.2   |
| 85°   | 30.8    | 39.5    | 57.1    | 79.1    | 114.2   | 144.9   | 149.3   | 127.4   | 136.2   | 140.5   | 131.8   |
| 87.5° | 8.8     | 13.2    | 17.5    | 13.2    | 17.5    | 17.5    | 21.9    | 26.4    | 26.4    | 26.4    | 30.8    |
| 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°    | 4941.0  | 4941.0 | 4941.0 | 4941.0 | 4941.0 | 4941.0 | 4941.0 | 4941.0 | 4941.0 | 4941.0 | 4941.0 |
| 2.5°  | 5020.0  | 4980.5 | 4826.8 | 4769.7 | 4620.4 | 4646.7 | 4567.6 | 4563.2 | 4545.7 | 4541.3 | 4536.9 |
| 5°    | 5143.0  | 5020.0 | 4835.6 | 4695.0 | 4611.6 | 4602.8 | 4545.7 | 4545.7 | 4563.2 | 4576.5 | 4545.7 |
| 7.5°  | 5345.1  | 5204.5 | 4892.7 | 4760.9 | 4686.3 | 4673.1 | 4633.6 | 4602.8 | 4642.3 | 4629.2 | 4594.0 |
| 10°   | 5577.9  | 5331.8 | 5002.5 | 4888.3 | 4765.3 | 4734.6 | 4734.6 | 4747.7 | 4681.9 | 4703.8 | 4668.7 |
| 12.5° | 5837.0  | 5507.5 | 5143.0 | 5011.3 | 4866.3 | 4848.7 | 4840.0 | 4743.3 | 4778.5 | 4760.9 | 4673.1 |
| 15°   | 6166.4  | 5709.6 | 5323.1 | 5099.1 | 4976.1 | 4897.0 | 4782.9 | 4765.3 | 4743.3 | 4699.4 | 4659.9 |
| 17.5° | 6522.1  | 5929.2 | 5406.5 | 5125.4 | 4941.0 | 4883.9 | 4796.0 | 4703.8 | 4637.9 | 4646.7 | 4615.9 |
| 20°   | 6825.2  | 6131.2 | 5437.3 | 5151.8 | 4914.7 | 4804.8 | 4668.7 | 4611.6 | 4541.3 | 4536.9 | 4532.6 |
| 22.5° | 7185.3  | 6403.5 | 5481.2 | 5081.5 | 4835.6 | 4721.4 | 4629.2 | 4528.2 | 4479.9 | 4418.3 | 4449.1 |
| 25°   | 7615.7  | 6508.9 | 5490.0 | 5042.0 | 4778.5 | 4576.5 | 4528.2 | 4418.3 | 4400.8 | 4312.9 | 4330.5 |
| 27.5° | 7927.6  | 6566.0 | 5419.7 | 4919.0 | 4646.7 | 4493.0 | 4405.2 | 4326.1 | 4295.4 | 4229.5 | 4211.9 |
| 30°   | 8344.7  | 6653.9 | 5270.4 | 4765.3 | 4514.9 | 4343.7 | 4291.0 | 4273.4 | 4185.5 | 4115.3 | 4106.5 |
| 32.5° | 8819.1  | 6710.9 | 5173.8 | 4607.2 | 4378.8 | 4247.1 | 4273.4 | 4190.0 | 4080.1 | 4018.7 | 4001.1 |
| 35°   | 9196.8  | 6732.9 | 4932.2 | 4427.1 | 4286.6 | 4203.1 | 4172.4 | 4154.8 | 3996.7 | 3939.6 | 3895.7 |
| 37.5° | 9772.2  | 6684.6 | 4730.2 | 4299.8 | 4185.5 | 4154.8 | 4128.4 | 4009.9 | 3829.8 | 3746.3 | 3684.9 |
| 40°   | 10444.1 | 6671.4 | 4471.0 | 4119.7 | 4088.9 | 4124.1 | 4045.1 | 3860.6 | 3610.2 | 3517.9 | 3474.1 |
| 42.5° | 11089.8 | 6763.6 | 4308.5 | 4023.1 | 3983.5 | 3996.7 | 3886.9 | 3610.2 | 3487.2 | 3434.6 | 3364.2 |
| 45°   | 12170.2 | 6956.9 | 4040.6 | 3873.7 | 3856.2 | 3847.3 | 3715.6 | 3425.8 | 3355.5 | 3289.6 | 3276.4 |
| 47.5° | 13145.2 | 6829.6 | 3869.4 | 3720.0 | 3737.6 | 3689.3 | 3408.2 | 3315.9 | 3236.9 | 3171.0 | 3149.1 |
| 50°   | 13202.3 | 6526.5 | 3627.8 | 3601.4 | 3605.8 | 3522.4 | 3254.5 | 3193.0 | 3092.0 | 3048.1 | 3017.3 |
| 52.5° | 12903.7 | 6030.2 | 3403.8 | 3412.5 | 3425.8 | 3289.6 | 3065.6 | 3021.7 | 2938.2 | 2876.7 | 2859.2 |
| 55°   | 12064.8 | 5257.2 | 3184.2 | 3219.3 | 3254.5 | 2995.4 | 2925.1 | 2815.3 | 2749.3 | 2661.6 | 2666.0 |
| 57.5° | 10628.6 | 4233.8 | 2876.7 | 2933.8 | 3008.5 | 2723.0 | 2670.3 | 2534.2 | 2437.6 | 2367.2 | 2358.5 |
| 60°   | 7123.8  | 3012.9 | 2415.6 | 2437.6 | 2604.4 | 2490.3 | 2485.9 | 2349.7 | 2217.9 | 2156.5 | 2121.3 |
| 62.5° | 4203.1  | 2301.4 | 2086.2 | 2064.2 | 2059.8 | 2125.7 | 2235.5 | 2187.2 | 2015.9 | 1897.4 | 1932.4 |
| 65°   | 2200.4  | 1989.6 | 1941.3 | 1866.6 | 1822.7 | 1805.1 | 1888.5 | 1910.5 | 1796.4 | 1669.0 | 1660.2 |
| 67.5° | 1849.1  | 1849.1 | 1809.5 | 1783.1 | 1721.7 | 1647.0 | 1594.3 | 1524.0 | 1506.4 | 1471.3 | 1427.4 |
| 70°   | 1682.1  | 1726.0 | 1712.9 | 1651.4 | 1598.7 | 1515.3 | 1379.1 | 1264.9 | 1155.1 | 1115.5 | 1141.9 |
| 72.5° | 1467.0  | 1510.9 | 1510.9 | 1480.1 | 1409.8 | 1282.5 | 1150.7 | 1018.9 | 926.7  | 856.4  | 847.7  |
| 75°   | 1128.8  | 1150.7 | 1203.4 | 1168.2 | 1076.0 | 997.0  | 860.8  | 724.7  | 636.8  | 571.0  | 557.8  |
| 77.5° | 720.3   | 755.4  | 755.4  | 751.1  | 685.1  | 610.5  | 522.7  | 426.0  | 360.2  | 311.9  | 298.6  |
| 80°   | 478.7   | 500.7  | 518.3  | 500.7  | 456.8  | 399.6  | 333.8  | 267.9  | 219.6  | 180.1  | 171.3  |
| 82.5° | 351.3   | 377.7  | 390.9  | 373.3  | 329.4  | 285.5  | 237.2  | 188.9  | 140.5  | 109.8  | 101.0  |
| 85°   | 136.2   | 140.5  | 158.1  | 188.9  | 184.5  | 180.1  | 144.9  | 105.4  | 79.1   | 57.1   | 52.7   |
| 87.5° | 35.2    | 30.8   | 35.2   | 35.2   | 30.8   | 26.4   | 26.4   | 26.4   | 26.4   | 13.2   | 17.5   |
| 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)