

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: P533962

Luminaire Tested: **GALN-SA9B-830-U-T2R-GRSWH**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P533962  
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-830-U-T2R-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 3000K, 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: 36021 lumens  
Efficiency: N/A  
Efficacy: 99.0 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

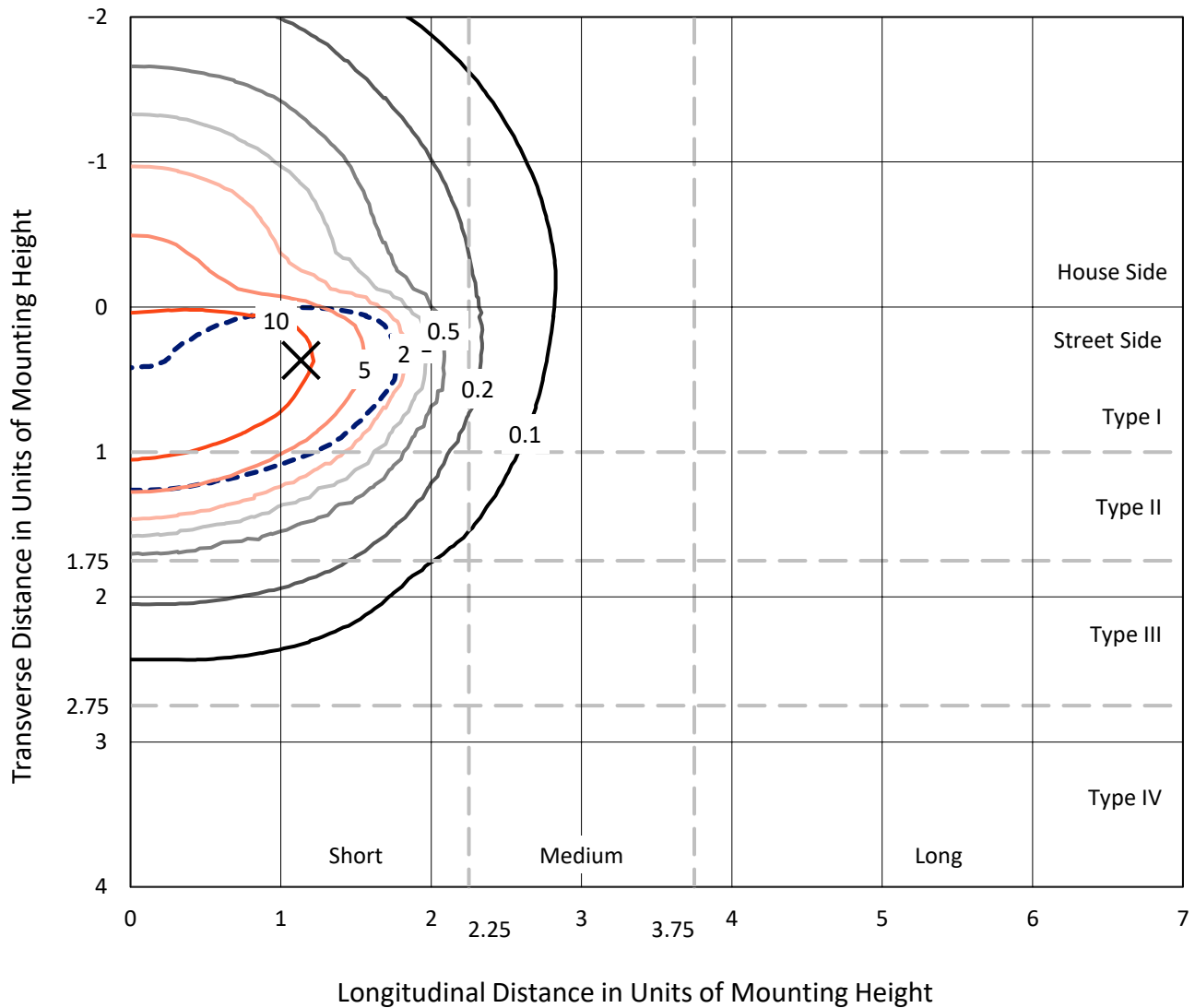


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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
- - - 1/2 Max cd

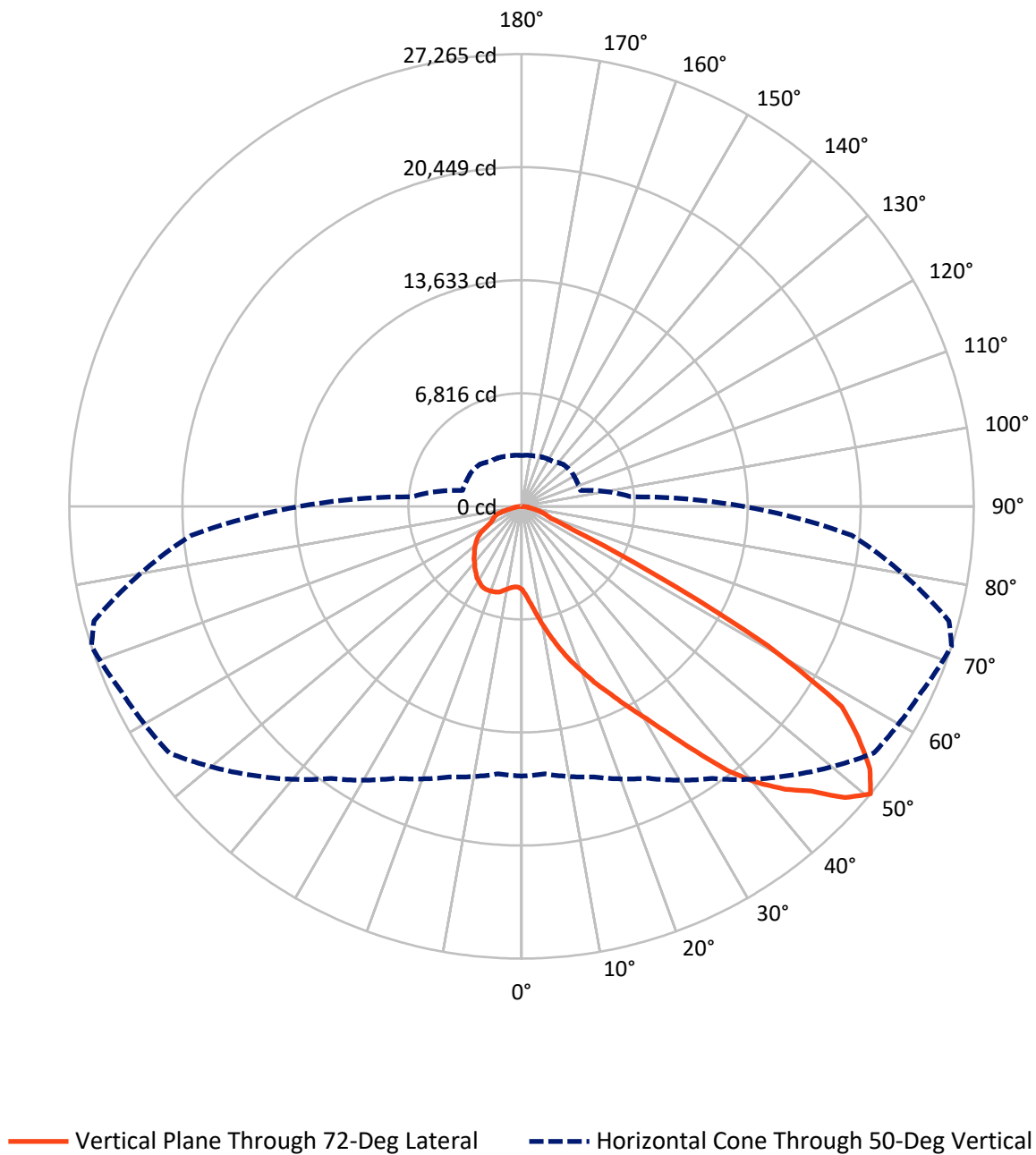


Based on 25 foot mounting height. Maximum calculated value = 17.9 fc  
Type II - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 8252.6   | 0.0    | 8252.6  |
|                    | % Fixture | 22.9     | 0.0    | 22.9    |
| <b>Street Side</b> | Lumens    | 27768.4  | 0.0    | 27768.4 |
|                    | % Fixture | 77.1     | 0.0    | 77.1    |
| <b>Total</b>       | Lumens    | 36021.0  | 0.0    | 36021.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 589.8   | 1.6       |
| 10°-20°   | 2205.0  | 6.1       |
| 20°-30°   | 4275.3  | 11.9      |
| 30°-40°   | 7082.6  | 19.7      |
| 40°-50°   | 9910.1  | 27.5      |
| 50°-60°   | 8360.5  | 23.2      |
| 60°-70°   | 2548.3  | 7.1       |
| 70°-80°   | 894.0   | 2.5       |
| 80°-90°   | 155.4   | 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°    | 36021.0 | 100.0     |
| 0°-180°   | 36021.0 | 100.0     |

**Coefficient of Utilization**



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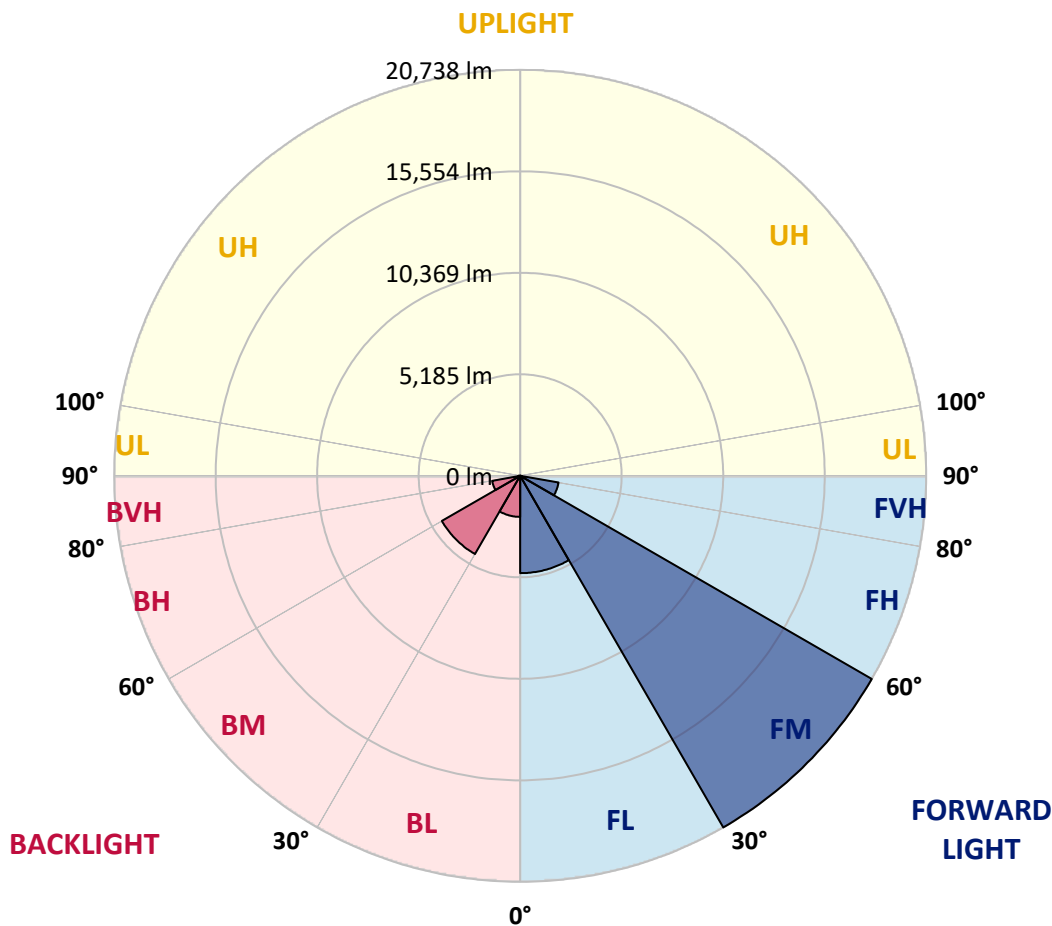
CATALOG NUMBER: GALN-SA9B-830-U-T2R-GRSWH

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 4972.2  | 13.8      |                         |      |         |
| FM   | (30°-60°)   | 20738.3 | 57.6      |                         |      |         |
| FH   | (60°-80°)   | 1988.3  | 5.5       |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 69.6    | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 2097.9  | 5.8       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 4615.0  | 12.8      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1454.0  | 4.0       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 85.8    | 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°    | 5014.4  | 5014.4  | 5014.4  | 5014.4  | 5014.4  | 5014.4  | 5014.4  | 5014.4  | 5014.4  | 5014.4  | 5014.4  |
| 2.5°  | 6449.7  | 6409.6  | 6289.2  | 6249.1  | 6106.5  | 5847.9  | 5758.8  | 5495.8  | 5384.4  | 5281.9  | 5161.5  |
| 5°    | 8156.8  | 7969.6  | 7956.2  | 7728.9  | 7399.1  | 7207.4  | 6636.9  | 6253.6  | 5901.4  | 5723.1  | 5393.3  |
| 7.5°  | 9244.4  | 9248.8  | 9248.8  | 9061.6  | 8798.7  | 8312.8  | 7800.2  | 7109.3  | 6578.9  | 6316.0  | 5754.3  |
| 10°   | 10278.5 | 10189.3 | 10140.3 | 10122.5 | 9944.2  | 9471.7  | 8923.5  | 8067.7  | 7341.1  | 7033.6  | 6026.2  |
| 12.5° | 11009.5 | 10933.7 | 11045.1 | 10987.2 | 10857.9 | 10550.4 | 10033.3 | 9057.2  | 8147.9  | 7733.4  | 6463.0  |
| 15°   | 11357.1 | 11410.6 | 11499.8 | 11660.2 | 11602.3 | 11486.4 | 10915.9 | 10073.4 | 9017.1  | 8549.0  | 6850.8  |
| 17.5° | 11892.0 | 11744.9 | 11851.9 | 12052.5 | 12212.9 | 12159.4 | 11834.1 | 10808.9 | 9877.3  | 9302.3  | 7372.3  |
| 20°   | 12266.4 | 12181.7 | 12235.2 | 12467.0 | 12587.3 | 12890.4 | 12721.1 | 11771.7 | 10701.9 | 10095.7 | 7987.4  |
| 22.5° | 13336.2 | 13211.4 | 13037.5 | 13073.2 | 13117.7 | 13331.7 | 13371.8 | 12828.0 | 11660.2 | 11018.4 | 8571.3  |
| 25°   | 14655.5 | 14539.6 | 14334.6 | 14125.1 | 13995.8 | 13955.7 | 14093.9 | 13657.1 | 12578.4 | 11914.3 | 9199.8  |
| 27.5° | 16108.6 | 15912.5 | 15783.2 | 15350.8 | 15003.2 | 14949.7 | 14882.8 | 14646.6 | 13666.0 | 12948.4 | 9908.5  |
| 30°   | 17521.5 | 17365.5 | 17191.7 | 16500.8 | 16139.8 | 16081.8 | 15752.0 | 15818.9 | 14847.2 | 14049.3 | 10710.8 |
| 32.5° | 18591.3 | 18604.7 | 18208.0 | 17686.5 | 17347.7 | 17040.1 | 16919.8 | 17111.5 | 16362.6 | 15720.8 | 11606.7 |
| 35°   | 19456.0 | 19496.1 | 19117.2 | 18644.8 | 18279.3 | 18493.2 | 18439.7 | 18528.9 | 18172.3 | 17387.8 | 12649.7 |
| 37.5° | 20298.4 | 20097.8 | 19692.2 | 19464.9 | 19273.2 | 19625.4 | 20080.0 | 20155.8 | 20222.6 | 19300.0 | 13862.1 |
| 40°   | 20436.6 | 20454.4 | 20218.2 | 20378.6 | 20138.0 | 20668.4 | 21724.7 | 21626.7 | 21898.6 | 21091.8 | 15177.0 |
| 42.5° | 20240.5 | 20280.6 | 20374.2 | 20601.5 | 21181.0 | 21818.3 | 23387.3 | 22986.1 | 23316.0 | 22598.4 | 16456.2 |
| 45°   | 19919.5 | 19754.6 | 19870.5 | 20735.2 | 21738.1 | 23155.5 | 24907.2 | 24595.2 | 24488.2 | 23886.5 | 17980.6 |
| 47.5° | 18386.2 | 18555.6 | 18916.7 | 19981.9 | 21488.5 | 23387.3 | 25985.9 | 25914.6 | 26235.5 | 25812.1 | 19366.8 |
| 50°   | 16260.1 | 16193.3 | 16888.6 | 18087.6 | 20031.0 | 22932.7 | 25927.9 | 26574.3 | 27265.1 | 26676.8 | 19986.4 |
| 52.5° | 12177.3 | 12533.8 | 13131.1 | 14619.9 | 17392.3 | 20454.4 | 24662.1 | 25740.7 | 26302.4 | 26177.6 | 19487.2 |
| 55°   | 7697.7  | 7804.7  | 8165.7  | 9935.3  | 12431.3 | 16416.1 | 21140.8 | 23641.4 | 24644.3 | 25112.3 | 19028.1 |
| 57.5° | 3739.7  | 3539.1  | 3980.3  | 5402.2  | 7180.7  | 11040.7 | 16304.7 | 20592.6 | 22772.2 | 23619.1 | 18029.7 |
| 60°   | 1952.3  | 2028.1  | 2201.9  | 2710.0  | 3712.9  | 5732.1  | 10162.6 | 13723.9 | 17053.5 | 18355.0 | 13666.0 |
| 62.5° | 1618.0  | 1644.7  | 1760.6  | 2014.7  | 2469.3  | 3298.4  | 5188.3  | 6690.4  | 8696.1  | 9868.4  | 7773.5  |
| 65°   | 1372.8  | 1386.2  | 1511.0  | 1680.4  | 1970.1  | 2322.2  | 2669.9  | 2794.7  | 3383.1  | 3472.2  | 2763.5  |
| 67.5° | 1145.5  | 1158.9  | 1292.6  | 1453.1  | 1640.3  | 1733.9  | 1823.0  | 1814.1  | 1881.0  | 1854.2  | 1849.8  |
| 70°   | 882.5   | 895.9   | 1034.1  | 1203.5  | 1297.1  | 1243.6  | 1519.9  | 1582.3  | 1609.1  | 1631.4  | 1667.0  |
| 72.5° | 637.4   | 664.1   | 771.1   | 891.5   | 842.4   | 967.2   | 1252.5  | 1346.1  | 1381.8  | 1395.1  | 1439.7  |
| 75°   | 463.6   | 472.5   | 499.2   | 463.6   | 534.9   | 673.0   | 882.5   | 998.4   | 1043.0  | 1056.4  | 1123.2  |
| 77.5° | 205.0   | 209.5   | 213.9   | 267.4   | 343.2   | 419.0   | 526.0   | 619.6   | 682.0   | 699.8   | 717.6   |
| 80°   | 107.0   | 111.4   | 138.2   | 182.7   | 245.1   | 307.6   | 383.3   | 436.8   | 476.9   | 481.4   | 499.2   |
| 82.5° | 66.9    | 71.3    | 98.1    | 129.3   | 173.8   | 227.3   | 280.8   | 325.4   | 356.6   | 361.0   | 365.5   |
| 85°   | 31.2    | 40.1    | 57.9    | 80.2    | 115.9   | 147.1   | 151.5   | 129.3   | 138.2   | 142.6   | 133.7   |
| 87.5° | 8.9     | 13.4    | 17.8    | 13.4    | 17.8    | 17.8    | 22.3    | 26.7    | 26.7    | 26.7    | 31.2    |
| 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°    | 5014.4  | 5014.4 | 5014.4 | 5014.4 | 5014.4 | 5014.4 | 5014.4 | 5014.4 | 5014.4 | 5014.4 | 5014.4 |
| 2.5°  | 5094.7  | 5054.5 | 4898.5 | 4840.6 | 4689.0 | 4715.8 | 4635.6 | 4631.1 | 4613.3 | 4608.8 | 4604.4 |
| 5°    | 5219.5  | 5094.7 | 4907.5 | 4764.8 | 4680.1 | 4671.2 | 4613.3 | 4613.3 | 4631.1 | 4644.5 | 4613.3 |
| 7.5°  | 5424.5  | 5281.9 | 4965.4 | 4831.7 | 4755.9 | 4742.5 | 4702.4 | 4671.2 | 4711.3 | 4698.0 | 4662.3 |
| 10°   | 5660.7  | 5411.1 | 5076.8 | 4960.9 | 4836.1 | 4804.9 | 4804.9 | 4818.3 | 4751.5 | 4773.7 | 4738.1 |
| 12.5° | 5923.7  | 5589.4 | 5219.5 | 5085.7 | 4938.7 | 4920.8 | 4911.9 | 4813.9 | 4849.5 | 4831.7 | 4742.5 |
| 15°   | 6258.0  | 5794.5 | 5402.2 | 5174.9 | 5050.1 | 4969.9 | 4854.0 | 4836.1 | 4813.9 | 4769.3 | 4729.2 |
| 17.5° | 6619.0  | 6017.3 | 5486.9 | 5201.6 | 5014.4 | 4956.5 | 4867.3 | 4773.7 | 4706.9 | 4715.8 | 4684.6 |
| 20°   | 6926.6  | 6222.4 | 5518.1 | 5228.4 | 4987.7 | 4876.3 | 4738.1 | 4680.1 | 4608.8 | 4604.4 | 4599.9 |
| 22.5° | 7292.1  | 6498.7 | 5562.7 | 5157.1 | 4907.5 | 4791.6 | 4698.0 | 4595.4 | 4546.4 | 4484.0 | 4515.2 |
| 25°   | 7728.9  | 6605.7 | 5571.6 | 5116.9 | 4849.5 | 4644.5 | 4595.4 | 4484.0 | 4466.2 | 4377.0 | 4394.9 |
| 27.5° | 8045.4  | 6663.6 | 5500.3 | 4992.1 | 4715.8 | 4559.8 | 4470.6 | 4390.4 | 4359.2 | 4292.4 | 4274.5 |
| 30°   | 8468.8  | 6752.8 | 5348.7 | 4836.1 | 4582.1 | 4408.2 | 4354.8 | 4336.9 | 4247.8 | 4176.5 | 4167.5 |
| 32.5° | 8950.2  | 6810.7 | 5250.7 | 4675.7 | 4443.9 | 4310.2 | 4336.9 | 4252.2 | 4140.8 | 4078.4 | 4060.6 |
| 35°   | 9333.5  | 6833.0 | 5005.5 | 4492.9 | 4350.3 | 4265.6 | 4234.4 | 4216.6 | 4056.1 | 3998.2 | 3953.6 |
| 37.5° | 9917.4  | 6784.0 | 4800.5 | 4363.7 | 4247.8 | 4216.6 | 4189.8 | 4069.5 | 3886.7 | 3802.1 | 3739.7 |
| 40°   | 10599.4 | 6770.6 | 4537.5 | 4180.9 | 4149.7 | 4185.4 | 4105.1 | 3917.9 | 3663.9 | 3570.3 | 3525.7 |
| 42.5° | 11254.6 | 6864.2 | 4372.6 | 4082.9 | 4042.7 | 4056.1 | 3944.7 | 3663.9 | 3539.1 | 3485.6 | 3414.3 |
| 45°   | 12351.1 | 7060.3 | 4100.7 | 3931.3 | 3913.5 | 3904.6 | 3770.9 | 3476.7 | 3405.4 | 3338.5 | 3325.1 |
| 47.5° | 13340.6 | 6931.1 | 3926.9 | 3775.3 | 3793.1 | 3744.1 | 3458.8 | 3365.2 | 3285.0 | 3218.1 | 3195.9 |
| 50°   | 13398.6 | 6623.5 | 3681.7 | 3655.0 | 3659.4 | 3574.7 | 3302.8 | 3240.4 | 3137.9 | 3093.3 | 3062.1 |
| 52.5° | 13095.5 | 6119.8 | 3454.4 | 3463.3 | 3476.7 | 3338.5 | 3111.2 | 3066.6 | 2981.9 | 2919.5 | 2901.7 |
| 55°   | 12244.1 | 5335.4 | 3231.5 | 3267.2 | 3302.8 | 3039.9 | 2968.5 | 2857.1 | 2790.3 | 2701.1 | 2705.6 |
| 57.5° | 10786.6 | 4296.8 | 2919.5 | 2977.5 | 3053.2 | 2763.5 | 2710.0 | 2571.8 | 2473.8 | 2402.5 | 2393.6 |
| 60°   | 7229.7  | 3057.7 | 2451.5 | 2473.8 | 2643.2 | 2527.3 | 2522.8 | 2384.6 | 2250.9 | 2188.5 | 2152.9 |
| 62.5° | 4265.6  | 2335.6 | 2117.2 | 2094.9 | 2090.5 | 2157.3 | 2268.8 | 2219.7 | 2045.9 | 1925.5 | 1961.2 |
| 65°   | 2233.1  | 2019.1 | 1970.1 | 1894.3 | 1849.8 | 1831.9 | 1916.6 | 1938.9 | 1823.0 | 1693.8 | 1684.8 |
| 67.5° | 1876.5  | 1876.5 | 1836.4 | 1809.7 | 1747.3 | 1671.5 | 1618.0 | 1546.7 | 1528.8 | 1493.2 | 1448.6 |
| 70°   | 1707.1  | 1751.7 | 1738.3 | 1675.9 | 1622.4 | 1537.8 | 1399.6 | 1283.7 | 1172.3 | 1132.1 | 1158.9 |
| 72.5° | 1488.7  | 1533.3 | 1533.3 | 1502.1 | 1430.8 | 1301.5 | 1167.8 | 1034.1 | 940.5  | 869.2  | 860.3  |
| 75°   | 1145.5  | 1167.8 | 1221.3 | 1185.6 | 1092.0 | 1011.8 | 873.6  | 735.4  | 646.3  | 579.4  | 566.1  |
| 77.5° | 731.0   | 766.7  | 766.7  | 762.2  | 695.3  | 619.6  | 530.4  | 432.4  | 365.5  | 316.5  | 303.1  |
| 80°   | 485.8   | 508.1  | 526.0  | 508.1  | 463.6  | 405.6  | 338.8  | 271.9  | 222.9  | 182.7  | 173.8  |
| 82.5° | 356.6   | 383.3  | 396.7  | 378.9  | 334.3  | 289.7  | 240.7  | 191.7  | 142.6  | 111.4  | 102.5  |
| 85°   | 138.2   | 142.6  | 160.5  | 191.7  | 187.2  | 182.7  | 147.1  | 107.0  | 80.2   | 57.9   | 53.5   |
| 87.5° | 35.7    | 31.2   | 35.7   | 35.7   | 31.2   | 26.7   | 26.7   | 26.7   | 26.7   | 13.4   | 17.8   |
| 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)