

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: P454330

Luminaire Tested: **GALN-SA5B-830-U-T3**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P454330  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA5B-830-U-T3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22455 lumens  
Efficiency: N/A  
Efficacy: 110.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G3

Input Watts (W): 204  
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

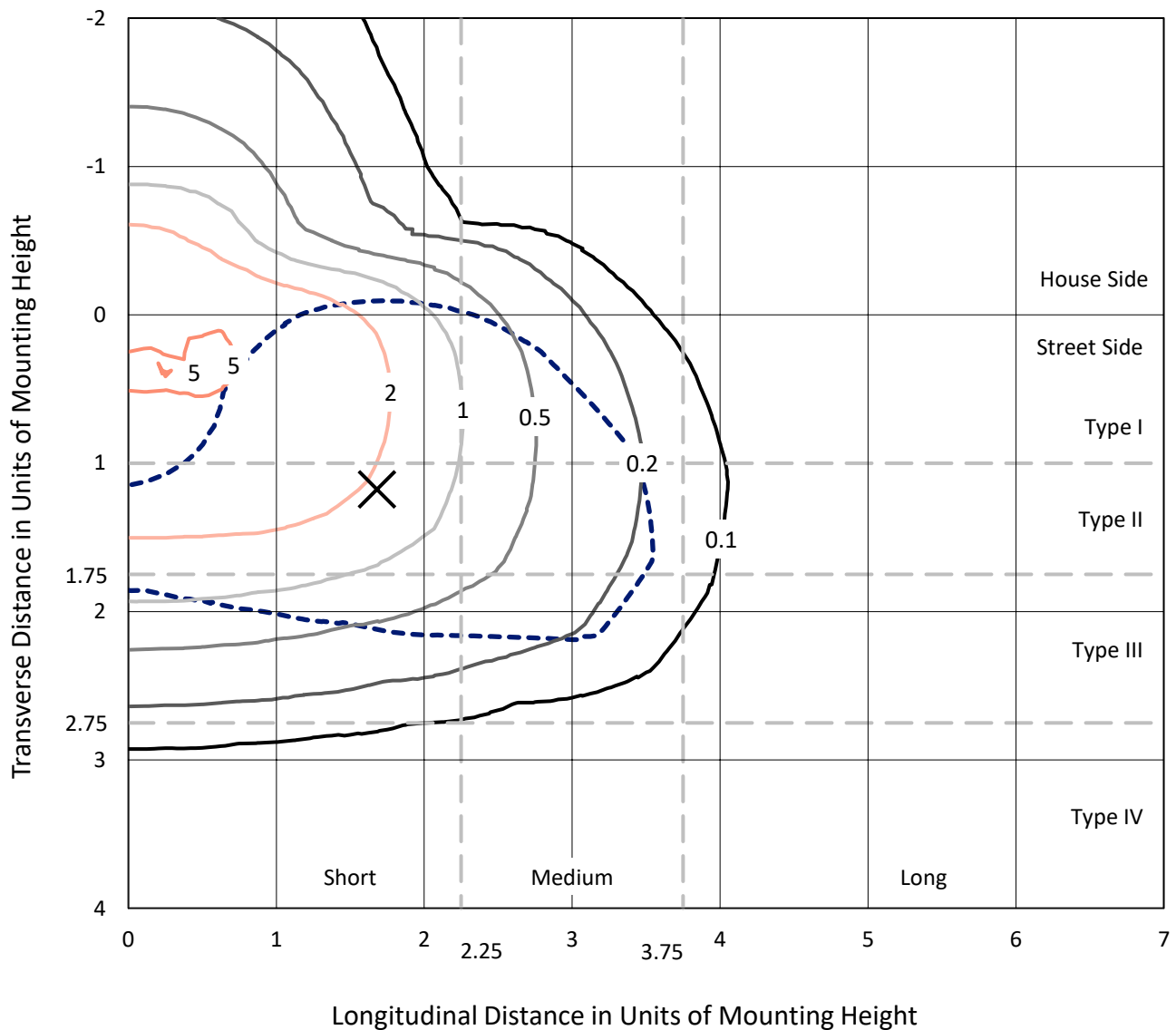


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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

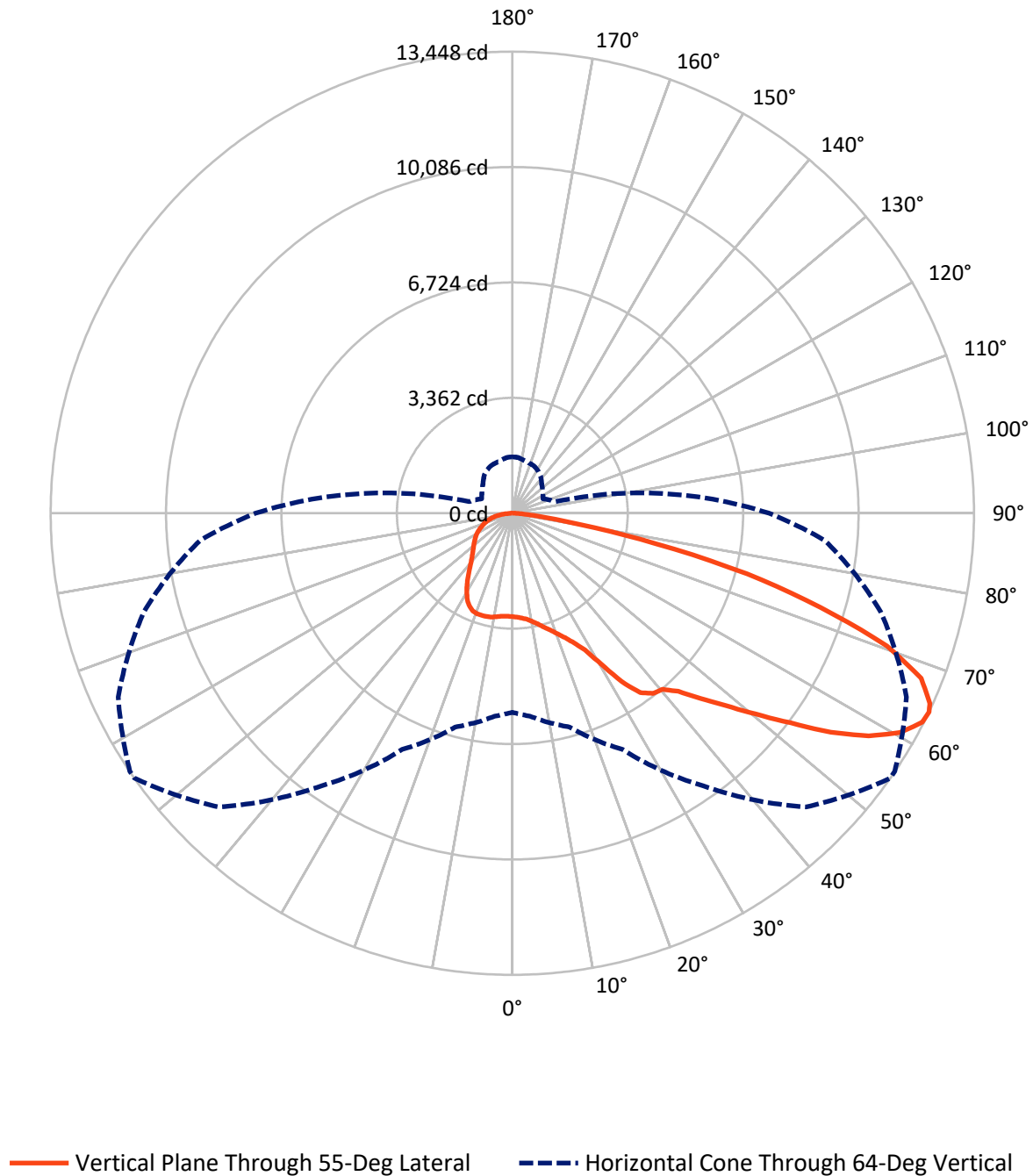


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc  
 Type III - Short - N/A

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## Luminous Intensity Polar Plot



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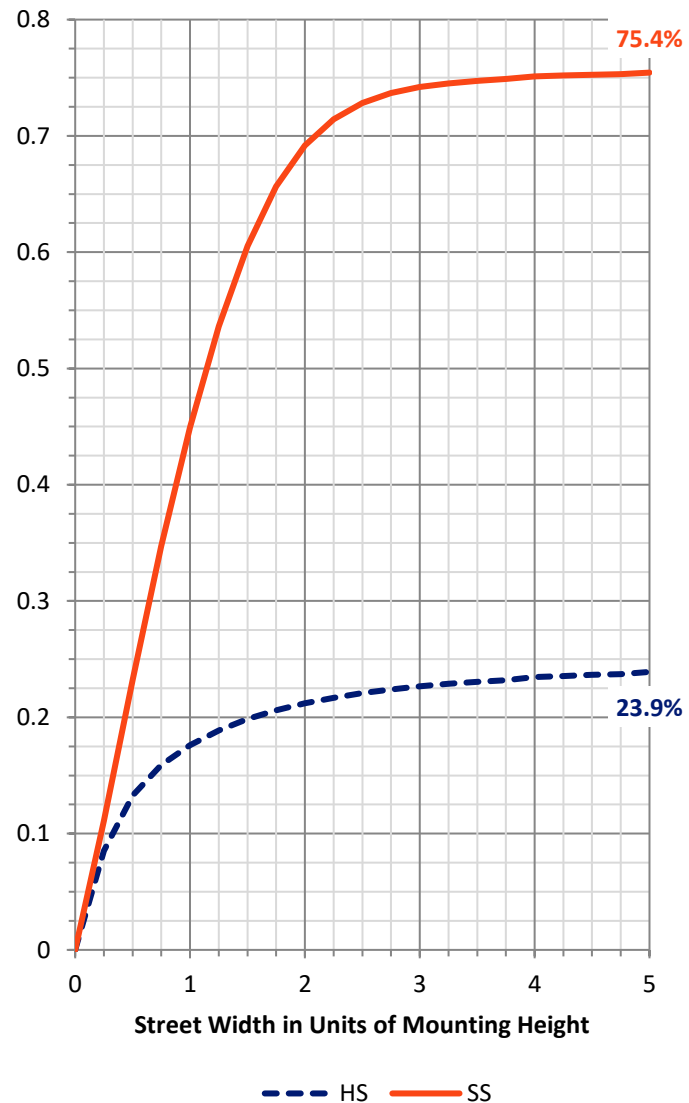
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5454.8   | 0.0    | 5454.8  |
|                    | % Fixture | 24.3     | 0.0    | 24.3    |
| <b>Street Side</b> | Lumens    | 17000.2  | 0.0    | 17000.2 |
|                    | % Fixture | 75.7     | 0.0    | 75.7    |
| <b>Total</b>       | Lumens    | 22455.0  | 0.0    | 22455.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 293.1   | 1.3       |
| 10°-20°   | 924.7   | 4.1       |
| 20°-30°   | 1646.2  | 7.3       |
| 30°-40°   | 2532.9  | 11.3      |
| 40°-50°   | 3590.6  | 16.0      |
| 50°-60°   | 5197.3  | 23.1      |
| 60°-70°   | 5378.6  | 24.0      |
| 70°-80°   | 2518.8  | 11.2      |
| 80°-90°   | 372.9   | 1.7       |
| 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°    | 22455.0 | 100.0     |
| 0°-180°   | 22455.0 | 100.0     |

**Coefficient of Utilization**



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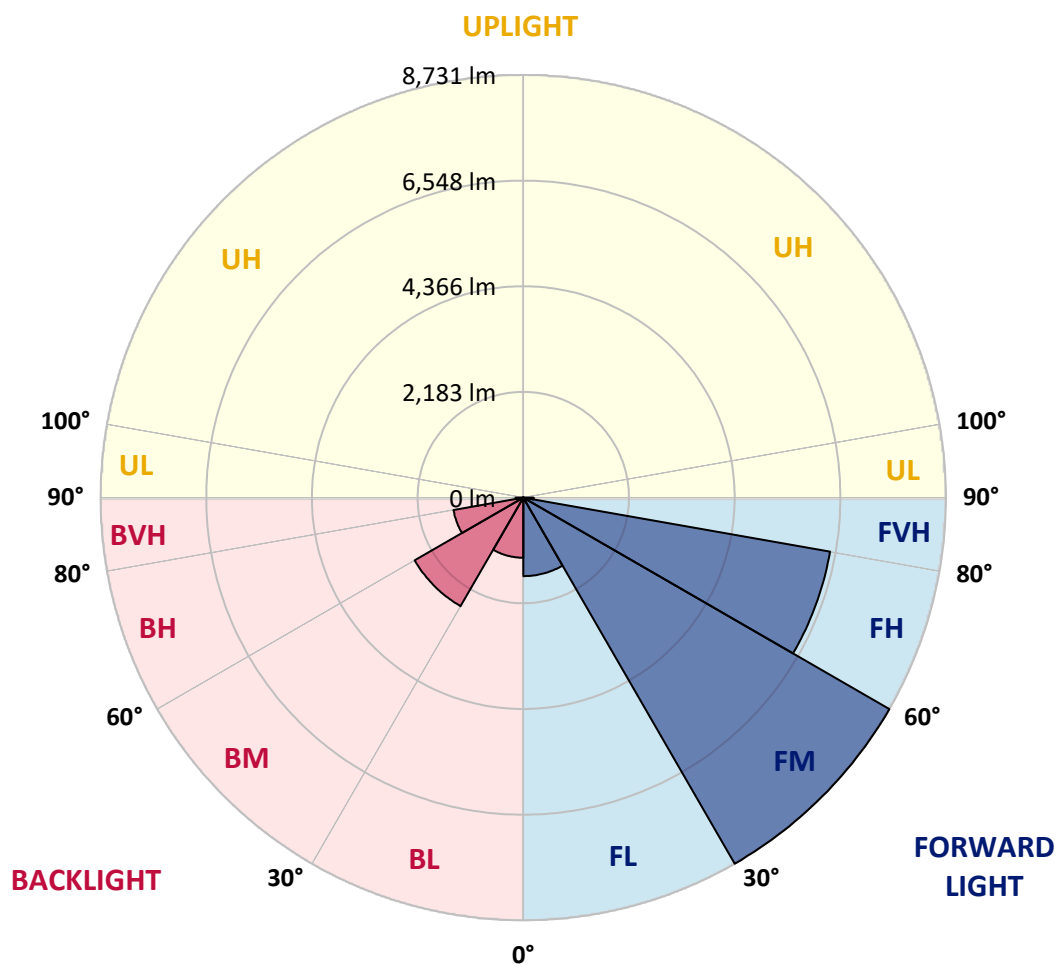
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1621.6 | 7.2       |                         |      |         |
| FM   | (30°-60°)   | 8731.1 | 38.9      |                         |      |         |
| FH   | (60°-80°)   | 6434.0 | 28.7      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 213.5  | 1.0       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1242.4 | 5.5       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 2589.6 | 11.5      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1463.4 | 6.5       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 159.4  | 0.7       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

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

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 45°     | 55°     | 56°     | 65°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 3012.8 | 3012.8 | 3012.8 | 3012.8 | 3012.8  | 3012.8  | 3012.8  | 3012.8  | 3012.8  | 3012.8  | 3012.8 |
| 2.5°  | 3046.6 | 3045.3 | 3049.1 | 3045.3 | 3047.8  | 3039.1  | 3035.3  | 3037.8  | 3034.1  | 3027.8  | 3016.5 |
| 5°    | 3084.1 | 3082.9 | 3084.1 | 3079.1 | 3081.6  | 3076.6  | 3067.9  | 3070.4  | 3064.1  | 3050.3  | 3034.1 |
| 7.5°  | 3148.0 | 3143.0 | 3143.0 | 3141.7 | 3136.7  | 3129.2  | 3122.9  | 3120.4  | 3114.2  | 3096.6  | 3071.6 |
| 10°   | 3230.6 | 3230.6 | 3231.8 | 3221.8 | 3228.1  | 3214.3  | 3208.0  | 3206.8  | 3185.5  | 3163.0  | 3127.9 |
| 12.5° | 3339.5 | 3345.7 | 3342.0 | 3337.0 | 3334.5  | 3329.5  | 3308.2  | 3313.2  | 3289.4  | 3250.6  | 3208.0 |
| 15°   | 3474.7 | 3484.7 | 3478.4 | 3475.9 | 3469.6  | 3450.9  | 3442.1  | 3438.4  | 3407.1  | 3350.7  | 3294.4 |
| 17.5° | 3653.6 | 3641.1 | 3636.1 | 3629.9 | 3603.6  | 3589.8  | 3574.8  | 3572.3  | 3544.7  | 3478.4  | 3390.8 |
| 20°   | 3810.1 | 3827.6 | 3817.6 | 3811.4 | 3785.1  | 3758.8  | 3747.5  | 3743.8  | 3720.0  | 3647.4  | 3507.2 |
| 22.5° | 3996.6 | 4000.4 | 4004.1 | 3989.1 | 3976.6  | 3956.5  | 3936.5  | 3930.3  | 3921.5  | 3846.4  | 3674.9 |
| 25°   | 4195.6 | 4210.6 | 4198.1 | 4183.1 | 4168.1  | 4166.8  | 4185.6  | 4183.1  | 4179.3  | 4106.7  | 3897.7 |
| 27.5° | 4519.8 | 4533.6 | 4537.3 | 4521.1 | 4463.5  | 4468.5  | 4511.0  | 4524.8  | 4582.4  | 4462.2  | 4184.4 |
| 30°   | 4702.5 | 4716.3 | 4747.6 | 4808.9 | 4900.3  | 4980.4  | 5083.1  | 5114.3  | 5169.4  | 4942.9  | 4524.8 |
| 32.5° | 4815.2 | 4820.2 | 4876.5 | 4990.4 | 5264.5  | 5563.7  | 5842.8  | 5854.1  | 5889.1  | 5571.2  | 4836.5 |
| 35°   | 4992.9 | 4996.7 | 5041.7 | 5166.9 | 5488.6  | 5986.8  | 6418.6  | 6432.4  | 6403.6  | 5766.5  | 4981.7 |
| 37.5° | 5212.0 | 5222.0 | 5250.8 | 5354.7 | 5738.9  | 6341.0  | 6657.7  | 6647.6  | 6392.3  | 5921.7  | 5238.3 |
| 40°   | 5531.2 | 5531.2 | 5497.4 | 5637.5 | 6003.0  | 6543.8  | 6741.5  | 6724.0  | 6656.4  | 6371.0  | 5628.8 |
| 42.5° | 5812.8 | 5807.8 | 5887.9 | 5983.0 | 6333.5  | 6856.7  | 7093.2  | 7122.0  | 7233.4  | 6935.5  | 6073.1 |
| 45°   | 6179.5 | 6202.1 | 6247.1 | 6419.8 | 6895.5  | 7391.1  | 7696.6  | 7724.1  | 7881.8  | 7600.2  | 6592.6 |
| 47.5° | 6550.0 | 6557.5 | 6699.0 | 6929.3 | 7591.4  | 8115.9  | 8366.2  | 8411.3  | 8555.2  | 8377.5  | 7152.1 |
| 50°   | 6812.9 | 6884.2 | 7110.8 | 7473.8 | 8308.6  | 8999.5  | 9194.8  | 9248.6  | 9502.7  | 9223.6  | 7804.2 |
| 52.5° | 7090.7 | 7160.8 | 7437.5 | 7990.7 | 9132.2  | 9903.3  | 10143.6 | 10179.9 | 10444.0 | 10079.7 | 8471.3 |
| 55°   | 7328.6 | 7393.6 | 7707.8 | 8448.8 | 9788.1  | 10825.7 | 11261.3 | 11218.8 | 11345.2 | 10739.4 | 8985.8 |
| 57.5° | 7367.4 | 7419.9 | 7815.5 | 8741.7 | 10281.3 | 11616.8 | 12241.4 | 12266.4 | 12120.0 | 11232.5 | 9410.1 |
| 60°   | 7067.0 | 7174.6 | 7629.0 | 8710.4 | 10502.8 | 12167.5 | 12972.4 | 12989.9 | 12574.3 | 11485.4 | 9579.1 |
| 62.5° | 6535.0 | 6523.7 | 7073.2 | 8207.2 | 10192.4 | 12292.7 | 13402.9 | 13384.2 | 12752.1 | 11364.0 | 9415.1 |
| 64°   | 5800.3 | 5935.4 | 6448.6 | 7588.9 | 9691.7  | 12099.9 | 13448.0 | 13438.0 | 12667.0 | 11111.1 | 9136.0 |
| 65°   | 5352.2 | 5344.7 | 5851.6 | 7083.2 | 9193.6  | 11809.6 | 13367.9 | 13354.1 | 12489.2 | 10884.6 | 8919.4 |
| 67.5° | 3863.9 | 3881.4 | 4382.1 | 5466.1 | 7473.8  | 10674.3 | 12845.9 | 12794.6 | 11788.3 | 10133.6 | 8095.8 |
| 70°   | 2340.6 | 2350.6 | 2743.7 | 3626.1 | 5364.7  | 8629.1  | 11579.3 | 11581.8 | 10715.6 | 9012.1  | 6890.5 |
| 72.5° | 1232.9 | 1259.2 | 1416.9 | 2059.0 | 3258.1  | 6054.4  | 9393.8  | 9616.6  | 9199.8  | 7691.5  | 5443.5 |
| 75°   | 685.9  | 689.7  | 801.1  | 1015.1 | 1662.2  | 3388.3  | 7060.7  | 7124.5  | 7283.5  | 6190.8  | 4025.4 |
| 77.5° | 523.2  | 530.7  | 565.8  | 655.9  | 905.0   | 1570.9  | 4273.2  | 4593.6  | 5133.1  | 4364.6  | 2296.8 |
| 80°   | 424.3  | 431.8  | 461.9  | 515.7  | 602.1   | 744.7   | 1985.2  | 2157.9  | 2747.4  | 1937.6  | 896.2  |
| 82.5° | 330.4  | 325.4  | 364.2  | 399.3  | 438.1   | 440.6   | 814.8   | 901.2   | 1119.0  | 833.6   | 388.0  |
| 85°   | 245.3  | 245.3  | 276.6  | 269.1  | 282.9   | 257.8   | 359.2   | 396.8   | 448.1   | 354.2   | 180.2  |
| 87.5° | 97.6   | 107.6  | 181.5  | 162.7  | 126.4   | 101.4   | 132.7   | 140.2   | 155.2   | 138.9   | 75.1   |
| 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°    | 3012.8 | 3012.8 | 3012.8 | 3012.8 | 3012.8 | 3012.8 | 3012.8 | 3012.8 | 3012.8 | 3012.8 | 3012.8 |
| 2.5°  | 3017.8 | 3021.5 | 3012.8 | 3006.5 | 3004.0 | 3000.3 | 2996.5 | 2997.8 | 3002.8 | 3007.8 | 3006.5 |
| 5°    | 3032.8 | 3034.1 | 3019.0 | 3011.5 | 3006.5 | 3001.5 | 3001.5 | 3005.3 | 3015.3 | 3022.8 | 3022.8 |
| 7.5°  | 3070.4 | 3070.4 | 3049.1 | 3035.3 | 3027.8 | 3019.0 | 3016.5 | 3017.8 | 3025.3 | 3035.3 | 3036.6 |
| 10°   | 3129.2 | 3124.2 | 3096.6 | 3075.4 | 3061.6 | 3040.3 | 3021.5 | 3011.5 | 3015.3 | 3021.5 | 3021.5 |
| 12.5° | 3200.5 | 3186.8 | 3151.7 | 3122.9 | 3089.1 | 3049.1 | 3010.3 | 2990.3 | 2989.0 | 2995.3 | 2992.8 |
| 15°   | 3276.9 | 3261.9 | 3213.1 | 3160.5 | 3101.7 | 3042.8 | 2996.5 | 2967.7 | 2945.2 | 2938.9 | 2952.7 |
| 17.5° | 3365.8 | 3334.5 | 3266.9 | 3194.3 | 3106.7 | 3030.3 | 2957.7 | 2898.9 | 2858.8 | 2847.6 | 2851.3 |
| 20°   | 3473.4 | 3432.1 | 3340.7 | 3226.8 | 3102.9 | 2985.2 | 2872.6 | 2793.7 | 2728.7 | 2708.6 | 2711.1 |
| 22.5° | 3622.3 | 3551.0 | 3417.1 | 3243.1 | 3071.6 | 2900.1 | 2743.7 | 2641.0 | 2562.2 | 2530.9 | 2549.7 |
| 25°   | 3791.3 | 3713.7 | 3489.7 | 3239.3 | 2990.3 | 2763.7 | 2591.0 | 2457.0 | 2385.7 | 2339.4 | 2349.4 |
| 27.5° | 4024.1 | 3886.5 | 3567.3 | 3205.5 | 2873.8 | 2597.2 | 2397.0 | 2270.5 | 2205.5 | 2181.7 | 2192.9 |
| 30°   | 4322.0 | 4110.5 | 3651.1 | 3114.2 | 2689.9 | 2386.9 | 2201.7 | 2119.1 | 2080.3 | 2050.2 | 2060.3 |
| 32.5° | 4537.3 | 4268.2 | 3669.9 | 2960.2 | 2490.8 | 2195.4 | 2069.0 | 2007.7 | 1965.1 | 1936.3 | 1942.6 |
| 35°   | 4691.3 | 4402.1 | 3661.2 | 2771.2 | 2283.1 | 2037.7 | 1963.9 | 1913.8 | 1845.0 | 1782.4 | 1771.1 |
| 37.5° | 4897.8 | 4569.9 | 3597.3 | 2564.7 | 2077.8 | 1931.3 | 1878.8 | 1786.1 | 1687.3 | 1603.4 | 1599.6 |
| 40°   | 5214.5 | 4766.4 | 3460.9 | 2321.9 | 1902.5 | 1852.5 | 1788.6 | 1668.5 | 1562.1 | 1494.5 | 1489.5 |
| 42.5° | 5541.2 | 4947.9 | 3275.6 | 2066.5 | 1758.6 | 1769.9 | 1692.3 | 1573.4 | 1508.3 | 1464.5 | 1459.5 |
| 45°   | 5940.5 | 5144.4 | 3075.4 | 1845.0 | 1652.2 | 1692.3 | 1608.4 | 1539.6 | 1500.8 | 1472.0 | 1464.5 |
| 47.5° | 6372.3 | 5345.9 | 2850.1 | 1646.0 | 1562.1 | 1620.9 | 1573.4 | 1542.1 | 1520.8 | 1500.8 | 1492.0 |
| 50°   | 6837.9 | 5571.2 | 2638.5 | 1485.7 | 1480.7 | 1547.1 | 1569.6 | 1558.3 | 1545.8 | 1539.6 | 1532.1 |
| 52.5° | 7348.6 | 5801.5 | 2460.8 | 1373.1 | 1409.4 | 1494.5 | 1570.9 | 1579.6 | 1579.6 | 1575.9 | 1570.9 |
| 55°   | 7694.1 | 5961.7 | 2280.6 | 1281.7 | 1336.8 | 1451.9 | 1568.3 | 1602.1 | 1614.7 | 1609.7 | 1604.6 |
| 57.5° | 7949.4 | 6049.3 | 2054.0 | 1202.9 | 1275.5 | 1410.6 | 1554.6 | 1604.6 | 1617.2 | 1623.4 | 1620.9 |
| 60°   | 8002.0 | 5968.0 | 1757.4 | 1120.2 | 1209.1 | 1350.6 | 1504.5 | 1567.1 | 1583.4 | 1622.2 | 1625.9 |
| 62.5° | 7765.4 | 5717.7 | 1462.0 | 1038.9 | 1127.8 | 1259.2 | 1436.9 | 1524.5 | 1557.1 | 1617.2 | 1623.4 |
| 64°   | 7475.0 | 5437.3 | 1298.0 | 987.6  | 1075.2 | 1207.9 | 1403.1 | 1513.3 | 1555.8 | 1635.9 | 1640.9 |
| 65°   | 7262.2 | 5233.3 | 1195.4 | 955.0  | 1041.4 | 1174.1 | 1384.4 | 1517.0 | 1567.1 | 1664.7 | 1672.2 |
| 67.5° | 6478.7 | 4531.1 | 988.8  | 878.7  | 961.3  | 1116.5 | 1388.1 | 1548.3 | 1564.6 | 1676.0 | 1674.7 |
| 70°   | 5360.9 | 3607.3 | 828.6  | 808.6  | 883.7  | 1070.2 | 1373.1 | 1498.3 | 1499.5 | 1573.4 | 1555.8 |
| 72.5° | 4014.1 | 2666.1 | 718.5  | 736.0  | 797.3  | 960.0  | 1296.7 | 1430.7 | 1409.4 | 1419.4 | 1401.9 |
| 75°   | 2757.4 | 1763.6 | 618.3  | 658.4  | 707.2  | 848.6  | 1189.1 | 1299.2 | 1265.4 | 1252.9 | 1240.4 |
| 77.5° | 1472.0 | 975.1  | 514.4  | 582.0  | 614.6  | 733.5  | 1037.6 | 1144.0 | 1109.0 | 1060.2 | 1043.9 |
| 80°   | 595.8  | 459.4  | 414.3  | 481.9  | 500.7  | 590.8  | 863.7  | 930.0  | 903.7  | 818.6  | 791.1  |
| 82.5° | 299.2  | 275.4  | 325.4  | 379.3  | 380.5  | 421.8  | 642.1  | 704.7  | 645.9  | 542.0  | 518.2  |
| 85°   | 156.5  | 161.5  | 224.0  | 266.6  | 235.3  | 227.8  | 385.5  | 426.8  | 391.8  | 340.5  | 306.7  |
| 87.5° | 56.3   | 65.1   | 117.7  | 116.4  | 82.6   | 43.8   | 85.1   | 41.3   | 22.5   | 13.8   | 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)