Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P950031

Luminaire Tested: **GALN-SB4C-835-U-T2R**

Issue Date: 1/21/2025

Report Generated By 670246001

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-08 |
| Report Number: | P950031 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 1/21/2025 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GALN-SB4C-835-U-T2R |
| Description: | GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE |
| | (4) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II ROADWAY OPTICS |
| Light Source: | - |
| Ballast/Driver: | - |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 28356 lumens |
| Efficiency: | N/A |
| Efficacy: | 141.3 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 1' x H: 0') |
| IES Classification: | Type II - Medium |
| BUG Rating: | B3 - U0 - G3 |
| Input Watts (W): | 200.7 |
| 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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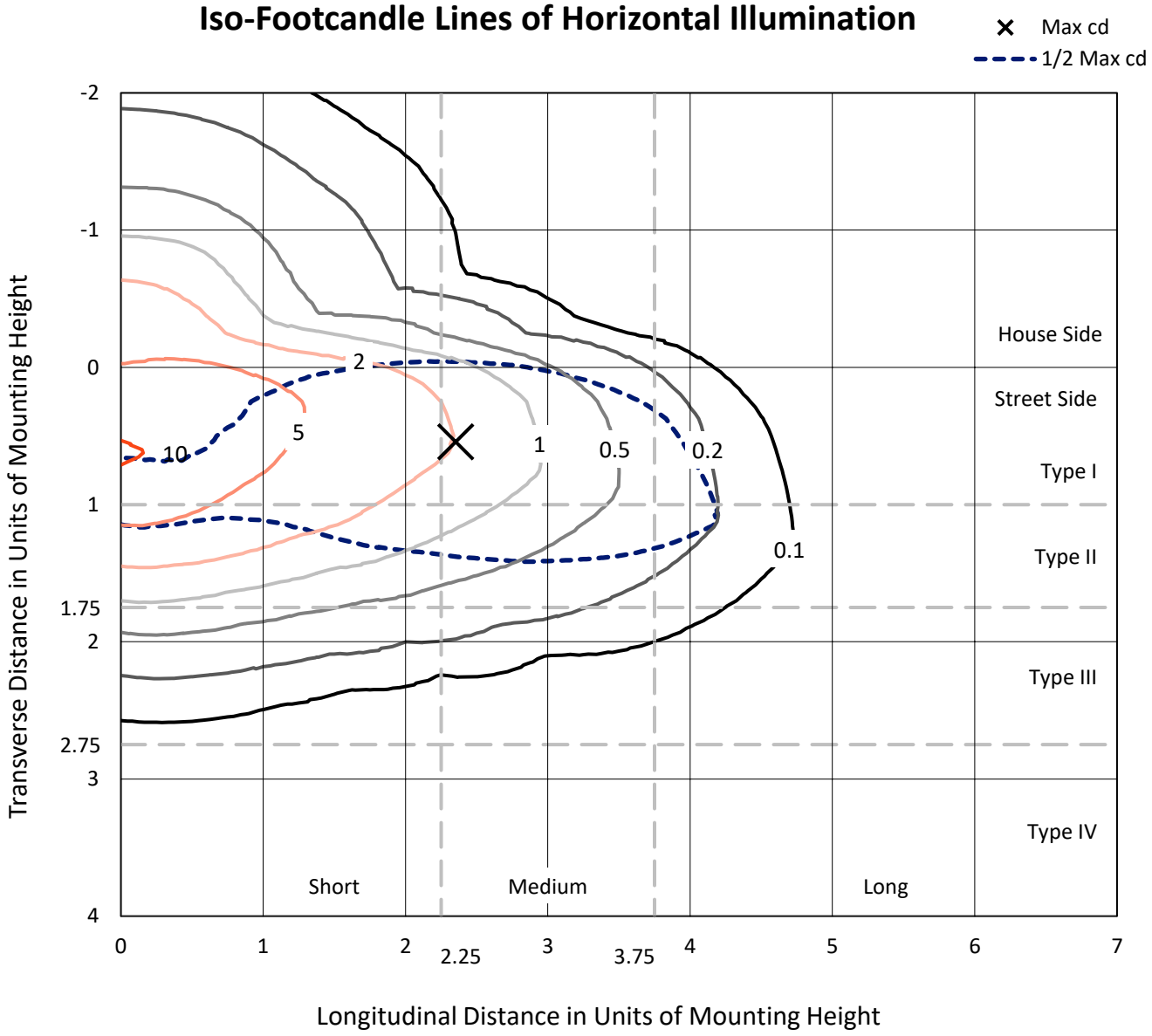
## Iso-Footcandle Lines of Horizontal Illumination




Based on 25 foot mounting height. Maximum calculated value = 10.4 fc
Type II - Medium - N/A

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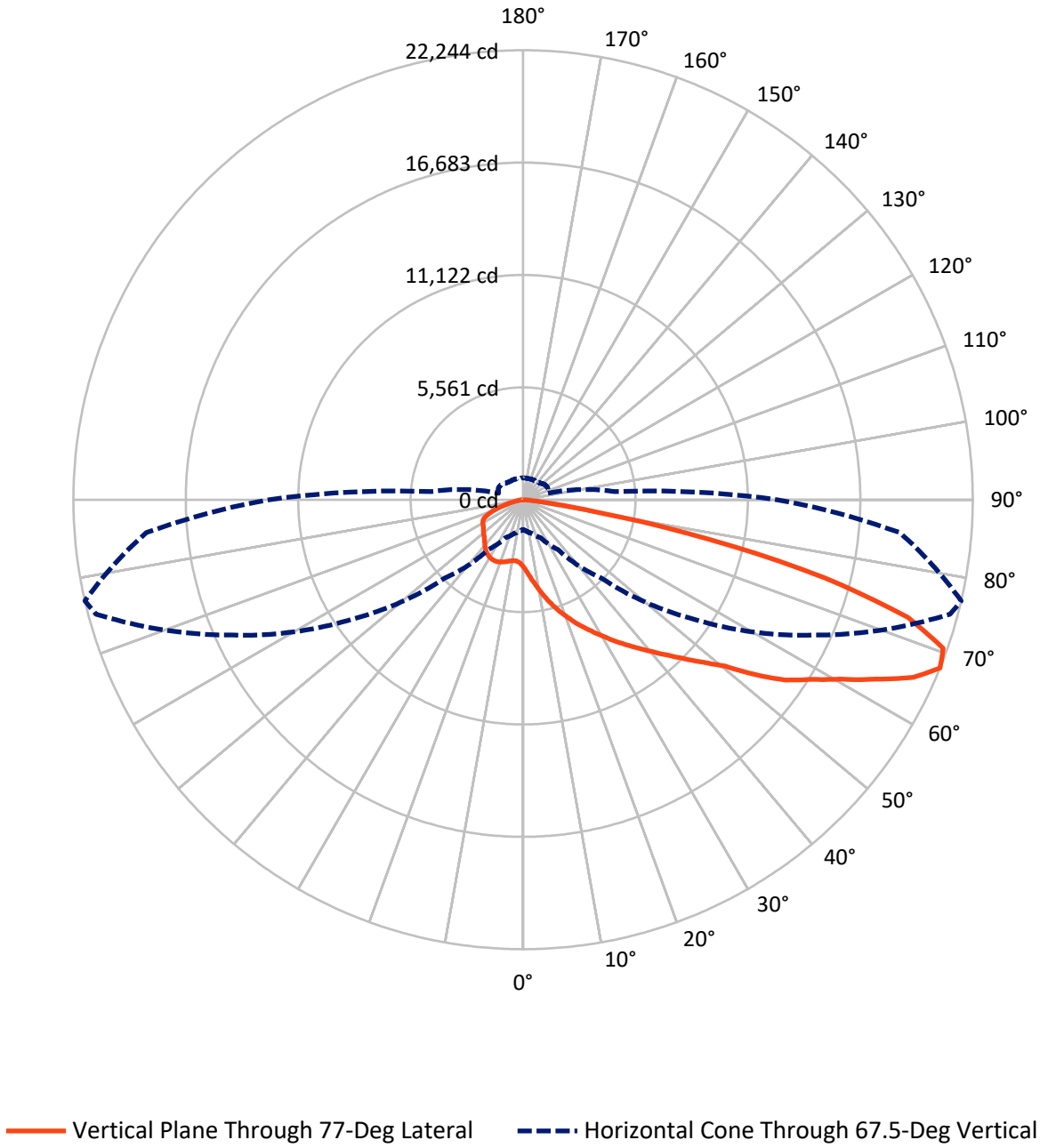
## Luminous Intensity Polar Plot



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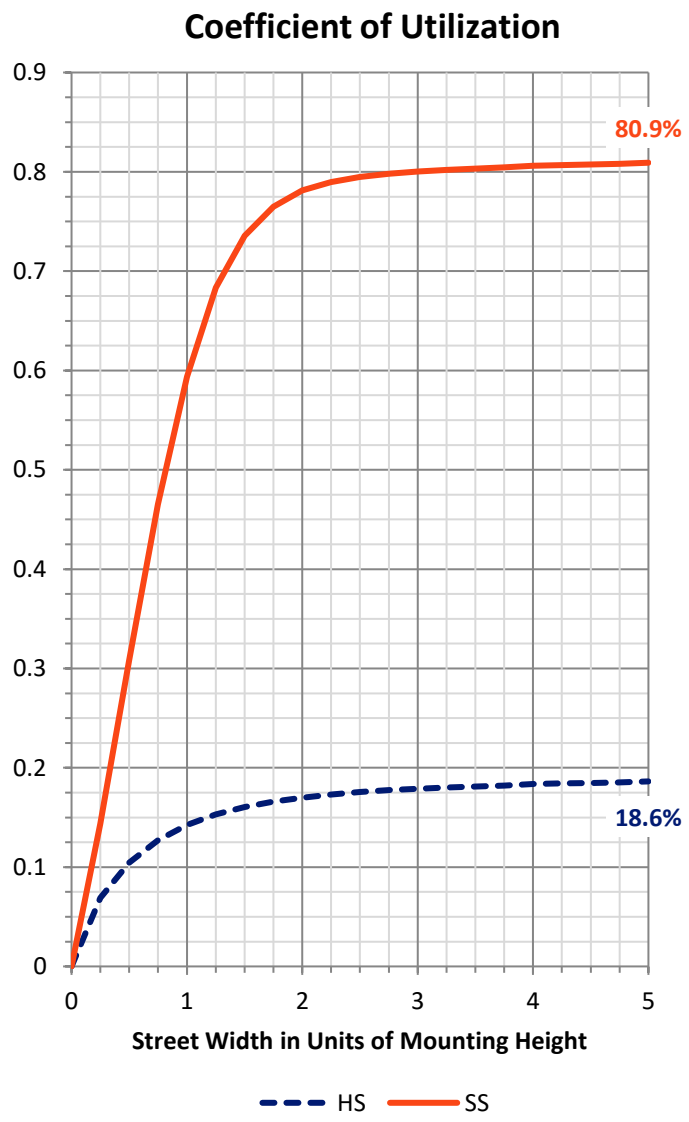
**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 5363.8 | 0.0 | 5363.8 |
| | % Fixture | 18.9 | 0.0 | 18.9 |
| **Street Side** | Lumens | 22992.2 | 0.0 | 22992.2 |
| | % Fixture | 81.1 | 0.0 | 81.1 |
| **Total** | Lumens | 28356.0 | 0.0 | 28356.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 356.6 | 1.3 |
| 10°-20° | 1281.2 | 4.5 |
| 20°-30° | 2419.0 | 8.5 |
| 30°-40° | 3896.9 | 13.7 |
| 40°-50° | 5330.3 | 18.8 |
| 50°-60° | 6012.6 | 21.2 |
| 60°-70° | 5612.0 | 19.8 |
| 70°-80° | 3076.3 | 10.8 |
| 80°-90° | 371.1 | 1.3 |
| 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° | 28356.0 | 100.0 |
| 0°-180° | 28356.0 | 100.0 |



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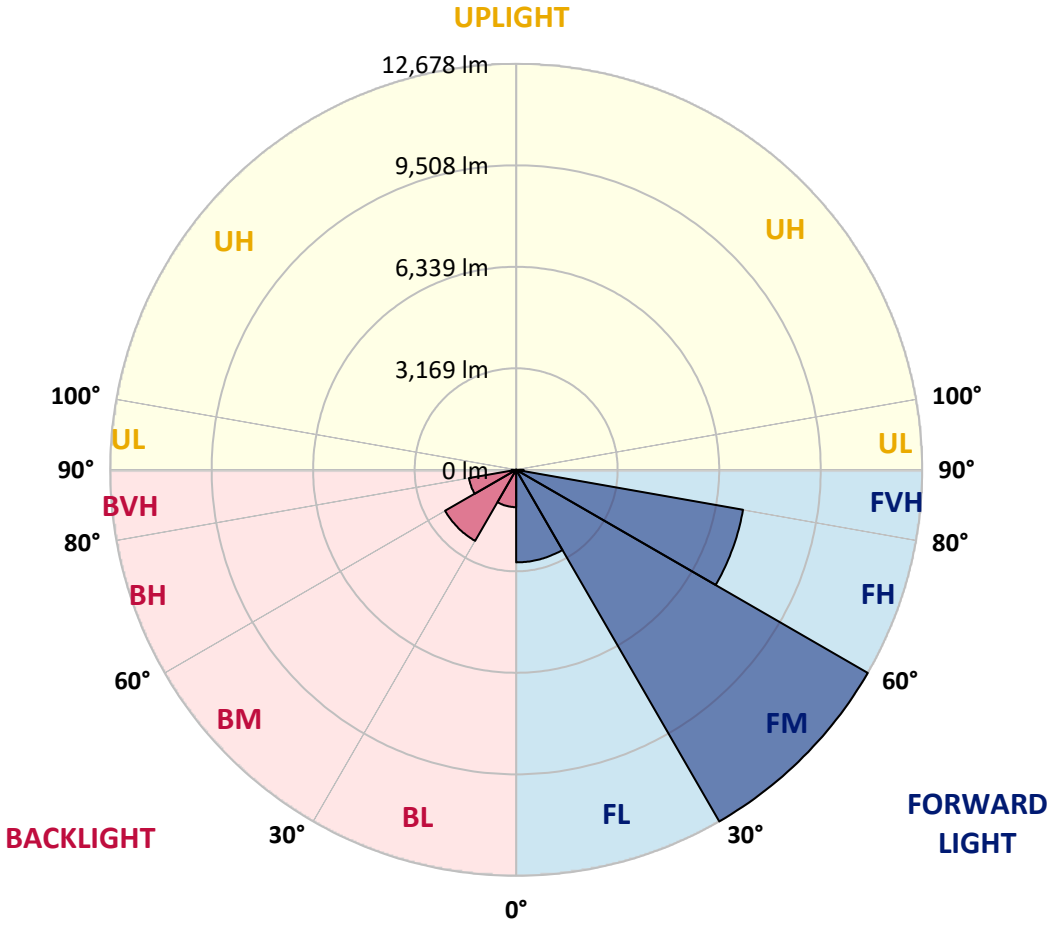
**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 2890.5 | 10.2 | | | |
| FM | (30°-60°) | 12677.7 | 44.7 | | | |
| FH | (60°-80°) | 7191.9 | 25.4 | | | G3/7500 |
| FVH | (80°-90°) | 232.1 | 0.8 | | | G3/500 |
| BL | (0°-30°) | 1166.2 | 4.1 | B3/2500 | | |
| BM | (30°-60°) | 2562.2 | 9.0 | B3/5000 | | |
| BH | (60°-80°) | 1496.4 | 5.3 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 139.0 | 0.5 | | | 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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77° |
|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 3327.0 | 3327.0 | 3327.0 | 3327.0 | 3327.0 | 3327.0 | 3327.0 | 3327.0 | 3327.0 | *3327.0* |
| 2.5° | 4165.8 | 4195.0 | 4158.4 | 4158.4 | 4035.5 | 3971.1 | 3848.1 | 3754.4 | 3586.1 | *3556.8* |
| 5° | 4924.0 | 4960.6 | 4909.3 | 4887.4 | 4742.5 | 4609.3 | 4402.9 | 4199.4 | 3899.4 | *3868.6* |
| 7.5° | 5510.9 | 5557.8 | 5512.4 | 5489.0 | 5360.1 | 5210.8 | 4969.3 | 4685.4 | 4262.4 | *4202.3* |
| 10° | 5989.5 | 5996.9 | 5982.2 | 5991.0 | 5890.0 | 5767.1 | 5519.7 | 5188.9 | 4660.5 | *4578.5* |
| 12.5° | 6260.3 | 6294.0 | 6323.3 | 6376.0 | 6358.4 | 6282.3 | 6059.8 | 5664.6 | 5082.0 | *4976.7* |
| 15° | 6387.7 | 6446.2 | 6512.1 | 6633.6 | 6731.7 | 6750.7 | 6580.9 | 6175.4 | 5510.9 | *5383.6* |
| 17.5° | 6433.1 | 6488.7 | 6592.6 | 6768.2 | 6979.0 | 7121.0 | 7044.9 | 6671.6 | 5935.4 | *5789.0* |
| 20° | 6662.9 | 6679.0 | 6741.9 | 6908.8 | 7137.1 | 7372.8 | 7429.9 | 7148.8 | 6355.5 | *6190.1* |
| 22.5° | 7154.7 | 7122.5 | 7140.0 | 7216.1 | 7380.1 | 7608.4 | 7738.7 | 7570.4 | 6787.3 | *6597.0* |
| 25° | 7967.0 | 7873.4 | 7779.7 | 7691.9 | 7775.3 | 7904.1 | 8051.9 | 7991.9 | 7239.6 | *6998.1* |
| 27.5° | 8993.1 | 8878.9 | 8672.6 | 8384.2 | 8283.2 | 8328.6 | 8394.4 | 8382.7 | 7658.2 | *7413.8* |
| 30° | 10003.1 | 9869.9 | 9624.0 | 9206.8 | 8940.4 | 8820.4 | 8770.6 | 8737.0 | 8113.4 | *7852.9* |
| 32.5° | 10809.6 | 10704.2 | 10462.7 | 9995.8 | 9609.3 | 9404.4 | 9239.0 | 9119.0 | 8589.1 | *8328.6* |
| 35° | 11515.1 | 11417.0 | 11140.4 | 10631.0 | 10210.9 | 9992.8 | 9776.2 | 9520.0 | 9083.9 | *8820.4* |
| 37.5° | 12159.1 | 12061.1 | 11682.0 | 11152.1 | 10729.1 | 10578.3 | 10385.1 | 9950.4 | 9580.1 | *9331.2* |
| 40° | 12566.1 | 12544.1 | 12189.9 | 11589.7 | 11150.6 | 11076.0 | 11011.6 | 10449.5 | 10130.4 | *9899.2* |
| 42.5° | 12670.0 | 12718.3 | 12437.2 | 11944.0 | 11525.3 | 11465.3 | 11616.1 | 11014.5 | 10748.1 | *10527.1* |
| 45° | 12419.7 | 12558.7 | 12374.3 | 12039.1 | 11791.7 | 11759.5 | 12151.8 | 11632.2 | 11431.7 | *11229.7* |
| 47.5° | 11785.9 | 12021.5 | 11945.4 | 11898.6 | 11863.5 | 12002.5 | 12623.1 | 12287.9 | 12206.0 | *12030.3* |
| 50° | 10506.6 | 10953.0 | 11086.2 | 11381.9 | 11721.5 | 12191.3 | 13052.0 | 13003.7 | 13110.6 | *12933.4* |
| 52.5° | 8294.9 | 8909.7 | 9682.5 | 10423.2 | 11285.3 | 12128.4 | 13523.3 | 14031.2 | 14482.1 | *14385.5* |
| 55° | 6847.3 | 7123.9 | 7718.2 | 9076.5 | 10439.3 | 11863.5 | 13735.6 | 14861.2 | 15843.3 | *15757.0* |
| 57.5° | 5734.9 | 5982.2 | 6348.2 | 7482.5 | 9160.0 | 11261.9 | 13867.3 | 15367.6 | 16775.7 | *16766.9* |
| 60° | 4541.9 | 4803.9 | 5178.6 | 5982.2 | 7665.5 | 10222.6 | 13838.0 | 15944.3 | 17965.7 | *18038.9* |
| 62.5° | 3195.3 | 3483.7 | 3899.4 | 4648.8 | 6138.8 | 8876.0 | 13240.8 | 16361.5 | 19366.5 | *19565.6* |
| 65° | 2100.4 | 2290.7 | 2604.0 | 3250.9 | 4574.1 | 7144.4 | 12100.6 | 16415.6 | 20865.4 | *21202.0* |
| 67.5° | *1472.5* | *1545.7* | *1730.1* | *2081.4* | *3015.3* | *5478.7* | *10284.1* | *15855.0* | *21865.1* | *22244.2* |
| 70° | 1149.0 | 1185.6 | 1279.3 | 1419.8 | 1894.1 | 3684.2 | 7880.7 | 14397.2 | 21651.4 | *22046.6* |
| 72.5° | 992.4 | 1027.5 | 1062.7 | 1080.2 | 1270.5 | 2274.6 | 5338.2 | 12037.6 | 19638.8 | *19906.6* |
| 75° | 900.2 | 909.0 | 938.2 | 932.4 | 969.0 | 1475.4 | 3081.1 | 8770.6 | 15495.0 | *15402.7* |
| 77.5° | 756.7 | 768.5 | 816.8 | 809.4 | 860.7 | 1008.5 | 1599.8 | 5660.2 | 10045.5 | *9419.1* |
| 80° | 641.1 | 647.0 | 699.7 | 690.9 | 748.0 | 730.4 | 816.8 | 2885.0 | 4260.9 | *3609.5* |
| 82.5° | 222.5 | 275.2 | 534.3 | 550.4 | 570.9 | 442.0 | 471.3 | 1176.8 | 1301.2 | *996.8* |
| 85° | 108.3 | 115.6 | 272.3 | 386.4 | 385.0 | 222.5 | 229.8 | 420.1 | 409.8 | *322.0* |
| 87.5° | 17.6 | 22.0 | 32.2 | 150.8 | 120.0 | 58.5 | 79.0 | 82.0 | 84.9 | *73.2* |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | *0.0* |

REPORT NUMBER: P950031
CATALOG NUMBER: GALN-SB4C-835-U-T2R

**CANDELA DISTRIBUTION (continued):**

| 85° | | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3327.0 | 0° | 3327.0 | 3327.0 | 3327.0 | 3327.0 | 3327.0 | 3327.0 | 3327.0 | 3327.0 | 3327.0 | 3327.0 |
| 3445.6 | 2.5° | 3363.6 | 3290.4 | 3136.8 | 2994.8 | 2883.5 | 2776.7 | 2716.7 | 2665.4 | 2636.2 | 2630.3 |
| 3606.6 | 5° | 3454.4 | 3303.6 | 3024.0 | 2788.4 | 2634.7 | 2520.5 | 2460.5 | 2422.5 | 2403.4 | 2391.7 |
| 3823.2 | 7.5° | 3584.7 | 3363.6 | 2965.5 | 2697.6 | 2536.6 | 2454.7 | 2423.9 | 2418.1 | 2416.6 | 2418.1 |
| 4085.2 | 10° | 3764.7 | 3461.7 | 2959.6 | 2675.7 | 2541.0 | 2495.6 | 2494.2 | 2495.6 | 2501.5 | 2503.0 |
| 4370.7 | 12.5° | 3959.4 | 3562.7 | 2983.1 | 2694.7 | 2596.6 | 2571.8 | 2567.4 | 2565.9 | 2570.3 | 2573.2 |
| 4659.0 | 15° | 4171.6 | 3695.9 | 3022.6 | 2735.7 | 2658.1 | 2631.8 | 2627.4 | 2618.6 | 2617.1 | 2615.7 |
| 4962.0 | 17.5° | 4389.7 | 3827.6 | 3066.5 | 2779.6 | 2697.6 | 2661.0 | 2644.9 | 2624.5 | 2608.4 | 2604.0 |
| 5275.3 | 20° | 4610.7 | 3957.9 | 3097.2 | 2801.6 | 2700.6 | 2649.3 | 2617.1 | 2582.0 | 2554.2 | 2538.1 |
| 5591.4 | 22.5° | 4846.4 | 4094.0 | 3116.3 | 2795.7 | 2674.2 | 2604.0 | 2545.4 | 2504.4 | 2462.0 | 2434.2 |
| 5910.5 | 25° | 5076.2 | 4212.6 | 3114.8 | 2765.0 | 2623.0 | 2533.7 | 2459.1 | 2406.4 | 2347.8 | 2318.5 |
| 6239.8 | 27.5° | 5297.2 | 4319.4 | 3078.2 | 2710.8 | 2549.8 | 2450.3 | 2361.0 | 2298.0 | 2241.0 | 2213.1 |
| 6572.1 | 30° | 5525.5 | 4408.7 | 3021.1 | 2631.8 | 2463.4 | 2353.7 | 2255.6 | 2201.4 | 2150.2 | 2123.9 |
| 6923.4 | 32.5° | 5752.4 | 4490.7 | 2940.6 | 2533.7 | 2363.9 | 2258.5 | 2161.9 | 2112.2 | 2081.4 | 2081.4 |
| 7301.0 | 35° | 5992.5 | 4547.8 | 2833.8 | 2419.5 | 2258.5 | 2157.5 | 2081.4 | 2052.1 | 2049.2 | 2031.6 |
| 7700.6 | 37.5° | 6245.7 | 4584.4 | 2703.5 | 2302.4 | 2154.6 | 2059.5 | 2036.0 | 2000.9 | 1971.6 | 1933.6 |
| 8139.8 | 40° | 6512.1 | 4621.0 | 2546.9 | 2180.9 | 2044.8 | 1992.1 | 1981.9 | 1935.0 | 1851.6 | 1757.9 |
| 8637.4 | 42.5° | 6835.6 | 4645.9 | 2384.4 | 2059.5 | 1929.2 | 1911.6 | 1926.3 | 1845.8 | 1712.6 | 1642.3 |
| 9237.5 | 45° | 7210.3 | 4686.8 | 2235.1 | 1939.4 | 1810.6 | 1810.6 | 1872.1 | 1766.7 | 1656.9 | 1613.0 |
| 9922.6 | 47.5° | 7696.2 | 4782.0 | 2096.0 | 1807.7 | 1700.8 | 1730.1 | 1752.1 | 1671.6 | 1610.1 | 1555.9 |
| 10756.9 | 50° | 8398.8 | 5010.3 | 1952.6 | 1674.5 | 1617.4 | 1676.0 | 1645.2 | 1598.4 | 1526.7 | 1482.8 |
| 12083.0 | 52.5° | 9271.2 | 5145.0 | 1825.3 | 1554.5 | 1545.7 | 1604.2 | 1560.3 | 1516.4 | 1462.3 | 1403.7 |
| 13088.6 | 55° | 9865.5 | 5169.9 | 1718.4 | 1466.6 | 1497.4 | 1491.5 | 1475.4 | 1435.9 | 1406.6 | 1329.1 |
| 14081.0 | 57.5° | 10530.0 | 5219.6 | 1630.6 | 1414.0 | 1466.6 | 1402.2 | 1396.4 | 1362.7 | 1324.7 | 1272.0 |
| 15291.5 | 60° | 11324.8 | 5297.2 | 1554.5 | 1393.5 | 1440.3 | 1343.7 | 1314.4 | 1301.2 | 1263.2 | 1236.8 |
| 16747.9 | 62.5° | 12191.3 | 5367.5 | 1476.9 | 1396.4 | 1409.6 | 1286.6 | 1242.7 | 1238.3 | 1214.9 | 1206.1 |
| 18115.0 | 65° | 12782.7 | 5175.7 | 1380.3 | 1393.5 | 1361.3 | 1228.1 | 1172.4 | 1171.0 | 1151.9 | 1149.0 |
| *18707.8* | 67.5° | *12576.3* | *4568.3* | *1250.0* | *1352.5* | *1311.5* | *1169.5* | *1108.0* | *1102.2* | *1077.3* | *1078.8* |
| 18088.7 | 70° | 11542.9 | 3701.8 | 1070.0 | 1251.5 | 1250.0 | 1116.8 | 1040.7 | 1021.7 | 988.0 | 993.9 |
| 15727.7 | 72.5° | 9604.9 | 2743.0 | 828.5 | 1083.2 | 1151.9 | 1068.5 | 963.1 | 932.4 | 889.9 | 895.8 |
| 11610.2 | 75° | 6936.6 | 1864.8 | 603.1 | 824.1 | 1002.6 | 1011.4 | 887.0 | 834.3 | 783.1 | 791.9 |
| 6462.3 | 77.5° | 3549.5 | 1056.8 | 443.5 | 567.9 | 787.5 | 919.2 | 818.2 | 748.0 | 736.3 | 818.2 |
| 1863.3 | 80° | 1157.8 | 529.9 | 307.4 | 398.1 | 516.7 | 752.4 | 717.2 | 636.7 | 633.8 | 652.8 |
| 390.8 | 82.5° | 345.4 | 223.9 | 197.6 | 262.0 | 285.4 | 576.7 | 619.2 | 481.6 | 414.2 | 436.2 |
| 130.3 | 85° | 118.6 | 108.3 | 112.7 | 130.3 | 136.1 | 338.1 | 433.3 | 319.1 | 301.5 | 332.3 |
| 29.3 | 87.5° | 27.8 | 38.1 | 32.2 | 29.3 | 29.3 | 82.0 | 168.3 | 133.2 | 184.4 | 123.0 |
| 0.0 | 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END O

| 180° |
|---|
| 3327.0 |
| 2630.3 |
| 2390.3 |
| 2422.5 |
| 2504.4 |
| 2574.7 |
| 2614.2 |
| 2608.4 |
| 2543.9 |
| 2435.6 |
| 2318.5 |
| 2211.7 |
| 2122.4 |
| 2082.9 |
| 2027.3 |
| 1927.7 |
| 1744.8 |
| 1643.8 |
| 1620.3 |
| 1554.5 |
| 1478.4 |
| 1392.0 |
| 1330.5 |
| 1254.4 |
| 1244.2 |
| 1206.1 |
| 1147.6 |
| *1078.8* |
| 999.7 |
| 894.3 |
| 794.8 |
| 806.5 |
| 560.6 |
| 450.8 |
| 327.9 |
| 118.6 |
| 0.0 |

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