

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: P453600

Luminaire Tested: **GALN-SA4C-827-U-T2-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453600
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-11)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4C-827-U-T2-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15284 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G3

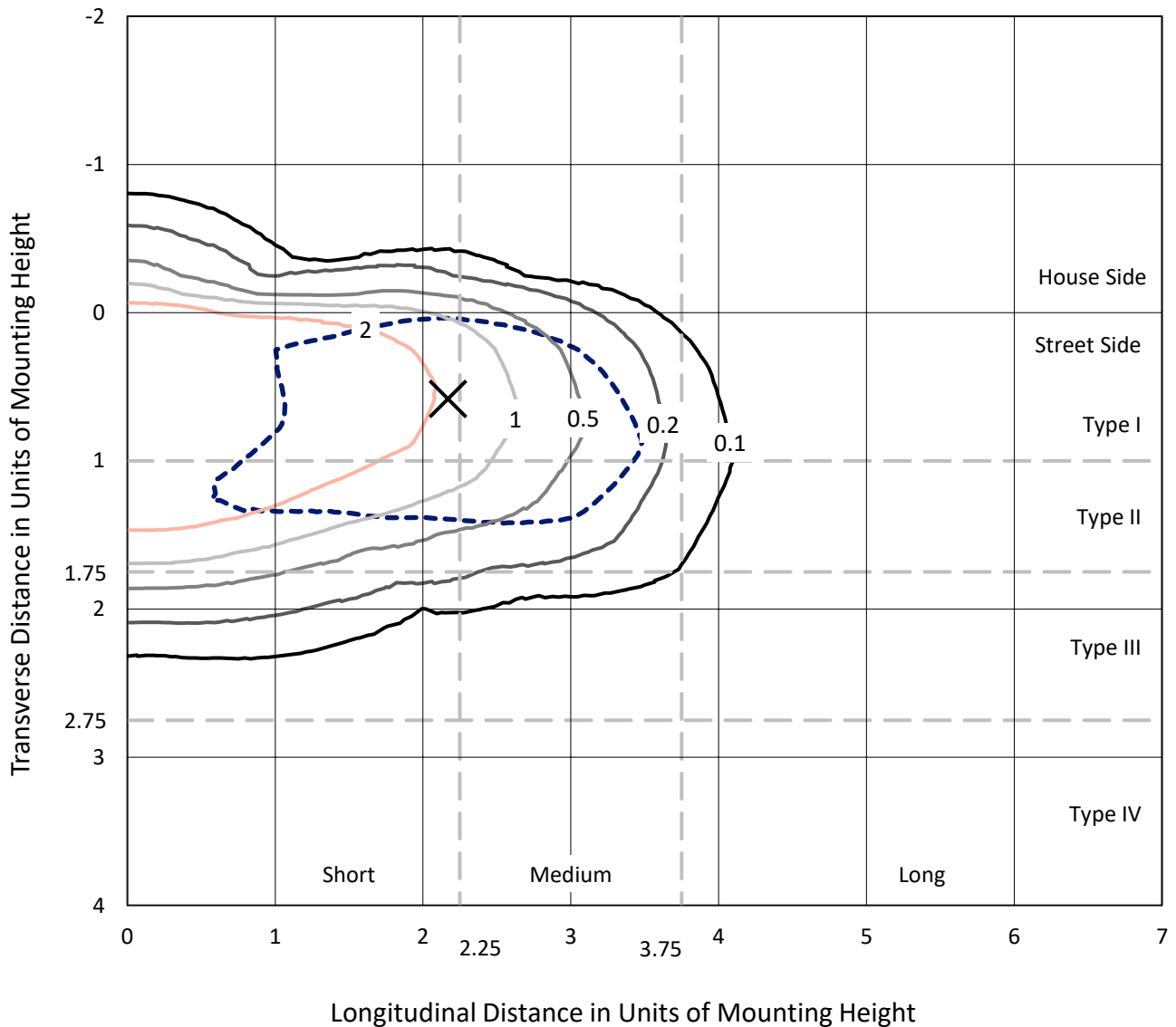
Input Watts (W): 213
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P453600
 CATALOG NUMBER: GALN-SA4C-827-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

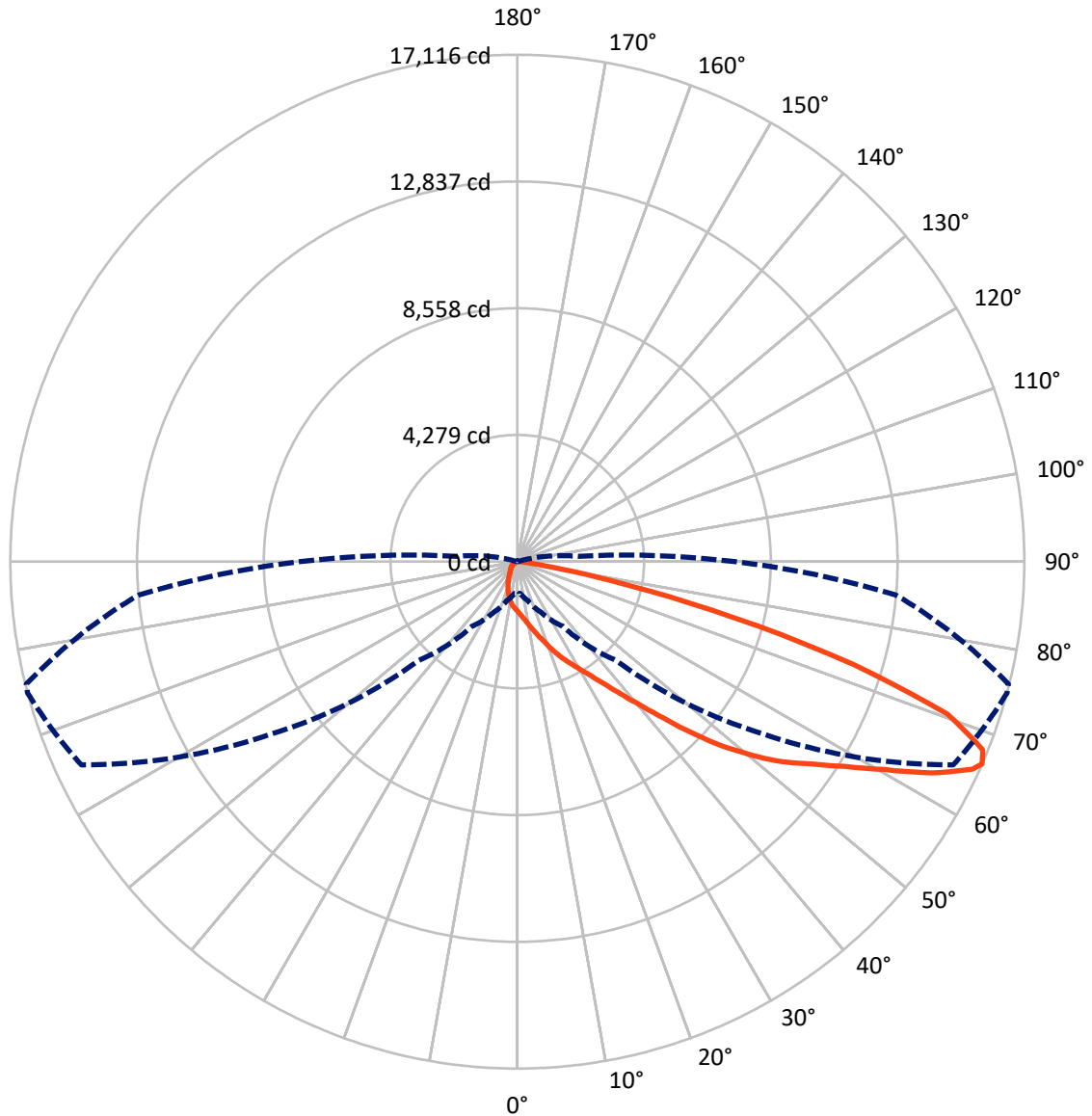
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type II - Short - N/A

REPORT NUMBER: P453600
CATALOG NUMBER: GALN-SA4C-827-U-T2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P453600

CATALOG NUMBER: GALN-SA4C-827-U-T2-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 943.6 | 0.0 | 943.6 |
| | % Fixture | 6.2 | 0.0 | 6.2 |
| Street Side | Lumens | 14340.4 | 0.0 | 14340.4 |
| | % Fixture | 93.8 | 0.0 | 93.8 |
| Total | Lumens | 15284.0 | 0.0 | 15284.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 161.2 | 1.1 |
| 10°-20° | 474.5 | 3.1 |
| 20°-30° | 819.3 | 5.4 |
| 30°-40° | 1477.8 | 9.7 |
| 40°-50° | 2669.7 | 17.5 |
| 50°-60° | 4162.2 | 27.2 |
| 60°-70° | 3953.9 | 25.9 |
| 70°-80° | 1481.8 | 9.7 |
| 80°-90° | 83.6 | 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° | 15284.0 | 100.0 |
| 0°-180° | 15284.0 | 100.0 |



REPORT NUMBER: P453600

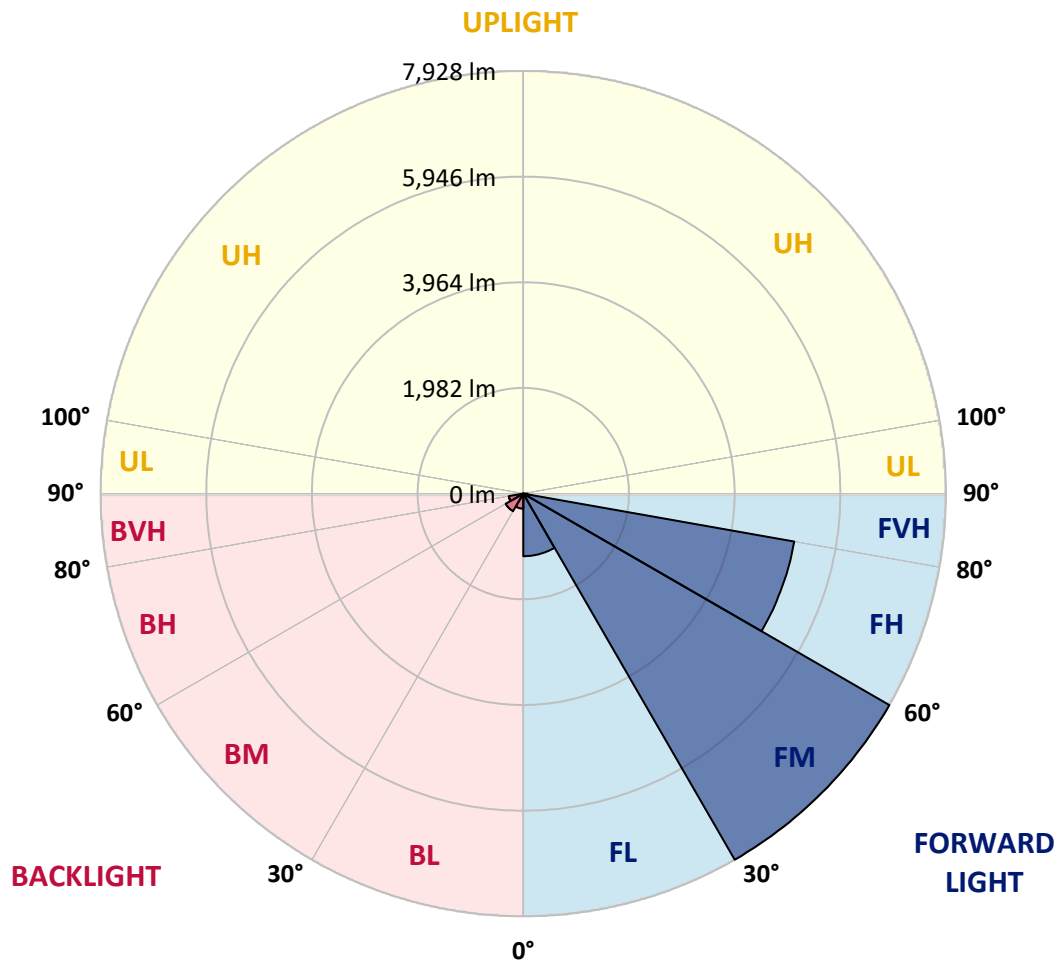
CATALOG NUMBER: GALN-SA4C-827-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1173.2 | 7.7 | | | |
| FM (30°-60°) | 7927.8 | 51.9 | | | |
| FH (60°-80°) | 5160.2 | 33.8 | | | G3/7500 |
| FVH (80°-90°) | 79.3 | 0.5 | | | G1/100 |
| BL (0°-30°) | 281.8 | 1.8 | B1/500 | | |
| BM (30°-60°) | 381.9 | 2.5 | B1/1000 | | |
| BH (60°-80°) | 275.5 | 1.8 | B1/500 | | G1/500 |
| BVH (80°-90°) | 4.3 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G3

Type II Short





REPORT NUMBER: P453600
 CATALOG NUMBER: GALN-SA4C-827-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0° | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 |
| 2.5° | 1996.9 | 1972.1 | 1980.0 | 1968.7 | 1942.7 | 1904.3 | 1870.4 | 1821.8 | 1773.2 | 1765.3 | 1711.0 |
| 5° | 2260.3 | 2253.5 | 2244.4 | 2211.7 | 2193.6 | 2134.8 | 2064.7 | 1981.1 | 1880.5 | 1862.4 | 1764.1 |
| 7.5° | 2439.9 | 2436.6 | 2441.1 | 2424.1 | 2408.3 | 2355.2 | 2280.6 | 2166.5 | 2010.5 | 2000.3 | 1836.5 |
| 10° | 2498.7 | 2507.7 | 2524.7 | 2551.8 | 2576.7 | 2559.7 | 2503.2 | 2360.8 | 2178.9 | 2149.5 | 1919.0 |
| 12.5° | 2464.8 | 2475.0 | 2515.7 | 2588.0 | 2668.2 | 2714.6 | 2692.0 | 2588.0 | 2357.4 | 2333.7 | 2011.6 |
| 15° | 2377.8 | 2390.2 | 2447.9 | 2559.7 | 2703.3 | 2834.4 | 2890.9 | 2816.3 | 2565.4 | 2527.0 | 2123.5 |
| 17.5° | 2249.0 | 2267.0 | 2349.5 | 2497.6 | 2694.2 | 2920.2 | 3079.6 | 3054.7 | 2786.9 | 2750.7 | 2245.6 |
| 20° | 2151.8 | 2165.3 | 2235.4 | 2404.9 | 2655.8 | 2967.7 | 3259.3 | 3329.4 | 3060.4 | 2998.2 | 2389.1 |
| 22.5° | 2216.2 | 2220.7 | 2244.4 | 2346.1 | 2586.9 | 2980.1 | 3417.5 | 3615.3 | 3350.8 | 3295.4 | 2538.3 |
| 25° | 2531.5 | 2486.3 | 2462.5 | 2439.9 | 2572.2 | 2968.8 | 3561.0 | 3913.6 | 3640.1 | 3581.4 | 2686.3 |
| 27.5° | 3028.7 | 3008.4 | 2888.6 | 2728.1 | 2697.6 | 2983.5 | 3656.0 | 4196.2 | 3912.5 | 3849.2 | 2831.0 |
| 30° | 3570.1 | 3535.0 | 3461.6 | 3226.5 | 2990.3 | 3087.5 | 3724.9 | 4470.8 | 4234.6 | 4151.0 | 2963.2 |
| 32.5° | 4067.3 | 4089.9 | 3980.3 | 3738.5 | 3465.0 | 3309.0 | 3814.2 | 4770.3 | 4604.1 | 4500.2 | 3116.9 |
| 35° | 4647.1 | 4692.3 | 4523.9 | 4292.2 | 3972.4 | 3709.1 | 3988.2 | 5108.2 | 5073.1 | 4942.0 | 3354.2 |
| 37.5° | 5235.9 | 5263.0 | 5160.2 | 4834.7 | 4546.5 | 4217.6 | 4316.0 | 5525.2 | 5650.6 | 5538.7 | 3637.9 |
| 40° | 5730.9 | 5768.2 | 5692.4 | 5403.1 | 5095.7 | 4806.4 | 4791.7 | 5979.5 | 6337.7 | 6222.5 | 4060.5 |
| 42.5° | 6109.5 | 6137.7 | 6140.0 | 5935.4 | 5658.5 | 5527.4 | 5398.6 | 6559.3 | 7198.9 | 7065.5 | 4551.0 |
| 45° | 6587.5 | 6628.2 | 6604.5 | 6465.5 | 6258.6 | 6234.9 | 6168.2 | 7259.9 | 8229.6 | 8061.2 | 5187.3 |
| 47.5° | 7326.6 | 7353.7 | 7295.0 | 7131.1 | 6920.9 | 6958.2 | 6918.6 | 8045.4 | 9280.6 | 9135.9 | 5846.1 |
| 50° | 7839.7 | 7884.9 | 7968.5 | 8034.1 | 7881.5 | 7743.6 | 7626.1 | 8778.8 | 10278.5 | 10148.5 | 6519.7 |
| 52.5° | 7834.0 | 7908.6 | 8173.1 | 8503.1 | 8836.5 | 8794.6 | 8456.7 | 9589.1 | 11231.2 | 11070.7 | 7152.6 |
| 55° | 7306.3 | 7450.9 | 7839.7 | 8425.1 | 9348.4 | 9808.4 | 9654.7 | 10527.1 | 12053.9 | 11945.4 | 7886.0 |
| 57.5° | 6216.8 | 6305.0 | 6845.2 | 7663.4 | 9062.5 | 10285.3 | 11042.5 | 11798.5 | 13040.5 | 12989.7 | 9025.2 |
| 60° | 4181.5 | 4221.0 | 4916.0 | 5927.5 | 7715.4 | 9809.5 | 12059.6 | 13336.6 | 14255.4 | 14230.5 | 10355.3 |
| 62.5° | 2395.9 | 2412.8 | 2916.9 | 3770.1 | 5490.2 | 8313.2 | 12145.5 | 15234.1 | 15712.1 | 15725.7 | 11894.6 |
| 65° | 1289.5 | 1298.5 | 1705.4 | 2212.8 | 3340.7 | 5925.3 | 10921.5 | 16273.8 | 16889.7 | 16915.7 | 12848.4 |
| 66° | 1113.2 | 1070.2 | 1357.3 | 1886.2 | 2658.1 | 4716.0 | 10147.4 | 16236.5 | 17115.8 | 17087.5 | 12814.5 |
| 67.5° | 846.5 | 884.9 | 1083.8 | 1450.0 | 1969.8 | 3353.1 | 8377.6 | 15514.4 | 16944.0 | 16855.8 | 12293.5 |
| 70° | 605.7 | 621.6 | 771.9 | 1034.1 | 1341.5 | 1839.8 | 5353.4 | 12885.7 | 15400.2 | 15281.6 | 10710.2 |
| 72.5° | 391.0 | 408.0 | 547.0 | 748.1 | 969.6 | 1004.7 | 2997.1 | 9310.0 | 11873.1 | 11856.2 | 8065.7 |
| 75° | 279.1 | 295.0 | 361.6 | 535.7 | 728.9 | 621.6 | 1443.2 | 6274.5 | 7548.1 | 7497.3 | 4989.5 |
| 77.5° | 202.3 | 210.2 | 241.8 | 350.3 | 521.0 | 445.3 | 669.0 | 3350.8 | 3757.7 | 3935.1 | 2204.9 |
| 80° | 116.4 | 123.2 | 168.4 | 213.6 | 352.6 | 304.0 | 319.8 | 1344.9 | 1386.7 | 1320.0 | 689.4 |
| 82.5° | 57.6 | 65.5 | 100.6 | 145.8 | 220.4 | 204.6 | 146.9 | 404.6 | 427.2 | 415.9 | 174.0 |
| 85° | 13.6 | 17.0 | 56.5 | 96.1 | 107.4 | 91.5 | 71.2 | 118.7 | 146.9 | 143.5 | 66.7 |
| 87.5° | 1.1 | 2.3 | 20.3 | 17.0 | 18.1 | 30.5 | 24.9 | 30.5 | 47.5 | 44.1 | 23.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P453600
 CATALOG NUMBER: GALN-SA4C-827-U-T2-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 | 1671.5 |
| 2.5° | 1686.1 | 1664.7 | 1602.5 | 1541.5 | 1490.6 | 1437.5 | 1388.9 | 1360.7 | 1349.4 | 1336.9 | 1342.6 |
| 5° | 1709.9 | 1657.9 | 1532.5 | 1424.0 | 1317.7 | 1227.3 | 1155.0 | 1108.7 | 1086.1 | 1082.7 | 1077.0 |
| 7.5° | 1741.5 | 1652.2 | 1457.9 | 1288.3 | 1149.3 | 1048.8 | 966.3 | 899.6 | 879.2 | 861.2 | 846.5 |
| 10° | 1779.9 | 1642.1 | 1365.2 | 1145.9 | 997.9 | 871.3 | 762.8 | 683.7 | 643.0 | 631.7 | 639.7 |
| 12.5° | 1820.6 | 1622.9 | 1268.0 | 1014.9 | 844.2 | 682.6 | 582.0 | 542.5 | 531.2 | 526.6 | 527.8 |
| 15° | 1861.3 | 1599.1 | 1166.3 | 888.3 | 672.4 | 544.7 | 498.4 | 488.2 | 483.7 | 481.4 | 479.2 |
| 17.5° | 1898.6 | 1560.7 | 1052.1 | 765.1 | 544.7 | 465.6 | 448.7 | 439.6 | 430.6 | 427.2 | 421.5 |
| 20° | 1942.7 | 1516.6 | 949.3 | 627.2 | 461.1 | 421.5 | 401.2 | 384.2 | 370.7 | 361.6 | 360.5 |
| 22.5° | 1984.5 | 1460.1 | 841.9 | 519.9 | 420.4 | 378.6 | 345.8 | 327.7 | 311.9 | 300.6 | 304.0 |
| 25° | 2007.1 | 1391.2 | 745.9 | 453.2 | 383.1 | 335.6 | 299.5 | 276.9 | 259.9 | 254.3 | 253.1 |
| 27.5° | 2007.1 | 1306.4 | 652.1 | 414.8 | 349.2 | 297.2 | 259.9 | 238.5 | 227.2 | 219.2 | 220.4 |
| 30° | 1991.3 | 1212.6 | 565.1 | 385.4 | 319.8 | 263.3 | 228.3 | 209.1 | 200.0 | 194.4 | 193.3 |
| 32.5° | 1978.9 | 1123.3 | 490.5 | 357.1 | 289.3 | 233.9 | 203.4 | 188.7 | 179.7 | 174.0 | 174.0 |
| 35° | 1998.1 | 1046.5 | 432.8 | 328.9 | 261.1 | 211.3 | 184.2 | 170.6 | 161.6 | 157.1 | 156.0 |
| 37.5° | 2048.9 | 976.4 | 388.8 | 298.4 | 235.1 | 192.1 | 170.6 | 154.8 | 145.8 | 140.1 | 137.9 |
| 40° | 2174.4 | 936.9 | 356.0 | 270.1 | 210.2 | 176.3 | 154.8 | 140.1 | 128.8 | 123.2 | 122.1 |
| 42.5° | 2375.5 | 938.0 | 324.3 | 244.1 | 191.0 | 162.7 | 141.3 | 124.3 | 111.9 | 106.2 | 105.1 |
| 45° | 2678.4 | 980.9 | 299.5 | 219.2 | 174.0 | 148.0 | 126.6 | 108.5 | 97.2 | 91.5 | 91.5 |
| 47.5° | 3041.2 | 1064.6 | 278.0 | 197.8 | 158.2 | 134.5 | 111.9 | 93.8 | 82.5 | 78.0 | 78.0 |
| 50° | 3434.5 | 1173.1 | 256.5 | 175.2 | 144.7 | 119.8 | 96.1 | 81.4 | 72.3 | 68.9 | 68.9 |
| 52.5° | 3835.6 | 1304.2 | 235.1 | 157.1 | 130.0 | 104.0 | 82.5 | 72.3 | 64.4 | 62.2 | 61.0 |
| 55° | 4362.3 | 1471.4 | 212.5 | 137.9 | 114.1 | 89.3 | 73.5 | 63.3 | 54.2 | 50.9 | 49.7 |
| 57.5° | 5172.6 | 1723.4 | 187.6 | 120.9 | 93.8 | 74.6 | 63.3 | 53.1 | 42.9 | 37.3 | 36.2 |
| 60° | 6150.1 | 2030.8 | 161.6 | 106.2 | 75.7 | 61.0 | 50.9 | 40.7 | 31.6 | 24.9 | 23.7 |
| 62.5° | 7065.5 | 2226.3 | 136.7 | 89.3 | 59.9 | 46.3 | 36.2 | 30.5 | 22.6 | 15.8 | 14.7 |
| 65° | 7470.1 | 2160.8 | 113.0 | 72.3 | 47.5 | 32.8 | 23.7 | 21.5 | 13.6 | 6.8 | 5.7 |
| 66° | 7335.6 | 2063.6 | 104.0 | 65.5 | 42.9 | 28.3 | 20.3 | 18.1 | 10.2 | 3.4 | 3.4 |
| 67.5° | 6939.0 | 1834.2 | 90.4 | 56.5 | 37.3 | 22.6 | 15.8 | 13.6 | 5.7 | 1.1 | 0.0 |
| 70° | 5945.6 | 1483.9 | 71.2 | 41.8 | 27.1 | 15.8 | 9.0 | 6.8 | 3.4 | 0.0 | 0.0 |
| 72.5° | 4566.8 | 1105.3 | 56.5 | 31.6 | 19.2 | 9.0 | 4.5 | 2.3 | 3.4 | 0.0 | 0.0 |
| 75° | 2798.2 | 631.7 | 44.1 | 23.7 | 12.4 | 5.7 | 3.4 | 0.0 | 3.4 | 1.1 | 0.0 |
| 77.5° | 1242.0 | 283.7 | 29.4 | 15.8 | 9.0 | 4.5 | 2.3 | 0.0 | 2.3 | 1.1 | 0.0 |
| 80° | 314.2 | 92.7 | 17.0 | 11.3 | 6.8 | 3.4 | 1.1 | 0.0 | 2.3 | 2.3 | 1.1 |
| 82.5° | 85.9 | 33.9 | 12.4 | 9.0 | 5.7 | 3.4 | 1.1 | 0.0 | 2.3 | 2.3 | 2.3 |
| 85° | 33.9 | 15.8 | 11.3 | 9.0 | 6.8 | 3.4 | 1.1 | 0.0 | 2.3 | 2.3 | 2.3 |
| 87.5° | 15.8 | 11.3 | 11.3 | 10.2 | 7.9 | 3.4 | 1.1 | 0.0 | 2.3 | 1.1 | 2.3 |
| 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)