

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: P522908

Luminaire Tested: **GALN-SA9A-827-U-T4W**

Issue Date: 5/13/2021

Test Information

Test Method: LM-79-08
Report Number: P522908
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2011-042-41)
Test Lab: INNOVATION CENTER
Issue Date: 5/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA9A-827-U-T4W
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30499 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

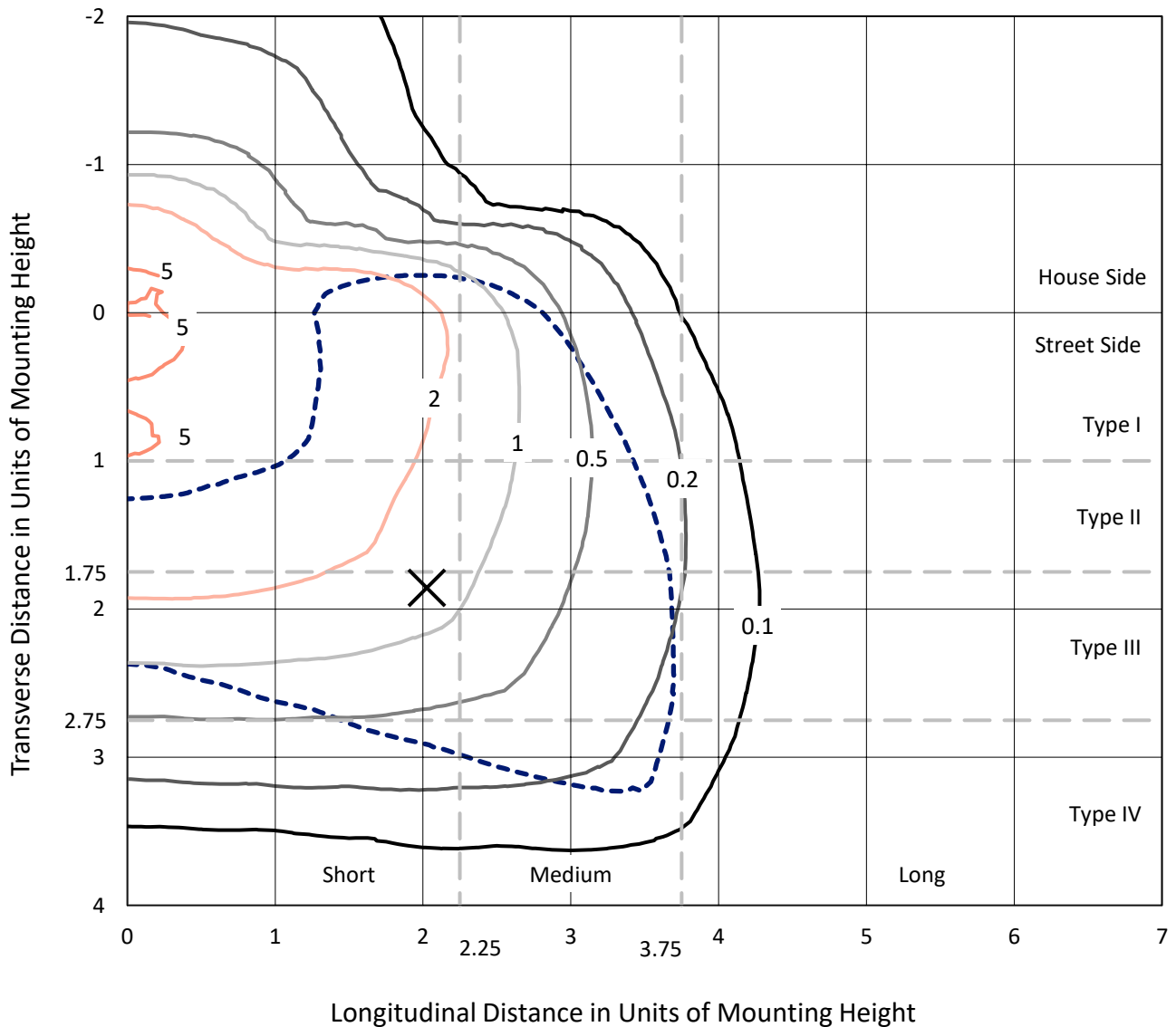
Input Watts (W): 274
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P522908
 CATALOG NUMBER: GALN-SA9A-827-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

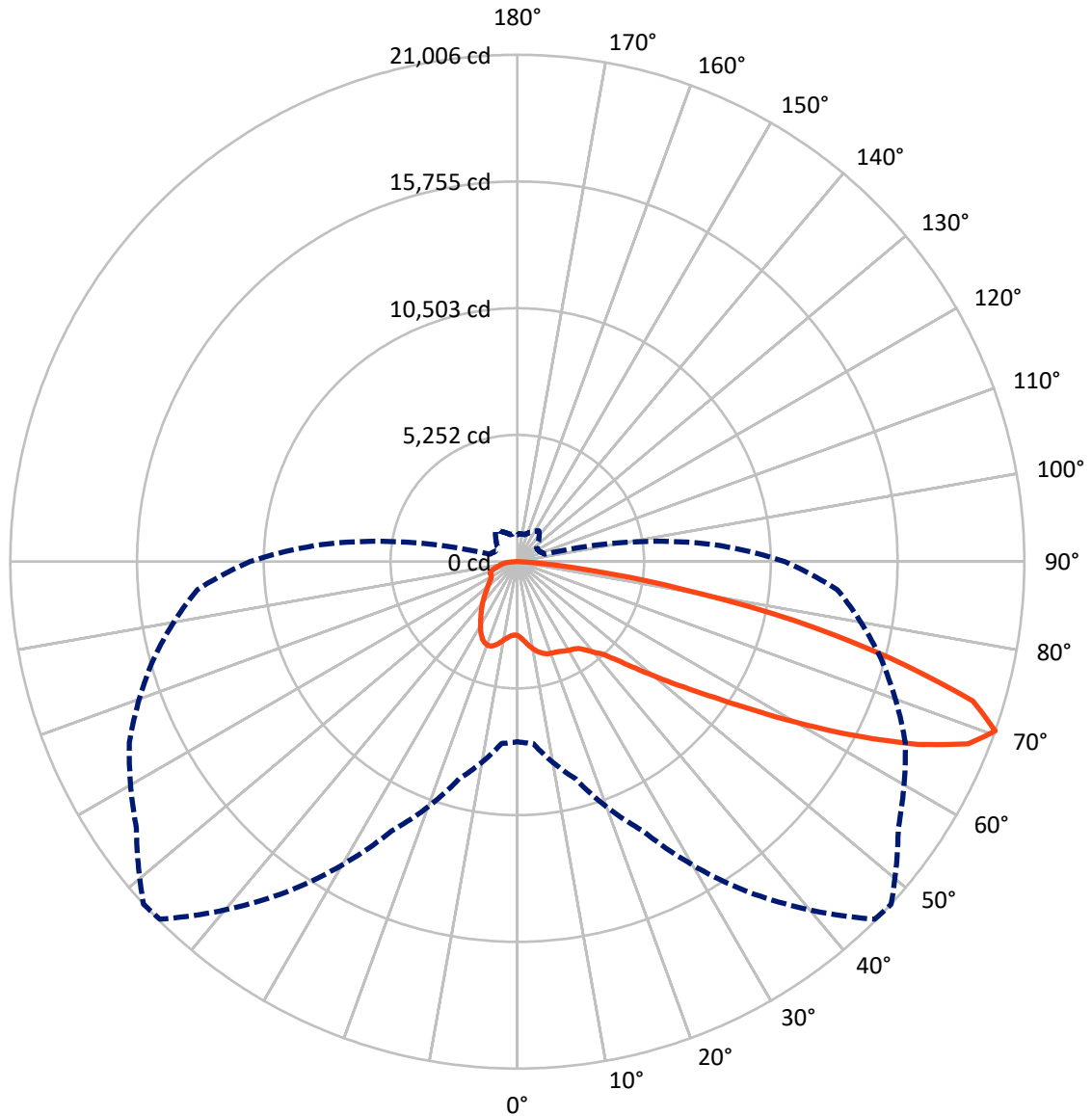
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type IV - Short - N/A

REPORT NUMBER: P522908
CATALOG NUMBER: GALN-SA9A-827-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P522908

CATALOG NUMBER: GALN-SA9A-827-U-T4W

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 6905.6 | 0.0 | 6905.6 |
| | % Fixture | 22.6 | 0.0 | 22.6 |
| Street Side | Lumens | 23593.4 | 0.0 | 23593.4 |
| | % Fixture | 77.4 | 0.0 | 77.4 |
| Total | Lumens | 30499.0 | 0.0 | 30499.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 315.6 | 1.0 |
| 10°-20° | 1055.1 | 3.5 |
| 20°-30° | 1754.6 | 5.8 |
| 30°-40° | 2486.9 | 8.2 |
| 40°-50° | 3671.1 | 12.0 |
| 50°-60° | 6358.6 | 20.8 |
| 60°-70° | 8981.7 | 29.4 |
| 70°-80° | 5163.1 | 16.9 |
| 80°-90° | 712.4 | 2.3 |
| 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° | 30499.0 | 100.0 |
| 0°-180° | 30499.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P522908

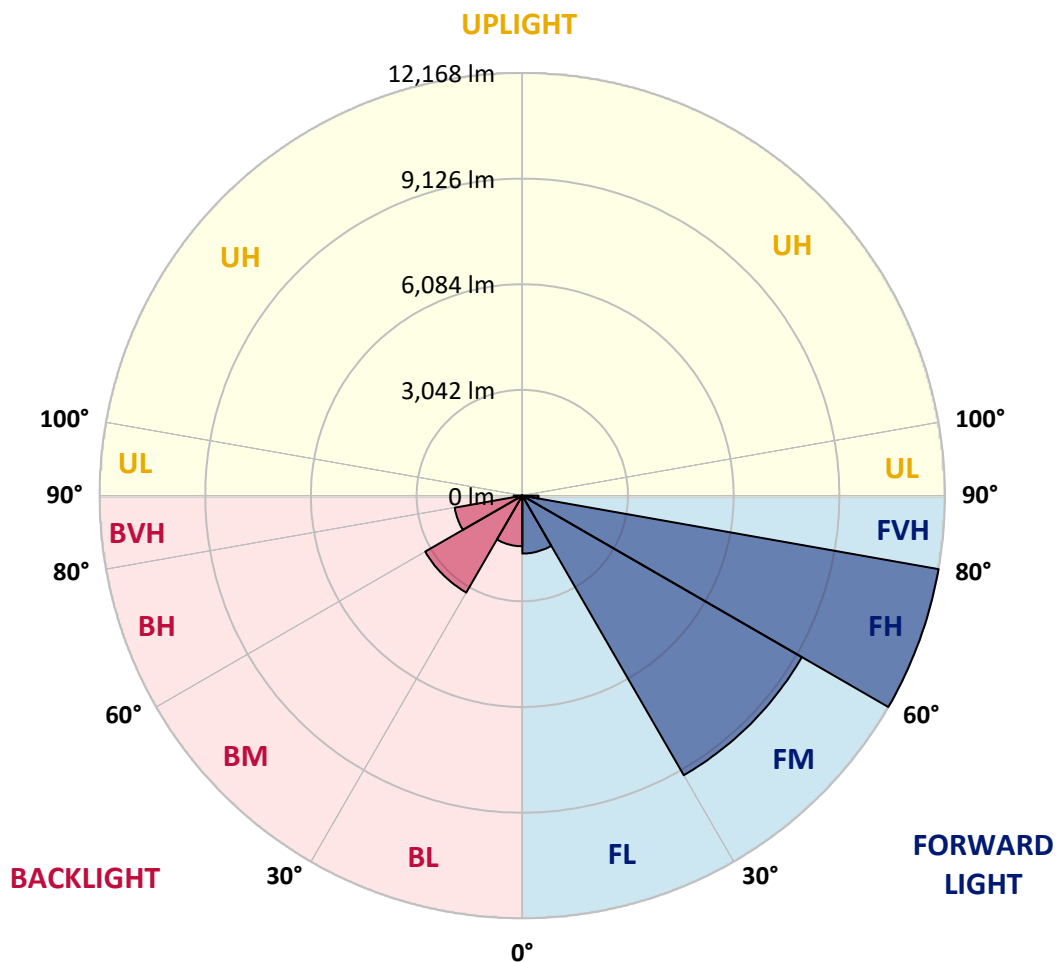
CATALOG NUMBER: GALN-SA9A-827-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1667.8 | 5.5 | | | |
| FM | (30°-60°) | 9292.5 | 30.5 | | | |
| FH | (60°-80°) | 12167.8 | 39.9 | | | G5 |
| FVH | (80°-90°) | 465.4 | 1.5 | | | G3/500 |
| BL | (0°-30°) | 1457.5 | 4.8 | B3/2500 | | |
| BM | (30°-60°) | 3224.1 | 10.6 | B3/5000 | | |
| BH | (60°-80°) | 1977.0 | 6.5 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 247.0 | 0.8 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G5

Type IV Short





REPORT NUMBER: P522908

CATALOG NUMBER: GALN-SA9A-827-U-T4W

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 47.5° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 |
| 2.5° | 3259.2 | 3247.8 | 3246.2 | 3221.7 | 3208.6 | 3184.1 | 3174.3 | 3151.5 | 3123.8 | 3096.0 | 3069.9 |
| 5° | 3515.4 | 3515.4 | 3504.0 | 3469.7 | 3415.9 | 3360.4 | 3335.9 | 3291.9 | 3213.5 | 3149.9 | 3096.0 |
| 7.5° | 3778.2 | 3781.5 | 3758.6 | 3708.0 | 3631.3 | 3541.6 | 3518.7 | 3453.4 | 3342.4 | 3249.4 | 3169.4 |
| 10° | 4005.1 | 4005.1 | 3974.1 | 3905.5 | 3809.2 | 3711.3 | 3688.4 | 3615.0 | 3491.0 | 3375.1 | 3270.6 |
| 12.5° | 4178.1 | 4178.1 | 4137.3 | 4047.5 | 3943.0 | 3854.9 | 3828.8 | 3758.6 | 3642.7 | 3513.8 | 3381.6 |
| 15° | 4290.7 | 4282.5 | 4236.8 | 4135.6 | 4034.4 | 3957.7 | 3939.8 | 3881.0 | 3774.9 | 3644.4 | 3495.9 |
| 17.5° | 4295.6 | 4292.3 | 4248.2 | 4163.4 | 4075.2 | 4023.0 | 4011.6 | 3972.4 | 3889.2 | 3765.1 | 3608.5 |
| 20° | 4200.9 | 4207.4 | 4178.1 | 4117.7 | 4075.2 | 4052.4 | 4047.5 | 4034.4 | 3975.7 | 3859.8 | 3703.1 |
| 22.5° | 4099.7 | 4111.1 | 4083.4 | 4050.8 | 4047.5 | 4070.3 | 4073.6 | 4076.9 | 4039.3 | 3926.7 | 3783.1 |
| 25° | 4075.2 | 4083.4 | 4055.7 | 4026.3 | 4044.2 | 4104.6 | 4117.7 | 4130.7 | 4101.4 | 4006.7 | 3877.8 |
| 27.5° | 4199.3 | 4192.7 | 4138.9 | 4075.2 | 4086.7 | 4168.3 | 4186.2 | 4200.9 | 4186.2 | 4104.6 | 3995.3 |
| 30° | 4550.2 | 4528.9 | 4421.2 | 4235.2 | 4176.4 | 4233.5 | 4251.5 | 4292.3 | 4292.3 | 4231.9 | 4122.6 |
| 32.5° | 5137.7 | 5096.9 | 4899.4 | 4533.8 | 4329.8 | 4295.6 | 4313.5 | 4380.4 | 4414.7 | 4367.4 | 4248.2 |
| 35° | 5850.9 | 5808.5 | 5526.1 | 5034.9 | 4610.6 | 4419.6 | 4414.7 | 4489.8 | 4581.2 | 4475.1 | 4320.0 |
| 37.5° | 6567.4 | 6523.3 | 6183.9 | 5632.2 | 5020.2 | 4680.7 | 4651.4 | 4677.5 | 4716.6 | 4522.4 | 4419.6 |
| 40° | 7283.9 | 7231.6 | 6934.6 | 6299.7 | 5521.2 | 5026.7 | 4950.0 | 4832.5 | 4816.2 | 4677.5 | 4612.2 |
| 42.5° | 7993.8 | 7946.5 | 7796.3 | 7048.8 | 6121.8 | 5364.6 | 5247.1 | 5044.7 | 5106.7 | 5023.5 | 4966.3 |
| 45° | 8710.3 | 8713.5 | 8553.6 | 7889.3 | 6846.5 | 5988.0 | 5829.7 | 5513.1 | 5660.0 | 5629.0 | 5661.6 |
| 47.5° | 9345.1 | 9337.0 | 9279.9 | 8705.4 | 7745.7 | 6791.0 | 6587.0 | 6219.8 | 6471.1 | 6585.3 | 6835.0 |
| 50° | 9960.4 | 9955.5 | 9958.8 | 9630.7 | 8790.2 | 7745.7 | 7520.5 | 7135.3 | 7701.7 | 8098.3 | 8545.4 |
| 52.5° | 10841.7 | 10869.5 | 10672.0 | 10585.5 | 10060.0 | 8873.5 | 8625.4 | 8227.2 | 9155.8 | 9780.9 | 10654.0 |
| 55° | 11726.3 | 11703.5 | 11548.4 | 11638.2 | 11388.5 | 10208.5 | 9949.0 | 9632.4 | 10774.8 | 11458.6 | 12770.8 |
| 57.5° | 12246.9 | 12255.1 | 12413.4 | 12852.4 | 13028.7 | 11873.2 | 11638.2 | 11393.4 | 12594.6 | 13079.3 | 14654.2 |
| 60° | 12715.3 | 12752.9 | 13208.2 | 14037.3 | 14515.5 | 13918.2 | 13709.3 | 13471.0 | 14264.1 | 14456.7 | 16289.5 |
| 62.5° | 12862.2 | 12978.1 | 13772.9 | 15013.3 | 15964.7 | 16225.9 | 15966.4 | 15440.9 | 15853.8 | 15778.7 | 17397.7 |
| 65° | 12129.4 | 12287.7 | 13712.5 | 15378.8 | 17259.0 | 18416.1 | 18251.3 | 17275.3 | 17208.4 | 16756.3 | 17578.8 |
| 67.5° | 10200.3 | 10358.6 | 12188.2 | 14611.8 | 17794.3 | 20312.5 | 20147.7 | 18613.6 | 18030.9 | 16847.7 | 16207.9 |
| 70° | 7463.4 | 7562.9 | 9312.5 | 12302.4 | 16718.8 | 20949.0 | 21006.2 | 19266.4 | 17737.2 | 15605.7 | 13307.8 |
| 72.5° | 4300.5 | 4520.8 | 5746.5 | 8654.8 | 13658.7 | 19339.8 | 19736.4 | 17908.5 | 15879.9 | 13018.9 | 9304.3 |
| 75° | 1849.1 | 1854.0 | 2657.0 | 4773.8 | 9250.5 | 15545.3 | 15928.8 | 14845.2 | 12470.5 | 9002.4 | 4968.0 |
| 77.5° | 879.7 | 896.0 | 1168.6 | 2131.5 | 5092.0 | 10740.5 | 11775.3 | 10487.6 | 7975.8 | 4324.9 | 1876.9 |
| 80° | 571.2 | 582.6 | 714.8 | 1057.6 | 2497.0 | 6227.9 | 6949.3 | 6050.0 | 3518.7 | 1545.6 | 809.5 |
| 82.5° | 346.0 | 349.3 | 478.2 | 646.3 | 1374.2 | 2820.2 | 3324.5 | 2626.0 | 1501.5 | 925.4 | 476.6 |
| 85° | 210.5 | 212.2 | 290.5 | 399.9 | 834.0 | 974.3 | 1000.4 | 992.3 | 881.3 | 605.5 | 254.6 |
| 87.5° | 101.2 | 104.5 | 150.1 | 189.3 | 328.0 | 301.9 | 285.6 | 331.3 | 416.2 | 326.4 | 109.3 |
| 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: P522908

CATALOG NUMBER: GALN-SA9A-827-U-T4W

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 | 3061.7 |
| 2.5° | 3058.5 | 3053.6 | 3042.1 | 3037.3 | 3034.0 | 3035.6 | 3034.0 | 3034.0 | 3035.6 | 3035.6 | 3035.6 |
| 5° | 3073.2 | 3065.0 | 3047.0 | 3047.0 | 3056.8 | 3079.7 | 3100.9 | 3117.2 | 3135.2 | 3133.5 | 3133.5 |
| 7.5° | 3136.8 | 3122.1 | 3100.9 | 3107.4 | 3131.9 | 3167.8 | 3205.4 | 3241.3 | 3277.2 | 3280.4 | 3278.8 |
| 10° | 3229.8 | 3215.1 | 3192.3 | 3200.5 | 3239.6 | 3293.5 | 3340.8 | 3393.0 | 3432.2 | 3443.6 | 3440.4 |
| 12.5° | 3335.9 | 3306.5 | 3287.0 | 3309.8 | 3371.8 | 3443.6 | 3489.3 | 3528.5 | 3556.2 | 3572.6 | 3566.0 |
| 15° | 3443.6 | 3415.9 | 3393.0 | 3440.4 | 3515.4 | 3582.4 | 3605.2 | 3611.7 | 3616.6 | 3633.0 | 3629.7 |
| 17.5° | 3548.1 | 3510.5 | 3502.4 | 3564.4 | 3636.2 | 3665.6 | 3652.5 | 3624.8 | 3603.6 | 3616.6 | 3615.0 |
| 20° | 3641.1 | 3611.7 | 3608.5 | 3670.5 | 3698.2 | 3670.5 | 3615.0 | 3566.0 | 3528.5 | 3531.8 | 3530.1 |
| 22.5° | 3729.2 | 3706.4 | 3709.7 | 3735.8 | 3691.7 | 3597.0 | 3505.7 | 3438.7 | 3397.9 | 3406.1 | 3411.0 |
| 25° | 3827.2 | 3804.3 | 3812.5 | 3770.0 | 3624.8 | 3460.0 | 3327.8 | 3270.6 | 3254.3 | 3270.6 | 3282.1 |
| 27.5° | 3954.5 | 3939.8 | 3934.9 | 3771.7 | 3505.7 | 3257.6 | 3107.4 | 3086.2 | 3100.9 | 3136.8 | 3154.8 |
| 30° | 4091.6 | 4091.6 | 4065.4 | 3743.9 | 3342.4 | 3014.4 | 2883.8 | 2887.1 | 2937.7 | 2988.3 | 3006.2 |
| 32.5° | 4223.8 | 4251.5 | 4169.9 | 3668.9 | 3131.9 | 2777.8 | 2678.2 | 2681.5 | 2725.5 | 2787.5 | 2803.9 |
| 35° | 4333.1 | 4413.1 | 4259.7 | 3531.8 | 2883.8 | 2578.6 | 2503.6 | 2459.5 | 2461.1 | 2508.5 | 2521.5 |
| 37.5° | 4483.3 | 4631.8 | 4311.9 | 3327.8 | 2619.4 | 2408.9 | 2324.0 | 2247.3 | 2196.7 | 2177.2 | 2177.2 |
| 40° | 4744.4 | 4963.1 | 4324.9 | 3025.8 | 2369.7 | 2247.3 | 2126.6 | 2035.2 | 1937.2 | 1849.1 | 1832.8 |
| 42.5° | 5186.7 | 5462.5 | 4298.8 | 2678.2 | 2144.5 | 2069.4 | 1951.9 | 1839.3 | 1703.9 | 1579.8 | 1570.0 |
| 45° | 5970.1 | 6112.0 | 4228.7 | 2317.5 | 1943.8 | 1898.1 | 1783.8 | 1661.4 | 1517.8 | 1406.8 | 1398.7 |
| 47.5° | 7225.1 | 7024.4 | 4135.6 | 1997.6 | 1761.0 | 1747.9 | 1659.8 | 1517.8 | 1374.2 | 1297.5 | 1289.3 |
| 50° | 9057.9 | 8460.6 | 4122.6 | 1765.9 | 1614.1 | 1620.6 | 1548.8 | 1418.3 | 1292.6 | 1228.9 | 1219.1 |
| 52.5° | 11264.4 | 10195.4 | 4209.1 | 1602.7 | 1485.2 | 1509.6 | 1473.7 | 1353.0 | 1242.0 | 1188.1 | 1178.3 |
| 55° | 13405.7 | 11755.7 | 4261.3 | 1475.4 | 1364.4 | 1410.1 | 1415.0 | 1313.8 | 1212.6 | 1158.8 | 1152.2 |
| 57.5° | 15143.8 | 12930.8 | 4029.5 | 1359.5 | 1259.9 | 1330.1 | 1366.0 | 1291.0 | 1197.9 | 1157.1 | 1150.6 |
| 60° | 16353.2 | 13485.7 | 3370.2 | 1256.7 | 1183.2 | 1266.5 | 1348.1 | 1292.6 | 1233.8 | 1238.7 | 1242.0 |
| 62.5° | 16738.3 | 13239.2 | 2528.1 | 1180.0 | 1131.0 | 1245.3 | 1377.5 | 1359.5 | 1299.1 | 1336.7 | 1343.2 |
| 65° | 16100.2 | 12220.8 | 1832.8 | 1119.6 | 1085.3 | 1259.9 | 1465.6 | 1408.5 | 1276.3 | 1304.0 | 1304.0 |
| 67.5° | 13963.9 | 10528.4 | 1426.4 | 1064.1 | 1033.1 | 1287.7 | 1553.7 | 1403.6 | 1222.4 | 1255.0 | 1225.7 |
| 70° | 11076.7 | 8143.9 | 1188.1 | 1002.1 | 977.6 | 1246.9 | 1561.9 | 1353.0 | 1158.8 | 1165.3 | 1109.8 |
| 72.5° | 7350.8 | 5354.8 | 1021.7 | 943.3 | 892.7 | 1121.2 | 1495.0 | 1287.7 | 1096.7 | 1059.2 | 1003.7 |
| 75° | 3601.9 | 2670.0 | 891.1 | 869.9 | 781.8 | 976.0 | 1403.6 | 1225.7 | 1029.8 | 971.1 | 940.1 |
| 77.5° | 1395.4 | 1135.9 | 760.5 | 776.9 | 680.6 | 860.1 | 1282.8 | 1137.5 | 941.7 | 861.7 | 837.2 |
| 80° | 677.3 | 644.7 | 623.4 | 647.9 | 559.8 | 732.8 | 1171.8 | 1060.8 | 860.1 | 772.0 | 736.1 |
| 82.5° | 421.1 | 398.2 | 478.2 | 504.3 | 430.9 | 669.1 | 1111.4 | 995.6 | 757.3 | 639.8 | 610.4 |
| 85° | 213.8 | 228.5 | 319.9 | 344.4 | 308.5 | 532.0 | 915.6 | 747.5 | 546.7 | 453.7 | 457.0 |
| 87.5° | 81.6 | 109.3 | 168.1 | 181.2 | 164.8 | 280.7 | 504.3 | 435.8 | 350.9 | 238.3 | 220.3 |
| 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)