

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: P529943

Luminaire Tested: **GALN-SA5A-827-U-AFL-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P529943  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA5A-827-U-AFL-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12559 lumens  
Efficiency: N/A  
Efficacy: 81.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G0

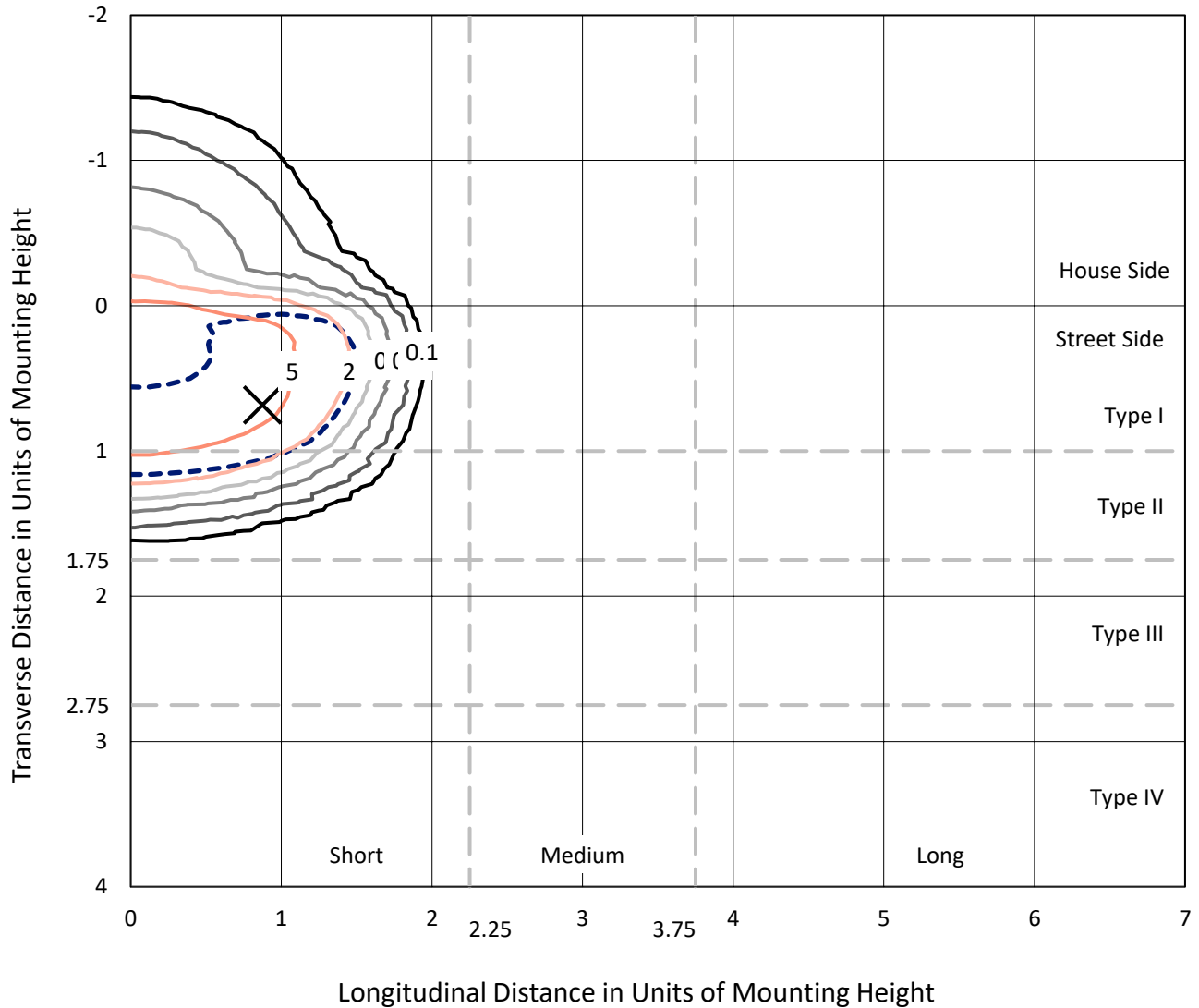
Input Watts (W): 154  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

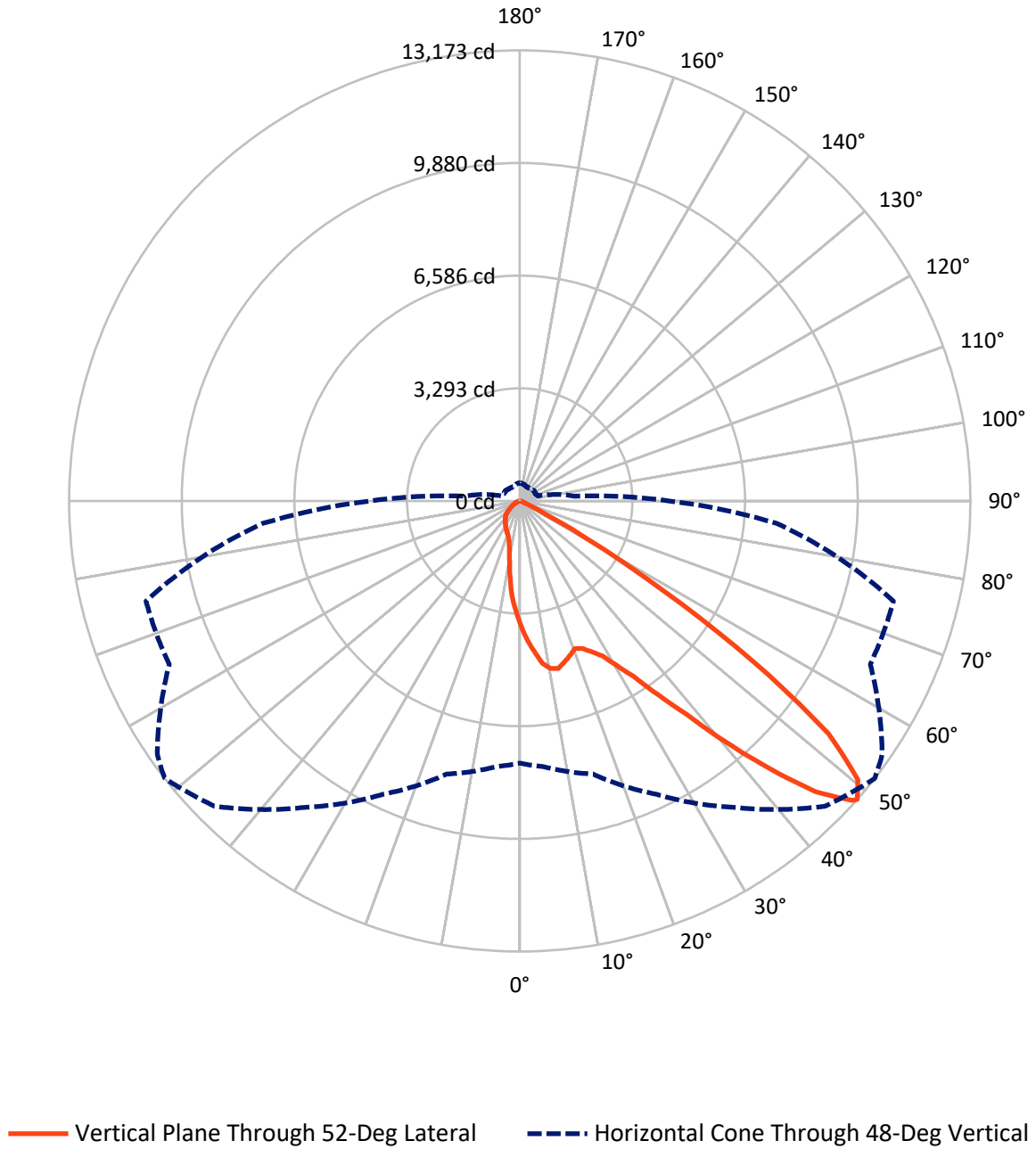
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



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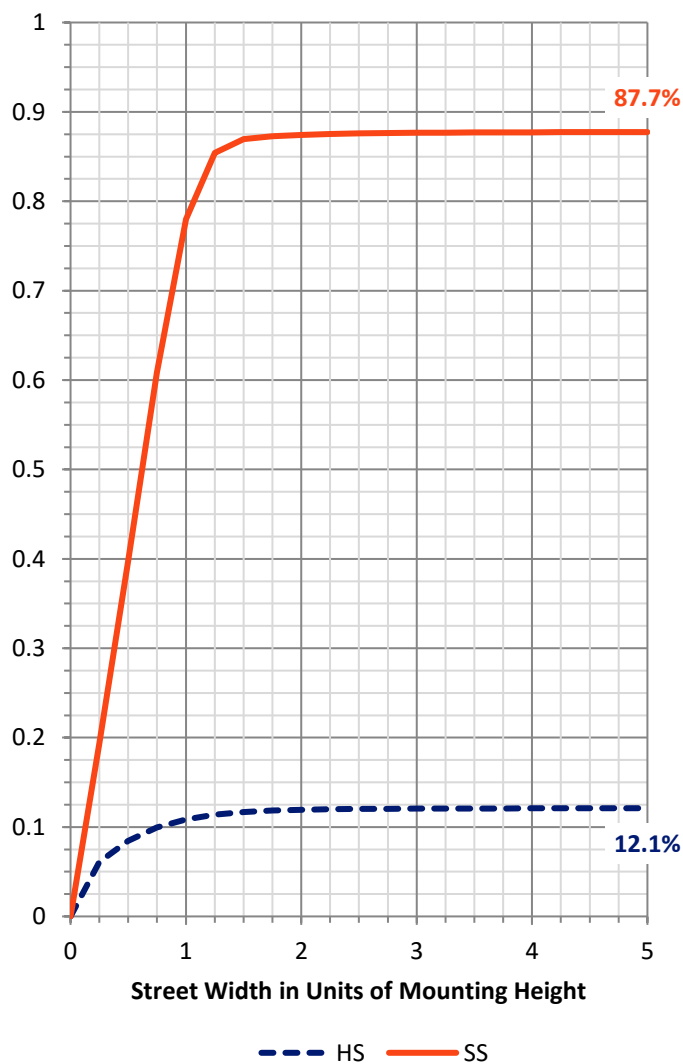
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1529.2   | 0.0    | 1529.2  |
|                    | % Fixture | 12.2     | 0.0    | 12.2    |
| <b>Street Side</b> | Lumens    | 11029.8  | 0.0    | 11029.8 |
|                    | % Fixture | 87.8     | 0.0    | 87.8    |
| <b>Total</b>       | Lumens    | 12559.0  | 0.0    | 12559.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 332.0   | 2.6       |
| 10°-20°   | 867.5   | 6.9       |
| 20°-30°   | 1481.2  | 11.8      |
| 30°-40°   | 2727.7  | 21.7      |
| 40°-50°   | 4236.1  | 33.7      |
| 50°-60°   | 2549.4  | 20.3      |
| 60°-70°   | 294.9   | 2.3       |
| 70°-80°   | 57.1    | 0.5       |
| 80°-90°   | 13.2    | 0.1       |
| 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°    | 12559.0 | 100.0     |
| 0°-180°   | 12559.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P529943

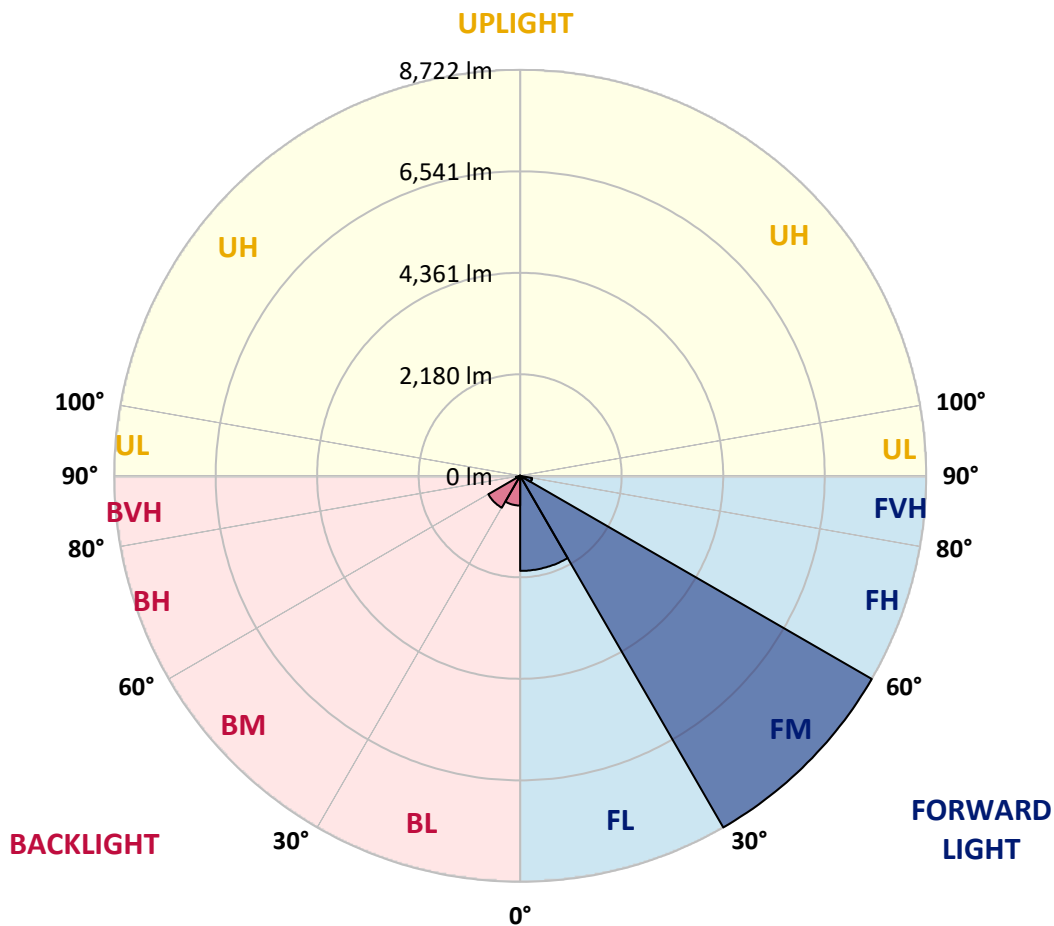
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|--------|-----------|-------------------------|------|--------|
|                |        |           | B                       | U    | G      |
| FL (0°-30°)    | 2041.9 | 16.3      |                         |      |        |
| FM (30°-60°)   | 8722.0 | 69.4      |                         |      |        |
| FH (60°-80°)   | 259.7  | 2.1       |                         |      | G0/660 |
| FVH (80°-90°)  | 6.3    | 0.1       |                         |      | G0/10  |
| BL (0°-30°)    | 638.8  | 5.1       | B2/1000                 |      |        |
| BM (30°-60°)   | 791.2  | 6.3       | B1/1000                 |      |        |
| BH (60°-80°)   | 92.3   | 0.7       | B0/110                  |      | G0/110 |
| BVH (80°-90°)  | 6.9    | 0.1       |                         |      | G0/10  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B2-U0-G0**

Type II Short





REPORT NUMBER: P529943

CATALOG NUMBER: GALN-SA5A-827-U-AFL-GRSBK

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 52°     | 55°     | 65°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 3626.8  | 3626.8  | 3626.8  | 3626.8  | 3626.8  | 3626.8  | 3626.8  | 3626.8  | 3626.8  | 3626.8  | 3626.8 |
| 2.5°  | 4395.8  | 4295.1  | 4304.2  | 4238.3  | 4199.9  | 4137.6  | 4053.4  | 4036.9  | 3945.4  | 3820.9  | 3694.6 |
| 5°    | 4791.2  | 4767.4  | 4798.5  | 4703.3  | 4707.0  | 4604.5  | 4406.8  | 4410.4  | 4199.9  | 3996.7  | 3800.8 |
| 7.5°  | 4816.9  | 4761.9  | 4793.1  | 4877.3  | 4926.7  | 4908.4  | 4796.7  | 4699.7  | 4500.1  | 4201.7  | 3916.1 |
| 10°   | 4313.4  | 4417.7  | 4450.7  | 4589.8  | 4787.6  | 4996.3  | 4983.5  | 4989.0  | 4822.3  | 4432.4  | 4015.0 |
| 12.5° | 4011.3  | 3941.7  | 4053.4  | 4137.6  | 4436.0  | 4840.7  | 5025.6  | 5065.8  | 5078.7  | 4655.7  | 4113.8 |
| 15°   | 3874.0  | 3874.0  | 3892.3  | 3916.1  | 4132.1  | 4505.6  | 4882.8  | 4999.9  | 5276.4  | 4948.7  | 4269.4 |
| 17.5° | 3960.0  | 3956.4  | 3982.0  | 3932.6  | 4013.1  | 4300.6  | 4750.9  | 4884.6  | 5497.9  | 5236.1  | 4392.1 |
| 20°   | 4221.8  | 4234.7  | 4218.2  | 4075.4  | 4080.9  | 4296.9  | 4604.5  | 4815.0  | 5648.0  | 5485.1  | 4555.1 |
| 22.5° | 4586.2  | 4593.5  | 4500.1  | 4344.5  | 4298.7  | 4404.9  | 4688.7  | 4849.8  | 5768.9  | 5783.5  | 4604.5 |
| 25°   | 5007.3  | 4978.0  | 4959.7  | 4740.0  | 4600.8  | 4692.4  | 4879.1  | 4972.5  | 5843.9  | 6039.8  | 4745.5 |
| 27.5° | 5591.3  | 5532.7  | 5421.0  | 5225.1  | 5122.6  | 4992.6  | 5126.3  | 5280.1  | 6058.1  | 6398.7  | 4899.2 |
| 30°   | 6453.6  | 6402.3  | 6184.5  | 5931.8  | 5662.7  | 5534.5  | 5576.6  | 5660.9  | 6444.4  | 6814.3  | 5102.5 |
| 32.5° | 7751.6  | 7643.6  | 7328.7  | 6847.2  | 6481.1  | 6127.7  | 6116.7  | 6206.4  | 6790.5  | 7389.1  | 5344.1 |
| 35°   | 9181.5  | 9148.5  | 8685.4  | 8189.2  | 7480.7  | 6935.1  | 6944.3  | 6991.9  | 7453.2  | 8143.4  | 5660.9 |
| 37.5° | 10131.7 | 10312.9 | 10018.2 | 9485.4  | 8890.4  | 8110.5  | 7912.8  | 7929.2  | 8363.1  | 9036.9  | 6232.1 |
| 40°   | 10865.8 | 10712.1 | 10746.8 | 10622.3 | 10215.9 | 9685.0  | 9247.4  | 9161.4  | 9415.8  | 10025.5 | 6799.6 |
| 42.5° | 10545.5 | 10552.8 | 10767.0 | 11061.7 | 11162.4 | 11124.0 | 10677.3 | 10514.3 | 10316.6 | 10834.7 | 7339.7 |
| 45°   | 9641.0  | 9829.6  | 10107.9 | 10887.8 | 11572.5 | 12215.2 | 12127.3 | 11856.3 | 10939.1 | 11475.5 | 7650.9 |
| 47.5° | 8198.4  | 8191.0  | 8646.9  | 9661.2  | 11182.6 | 12687.5 | 13086.6 | 12896.2 | 11380.3 | 11404.1 | 7586.9 |
| 48°   | 7665.6  | 7797.4  | 8267.9  | 9461.6  | 10935.4 | 12617.9 | 13172.7 | 12932.8 | 11305.2 | 11308.9 | 7531.9 |
| 50°   | 5666.4  | 5642.6  | 6228.4  | 7693.1  | 9767.4  | 11856.3 | 12810.2 | 12996.9 | 11303.4 | 10827.4 | 7147.5 |
| 52.5° | 2993.4  | 3095.9  | 3522.5  | 4837.0  | 6905.8  | 9703.3  | 11299.7 | 11590.8 | 10904.3 | 10040.2 | 6594.6 |
| 55°   | 1272.4  | 1149.7  | 1477.5  | 2184.2  | 3885.0  | 6482.9  | 8289.9  | 8938.0  | 9219.9  | 8884.9  | 5768.9 |
| 57.5° | 454.0   | 496.1   | 571.2   | 822.0   | 1633.1  | 3548.1  | 4943.2  | 5446.7  | 6387.7  | 6519.5  | 3930.7 |
| 60°   | 291.1   | 296.6   | 320.4   | 377.1   | 613.3   | 1367.6  | 2345.3  | 2746.2  | 3172.8  | 3275.3  | 1834.5 |
| 62.5° | 225.2   | 227.0   | 238.0   | 247.2   | 291.1   | 530.9   | 880.6   | 1043.6  | 1083.8  | 931.9   | 481.5  |
| 65°   | 188.6   | 190.4   | 194.1   | 194.1   | 206.9   | 249.0   | 307.6   | 338.7   | 329.5   | 325.9   | 272.8  |
| 67.5° | 144.6   | 148.3   | 155.6   | 155.6   | 162.9   | 152.0   | 170.3   | 181.2   | 205.1   | 249.0   | 232.5  |
| 70°   | 113.5   | 115.3   | 120.8   | 124.5   | 124.5   | 109.8   | 122.7   | 133.6   | 150.1   | 184.9   | 183.1  |
| 72.5° | 87.9    | 91.5    | 95.2    | 95.2    | 89.7    | 75.1    | 87.9    | 97.0    | 108.0   | 128.2   | 124.5  |
| 75°   | 67.7    | 67.7    | 69.6    | 56.8    | 43.9    | 38.4    | 53.1    | 64.1    | 80.6    | 84.2    | 69.6   |
| 77.5° | 18.3    | 20.1    | 18.3    | 16.5    | 18.3    | 27.5    | 34.8    | 40.3    | 51.3    | 51.3    | 45.8   |
| 80°   | 0.0     | 1.8     | 5.5     | 11.0    | 18.3    | 25.6    | 31.1    | 34.8    | 40.3    | 43.9    | 42.1   |
| 82.5° | 0.0     | 1.8     | 5.5     | 11.0    | 16.5    | 20.1    | 27.5    | 29.3    | 33.0    | 38.4    | 38.4   |
| 85°   | 0.0     | 1.8     | 3.7     | 7.3     | 11.0    | 12.8    | 12.8    | 11.0    | 11.0    | 9.2     | 7.3    |
| 87.5° | 0.0     | 0.0     | 1.8     | 3.7     | 3.7     | 5.5     | 5.5     | 5.5     | 5.5     | 5.5     | 5.5    |
| 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: P529943

CATALOG NUMBER: GALN-SA5A-827-U-AFL-GRSBK

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3626.8 | 3626.8 | 3626.8 | 3626.8 | 3626.8 | 3626.8 | 3626.8 | 3626.8 | 3626.8 | 3626.8 | 3626.8 |
| 2.5°  | 3645.1 | 3588.4 | 3502.3 | 3366.9 | 3236.9 | 3152.7 | 3072.1 | 2982.4 | 2933.0 | 2929.3 | 2901.8 |
| 5°    | 3689.1 | 3560.9 | 3355.9 | 3123.4 | 2874.4 | 2660.2 | 2444.1 | 2303.2 | 2176.8 | 2107.3 | 2094.4 |
| 7.5°  | 3712.9 | 3546.3 | 3214.9 | 2824.9 | 2400.2 | 2050.5 | 1808.8 | 1631.2 | 1561.7 | 1510.4 | 1508.6 |
| 10°   | 3762.3 | 3520.6 | 3004.4 | 2429.5 | 1904.0 | 1550.7 | 1384.1 | 1303.5 | 1265.1 | 1250.4 | 1228.5 |
| 12.5° | 3798.9 | 3473.0 | 2788.3 | 2023.0 | 1504.9 | 1285.2 | 1212.0 | 1193.7 | 1195.5 | 1202.8 | 1193.7 |
| 15°   | 3850.2 | 3430.9 | 2497.2 | 1660.5 | 1263.3 | 1157.1 | 1157.1 | 1160.7 | 1186.4 | 1190.0 | 1188.2 |
| 17.5° | 3846.5 | 3348.5 | 2197.0 | 1367.6 | 1116.8 | 1102.1 | 1107.6 | 1142.4 | 1158.9 | 1164.4 | 1151.6 |
| 20°   | 3890.5 | 3271.7 | 1887.6 | 1168.1 | 1034.4 | 1056.4 | 1093.0 | 1102.1 | 1122.3 | 1125.9 | 1111.3 |
| 22.5° | 3877.7 | 3079.4 | 1600.1 | 1010.6 | 972.2  | 1014.3 | 1050.9 | 1061.9 | 1056.4 | 1045.4 | 1043.6 |
| 25°   | 3853.9 | 2914.6 | 1336.5 | 906.2  | 926.4  | 972.2  | 1006.9 | 986.8  | 975.8  | 977.7  | 979.5  |
| 27.5° | 3811.7 | 2705.9 | 1118.6 | 833.0  | 864.1  | 931.9  | 930.1  | 922.7  | 933.7  | 924.6  | 933.7  |
| 30°   | 3804.4 | 2497.2 | 939.2  | 767.1  | 818.4  | 867.8  | 871.5  | 884.3  | 897.1  | 880.6  | 897.1  |
| 32.5° | 3815.4 | 2268.4 | 811.0  | 726.8  | 790.9  | 792.7  | 833.0  | 845.8  | 836.7  | 800.1  | 803.7  |
| 35°   | 3899.6 | 2092.6 | 717.7  | 704.9  | 747.0  | 748.8  | 787.2  | 770.8  | 730.5  | 708.5  | 721.3  |
| 37.5° | 4077.2 | 1946.1 | 673.7  | 684.7  | 688.4  | 712.2  | 714.0  | 681.1  | 684.7  | 682.9  | 690.2  |
| 40°   | 4304.2 | 1834.5 | 642.6  | 666.4  | 662.8  | 679.2  | 613.3  | 631.6  | 648.1  | 653.6  | 657.3  |
| 42.5° | 4459.8 | 1753.9 | 622.5  | 637.1  | 629.8  | 600.5  | 563.9  | 582.2  | 595.0  | 615.2  | 618.8  |
| 45°   | 4529.4 | 1689.8 | 598.7  | 585.9  | 585.9  | 532.8  | 518.1  | 521.8  | 551.1  | 573.0  | 569.4  |
| 47.5° | 4415.9 | 1627.6 | 556.6  | 518.1  | 530.9  | 487.0  | 470.5  | 470.5  | 501.6  | 529.1  | 523.6  |
| 48°   | 4372.0 | 1602.0 | 558.4  | 503.5  | 512.6  | 479.7  | 463.2  | 459.5  | 494.3  | 519.9  | 519.9  |
| 50°   | 4154.1 | 1506.8 | 510.8  | 463.2  | 444.9  | 441.2  | 430.2  | 433.9  | 455.9  | 479.7  | 479.7  |
| 52.5° | 3729.4 | 1301.7 | 432.1  | 397.3  | 364.3  | 386.3  | 391.8  | 384.5  | 395.5  | 417.4  | 415.6  |
| 55°   | 3112.4 | 999.6  | 346.0  | 329.5  | 303.9  | 327.7  | 338.7  | 329.5  | 318.6  | 335.0  | 335.0  |
| 57.5° | 1993.7 | 538.3  | 276.5  | 280.1  | 254.5  | 278.3  | 287.4  | 265.5  | 245.3  | 258.1  | 256.3  |
| 60°   | 898.9  | 322.2  | 227.0  | 221.5  | 205.1  | 232.5  | 247.2  | 221.5  | 194.1  | 203.2  | 212.4  |
| 62.5° | 336.9  | 228.9  | 172.1  | 168.4  | 164.8  | 190.4  | 197.7  | 177.6  | 150.1  | 155.6  | 157.4  |
| 65°   | 247.2  | 201.4  | 137.3  | 124.5  | 131.8  | 150.1  | 146.5  | 126.3  | 108.0  | 108.0  | 111.7  |
| 67.5° | 210.5  | 175.8  | 111.7  | 97.0   | 97.0   | 98.9   | 91.5   | 80.6   | 75.1   | 78.7   | 82.4   |
| 70°   | 164.8  | 139.1  | 87.9   | 75.1   | 67.7   | 60.4   | 53.1   | 51.3   | 45.8   | 51.3   | 49.4   |
| 72.5° | 106.2  | 93.4   | 67.7   | 56.8   | 51.3   | 42.1   | 34.8   | 33.0   | 27.5   | 25.6   | 25.6   |
| 75°   | 56.8   | 56.8   | 53.1   | 45.8   | 40.3   | 33.0   | 27.5   | 22.0   | 14.6   | 11.0   | 11.0   |
| 77.5° | 40.3   | 43.9   | 47.6   | 43.9   | 36.6   | 27.5   | 22.0   | 14.6   | 7.3    | 3.7    | 3.7    |
| 80°   | 38.4   | 43.9   | 47.6   | 42.1   | 36.6   | 27.5   | 20.1   | 11.0   | 5.5    | 1.8    | 1.8    |
| 82.5° | 34.8   | 40.3   | 43.9   | 38.4   | 33.0   | 23.8   | 18.3   | 11.0   | 5.5    | 1.8    | 1.8    |
| 85°   | 7.3    | 9.2    | 11.0   | 11.0   | 12.8   | 16.5   | 12.8   | 9.2    | 3.7    | 1.8    | 1.8    |
| 87.5° | 5.5    | 5.5    | 5.5    | 5.5    | 5.5    | 5.5    | 3.7    | 3.7    | 1.8    | 1.8    | 1.8    |
| 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)