

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: P651890

Luminaire Tested: **GALN-SA5A-840-U-SL2-GRSWH**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P651890
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA5A-840-U-SL2-GRSWH
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS WITH WHITE GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16324.6 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

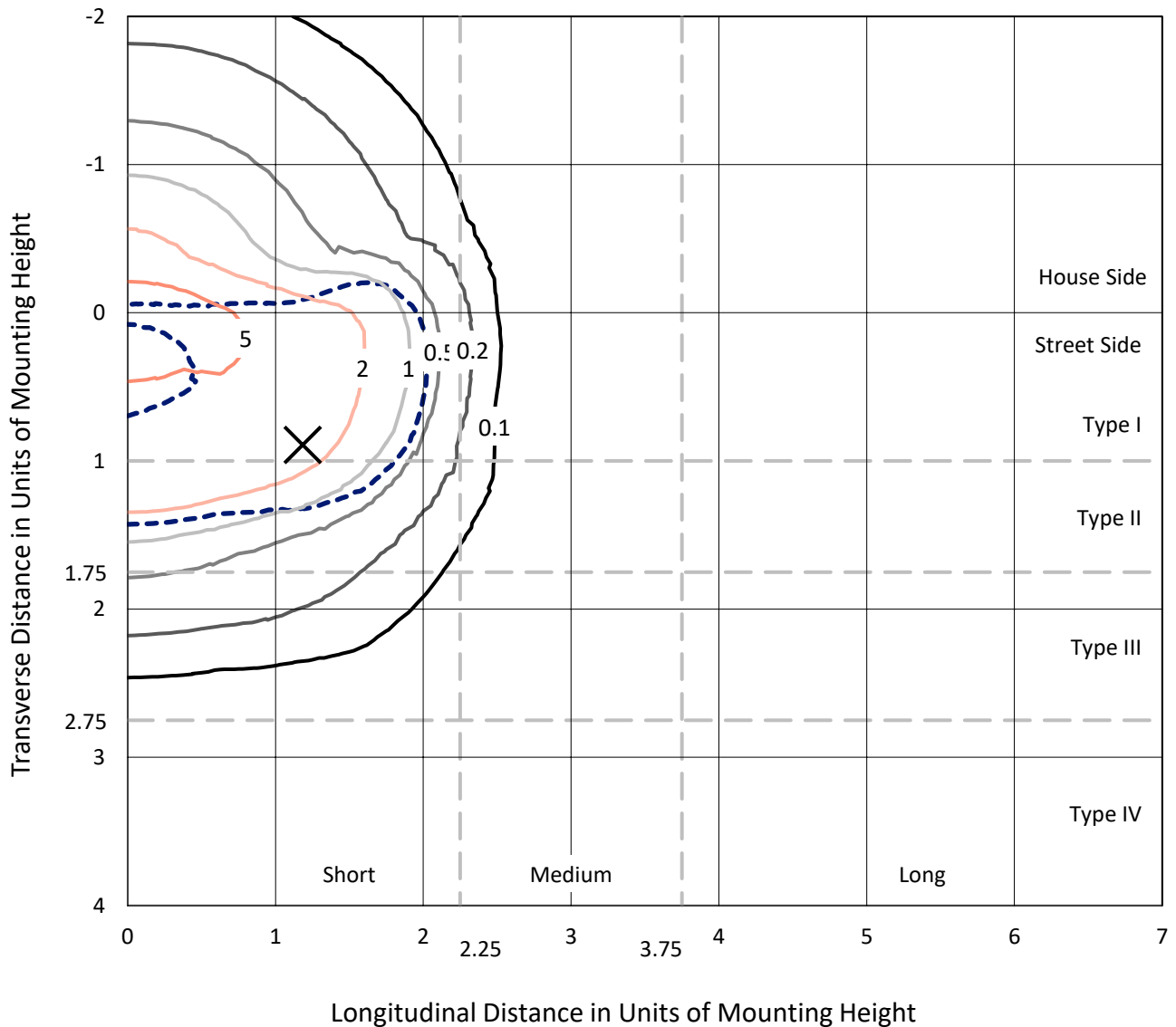
Input Watts (W): 154
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

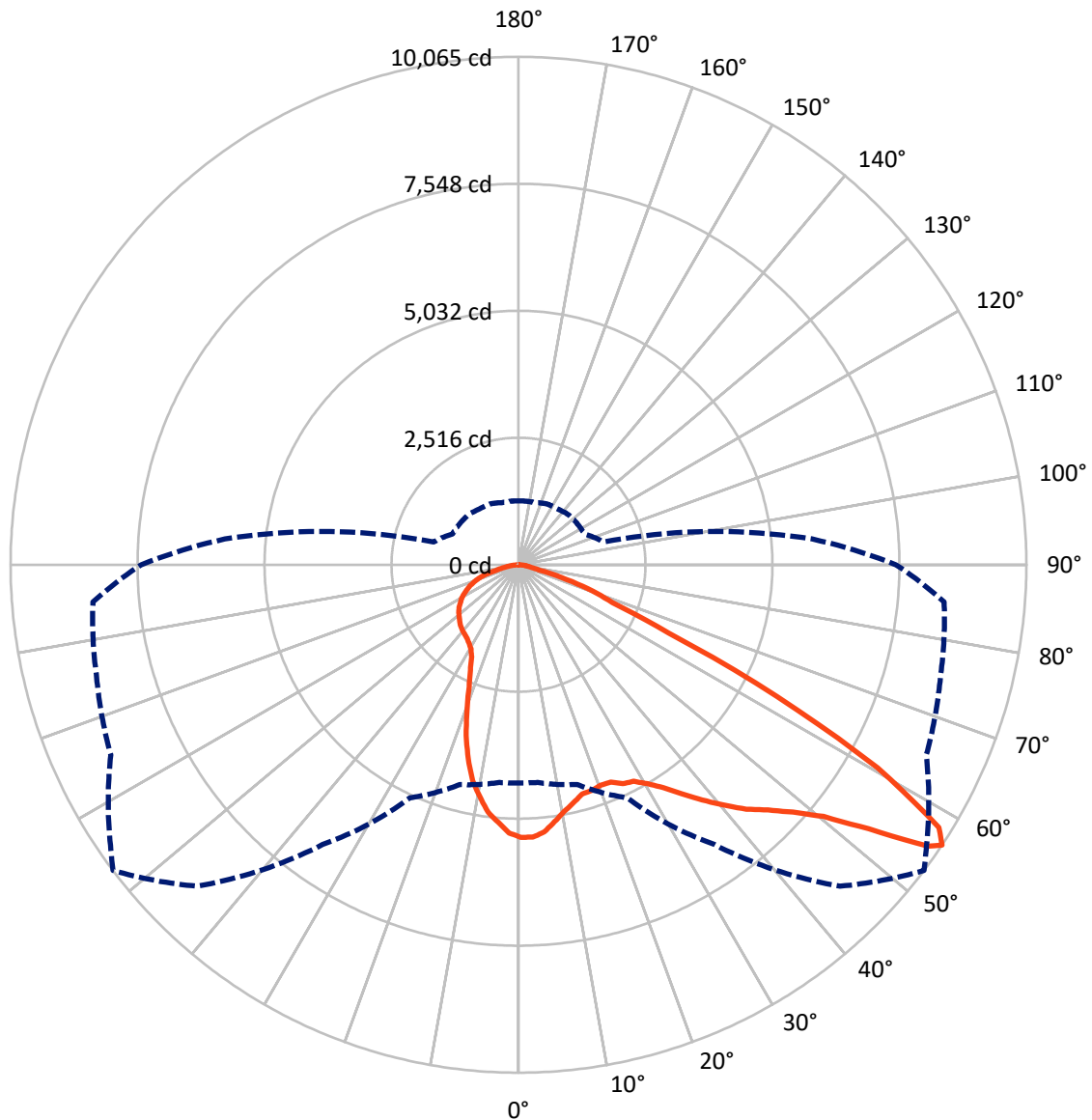
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 53-Deg Lateral - - - Horizontal Cone Through 56-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4763.9 | 0.0 | 4763.9 |
| | % Fixture | 29.2 | 0.0 | 29.2 |
| Street Side | Lumens | 11560.8 | 0.0 | 11560.8 |
| | % Fixture | 70.8 | 0.0 | 70.8 |
| Total | Lumens | 16324.6 | 0.0 | 16324.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 478.1 | 2.9 |
| 10°-20° | 1194.2 | 7.3 |
| 20°-30° | 1760.9 | 10.8 |
| 30°-40° | 2516.0 | 15.4 |
| 40°-50° | 3462.9 | 21.2 |
| 50°-60° | 4092.2 | 25.1 |
| 60°-70° | 2180.9 | 13.4 |
| 70°-80° | 553.3 | 3.4 |
| 80°-90° | 86.3 | 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° | 16324.6 | 100.0 |
| 0°-180° | 16324.6 | 100.0 |

Coefficient of Utilization



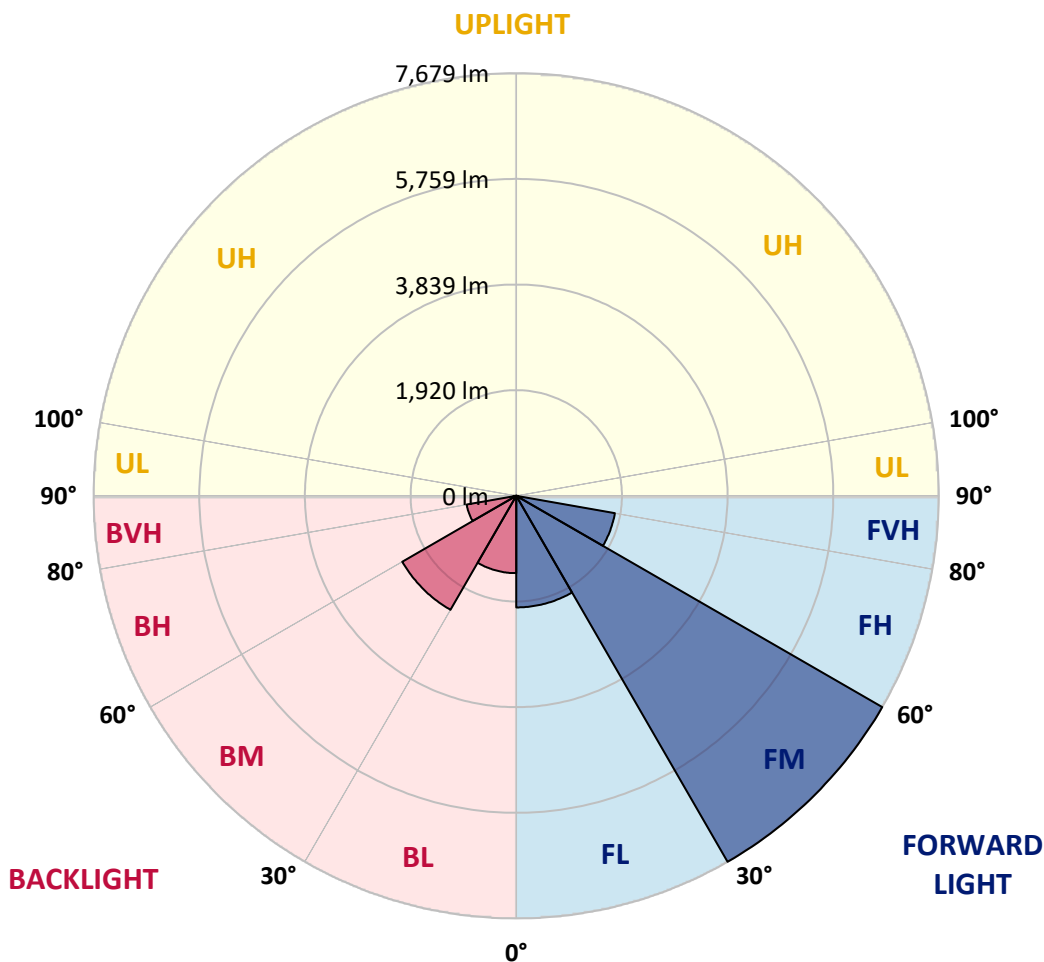
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2028.1 | 12.4 | | | |
| FM (30°-60°) | 7678.8 | 47.0 | | | |
| FH (60°-80°) | 1819.2 | 11.1 | | | G2/5000 |
| FVH (80°-90°) | 34.7 | 0.2 | | | G1/100 |
| BL (0°-30°) | 1405.1 | 8.6 | B3/2500 | | |
| BM (30°-60°) | 2392.3 | 14.7 | B2/2500 | | |
| BH (60°-80°) | 915.0 | 5.6 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 51.6 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 53° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|--------|
| 0° | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 |
| 2.5° | 5333.8 | 5287.8 | 5315.0 | 5304.5 | 5390.4 | 5415.5 | 5402.9 | 5413.4 | 5461.5 | 5438.5 | 5390.4 |
| 5° | 4984.1 | 5049.0 | 5061.6 | 5093.0 | 5143.2 | 5241.7 | 5319.2 | 5340.1 | 5363.1 | 5469.9 | 5459.4 |
| 7.5° | 4665.8 | 4709.8 | 4686.7 | 4778.9 | 4887.8 | 5046.9 | 5141.2 | 5157.9 | 5369.4 | 5428.1 | 5472.1 |
| 10° | 4464.8 | 4420.8 | 4525.5 | 4550.7 | 4674.2 | 4856.4 | 4969.5 | 5038.5 | 5231.2 | 5463.6 | 5490.9 |
| 12.5° | 4278.3 | 4263.7 | 4326.5 | 4397.8 | 4535.9 | 4724.4 | 4839.6 | 4866.9 | 5164.2 | 5409.2 | 5537.0 |
| 15° | 4140.2 | 4123.4 | 4186.2 | 4238.6 | 4399.9 | 4567.4 | 4714.0 | 4791.4 | 5090.9 | 5377.8 | 5497.2 |
| 17.5° | 4031.2 | 4029.1 | 4064.8 | 4159.0 | 4324.4 | 4464.8 | 4701.4 | 4705.6 | 5053.2 | 5426.0 | 5530.7 |
| 20° | 4024.9 | 4022.8 | 4029.1 | 4133.9 | 4284.6 | 4456.4 | 4661.6 | 4699.3 | 5053.2 | 5392.5 | 5532.8 |
| 22.5° | 4077.3 | 4043.9 | 4081.5 | 4148.6 | 4257.4 | 4471.0 | 4676.3 | 4760.1 | 5174.7 | 5557.9 | 5627.0 |
| 25° | 4161.1 | 4169.5 | 4190.5 | 4213.4 | 4276.2 | 4504.6 | 4806.1 | 4875.2 | 5317.1 | 5700.3 | 5756.8 |
| 27.5° | 4314.0 | 4309.8 | 4318.2 | 4330.7 | 4385.1 | 4535.9 | 4858.5 | 5036.4 | 5614.4 | 5953.7 | 5897.2 |
| 30° | 4538.0 | 4523.4 | 4556.9 | 4600.9 | 4550.7 | 4636.4 | 5032.3 | 5166.3 | 5890.9 | 6209.2 | 6054.2 |
| 32.5° | 4741.1 | 4795.6 | 4858.5 | 4877.3 | 4816.6 | 4833.3 | 5262.6 | 5398.7 | 6121.2 | 6523.3 | 6246.9 |
| 35° | 4994.5 | 5038.5 | 5122.3 | 5181.0 | 5170.5 | 5120.3 | 5576.8 | 5756.8 | 6454.2 | 6753.7 | 6450.0 |
| 37.5° | 5241.7 | 5294.0 | 5432.3 | 5606.1 | 5509.7 | 5486.7 | 5911.8 | 6060.5 | 6556.8 | 6877.2 | 6598.7 |
| 40° | 5639.6 | 5637.5 | 5876.2 | 5966.2 | 6052.1 | 6012.3 | 6259.5 | 6309.7 | 6611.3 | 6850.0 | 6602.9 |
| 42.5° | 6106.6 | 6077.2 | 6320.2 | 6460.5 | 6571.5 | 6575.7 | 6621.7 | 6605.0 | 6636.4 | 6711.8 | 6558.9 |
| 45° | 6550.5 | 6613.4 | 6858.4 | 7109.6 | 7220.7 | 7233.2 | 6927.5 | 6896.0 | 6680.4 | 6672.0 | 6475.1 |
| 47.5° | 7092.9 | 7107.5 | 7308.6 | 7639.5 | 7897.1 | 7809.1 | 7323.3 | 7254.1 | 6873.1 | 6937.9 | 6615.5 |
| 50° | 7124.4 | 7233.2 | 7413.3 | 7802.8 | 8594.4 | 8571.4 | 7836.4 | 7706.5 | 7183.0 | 7314.9 | 7007.0 |
| 52.5° | 6466.8 | 6441.6 | 6655.3 | 7291.9 | 8542.0 | 9329.5 | 8686.6 | 8376.6 | 7848.9 | 7748.4 | 7641.6 |
| 55° | 4927.6 | 4986.2 | 5174.7 | 5817.6 | 7417.5 | 9340.0 | 9844.7 | 9591.3 | 8561.0 | 8389.2 | 8265.7 |
| 56° | 4322.3 | 4330.7 | 4508.7 | 5095.1 | 6768.3 | 9006.9 | 10064.5 | 9859.3 | 8914.9 | 8653.0 | 8464.6 |
| 57.5° | 3583.1 | 3535.0 | 3627.1 | 3947.5 | 5712.8 | 8303.4 | 9823.7 | 10024.7 | 9329.5 | 8937.9 | 8676.1 |
| 60° | 2820.8 | 2810.4 | 2772.7 | 2831.3 | 3610.3 | 6255.3 | 8177.7 | 8630.0 | 9287.6 | 8669.8 | 8309.6 |
| 62.5° | 2303.6 | 2251.2 | 2326.6 | 2410.4 | 2508.8 | 3880.5 | 5746.4 | 6012.3 | 7373.6 | 6921.2 | 6242.7 |
| 65° | 1786.3 | 1761.2 | 1855.4 | 2127.6 | 2186.3 | 2464.8 | 3273.2 | 3478.4 | 4353.8 | 4276.2 | 3765.3 |
| 67.5° | 1229.3 | 1233.5 | 1315.2 | 1729.8 | 2027.1 | 2002.0 | 2004.1 | 2110.9 | 2272.1 | 1687.9 | 1470.1 |
| 70° | 779.0 | 776.9 | 820.9 | 1114.1 | 1631.4 | 1648.1 | 1564.3 | 1532.9 | 1453.3 | 879.5 | 931.9 |
| 72.5° | 500.5 | 485.8 | 508.9 | 615.7 | 843.9 | 975.9 | 1005.2 | 1024.1 | 841.8 | 691.0 | 749.7 |
| 75° | 282.7 | 268.0 | 259.7 | 286.9 | 333.0 | 385.3 | 423.0 | 435.6 | 487.9 | 523.5 | 555.0 |
| 77.5° | 85.9 | 77.5 | 94.3 | 125.6 | 165.4 | 221.9 | 270.1 | 278.5 | 328.7 | 370.6 | 402.1 |
| 80° | 37.7 | 41.9 | 58.6 | 83.8 | 117.2 | 157.1 | 190.6 | 203.1 | 236.7 | 268.0 | 276.4 |
| 82.5° | 23.0 | 25.1 | 39.8 | 56.5 | 81.7 | 111.0 | 136.2 | 140.3 | 173.8 | 199.0 | 205.2 |
| 85° | 8.4 | 10.5 | 20.9 | 33.5 | 52.4 | 71.2 | 71.2 | 77.5 | 71.2 | 71.2 | 77.5 |
| 87.5° | 0.0 | 0.0 | 2.1 | 4.2 | 4.2 | 6.3 | 8.4 | 8.4 | 10.5 | 12.5 | 14.6 |
| 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: P651890

CATALOG NUMBER: GALN-SA5A-840-U-SL2-GRSWH

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 | 5400.8 |
| 2.5° | 5415.5 | 5405.0 | 5388.3 | 5327.6 | 5321.3 | 5302.4 | 5197.7 | 5181.0 | 5197.7 | 5147.4 | 5151.6 |
| 5° | 5405.0 | 5436.5 | 5310.8 | 5250.0 | 5137.0 | 5055.3 | 4961.1 | 4912.9 | 4827.0 | 4772.6 | 4833.3 |
| 7.5° | 5451.1 | 5438.5 | 5281.5 | 5149.5 | 4979.9 | 4772.6 | 4607.2 | 4512.9 | 4362.1 | 4320.2 | 4351.7 |
| 10° | 5434.4 | 5367.3 | 5183.1 | 5009.2 | 4688.8 | 4506.7 | 4238.6 | 3978.9 | 3836.5 | 3763.2 | 3752.7 |
| 12.5° | 5411.3 | 5392.5 | 5084.6 | 4785.1 | 4448.0 | 4064.8 | 3687.8 | 3442.8 | 3210.3 | 3109.8 | 3124.5 |
| 15° | 5438.5 | 5279.4 | 4900.3 | 4521.3 | 4073.1 | 3570.5 | 3164.3 | 2848.0 | 2686.8 | 2621.9 | 2621.9 |
| 17.5° | 5426.0 | 5225.0 | 4812.4 | 4226.0 | 3658.5 | 3063.8 | 2617.7 | 2427.1 | 2360.1 | 2360.1 | 2378.9 |
| 20° | 5432.3 | 5260.5 | 4634.4 | 3930.7 | 3168.5 | 2580.0 | 2255.4 | 2186.3 | 2215.6 | 2226.1 | 2236.6 |
| 22.5° | 5467.8 | 5143.2 | 4460.6 | 3606.1 | 2714.0 | 2207.2 | 2048.1 | 2050.2 | 2102.5 | 2159.1 | 2148.6 |
| 25° | 5511.8 | 5097.2 | 4249.1 | 3283.6 | 2366.4 | 2025.0 | 1974.8 | 1968.5 | 2008.3 | 2037.7 | 2041.8 |
| 27.5° | 5474.2 | 5017.6 | 4033.4 | 2881.6 | 2081.6 | 1903.6 | 1893.1 | 1897.3 | 1909.9 | 1968.5 | 1949.7 |
| 30° | 5597.7 | 5040.6 | 3763.2 | 2544.4 | 1924.5 | 1863.8 | 1851.2 | 1845.0 | 1863.8 | 1880.6 | 1865.9 |
| 32.5° | 5750.6 | 4959.0 | 3562.1 | 2219.8 | 1847.1 | 1834.5 | 1809.3 | 1801.0 | 1811.4 | 1794.7 | 1803.1 |
| 35° | 5817.6 | 4944.3 | 3300.4 | 1987.4 | 1786.3 | 1775.9 | 1761.2 | 1759.1 | 1761.2 | 1746.5 | 1734.0 |
| 37.5° | 5855.3 | 5013.5 | 3000.9 | 1880.6 | 1748.6 | 1759.1 | 1725.6 | 1721.4 | 1683.7 | 1692.1 | 1698.4 |
| 40° | 5920.2 | 4906.6 | 2758.0 | 1778.0 | 1725.6 | 1704.6 | 1675.4 | 1669.0 | 1643.9 | 1629.3 | 1643.9 |
| 42.5° | 5825.9 | 4875.2 | 2519.3 | 1734.0 | 1692.1 | 1669.0 | 1648.1 | 1612.5 | 1604.1 | 1591.6 | 1583.2 |
| 45° | 5750.6 | 4695.1 | 2305.7 | 1679.5 | 1652.3 | 1639.7 | 1599.9 | 1562.2 | 1530.9 | 1543.4 | 1524.6 |
| 47.5° | 5807.1 | 4632.3 | 2094.2 | 1633.5 | 1597.8 | 1583.2 | 1543.4 | 1514.1 | 1482.7 | 1468.0 | 1463.8 |
| 50° | 6033.2 | 4749.5 | 1916.1 | 1599.9 | 1551.8 | 1543.4 | 1491.0 | 1457.5 | 1428.2 | 1417.8 | 1422.0 |
| 52.5° | 6573.6 | 5070.0 | 1794.7 | 1530.9 | 1507.8 | 1470.1 | 1440.8 | 1398.9 | 1380.1 | 1346.5 | 1367.5 |
| 55° | 7258.3 | 5591.4 | 1763.2 | 1465.9 | 1453.3 | 1419.9 | 1380.1 | 1348.6 | 1313.1 | 1285.8 | 1279.5 |
| 56° | 7478.3 | 5840.6 | 1738.2 | 1440.8 | 1419.9 | 1401.0 | 1348.6 | 1329.8 | 1273.3 | 1267.0 | 1262.8 |
| 57.5° | 7656.2 | 6060.5 | 1742.3 | 1392.6 | 1371.7 | 1354.9 | 1323.5 | 1277.5 | 1239.7 | 1216.7 | 1227.2 |
| 60° | 7254.1 | 5673.0 | 1662.7 | 1319.4 | 1315.2 | 1283.7 | 1239.7 | 1218.8 | 1172.7 | 1145.5 | 1139.2 |
| 62.5° | 5392.5 | 3851.2 | 1348.6 | 1225.1 | 1223.0 | 1189.5 | 1139.2 | 1116.2 | 1107.8 | 1070.1 | 1070.1 |
| 65° | 3105.6 | 2414.6 | 1166.5 | 1147.6 | 1130.8 | 1097.3 | 1047.0 | 1028.2 | 1007.3 | 994.7 | 984.2 |
| 67.5° | 1325.6 | 1252.3 | 1059.7 | 1057.6 | 1038.7 | 996.8 | 946.5 | 917.3 | 890.0 | 864.9 | 877.4 |
| 70° | 961.2 | 975.9 | 957.1 | 946.5 | 923.5 | 871.2 | 827.2 | 791.6 | 749.7 | 732.9 | 745.5 |
| 72.5° | 762.3 | 793.7 | 820.9 | 823.0 | 795.8 | 735.0 | 686.8 | 638.7 | 592.7 | 569.6 | 580.1 |
| 75° | 578.0 | 599.0 | 626.1 | 632.4 | 592.7 | 550.8 | 504.7 | 454.4 | 418.8 | 391.6 | 395.8 |
| 77.5° | 416.7 | 412.5 | 437.7 | 433.5 | 414.6 | 385.3 | 343.5 | 297.4 | 257.6 | 232.5 | 234.6 |
| 80° | 284.8 | 291.1 | 305.8 | 303.7 | 280.6 | 261.8 | 230.3 | 192.7 | 163.3 | 142.4 | 138.2 |
| 82.5° | 199.0 | 209.4 | 221.9 | 211.5 | 192.7 | 173.8 | 150.8 | 123.5 | 100.5 | 83.8 | 79.6 |
| 85° | 71.2 | 81.7 | 94.3 | 100.5 | 106.8 | 102.6 | 85.9 | 69.1 | 50.3 | 41.9 | 39.8 |
| 87.5° | 14.6 | 16.7 | 18.8 | 18.8 | 18.8 | 16.7 | 14.6 | 14.6 | 12.5 | 6.3 | 6.3 |
| 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)