

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: P458429

Luminaire Tested: **GALN-SA9D-760-U-AFL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458429
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA9D-760-U-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 57459 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

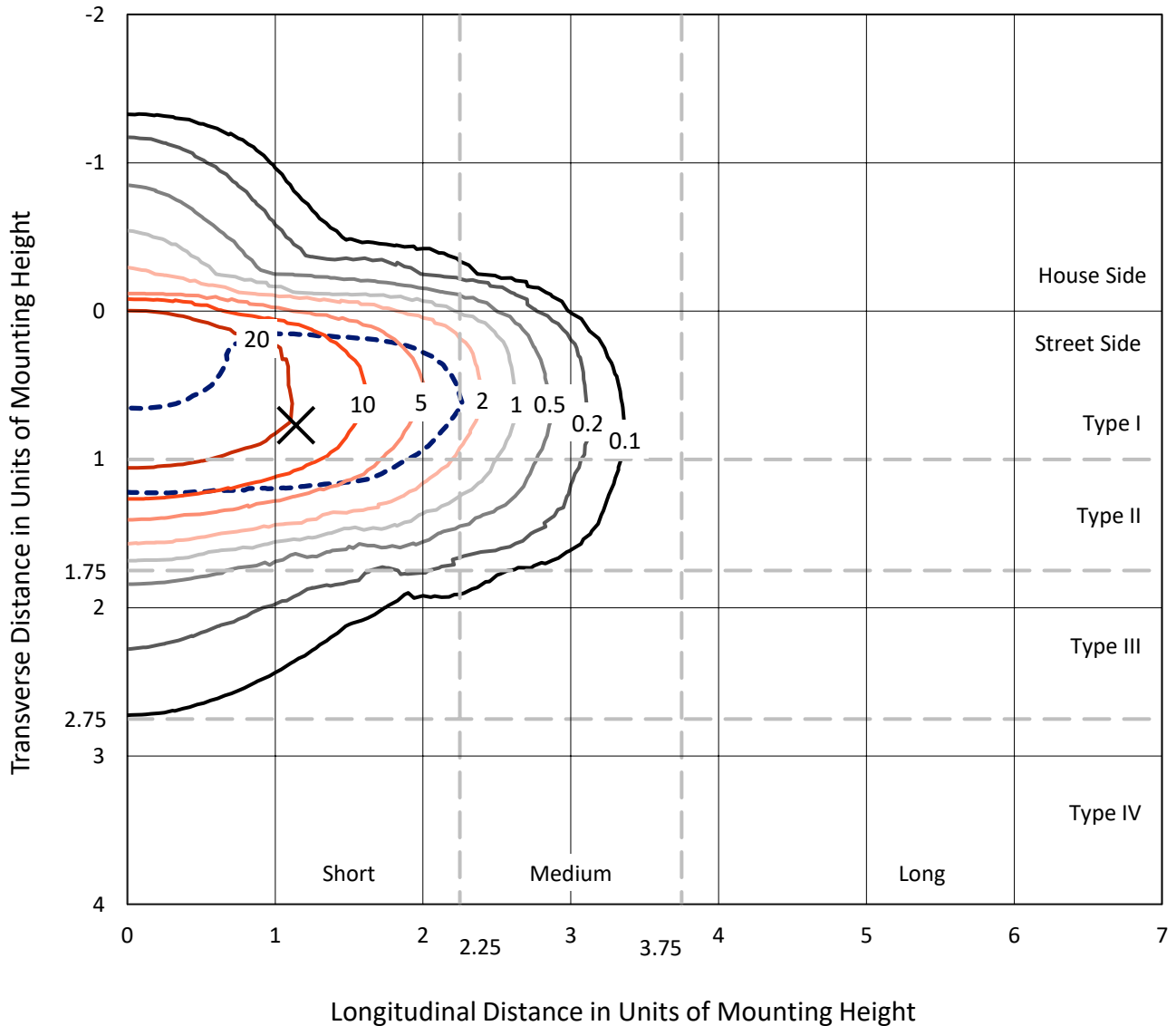
Input Watts (W): 552
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

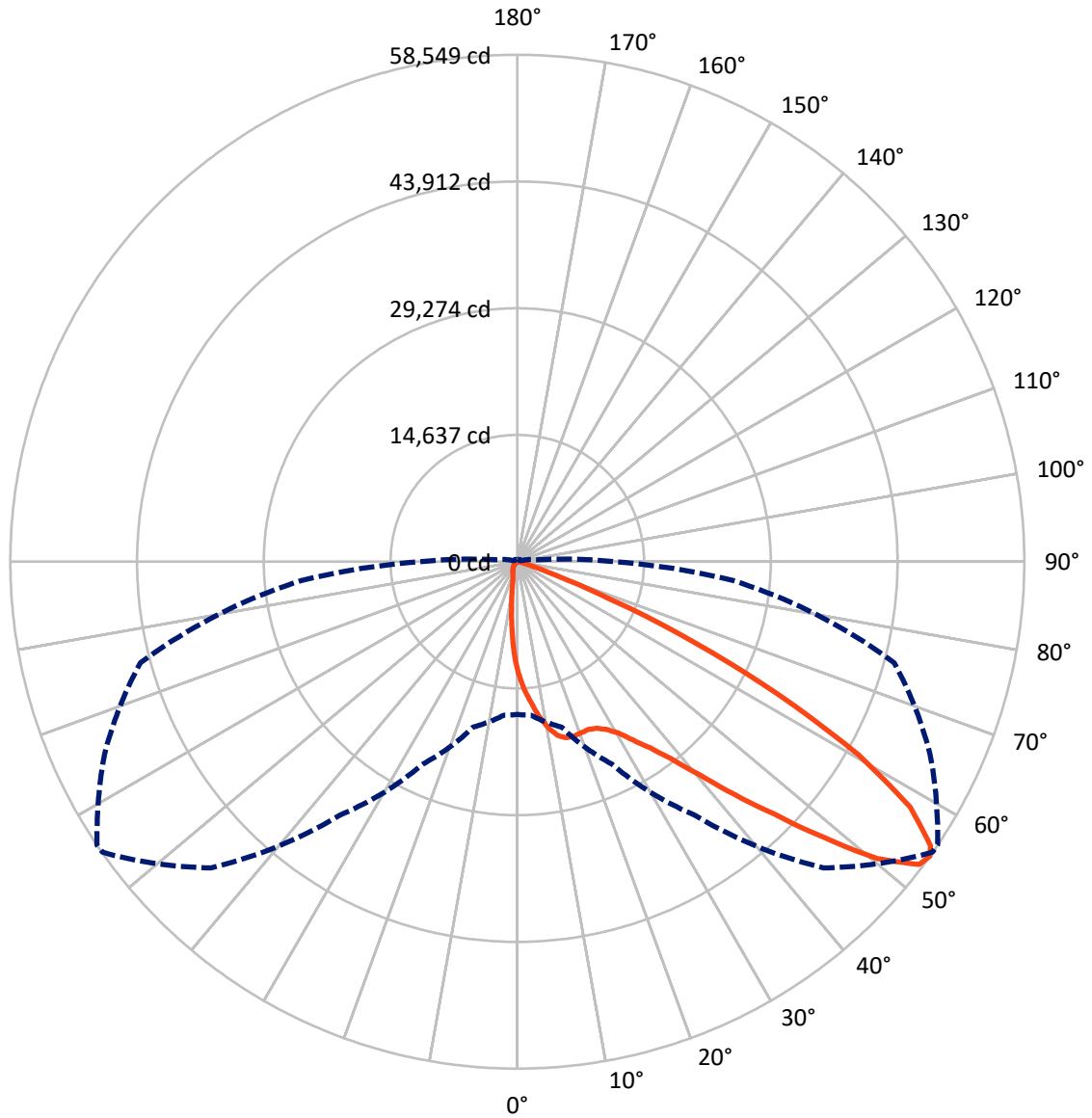
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 30.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 54-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2717.1 | 0.0 | 2717.1 |
| | % Fixture | 4.7 | 0.0 | 4.7 |
| Street Side | Lumens | 54741.9 | 0.0 | 54741.9 |
| | % Fixture | 95.3 | 0.0 | 95.3 |
| Total | Lumens | 57459.0 | 0.0 | 57459.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1128.0 | 2.0 |
| 10°-20° | 3049.5 | 5.3 |
| 20°-30° | 5281.5 | 9.2 |
| 30°-40° | 9116.7 | 15.9 |
| 40°-50° | 15517.0 | 27.0 |
| 50°-60° | 15356.0 | 26.7 |
| 60°-70° | 7008.8 | 12.2 |
| 70°-80° | 900.1 | 1.6 |
| 80°-90° | 101.4 | 0.2 |
| 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° | 57459.0 | 100.0 |
| 0°-180° | 57459.0 | 100.0 |

Coefficient of Utilization



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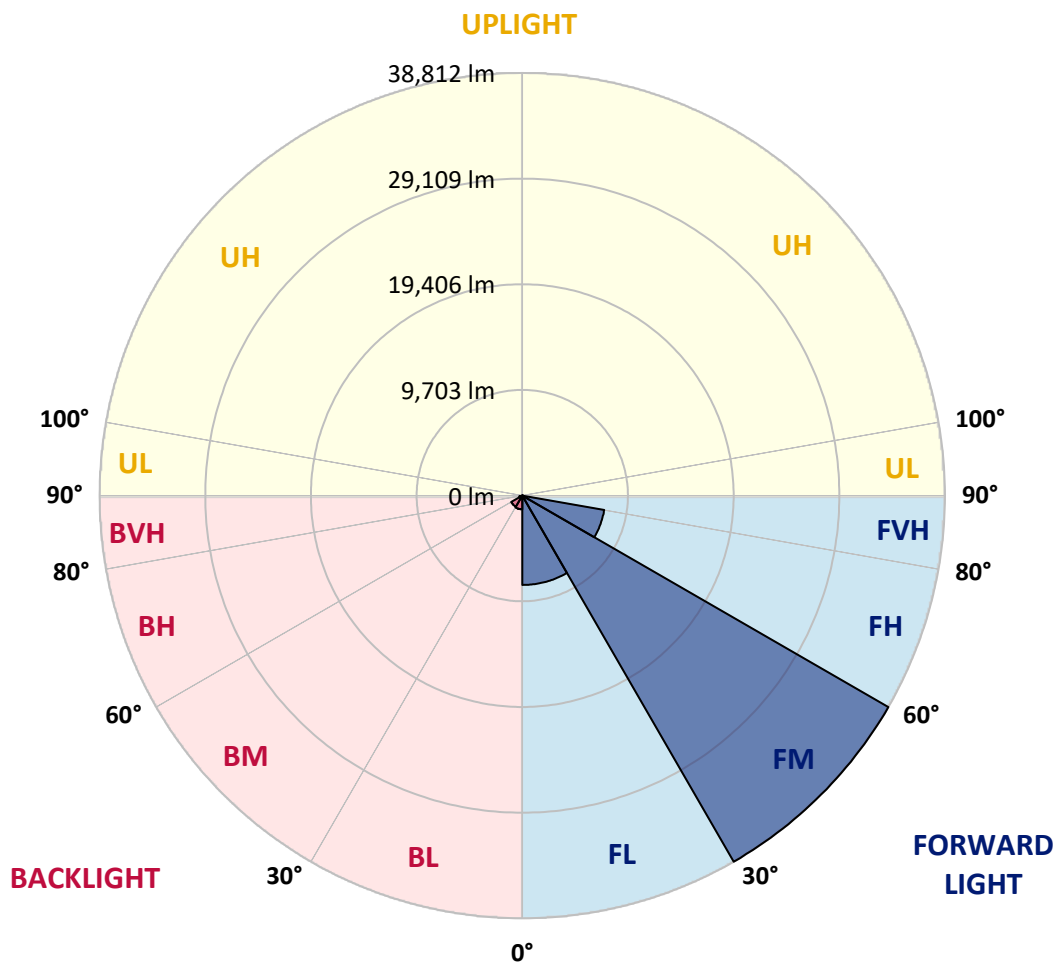
CATALOG NUMBER: GALN-SA9D-760-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 8202.5 | 14.3 | | | |
| FM | (30°-60°) | 38812.1 | 67.5 | | | |
| FH | (60°-80°) | 7636.8 | 13.3 | | | G4/12000 |
| FVH | (80°-90°) | 90.6 | 0.2 | | | G1/100 |
| BL | (0°-30°) | 1256.6 | 2.2 | B3/2500 | | |
| BM | (30°-60°) | 1177.6 | 2.0 | B2/2500 | | |
| BH | (60°-80°) | 272.1 | 0.5 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 10.9 | 0.0 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 |
| 2.5° | 16223.7 | 16111.3 | 15956.2 | 15836.0 | 15553.0 | 15146.0 | 14715.7 | 14715.7 | 14300.9 | 13723.3 | 13134.0 |
| 5° | 18712.5 | 18638.8 | 18487.6 | 18177.5 | 17859.6 | 17289.8 | 16425.3 | 16274.1 | 15533.7 | 14487.0 | 13386.0 |
| 7.5° | 19724.3 | 19759.2 | 19766.9 | 19685.5 | 19534.3 | 18972.2 | 18115.5 | 18010.8 | 16828.4 | 15425.1 | 13715.5 |
| 10° | 18755.1 | 18925.7 | 19092.4 | 19429.7 | 19906.5 | 20042.2 | 19557.6 | 19449.0 | 18286.1 | 16374.9 | 14072.2 |
| 12.5° | 17313.0 | 17406.1 | 17499.1 | 18030.2 | 18987.7 | 20084.8 | 20592.7 | 20588.8 | 19604.1 | 17320.8 | 14525.7 |
| 15° | 16642.4 | 16723.8 | 16731.5 | 16968.0 | 17797.6 | 19394.8 | 21034.6 | 21092.7 | 20891.2 | 18487.6 | 15014.2 |
| 17.5° | 16781.9 | 16847.8 | 16793.6 | 16851.7 | 17285.9 | 18635.0 | 20984.2 | 21178.0 | 21934.0 | 19608.0 | 15456.1 |
| 20° | 17692.9 | 17820.9 | 17611.5 | 17448.7 | 17580.5 | 18433.4 | 20813.6 | 21085.0 | 22670.5 | 20701.2 | 15859.3 |
| 22.5° | 19328.9 | 19398.6 | 19135.0 | 18689.2 | 18456.6 | 18855.9 | 20767.1 | 21034.6 | 23298.5 | 21596.7 | 16091.9 |
| 25° | 21147.0 | 21123.7 | 20833.0 | 20332.9 | 19844.5 | 19708.8 | 21073.4 | 21313.7 | 23818.0 | 22403.0 | 16161.7 |
| 27.5° | 22965.1 | 23034.9 | 22546.5 | 21926.2 | 21340.8 | 20988.1 | 21759.5 | 21937.8 | 24403.4 | 23321.8 | 16247.0 |
| 30° | 25077.9 | 24965.5 | 24484.8 | 23775.4 | 23104.7 | 22612.4 | 22864.4 | 22914.8 | 25209.7 | 24539.1 | 16471.8 |
| 32.5° | 27826.4 | 27516.3 | 26977.5 | 25736.9 | 25256.2 | 24422.8 | 24484.8 | 24546.8 | 26190.5 | 25744.7 | 16743.2 |
| 35° | 31555.8 | 31540.3 | 30485.8 | 28815.0 | 27644.2 | 26609.2 | 26337.8 | 26388.2 | 27675.3 | 27535.7 | 17344.0 |
| 37.5° | 36044.9 | 36106.9 | 34905.2 | 33222.7 | 31067.3 | 29423.6 | 28865.4 | 28873.1 | 29931.4 | 30009.0 | 18258.9 |
| 40° | 39700.6 | 39863.4 | 39146.2 | 38010.3 | 35882.1 | 33311.9 | 32373.7 | 32288.4 | 33102.5 | 33005.6 | 19565.3 |
| 42.5° | 41274.5 | 41425.7 | 41693.1 | 42088.6 | 40917.8 | 38797.3 | 36583.7 | 36700.0 | 36948.1 | 36269.7 | 21030.7 |
| 45° | 40503.0 | 40743.4 | 41793.9 | 44236.2 | 45337.2 | 44623.9 | 41983.9 | 41576.8 | 40526.3 | 39816.9 | 22503.8 |
| 47.5° | 37289.3 | 37874.7 | 39630.8 | 43697.4 | 47550.7 | 49962.0 | 48077.9 | 47539.1 | 44108.3 | 42406.4 | 23442.0 |
| 50° | 32005.4 | 32040.3 | 34486.5 | 39685.0 | 46403.2 | 53330.8 | 54299.9 | 53896.8 | 47446.1 | 43860.2 | 23914.9 |
| 52.5° | 23201.6 | 23965.3 | 26206.0 | 32226.4 | 41433.4 | 52819.1 | 58265.7 | 58099.0 | 50888.5 | 44604.5 | 24597.2 |
| 54° | 17638.7 | 17786.0 | 19778.6 | 25752.4 | 35723.1 | 50008.5 | 58510.0 | 58548.7 | 52598.1 | 45054.2 | 25000.4 |
| 55° | 14459.8 | 14107.1 | 16200.4 | 21937.8 | 31827.1 | 47523.6 | 57711.4 | 57897.4 | 53365.7 | 45286.8 | 25298.9 |
| 57.5° | 6853.9 | 6857.8 | 8458.8 | 11571.7 | 19933.6 | 36901.6 | 52830.7 | 53489.7 | 53451.0 | 45686.1 | 26217.6 |
| 60° | 3469.6 | 3492.8 | 3845.6 | 5342.0 | 9846.6 | 24531.3 | 43681.9 | 45251.9 | 49337.9 | 45744.2 | 26520.0 |
| 62.5° | 2426.8 | 2399.6 | 2341.5 | 2570.2 | 4144.1 | 12467.2 | 32521.0 | 33885.6 | 41918.0 | 43530.7 | 25558.6 |
| 65° | 2077.9 | 2019.7 | 1856.9 | 1822.0 | 2093.4 | 4966.0 | 20255.4 | 22480.6 | 32005.4 | 37692.5 | 22821.7 |
| 67.5° | 1775.5 | 1752.2 | 1604.9 | 1515.8 | 1480.9 | 2163.2 | 10451.4 | 11622.1 | 21875.8 | 27093.8 | 17285.9 |
| 70° | 1508.0 | 1496.4 | 1407.2 | 1294.8 | 1197.9 | 1294.8 | 3876.6 | 4803.1 | 12192.0 | 14587.8 | 8156.4 |
| 72.5° | 1225.0 | 1236.6 | 1252.2 | 1108.7 | 1007.9 | 918.8 | 1655.3 | 1926.7 | 5101.6 | 5214.1 | 2853.2 |
| 75° | 1073.8 | 1062.2 | 1062.2 | 965.3 | 841.2 | 682.3 | 911.0 | 980.8 | 1562.3 | 1449.9 | 662.9 |
| 77.5° | 755.9 | 728.8 | 852.9 | 794.7 | 701.7 | 484.6 | 519.5 | 550.5 | 647.4 | 554.4 | 310.1 |
| 80° | 523.3 | 523.3 | 546.6 | 713.3 | 631.9 | 352.8 | 317.9 | 341.1 | 383.8 | 329.5 | 178.3 |
| 82.5° | 294.6 | 302.4 | 356.6 | 379.9 | 368.3 | 236.5 | 209.3 | 213.2 | 255.9 | 224.8 | 112.4 |
| 85° | 34.9 | 58.1 | 205.5 | 201.6 | 151.2 | 104.7 | 116.3 | 120.2 | 158.9 | 139.6 | 65.9 |
| 87.5° | 3.9 | 7.8 | 42.6 | 54.3 | 38.8 | 42.6 | 42.6 | 42.6 | 54.3 | 62.0 | 46.5 |
| 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: P458429

CATALOG NUMBER: GALN-SA9D-760-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 | 12765.7 |
| 2.5° | 12816.1 | 12521.5 | 11819.8 | 11005.7 | 10486.3 | 9641.2 | 8927.9 | 8412.3 | 8284.4 | 8036.3 | 8109.9 |
| 5° | 12800.6 | 12188.1 | 10757.6 | 9245.8 | 7633.1 | 6431.3 | 5535.8 | 4830.3 | 4520.1 | 4314.7 | 4171.3 |
| 7.5° | 12808.4 | 11850.9 | 9555.9 | 7148.5 | 5221.8 | 4043.3 | 3213.7 | 2783.4 | 2496.5 | 2376.4 | 2391.9 |
| 10° | 12831.6 | 11470.9 | 8160.3 | 5295.5 | 3523.9 | 2612.8 | 2105.0 | 1899.5 | 1802.6 | 1787.1 | 1783.2 |
| 12.5° | 12885.9 | 11056.1 | 6826.7 | 3930.9 | 2465.5 | 1899.5 | 1705.7 | 1635.9 | 1604.9 | 1604.9 | 1593.3 |
| 15° | 12944.1 | 10598.7 | 5718.0 | 2923.0 | 1899.5 | 1632.1 | 1542.9 | 1508.0 | 1488.6 | 1488.6 | 1484.7 |
| 17.5° | 12944.1 | 10071.5 | 4683.0 | 2267.8 | 1635.9 | 1500.3 | 1430.5 | 1384.0 | 1368.4 | 1368.4 | 1364.6 |
| 20° | 12862.7 | 9459.0 | 3764.2 | 1825.9 | 1484.7 | 1376.2 | 1306.4 | 1256.0 | 1236.6 | 1228.9 | 1225.0 |
| 22.5° | 12579.7 | 8641.0 | 2996.6 | 1570.0 | 1360.7 | 1267.7 | 1178.5 | 1120.3 | 1104.8 | 1097.1 | 1101.0 |
| 25° | 12075.7 | 7718.4 | 2372.5 | 1380.1 | 1248.3 | 1135.9 | 1058.3 | 1015.7 | 1000.2 | 1000.2 | 1004.0 |
| 27.5° | 11556.2 | 6753.1 | 1880.2 | 1236.6 | 1112.6 | 1011.8 | 949.8 | 922.6 | 918.8 | 930.4 | 934.3 |
| 30° | 11075.5 | 5783.9 | 1523.5 | 1120.3 | 992.4 | 907.1 | 864.5 | 856.7 | 856.7 | 860.6 | 864.5 |
| 32.5° | 10540.6 | 4934.9 | 1275.4 | 1019.6 | 895.5 | 821.8 | 798.6 | 798.6 | 806.3 | 806.3 | 814.1 |
| 35° | 10203.3 | 4206.1 | 1120.3 | 922.6 | 821.8 | 759.8 | 744.3 | 748.2 | 759.8 | 775.3 | 783.1 |
| 37.5° | 10021.1 | 3624.6 | 1019.6 | 845.1 | 752.1 | 709.4 | 693.9 | 701.7 | 728.8 | 755.9 | 759.8 |
| 40° | 10036.6 | 3186.6 | 938.1 | 779.2 | 697.8 | 651.3 | 639.6 | 662.9 | 690.0 | 717.2 | 721.1 |
| 42.5° | 10207.2 | 2861.0 | 860.6 | 701.7 | 651.3 | 585.4 | 581.5 | 604.8 | 616.4 | 643.5 | 647.4 |
| 45° | 10408.7 | 2624.5 | 779.2 | 620.3 | 566.0 | 507.8 | 511.7 | 531.1 | 546.6 | 589.2 | 597.0 |
| 47.5° | 10470.8 | 2461.7 | 686.2 | 527.2 | 465.2 | 445.8 | 449.7 | 461.3 | 492.3 | 531.1 | 535.0 |
| 50° | 10540.6 | 2360.9 | 597.0 | 445.8 | 395.4 | 391.5 | 395.4 | 403.2 | 422.6 | 438.1 | 434.2 |
| 52.5° | 10839.1 | 2357.0 | 523.3 | 387.7 | 337.3 | 345.0 | 348.9 | 345.0 | 329.5 | 306.3 | 298.5 |
| 54° | 11118.2 | 2368.6 | 488.5 | 360.5 | 310.1 | 321.8 | 317.9 | 298.5 | 259.7 | 236.5 | 224.8 |
| 55° | 11343.0 | 2380.2 | 469.1 | 341.1 | 294.6 | 298.5 | 302.4 | 263.6 | 213.2 | 190.0 | 182.2 |
| 57.5° | 11785.0 | 2353.1 | 422.6 | 298.5 | 259.7 | 244.2 | 240.4 | 174.4 | 116.3 | 100.8 | 93.0 |
| 60° | 11564.0 | 2124.4 | 383.8 | 255.9 | 221.0 | 197.7 | 162.8 | 96.9 | 58.1 | 42.6 | 42.6 |
| 62.5° | 10695.6 | 1802.6 | 341.1 | 209.3 | 182.2 | 151.2 | 85.3 | 54.3 | 27.1 | 15.5 | 11.6 |
| 65° | 9567.5 | 1515.8 | 306.3 | 166.7 | 143.4 | 96.9 | 46.5 | 34.9 | 11.6 | 0.0 | 0.0 |
| 67.5° | 7113.6 | 1124.2 | 259.7 | 131.8 | 108.5 | 62.0 | 31.0 | 19.4 | 3.9 | 0.0 | 0.0 |
| 70° | 3295.1 | 686.2 | 221.0 | 100.8 | 77.5 | 46.5 | 23.3 | 11.6 | 0.0 | 0.0 | 0.0 |
| 72.5° | 945.9 | 430.3 | 182.2 | 73.7 | 54.3 | 38.8 | 19.4 | 7.8 | 3.9 | 0.0 | 0.0 |
| 75° | 329.5 | 345.0 | 135.7 | 54.3 | 42.6 | 27.1 | 15.5 | 7.8 | 3.9 | 0.0 | 0.0 |
| 77.5° | 197.7 | 279.1 | 85.3 | 46.5 | 34.9 | 23.3 | 15.5 | 7.8 | 3.9 | 3.9 | 0.0 |
| 80° | 112.4 | 186.1 | 54.3 | 38.8 | 31.0 | 19.4 | 11.6 | 7.8 | 3.9 | 3.9 | 0.0 |
| 82.5° | 62.0 | 89.2 | 42.6 | 34.9 | 27.1 | 19.4 | 11.6 | 7.8 | 3.9 | 3.9 | 3.9 |
| 85° | 50.4 | 46.5 | 34.9 | 31.0 | 23.3 | 15.5 | 11.6 | 3.9 | 0.0 | 0.0 | 0.0 |
| 87.5° | 38.8 | 31.0 | 31.0 | 31.0 | 23.3 | 15.5 | 11.6 | 3.9 | 0.0 | 0.0 | 0.0 |
| 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)