

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: P458155

Luminaire Tested: **GALN-SA9C-740-U-T2R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458155
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA9C-740-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 51028 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G4

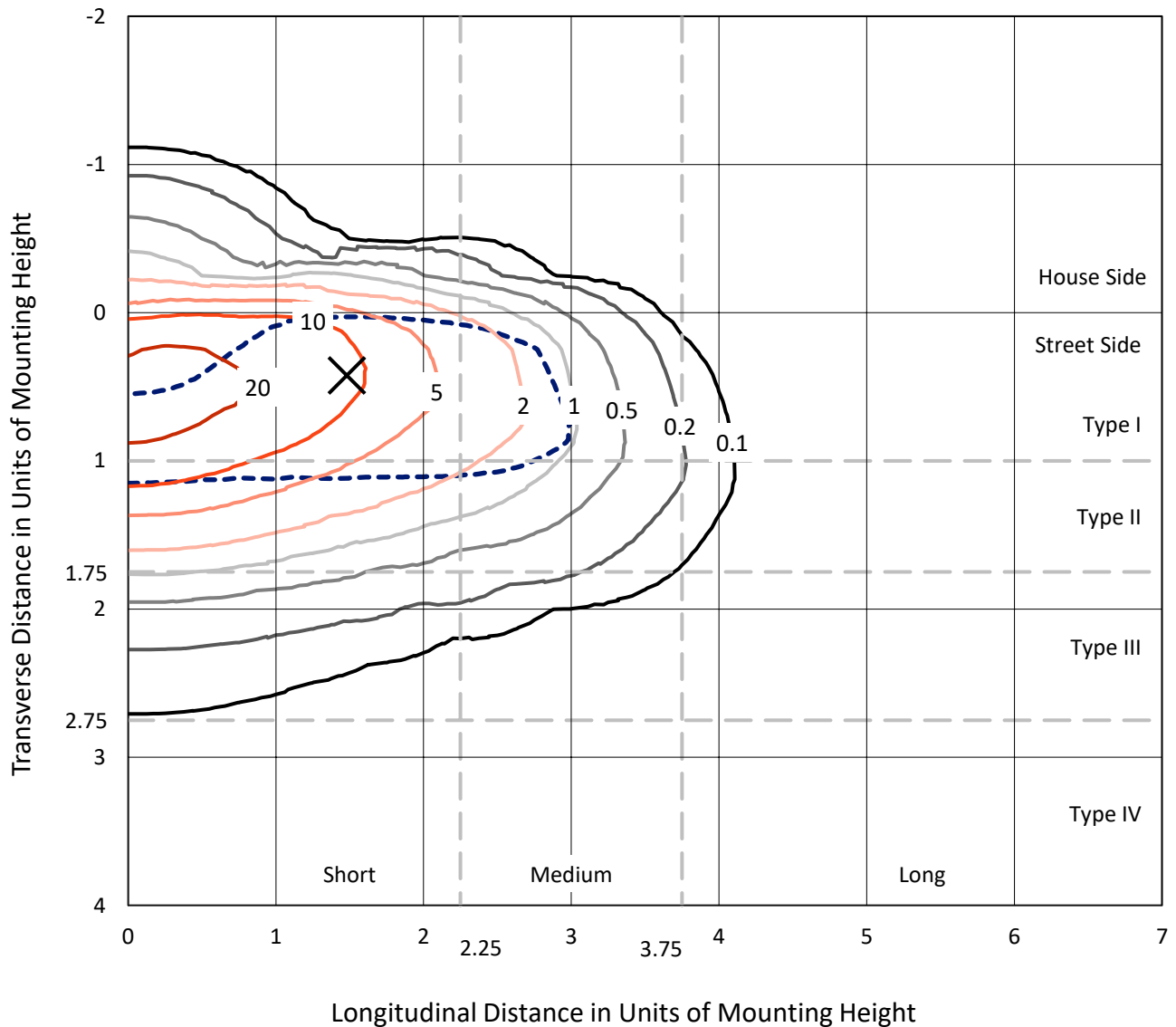
Input Watts (W): 481
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

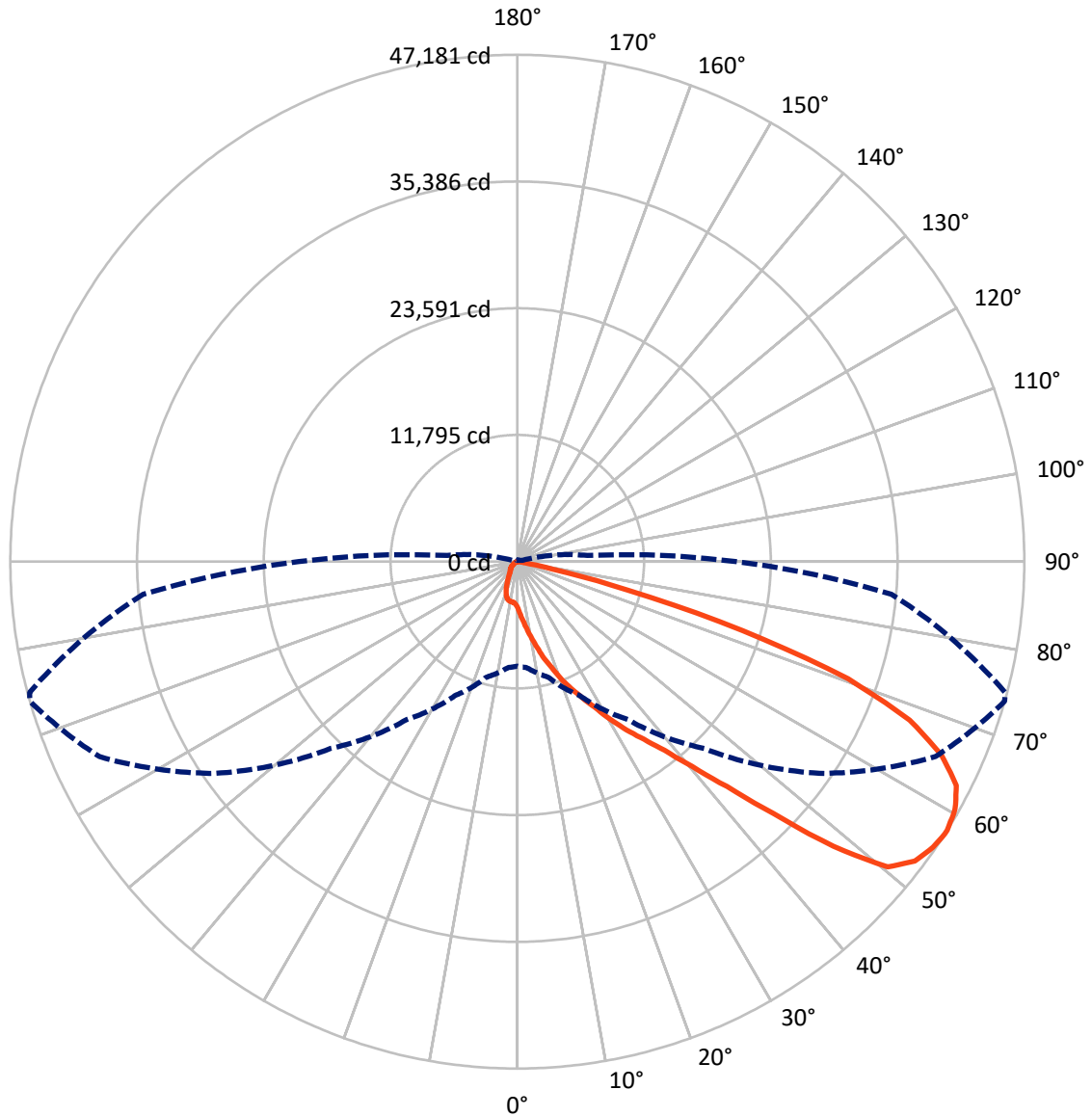
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 25.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 57-Deg Vertical

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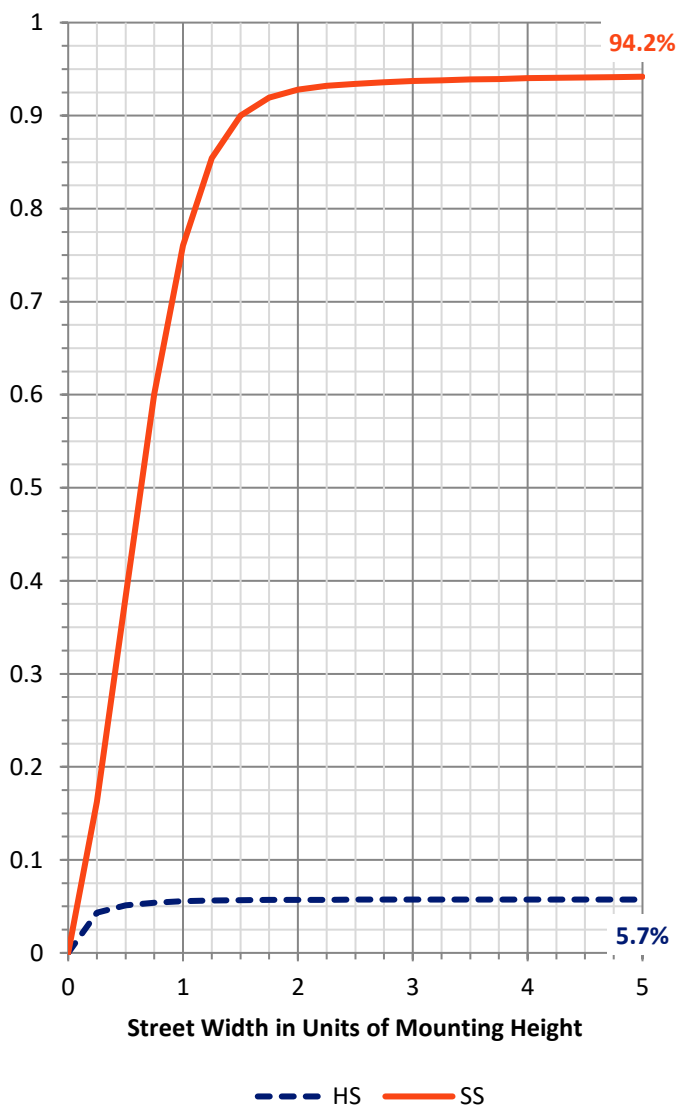
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2943.1 | 0.0 | 2943.1 |
| | % Fixture | 5.8 | 0.0 | 5.8 |
| Street Side | Lumens | 48084.9 | 0.0 | 48084.9 |
| | % Fixture | 94.2 | 0.0 | 94.2 |
| Total | Lumens | 51028.0 | 0.0 | 51028.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 515.8 | 1.0 |
| 10°-20° | 2033.2 | 4.0 |
| 20°-30° | 4350.5 | 8.5 |
| 30°-40° | 7996.2 | 15.7 |
| 40°-50° | 12258.2 | 24.0 |
| 50°-60° | 12967.6 | 25.4 |
| 60°-70° | 8468.2 | 16.6 |
| 70°-80° | 2313.8 | 4.5 |
| 80°-90° | 124.6 | 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° | 51028.0 | 100.0 |
| 0°-180° | 51028.0 | 100.0 |

Coefficient of Utilization



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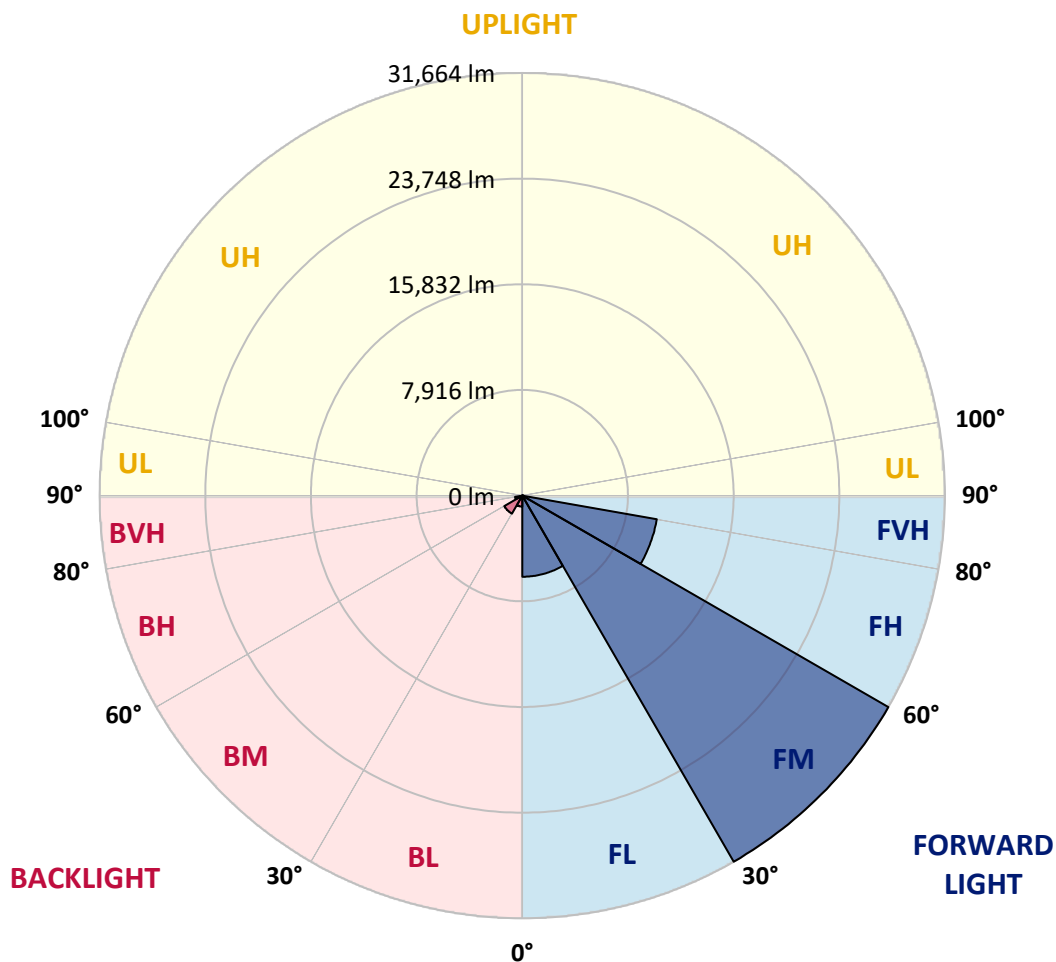
CATALOG NUMBER: GALN-SA9C-740-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 6077.4 | 11.9 | | | |
| FM | (30°-60°) | 31663.8 | 62.1 | | | |
| FH | (60°-80°) | 10229.4 | 20.0 | | | G4/12000 |
| FVH | (80°-90°) | 114.3 | 0.2 | | | G2/225 |
| BL | (0°-30°) | 822.1 | 1.6 | B2/1000 | | |
| BM | (30°-60°) | 1558.2 | 3.1 | B2/2500 | | |
| BH | (60°-80°) | 552.5 | 1.1 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 10.3 | 0.0 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 74° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 |
| 2.5° | 6253.5 | 6197.1 | 6084.4 | 6045.7 | 5880.1 | 5622.9 | 5397.4 | 5094.4 | 4854.8 | 4830.2 | 4541.3 |
| 5° | 8374.4 | 8247.6 | 8194.7 | 7941.1 | 7543.0 | 7169.5 | 6528.3 | 6042.1 | 5482.0 | 5439.7 | 4858.4 |
| 7.5° | 10417.8 | 10241.7 | 10188.8 | 9949.3 | 9484.2 | 8895.8 | 8064.4 | 7180.1 | 6292.3 | 6211.2 | 5284.7 |
| 10° | 11897.5 | 11922.2 | 11827.1 | 11668.5 | 11291.6 | 10692.6 | 9667.4 | 8459.0 | 7194.2 | 7092.0 | 5763.8 |
| 12.5° | 12958.0 | 12954.5 | 12972.1 | 12968.6 | 12767.7 | 12313.3 | 11235.2 | 9843.6 | 8187.7 | 7986.9 | 6313.4 |
| 15° | 13648.5 | 13659.1 | 13711.9 | 13895.1 | 13916.3 | 13634.4 | 12736.0 | 11168.2 | 9339.8 | 9089.6 | 6908.8 |
| 17.5° | 14346.1 | 14420.1 | 14504.6 | 14677.3 | 14832.3 | 14719.5 | 14085.4 | 12549.3 | 10382.6 | 10195.9 | 7546.5 |
| 20° | 15498.1 | 15600.3 | 15551.0 | 15656.7 | 15737.7 | 15748.3 | 15258.6 | 13824.7 | 11647.4 | 11333.8 | 8275.8 |
| 22.5° | 17340.7 | 17337.2 | 17210.4 | 17020.1 | 16861.6 | 16854.5 | 16410.6 | 15135.3 | 12795.9 | 12492.9 | 9008.6 |
| 25° | 19669.5 | 19680.1 | 19433.5 | 18890.9 | 18496.3 | 18013.6 | 17502.8 | 16283.8 | 14025.5 | 13652.0 | 9780.1 |
| 27.5° | 22340.0 | 22273.1 | 21899.6 | 21152.7 | 20370.6 | 19546.2 | 18809.9 | 17619.1 | 15329.0 | 15019.0 | 10664.4 |
| 30° | 24739.3 | 24714.6 | 24277.7 | 23365.2 | 22336.5 | 21508.6 | 20441.1 | 19292.5 | 17016.6 | 16636.1 | 11654.4 |
| 32.5° | 26972.9 | 27008.1 | 26402.2 | 25458.0 | 24464.5 | 23509.7 | 22382.3 | 20892.0 | 18672.5 | 18133.4 | 12732.5 |
| 35° | 28716.8 | 28752.1 | 28125.0 | 27339.3 | 26317.6 | 25524.9 | 24450.4 | 22597.2 | 20307.2 | 19852.7 | 13972.6 |
| 37.5° | 29646.9 | 29692.7 | 29329.9 | 28738.0 | 28100.3 | 27702.2 | 26701.6 | 24792.1 | 22294.2 | 22019.4 | 15438.3 |
| 40° | 29823.1 | 29875.9 | 29717.4 | 29558.9 | 29523.6 | 29809.0 | 29516.6 | 27378.1 | 25049.3 | 24619.5 | 17622.6 |
| 42.5° | 29294.6 | 29365.1 | 29435.6 | 29787.9 | 30506.6 | 31552.9 | 32571.1 | 30887.1 | 28597.1 | 28019.3 | 20293.1 |
| 45° | 27906.5 | 27899.5 | 28177.8 | 29090.3 | 30700.4 | 32934.0 | 35763.1 | 35280.4 | 33430.8 | 32743.8 | 24066.3 |
| 47.5° | 25532.0 | 25496.7 | 26099.2 | 27399.2 | 29907.7 | 33187.7 | 38366.6 | 40614.4 | 39599.7 | 38965.6 | 28121.4 |
| 50° | 21913.7 | 22086.4 | 23034.1 | 24848.5 | 27938.2 | 32419.6 | 39169.9 | 44112.8 | 44662.4 | 43989.5 | 31397.9 |
| 52.5° | 17675.4 | 17668.4 | 19155.1 | 21617.8 | 25021.1 | 30728.5 | 38609.7 | 44747.0 | 46307.7 | 45793.3 | 33011.5 |
| 55° | 13081.3 | 13172.9 | 14719.5 | 17203.3 | 21233.8 | 27642.3 | 36781.2 | 44095.2 | 46934.8 | 46571.9 | 34075.5 |
| 57° | 9730.8 | 9892.9 | 11133.0 | 13761.3 | 17936.1 | 24587.8 | 34346.8 | 42929.1 | 47181.4 | 46984.2 | 34959.8 |
| 57.5° | 9082.6 | 9089.6 | 10298.0 | 12686.7 | 16970.8 | 23414.6 | 33649.2 | 42442.9 | 47174.4 | 47065.2 | 35104.2 |
| 60° | 5591.2 | 5767.3 | 6602.3 | 8575.2 | 12422.5 | 18274.4 | 28974.0 | 39649.0 | 46808.0 | 46966.5 | 35720.8 |
| 62.5° | 3347.0 | 3420.9 | 3963.5 | 5168.4 | 8008.0 | 13338.5 | 23710.5 | 36073.1 | 45853.2 | 46335.9 | 35678.5 |
| 65° | 2152.6 | 2170.2 | 2416.9 | 3128.5 | 5006.3 | 9015.6 | 18270.8 | 31348.6 | 43383.5 | 44271.4 | 34283.4 |
| 67.5° | 1662.9 | 1691.1 | 1789.7 | 2054.0 | 2903.0 | 5615.8 | 12922.8 | 26307.0 | 39388.3 | 40533.3 | 30901.2 |
| 70° | 1476.2 | 1490.3 | 1525.5 | 1610.1 | 1920.1 | 3170.8 | 8039.7 | 20550.3 | 32662.7 | 32986.8 | 24182.6 |
| 72.5° | 1204.9 | 1243.7 | 1352.9 | 1381.1 | 1522.0 | 1980.0 | 4474.3 | 13793.0 | 21945.4 | 22026.5 | 13528.7 |
| 75° | 933.6 | 940.7 | 1102.7 | 1183.8 | 1282.4 | 1363.4 | 1997.6 | 6954.6 | 10541.1 | 9977.4 | 5214.2 |
| 77.5° | 697.6 | 729.3 | 803.3 | 905.4 | 1046.4 | 975.9 | 894.9 | 2621.2 | 3273.0 | 3213.1 | 1514.9 |
| 80° | 447.4 | 465.1 | 560.2 | 680.0 | 813.8 | 637.7 | 503.8 | 768.0 | 718.7 | 739.9 | 362.9 |
| 82.5° | 225.5 | 229.0 | 359.4 | 553.1 | 517.9 | 320.6 | 317.1 | 313.6 | 267.8 | 264.2 | 169.1 |
| 85° | 24.7 | 52.8 | 232.5 | 317.1 | 232.5 | 105.7 | 148.0 | 144.4 | 140.9 | 144.4 | 98.6 |
| 87.5° | 3.5 | 3.5 | 38.8 | 45.8 | 31.7 | 35.2 | 42.3 | 45.8 | 56.4 | 52.8 | 42.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: GALN-SA9C-740-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 | 4273.5 |
| 2.5° | 4400.4 | 4259.4 | 3998.7 | 3748.6 | 3561.9 | 3442.1 | 3287.1 | 3230.7 | 3149.7 | 3139.1 | 3100.3 |
| 5° | 4590.6 | 4322.9 | 3868.4 | 3509.0 | 3220.1 | 3001.7 | 2811.4 | 2652.9 | 2526.1 | 2497.9 | 2512.0 |
| 7.5° | 4861.9 | 4463.8 | 3829.6 | 3339.9 | 2938.3 | 2564.8 | 2261.8 | 2075.1 | 1941.2 | 1891.9 | 1899.0 |
| 10° | 5168.4 | 4650.5 | 3822.6 | 3160.2 | 2547.2 | 2089.2 | 1758.0 | 1592.4 | 1514.9 | 1486.8 | 1455.0 |
| 12.5° | 5531.3 | 4865.4 | 3805.0 | 2881.9 | 2117.4 | 1666.4 | 1430.4 | 1331.7 | 1257.7 | 1236.6 | 1236.6 |
| 15° | 5940.0 | 5094.4 | 3720.4 | 2536.6 | 1719.3 | 1377.5 | 1219.0 | 1141.5 | 1116.8 | 1095.7 | 1095.7 |
| 17.5° | 6366.3 | 5319.9 | 3544.2 | 2110.3 | 1426.9 | 1180.2 | 1081.6 | 1035.8 | 1000.6 | 975.9 | 975.9 |
| 20° | 6852.4 | 5541.8 | 3262.4 | 1733.4 | 1204.9 | 1053.4 | 975.9 | 923.1 | 894.9 | 873.7 | 866.7 |
| 22.5° | 7314.0 | 5721.5 | 2903.0 | 1423.3 | 1049.9 | 947.7 | 877.3 | 820.9 | 792.7 | 782.1 | 782.1 |
| 25° | 7793.1 | 5830.7 | 2469.7 | 1176.7 | 958.3 | 859.6 | 782.1 | 736.3 | 711.7 | 704.6 | 701.1 |
| 27.5° | 8258.2 | 5894.2 | 2089.2 | 1028.7 | 873.7 | 778.6 | 704.6 | 669.4 | 644.7 | 637.7 | 641.2 |
| 30° | 8821.9 | 5904.7 | 1719.3 | 923.1 | 799.7 | 701.1 | 634.2 | 602.5 | 588.4 | 581.3 | 577.8 |
| 32.5° | 9392.6 | 5890.6 | 1444.5 | 859.6 | 729.3 | 634.2 | 577.8 | 553.1 | 542.6 | 532.0 | 532.0 |
| 35° | 10033.8 | 5816.6 | 1229.6 | 796.2 | 662.3 | 577.8 | 528.5 | 507.3 | 493.2 | 482.7 | 479.1 |
| 37.5° | 10830.0 | 5777.9 | 1106.3 | 725.8 | 602.5 | 524.9 | 479.1 | 458.0 | 447.4 | 433.3 | 429.8 |
| 40° | 12084.3 | 5950.5 | 1067.5 | 662.3 | 542.6 | 475.6 | 433.3 | 408.7 | 394.6 | 380.5 | 377.0 |
| 42.5° | 13648.5 | 6253.5 | 1004.1 | 598.9 | 489.7 | 429.8 | 387.5 | 359.4 | 334.7 | 317.1 | 310.0 |
| 45° | 15674.3 | 6651.6 | 905.4 | 532.0 | 443.9 | 380.5 | 341.7 | 306.5 | 274.8 | 260.7 | 257.2 |
| 47.5° | 17798.7 | 7035.6 | 817.4 | 479.1 | 394.6 | 338.2 | 295.9 | 257.2 | 229.0 | 218.4 | 214.9 |
| 50° | 19102.3 | 7113.2 | 761.0 | 419.2 | 345.3 | 292.4 | 250.1 | 214.9 | 197.3 | 186.7 | 186.7 |
| 52.5° | 19697.7 | 6989.8 | 683.5 | 366.4 | 299.5 | 257.2 | 214.9 | 186.7 | 176.2 | 169.1 | 165.6 |
| 55° | 20113.4 | 6799.6 | 581.3 | 317.1 | 257.2 | 218.4 | 190.2 | 169.1 | 155.0 | 148.0 | 144.4 |
| 57° | 20356.5 | 6542.4 | 503.8 | 278.3 | 222.0 | 190.2 | 169.1 | 151.5 | 137.4 | 123.3 | 123.3 |
| 57.5° | 20367.1 | 6443.8 | 482.7 | 274.8 | 211.4 | 183.2 | 165.6 | 148.0 | 130.4 | 116.3 | 112.7 |
| 60° | 20053.5 | 5767.3 | 387.5 | 232.5 | 169.1 | 155.0 | 137.4 | 116.3 | 91.6 | 77.5 | 74.0 |
| 62.5° | 19045.9 | 4907.7 | 320.6 | 197.3 | 137.4 | 119.8 | 98.6 | 88.1 | 63.4 | 45.8 | 45.8 |
| 65° | 17520.4 | 3981.1 | 274.8 | 158.5 | 112.7 | 88.1 | 66.9 | 63.4 | 38.8 | 21.1 | 17.6 |
| 67.5° | 15314.9 | 3100.3 | 232.5 | 130.4 | 95.1 | 63.4 | 45.8 | 42.3 | 21.1 | 7.0 | 0.0 |
| 70° | 11668.5 | 2113.9 | 193.8 | 105.7 | 70.5 | 45.8 | 31.7 | 24.7 | 14.1 | 3.5 | 0.0 |
| 72.5° | 6725.6 | 1162.6 | 162.1 | 81.0 | 52.8 | 35.2 | 24.7 | 14.1 | 14.1 | 0.0 | 0.0 |
| 75° | 2402.8 | 500.3 | 123.3 | 59.9 | 42.3 | 28.2 | 17.6 | 7.0 | 10.6 | 3.5 | 0.0 |
| 77.5° | 764.5 | 267.8 | 81.0 | 45.8 | 35.2 | 21.1 | 14.1 | 7.0 | 7.0 | 3.5 | 0.0 |
| 80° | 225.5 | 140.9 | 49.3 | 38.8 | 24.7 | 17.6 | 10.6 | 3.5 | 7.0 | 3.5 | 0.0 |
| 82.5° | 123.3 | 70.5 | 38.8 | 28.2 | 24.7 | 14.1 | 10.6 | 3.5 | 3.5 | 3.5 | 0.0 |
| 85° | 63.4 | 42.3 | 31.7 | 28.2 | 24.7 | 14.1 | 10.6 | 3.5 | 0.0 | 3.5 | 3.5 |
| 87.5° | 35.2 | 31.7 | 31.7 | 28.2 | 24.7 | 17.6 | 10.6 | 3.5 | 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)