

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: P458421

Luminaire Tested: **GALN-SA9D-750-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458421  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA9D-750-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 71767 lumens  
Efficiency: N/A  
Efficacy: 130.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B4 - U0 - G5

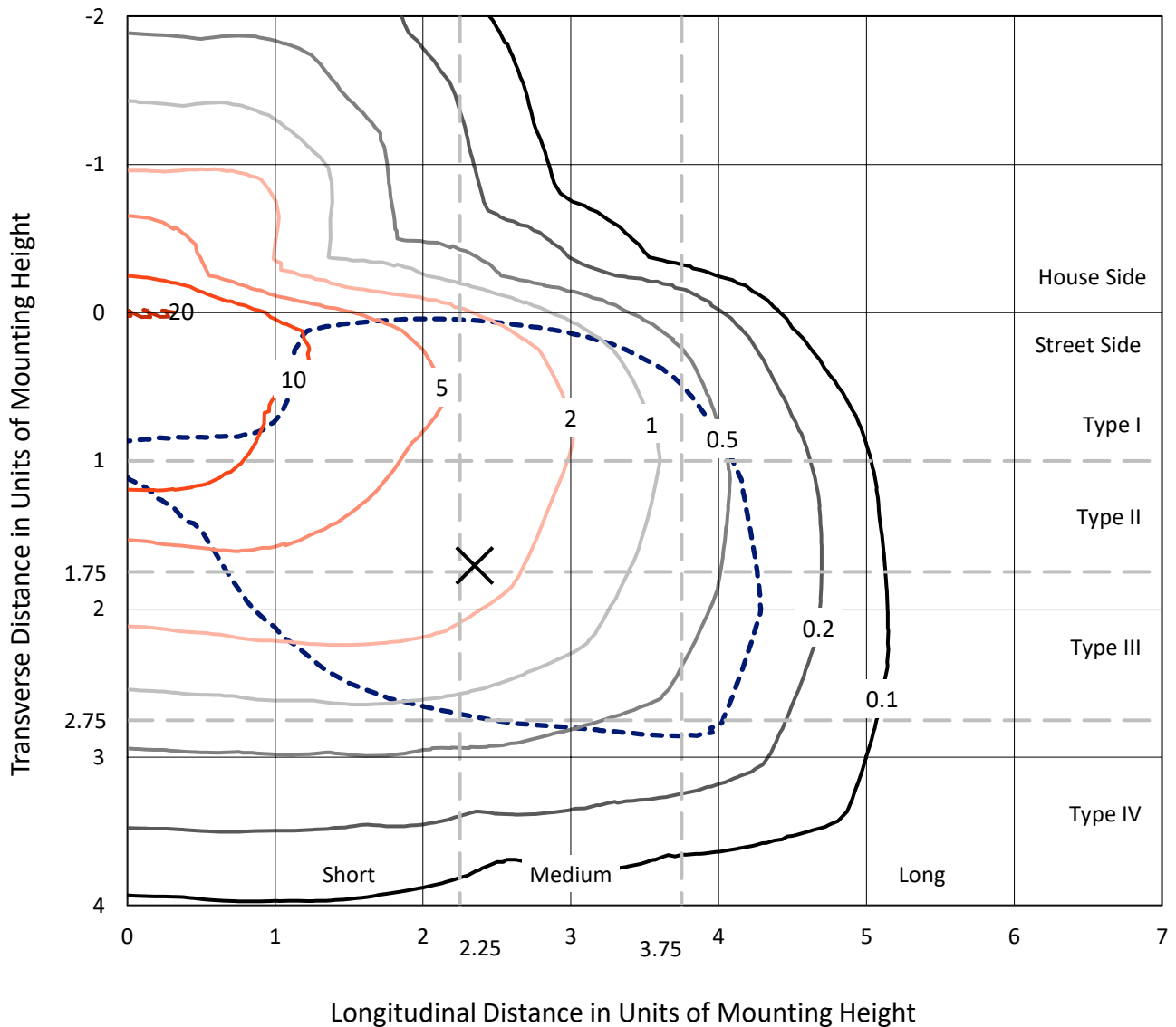
Input Watts (W): 552  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P458421  
 CATALOG NUMBER: GALN-SA9D-750-U-T3R

### Iso-Footcandle Lines of Horizontal Illumination

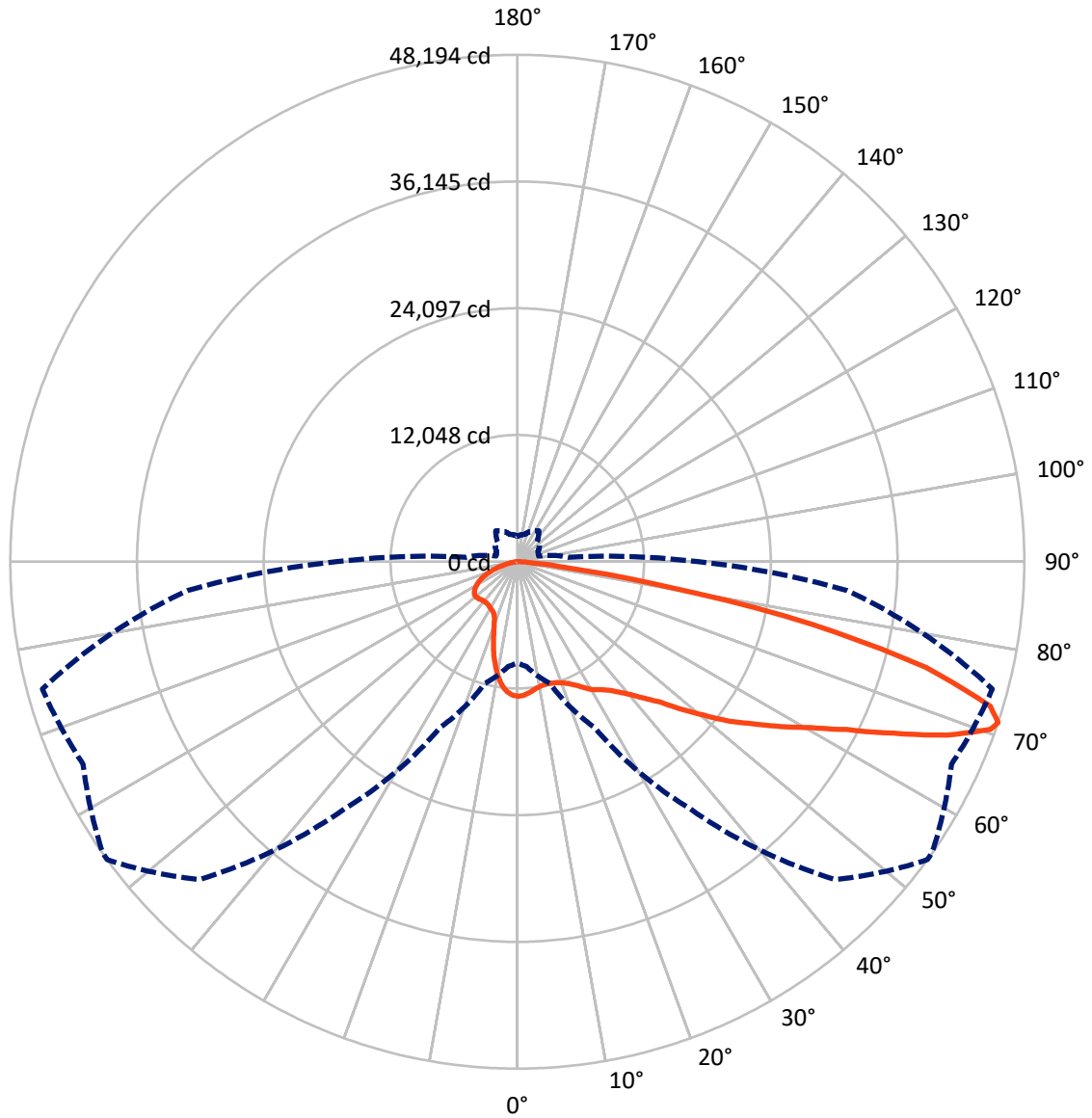
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20.6 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P458421  
CATALOG NUMBER: GALN-SA9D-750-U-T3R

### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P458421

CATALOG NUMBER: GALN-SA9D-750-U-T3R

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 12957.1  | 0.0    | 12957.1 |
|                    | % Fixture | 18.1     | 0.0    | 18.1    |
| <b>Street Side</b> | Lumens    | 58809.9  | 0.0    | 58809.9 |
|                    | % Fixture | 81.9     | 0.0    | 81.9    |
| <b>Total</b>       | Lumens    | 71767.0  | 0.0    | 71767.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1141.1  | 1.6       |
| 10°-20°   | 3013.0  | 4.2       |
| 20°-30°   | 5016.7  | 7.0       |
| 30°-40°   | 7418.1  | 10.3      |
| 40°-50°   | 10448.6 | 14.6      |
| 50°-60°   | 13991.1 | 19.5      |
| 60°-70°   | 17634.7 | 24.6      |
| 70°-80°   | 12044.5 | 16.8      |
| 80°-90°   | 1059.2  | 1.5       |
| 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°    | 71767.0 | 100.0     |
| 0°-180°   | 71767.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P458421

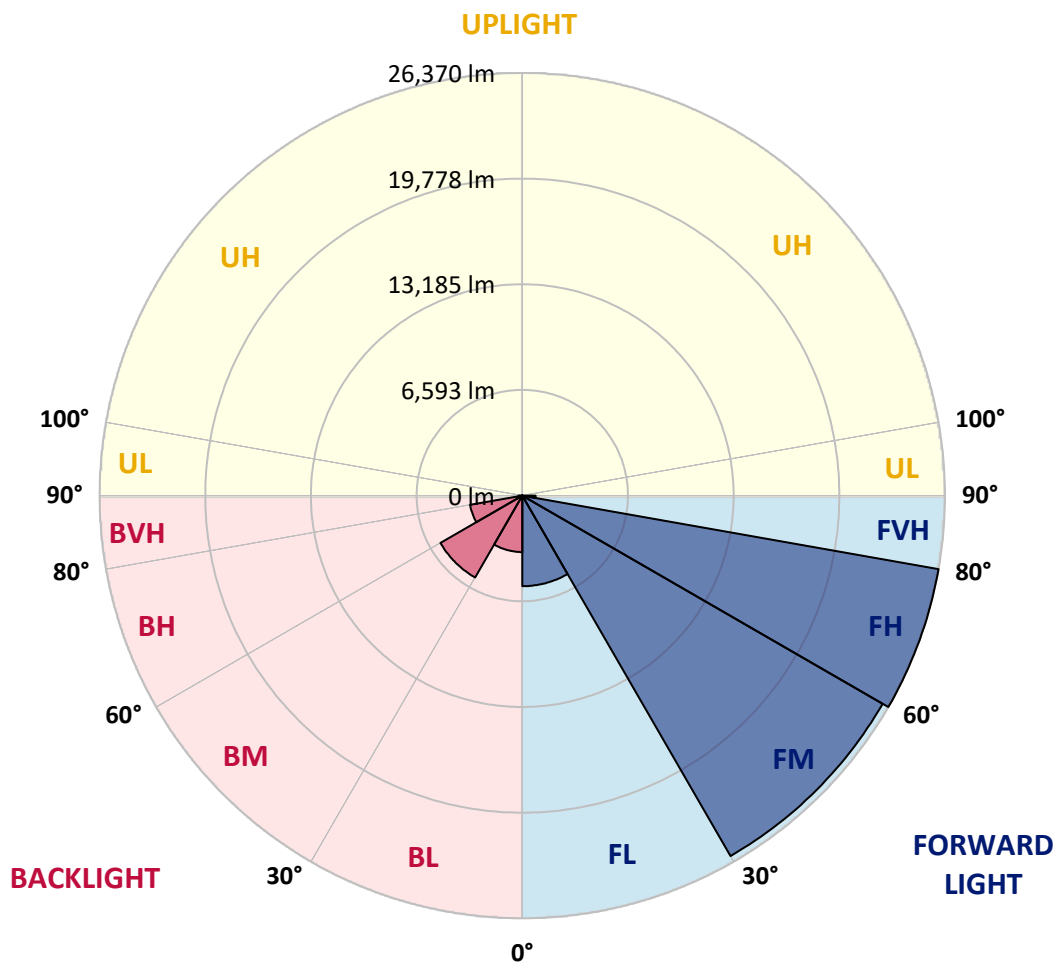
CATALOG NUMBER: GALN-SA9D-750-U-T3R

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 5649.2  | 7.9       |                         |      |         |
| FM   | (30°-60°)   | 25962.7 | 36.2      |                         |      |         |
| FH   | (60°-80°)   | 26370.0 | 36.7      |                         |      | G5      |
| FVH  | (80°-90°)   | 828.0   | 1.2       |                         |      | G5      |
| BL   | (0°-30°)    | 3521.5  | 4.9       | B4/5000                 |      |         |
| BM   | (30°-60°)   | 5895.1  | 8.2       | B4/8500                 |      |         |
| BH   | (60°-80°)   | 3309.2  | 4.6       | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 231.3   | 0.3       |                         |      | G3/500  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G5**

Type IV Medium





REPORT NUMBER: P458421

CATALOG NUMBER: GALN-SA9D-750-U-T3R

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 54°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 |
| 2.5°  | 12370.1 | 12428.3 | 12443.8 | 12482.5 | 12563.9 | 12629.8 | 12695.8 | 12688.0 | 12781.0 | 12819.8 | 12854.7 |
| 5°    | 11819.6 | 11835.2 | 11893.3 | 11970.8 | 12114.3 | 12296.5 | 12474.8 | 12478.7 | 12707.4 | 12889.6 | 12978.7 |
| 7.5°  | 11416.5 | 11466.9 | 11505.6 | 11587.1 | 11738.2 | 11935.9 | 12218.9 | 12242.2 | 12649.2 | 13009.8 | 13199.7 |
| 10°   | 11152.9 | 11211.0 | 11253.7 | 11354.5 | 11505.6 | 11726.6 | 12032.9 | 12075.5 | 12606.6 | 13199.7 | 13533.1 |
| 12.5° | 10912.5 | 10970.7 | 11009.4 | 11141.2 | 11339.0 | 11610.3 | 11955.3 | 12005.7 | 12622.1 | 13420.7 | 13897.5 |
| 15°   | 11059.8 | 11106.4 | 11090.9 | 11129.6 | 11261.4 | 11571.5 | 11986.3 | 12036.7 | 12680.2 | 13633.9 | 14258.0 |
| 17.5° | 11715.0 | 11753.7 | 11625.8 | 11478.5 | 11416.5 | 11645.2 | 12083.3 | 12137.5 | 12796.5 | 13854.8 | 14626.3 |
| 20°   | 12680.2 | 12784.9 | 12505.8 | 12176.3 | 11877.8 | 11908.8 | 12284.8 | 12343.0 | 12959.4 | 14075.8 | 15002.3 |
| 22.5° | 13936.3 | 14013.8 | 13672.6 | 13129.9 | 12579.5 | 12296.5 | 12587.2 | 12622.1 | 13203.6 | 14362.7 | 15413.2 |
| 25°   | 15413.2 | 15459.7 | 14986.8 | 14289.0 | 13494.3 | 12959.4 | 13002.0 | 13064.0 | 13606.7 | 14688.3 | 15777.6 |
| 27.5° | 16847.6 | 16994.9 | 16448.3 | 15595.4 | 14548.7 | 13657.1 | 13571.9 | 13610.6 | 14044.8 | 14870.5 | 16029.6 |
| 30°   | 18549.4 | 18537.7 | 17960.1 | 16971.6 | 15630.3 | 14416.9 | 14110.7 | 14102.9 | 14281.3 | 14959.7 | 16211.8 |
| 32.5° | 19906.2 | 20065.1 | 19499.1 | 18421.4 | 16866.9 | 15203.9 | 14482.8 | 14467.3 | 14463.5 | 15114.7 | 16483.2 |
| 35°   | 21449.0 | 21472.3 | 20952.8 | 19867.4 | 18204.4 | 16192.4 | 15002.3 | 14924.8 | 14835.6 | 15448.1 | 16851.4 |
| 37.5° | 22829.1 | 22937.6 | 22460.8 | 21243.6 | 19518.5 | 17219.7 | 15715.6 | 15665.2 | 15393.8 | 16025.7 | 17440.7 |
| 40°   | 23906.8 | 23988.2 | 23701.3 | 22542.2 | 20813.3 | 18328.4 | 16622.7 | 16529.7 | 16200.2 | 16971.6 | 18227.6 |
| 42.5° | 24259.5 | 24426.2 | 24538.7 | 23968.8 | 22301.9 | 19642.6 | 17739.2 | 17622.9 | 17370.9 | 18405.9 | 19134.7 |
| 45°   | 24286.7 | 24550.3 | 25143.4 | 25170.5 | 23798.2 | 21216.4 | 19041.7 | 18960.3 | 18940.9 | 20243.4 | 20410.1 |
| 47.5° | 24081.2 | 24348.7 | 25345.0 | 25883.8 | 25131.8 | 22805.8 | 20921.8 | 20793.9 | 20805.5 | 22515.1 | 21840.6 |
| 50°   | 23585.0 | 23902.9 | 25112.4 | 26341.3 | 26174.6 | 24457.3 | 22906.6 | 22864.0 | 23104.3 | 25108.5 | 23325.3 |
| 52.5° | 22650.8 | 23034.6 | 24872.0 | 26628.1 | 26949.9 | 25880.0 | 25162.8 | 25042.6 | 25651.2 | 27922.9 | 24949.6 |
| 55°   | 20065.1 | 20642.7 | 23992.1 | 26787.1 | 27686.4 | 27240.6 | 27194.1 | 27411.2 | 28217.5 | 30993.1 | 26736.7 |
| 57.5° | 18716.1 | 19150.2 | 22080.9 | 26814.2 | 28616.8 | 28822.3 | 29566.6 | 29620.8 | 31031.9 | 34253.3 | 28756.4 |
| 60°   | 17979.5 | 18363.3 | 21034.2 | 26635.9 | 29915.5 | 30779.9 | 31993.3 | 32187.1 | 33780.4 | 37784.9 | 30849.7 |
| 62.5° | 17336.0 | 17665.5 | 20406.2 | 26019.5 | 31380.8 | 33683.5 | 35137.2 | 35230.2 | 36901.0 | 41684.7 | 32915.9 |
| 65°   | 15820.3 | 16196.3 | 19142.5 | 25403.1 | 32644.6 | 37311.9 | 39308.4 | 39199.8 | 40223.2 | 45049.6 | 34210.7 |
| 67.5° | 13777.3 | 14254.1 | 16781.7 | 23274.9 | 33268.7 | 41277.7 | 44006.8 | 43871.1 | 43502.8 | 47255.3 | 34582.8 |
| 70°   | 11168.4 | 11424.2 | 13761.8 | 19596.0 | 30776.1 | 43359.4 | 47716.6 | 47573.2 | 45534.1 | 47546.1 | 32822.9 |
| 71°   | 9610.0  | 10009.3 | 11982.5 | 17405.8 | 28702.1 | 42723.6 | 48193.5 | 48154.7 | 45538.0 | 46743.6 | 31497.1 |
| 72.5° | 7501.2  | 7745.4  | 9489.8  | 13486.6 | 24395.2 | 39110.7 | 47015.0 | 47162.3 | 44549.5 | 44514.6 | 28764.1 |
| 75°   | 4744.9  | 4853.5  | 5954.4  | 7939.2  | 13385.8 | 27698.1 | 40134.1 | 40533.4 | 39556.5 | 36435.8 | 21390.9 |
| 77.5° | 2756.2  | 2895.8  | 3566.4  | 4679.0  | 5783.8  | 15033.3 | 28717.6 | 29151.8 | 27484.8 | 20061.2 | 8757.2  |
| 80°   | 1604.9  | 1760.0  | 2349.2  | 2717.5  | 2655.4  | 5578.4  | 14622.4 | 15362.8 | 11901.1 | 5066.7  | 2457.7  |
| 82.5° | 891.6   | 996.3   | 1651.4  | 1655.3  | 1414.9  | 1822.0  | 4601.5  | 4814.7  | 3395.9  | 2042.9  | 1004.0  |
| 85°   | 647.4   | 732.7   | 1066.1  | 965.3   | 678.4   | 783.1   | 1601.0  | 1678.6  | 1372.3  | 860.6   | 325.6   |
| 87.5° | 228.7   | 325.6   | 585.4   | 465.2   | 186.1   | 162.8   | 461.3   | 376.0   | 348.9   | 240.3   | 73.7    |
| 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: P458421  
 CATALOG NUMBER: GALN-SA9D-750-U-T3R

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°    | 115°    | 125°    | 135°    | 145°    | 155°    | 165°    | 175°    | 180°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 | 12804.3 |
| 2.5°  | 12874.1 | 12881.8 | 12843.1 | 12773.3 | 12703.5 | 12614.3 | 12513.6 | 12436.0 | 12401.1 | 12397.3 | 12393.4 |
| 5°    | 13013.6 | 13033.0 | 12885.7 | 12668.6 | 12428.3 | 12133.6 | 11881.7 | 11594.8 | 11521.2 | 11404.9 | 11439.7 |
| 7.5°  | 13238.5 | 13226.8 | 12936.1 | 12474.8 | 11912.7 | 11288.6 | 10761.3 | 10455.1 | 10137.2 | 10048.1 | 10051.9 |
| 10°   | 13560.2 | 13486.6 | 12936.1 | 12079.4 | 11141.2 | 10214.7 | 9478.2  | 9013.0  | 8761.0  | 8551.7  | 8474.2  |
| 12.5° | 13901.4 | 13715.3 | 12812.0 | 11525.0 | 10148.8 | 9013.0  | 8222.2  | 7594.2  | 7431.4  | 7260.8  | 7264.7  |
| 15°   | 14227.0 | 13916.9 | 12567.8 | 10745.8 | 9078.9  | 7729.9  | 6962.3  | 6586.3  | 6535.9  | 6555.3  | 6551.4  |
| 17.5° | 14521.6 | 14060.3 | 12195.7 | 9877.5  | 7830.7  | 6628.9  | 6221.9  | 6249.0  | 6384.7  | 6481.6  | 6493.2  |
| 20°   | 14820.1 | 14145.6 | 11641.3 | 8714.5  | 6652.2  | 5962.2  | 5977.7  | 6190.9  | 6396.3  | 6528.1  | 6547.5  |
| 22.5° | 15103.1 | 14184.4 | 10990.1 | 7590.3  | 5799.3  | 5679.2  | 5907.9  | 6136.6  | 6338.2  | 6466.1  | 6485.5  |
| 25°   | 15289.2 | 14095.2 | 10067.4 | 6415.7  | 5380.7  | 5578.4  | 5818.7  | 6012.6  | 6183.1  | 6314.9  | 6345.9  |
| 27.5° | 15339.6 | 13808.3 | 8923.9  | 5466.0  | 5186.8  | 5481.5  | 5702.4  | 5845.9  | 5977.7  | 6101.7  | 6125.0  |
| 30°   | 15312.4 | 13385.8 | 7667.8  | 4907.7  | 5074.4  | 5369.0  | 5539.6  | 5644.3  | 5803.2  | 5900.1  | 5919.5  |
| 32.5° | 15269.8 | 12893.5 | 6357.6  | 4609.2  | 4981.4  | 5264.4  | 5365.2  | 5458.2  | 5454.3  | 5415.6  | 5442.7  |
| 35°   | 15285.3 | 12304.2 | 5295.4  | 4430.9  | 4900.0  | 5186.8  | 5272.1  | 5155.8  | 4822.4  | 4806.9  | 4791.4  |
| 37.5° | 15366.7 | 11722.7 | 4524.0  | 4306.9  | 4857.3  | 5175.2  | 5221.7  | 4686.8  | 4392.1  | 4256.5  | 4221.6  |
| 40°   | 15576.0 | 11044.3 | 4016.1  | 4213.8  | 4853.5  | 5264.4  | 4993.0  | 4450.3  | 3884.3  | 3620.7  | 3601.3  |
| 42.5° | 15855.2 | 10377.6 | 3706.0  | 4155.7  | 4900.0  | 5400.1  | 4900.0  | 4116.9  | 3500.5  | 3345.5  | 3322.2  |
| 45°   | 16269.9 | 9613.9  | 3535.4  | 4128.5  | 4969.8  | 5450.5  | 4869.0  | 3872.7  | 3345.5  | 3221.4  | 3221.4  |
| 47.5° | 16739.0 | 8885.1  | 3442.4  | 4109.2  | 5058.9  | 5415.6  | 4593.7  | 3795.2  | 3271.8  | 3287.3  | 3361.0  |
| 50°   | 17204.2 | 8253.2  | 3372.6  | 4066.5  | 5136.4  | 5396.2  | 4481.3  | 3791.3  | 3291.2  | 3488.9  | 3620.7  |
| 52.5° | 17743.0 | 7807.4  | 3287.3  | 3996.7  | 5136.4  | 5272.1  | 4446.4  | 3868.8  | 3345.5  | 3403.6  | 3461.8  |
| 55°   | 18394.3 | 7667.8  | 3178.8  | 3845.6  | 5043.4  | 4962.0  | 4427.0  | 3981.2  | 3384.2  | 3248.6  | 3271.8  |
| 57.5° | 19254.9 | 7892.7  | 3074.1  | 3655.6  | 4830.2  | 4640.2  | 4419.3  | 4012.2  | 3295.1  | 3182.7  | 3159.4  |
| 60°   | 20255.1 | 8338.5  | 3043.1  | 3461.8  | 4539.5  | 4365.0  | 4372.8  | 3923.1  | 3171.0  | 3054.7  | 3074.1  |
| 62.5° | 20956.7 | 8606.0  | 3023.7  | 3314.5  | 4221.6  | 4062.6  | 4260.3  | 3814.5  | 3116.8  | 3016.0  | 3035.4  |
| 65°   | 20956.7 | 8280.3  | 2845.4  | 3089.6  | 3810.7  | 3698.2  | 4124.7  | 3678.9  | 3047.0  | 2930.7  | 2911.3  |
| 67.5° | 20162.0 | 7330.6  | 2574.0  | 2752.4  | 3357.1  | 3283.5  | 3934.7  | 3516.0  | 2942.3  | 2853.2  | 2806.6  |
| 70°   | 18091.9 | 5559.0  | 2232.9  | 2357.0  | 2783.4  | 2849.3  | 3690.5  | 3295.1  | 2767.9  | 2659.3  | 2589.5  |
| 71°   | 17180.9 | 4841.8  | 2089.5  | 2155.4  | 2562.4  | 2659.3  | 3574.2  | 3202.0  | 2690.3  | 2535.3  | 2411.2  |
| 72.5° | 15424.9 | 4078.1  | 1872.4  | 1899.5  | 2190.3  | 2364.7  | 3330.0  | 3023.7  | 2543.0  | 2322.1  | 2182.5  |
| 75°   | 11718.9 | 2977.2  | 1508.0  | 1492.5  | 1620.4  | 1876.3  | 2818.3  | 2694.2  | 2229.0  | 1930.5  | 1849.1  |
| 77.5° | 5062.8  | 1620.4  | 1128.1  | 1139.7  | 1100.9  | 1422.7  | 2217.4  | 2314.3  | 1911.1  | 1570.0  | 1496.4  |
| 80°   | 1535.1  | 934.3   | 771.4   | 786.9   | 736.5   | 953.6   | 1562.3  | 1814.2  | 1535.1  | 1221.1  | 1120.3  |
| 82.5° | 786.9   | 558.2   | 527.2   | 519.5   | 469.1   | 538.8   | 945.9   | 1240.5  | 1097.1  | 763.7   | 674.5   |
| 85°   | 341.1   | 298.5   | 259.7   | 252.0   | 221.0   | 193.8   | 337.3   | 620.3   | 581.5   | 426.4   | 407.0   |
| 87.5° | 85.3    | 77.5    | 50.4    | 46.5    | 27.1    | 3.9     | 0.0     | 0.0     | 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)