

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: STREETWORKS

Report Number: P302858

Luminaire Tested: **GAA-AF-07-LED-U-T4W-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P302858
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191569)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-07-LED-U-T4W-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29246.8 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 295
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: 28.75 FT

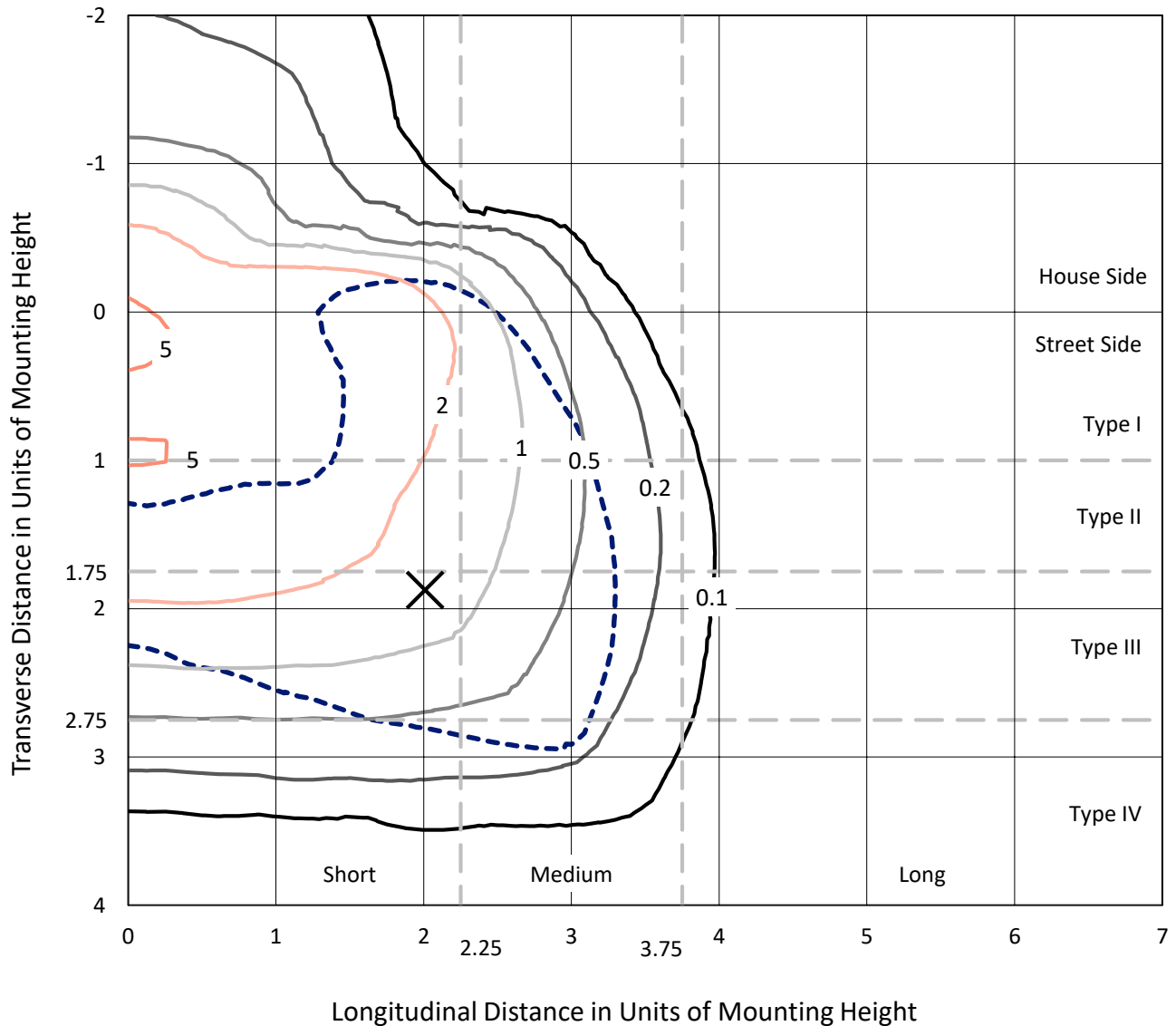


REPORT NUMBER: P302858

CATALOG NUMBER: GAA-AF-07-LED-U-T4W-7027-800

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

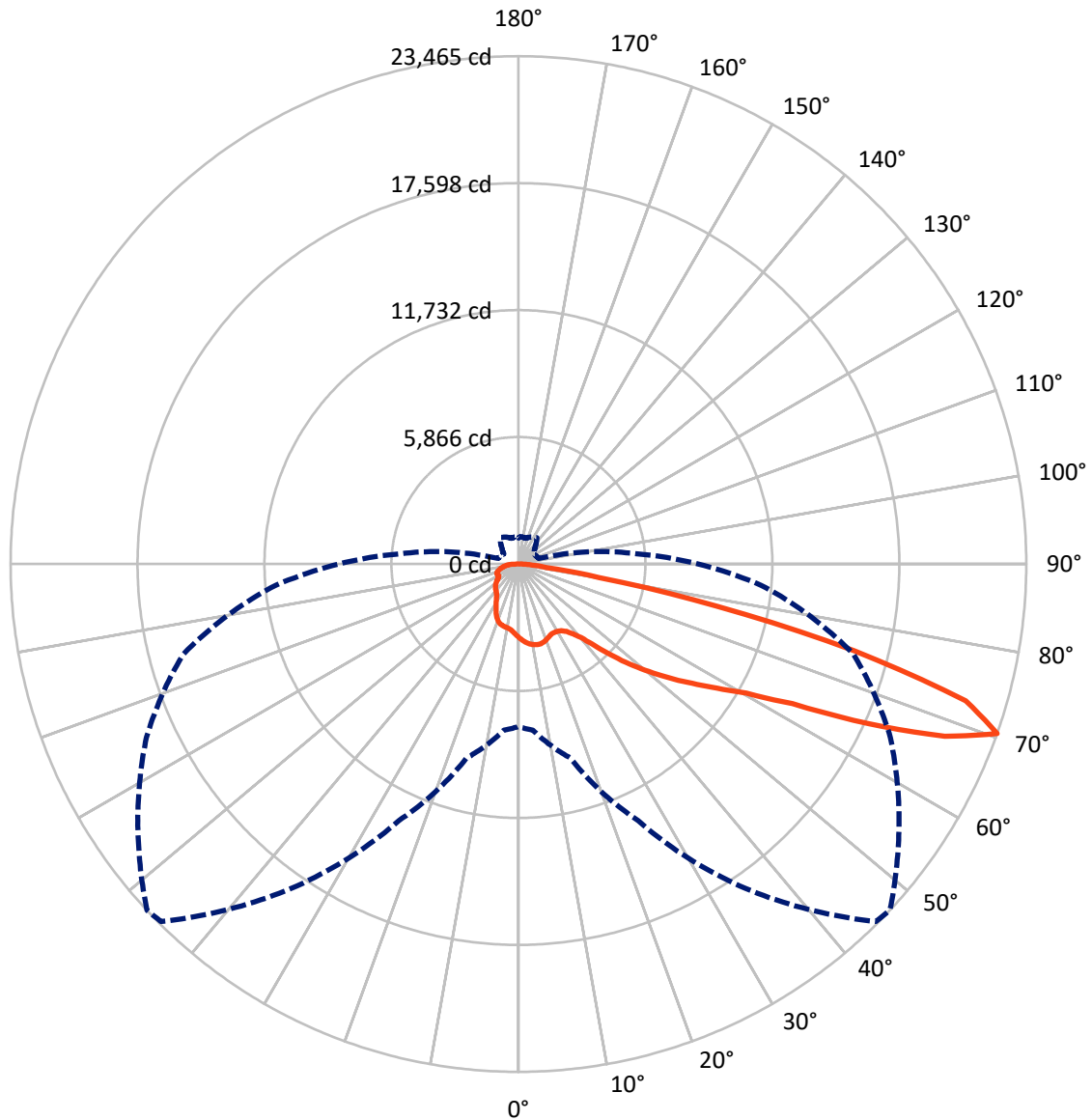


Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P302858

CATALOG NUMBER: GAA-AF-07-LED-U-T4W-7027-800

Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P302858

CATALOG NUMBER: GAA-AF-07-LED-U-T4W-7027-800

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 6101.5 | 0.0 | 6101.5 |
| | % Fixture | 20.9 | 0.0 | 20.9 |
| Street Side | Lumens | 23145.3 | 0.0 | 23145.3 |
| | % Fixture | 79.1 | 0.0 | 79.1 |
| Total | Lumens | 29246.8 | 0.0 | 29246.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 325.2 | 1.1 |
| 10°-20° | 953.9 | 3.3 |
| 20°-30° | 1408.7 | 4.8 |
| 30°-40° | 2047.5 | 7.0 |
| 40°-50° | 3684.8 | 12.6 |
| 50°-60° | 6383.5 | 21.8 |
| 60°-70° | 9111.2 | 31.2 |
| 70°-80° | 4677.2 | 16.0 |
| 80°-90° | 654.8 | 2.2 |
| 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° | 29246.8 | 100.0 |
| 0°-180° | 29246.8 | 100.0 |



REPORT NUMBER: P302858

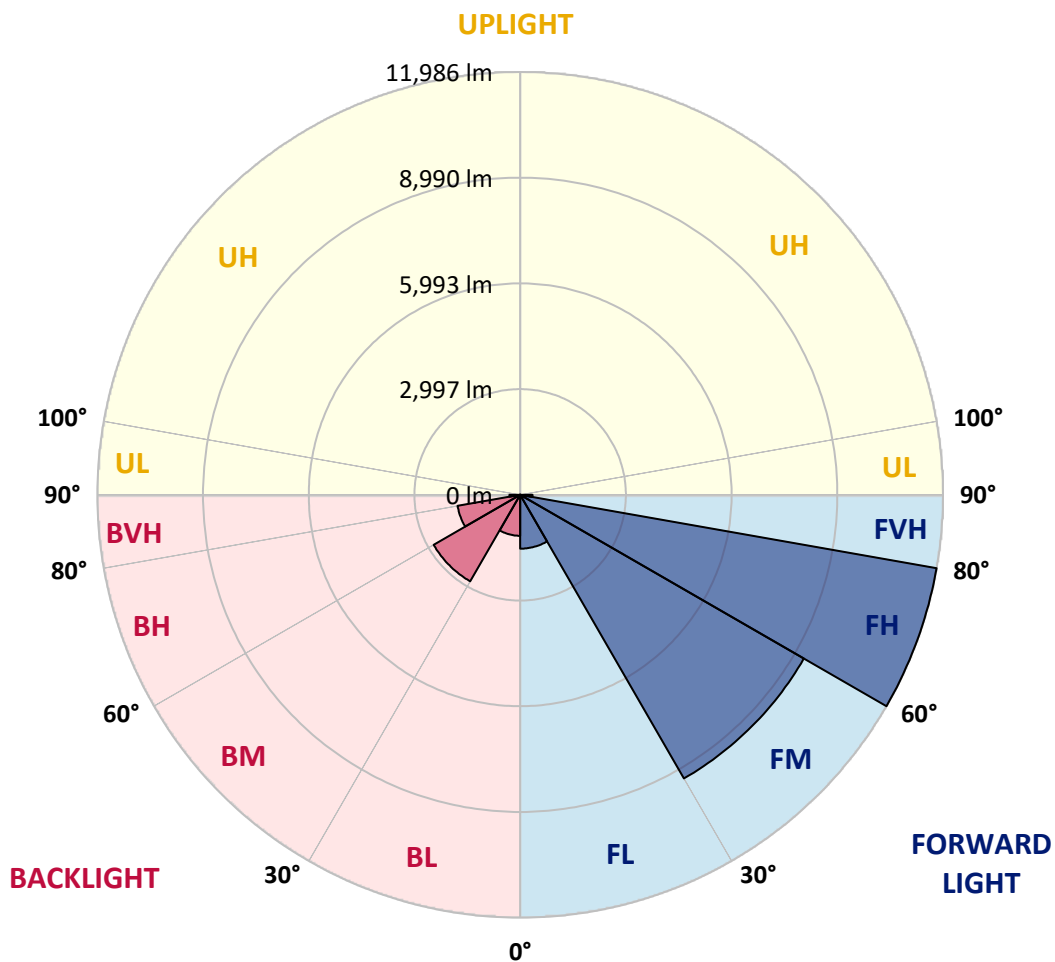
CATALOG NUMBER: GAA-AF-07-LED-U-T4W-7027-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 1526.0 | 5.2 | | | |
| FM | (30°-60°) | 9283.7 | 31.7 | | | |
| FH | (60°-80°) | 11986.1 | 41.0 | | | G4/12000 |
| FVH | (80°-90°) | 349.4 | 1.2 | | | G3/500 |
| BL | (0°-30°) | 1161.7 | 4.0 | B3/2500 | | |
| BM | (30°-60°) | 2832.1 | 9.7 | B3/5000 | | |
| BH | (60°-80°) | 1802.2 | 6.2 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 305.4 | 1.0 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type IV Short





REPORT NUMBER: P302858

CATALOG NUMBER: GAA-AF-07-LED-U-T4W-7027-800

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 47° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 |
| 2.5° | 3592.9 | 3585.8 | 3583.0 | 3577.3 | 3570.2 | 3534.3 | 3527.2 | 3501.7 | 3466.2 | 3428.9 | 3390.6 |
| 5° | 3829.2 | 3827.7 | 3811.7 | 3783.3 | 3738.0 | 3659.5 | 3641.1 | 3578.7 | 3494.6 | 3413.3 | 3332.5 |
| 7.5° | 4036.6 | 4023.9 | 3994.1 | 3936.9 | 3857.5 | 3750.7 | 3725.2 | 3638.2 | 3522.9 | 3411.9 | 3302.3 |
| 10° | 4188.8 | 4181.7 | 4116.5 | 4038.0 | 3934.1 | 3815.9 | 3786.2 | 3689.3 | 3562.6 | 3421.8 | 3285.2 |
| 12.5° | 4275.7 | 4261.6 | 4185.9 | 4092.4 | 3968.6 | 3853.3 | 3823.0 | 3725.2 | 3583.0 | 3421.8 | 3261.1 |
| 15° | 4270.1 | 4260.1 | 4184.5 | 4082.0 | 3957.2 | 3856.1 | 3829.2 | 3730.9 | 3578.7 | 3407.6 | 3230.0 |
| 17.5° | 4156.2 | 4160.4 | 4096.6 | 3995.5 | 3893.0 | 3815.9 | 3791.8 | 3701.1 | 3549.9 | 3379.3 | 3193.1 |
| 20° | 3957.2 | 3977.1 | 3934.1 | 3844.8 | 3787.6 | 3735.1 | 3719.5 | 3642.5 | 3505.9 | 3338.2 | 3152.9 |
| 22.5° | 3757.8 | 3776.2 | 3759.2 | 3683.6 | 3675.1 | 3643.9 | 3635.4 | 3580.1 | 3467.7 | 3312.7 | 3128.8 |
| 25° | 3611.3 | 3628.3 | 3625.5 | 3559.8 | 3585.8 | 3584.4 | 3577.3 | 3549.9 | 3459.1 | 3312.7 | 3133.1 |
| 27.5° | 3571.6 | 3577.3 | 3571.6 | 3511.6 | 3547.0 | 3575.9 | 3570.2 | 3565.5 | 3484.7 | 3353.8 | 3187.4 |
| 30° | 3708.2 | 3699.7 | 3655.3 | 3534.3 | 3567.4 | 3607.1 | 3601.4 | 3604.2 | 3561.2 | 3462.0 | 3308.4 |
| 32.5° | 4253.0 | 4214.3 | 4074.9 | 3735.1 | 3648.2 | 3669.4 | 3672.3 | 3719.5 | 3726.6 | 3628.3 | 3496.0 |
| 35° | 5068.2 | 5025.7 | 4844.7 | 4272.9 | 3900.0 | 3826.3 | 3826.3 | 3897.2 | 3939.7 | 3867.4 | 3787.6 |
| 37.5° | 5932.1 | 5884.8 | 5788.4 | 5018.6 | 4429.3 | 4098.0 | 4091.0 | 4140.6 | 4201.5 | 4219.0 | 4238.9 |
| 40° | 6913.6 | 6863.9 | 6890.9 | 5855.0 | 5167.9 | 4568.7 | 4467.6 | 4432.1 | 4597.1 | 4706.7 | 4866.4 |
| 42.5° | 7988.2 | 7965.0 | 7974.9 | 6786.9 | 6008.6 | 5273.3 | 5129.6 | 4945.8 | 5145.2 | 5339.9 | 5674.5 |
| 45° | 8982.4 | 9002.3 | 8992.4 | 7784.5 | 6945.2 | 6132.4 | 5980.3 | 5624.4 | 5819.6 | 6153.7 | 6699.0 |
| 47.5° | 9853.4 | 9770.7 | 9898.7 | 8874.2 | 7993.8 | 7094.6 | 6906.5 | 6430.1 | 6627.7 | 7040.2 | 7962.2 |
| 50° | 10910.5 | 10899.1 | 10711.5 | 10328.8 | 9261.2 | 8060.5 | 7814.3 | 7262.3 | 7569.5 | 8143.2 | 9554.7 |
| 52.5° | 12021.9 | 11815.4 | 11643.4 | 11459.6 | 10606.2 | 9051.0 | 8749.0 | 8091.7 | 8676.7 | 9397.8 | 11495.5 |
| 55° | 12249.3 | 12157.1 | 12370.2 | 12679.3 | 11902.4 | 10079.7 | 9728.1 | 9131.8 | 9923.3 | 10832.5 | 13733.6 |
| 57.5° | 12736.0 | 12734.6 | 13175.9 | 13726.5 | 13236.9 | 11170.9 | 10816.4 | 10388.3 | 11324.4 | 12475.6 | 16109.6 |
| 60° | 13064.9 | 13157.0 | 13976.9 | 15045.4 | 14547.3 | 12431.7 | 12105.6 | 11838.1 | 12918.4 | 14312.5 | 18323.5 |
| 62.5° | 13236.9 | 13362.1 | 14480.7 | 15580.3 | 16399.8 | 14530.3 | 14204.7 | 13819.1 | 15027.0 | 16327.5 | 19618.4 |
| 65° | 12521.4 | 12767.2 | 14402.2 | 16043.0 | 18022.1 | 17932.3 | 17785.8 | 17108.6 | 17663.4 | 17919.5 | 19150.5 |
| 67.5° | 10540.5 | 10792.3 | 12696.3 | 15611.5 | 19180.3 | 21213.7 | 21244.9 | 20088.1 | 19285.7 | 18056.1 | 16101.1 |
| 70° | 7509.9 | 7707.5 | 9283.0 | 13089.0 | 18298.0 | 23357.7 | 23464.5 | 21460.9 | 18962.4 | 16012.7 | 11249.3 |
| 72.5° | 3565.5 | 3686.4 | 5177.8 | 8518.9 | 14520.4 | 21401.3 | 21607.8 | 19708.2 | 16123.8 | 11855.1 | 6136.7 |
| 75° | 1310.4 | 1347.3 | 1749.9 | 3624.1 | 8422.0 | 15782.6 | 16026.0 | 14127.7 | 10688.4 | 5902.3 | 2337.8 |
| 77.5° | 785.4 | 809.5 | 982.0 | 1529.7 | 3312.7 | 9021.2 | 9380.8 | 7683.4 | 4671.3 | 2196.9 | 1149.7 |
| 80° | 549.1 | 566.1 | 704.1 | 951.7 | 1565.1 | 3437.9 | 3757.8 | 3135.9 | 1860.9 | 1390.3 | 836.4 |
| 82.5° | 371.4 | 379.9 | 495.2 | 643.2 | 1040.1 | 1227.7 | 1324.6 | 1394.5 | 1255.1 | 1034.4 | 530.7 |
| 85° | 243.4 | 251.9 | 336.0 | 423.9 | 661.6 | 634.6 | 648.8 | 820.8 | 916.3 | 702.7 | 294.4 |
| 87.5° | 139.4 | 145.1 | 202.3 | 226.4 | 324.6 | 268.9 | 271.7 | 432.4 | 586.4 | 474.0 | 179.1 |
| 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: P302858

CATALOG NUMBER: GAA-AF-07-LED-U-T4W-7027-800

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 | 3393.5 |
| 2.5° | 3380.7 | 3362.3 | 3321.2 | 3295.2 | 3271.1 | 3265.4 | 3255.5 | 3254.1 | 3252.6 | 3252.6 | 3248.4 |
| 5° | 3305.1 | 3273.9 | 3210.1 | 3174.2 | 3144.4 | 3141.6 | 3140.2 | 3147.3 | 3150.1 | 3152.9 | 3148.7 |
| 7.5° | 3256.9 | 3214.4 | 3134.5 | 3083.5 | 3048.0 | 3039.0 | 3053.7 | 3086.3 | 3107.6 | 3116.1 | 3111.8 |
| 10° | 3227.1 | 3174.2 | 3082.0 | 3026.3 | 2996.5 | 2992.3 | 3010.7 | 3049.4 | 3093.4 | 3110.4 | 3109.0 |
| 12.5° | 3193.1 | 3133.1 | 3034.8 | 2976.7 | 2959.6 | 2968.2 | 2992.3 | 3027.7 | 3073.5 | 3100.5 | 3101.9 |
| 15° | 3158.6 | 3089.1 | 2988.0 | 2937.0 | 2929.9 | 2941.2 | 2963.9 | 2990.8 | 3026.3 | 3053.7 | 3056.5 |
| 17.5° | 3117.5 | 3044.7 | 2944.1 | 2891.1 | 2885.5 | 2891.1 | 2892.5 | 2906.7 | 2929.9 | 2955.4 | 2962.5 |
| 20° | 3073.5 | 2999.3 | 2894.0 | 2841.5 | 2816.0 | 2793.3 | 2767.3 | 2770.2 | 2777.2 | 2803.2 | 2808.9 |
| 22.5° | 3041.9 | 2968.2 | 2855.7 | 2782.9 | 2714.9 | 2646.3 | 2595.3 | 2588.2 | 2591.1 | 2612.3 | 2619.4 |
| 25° | 3044.7 | 2966.7 | 2845.8 | 2720.5 | 2571.2 | 2461.6 | 2393.0 | 2381.7 | 2380.3 | 2395.9 | 2406.3 |
| 27.5° | 3100.5 | 3022.0 | 2882.6 | 2656.3 | 2414.8 | 2252.2 | 2179.9 | 2171.4 | 2160.1 | 2164.3 | 2175.7 |
| 30° | 3224.3 | 3151.5 | 2972.4 | 2591.1 | 2245.1 | 2047.6 | 1972.0 | 1963.5 | 1947.9 | 1940.8 | 1949.3 |
| 32.5° | 3426.1 | 3366.5 | 3103.3 | 2528.2 | 2076.0 | 1872.3 | 1795.7 | 1777.3 | 1767.4 | 1758.9 | 1766.0 |
| 35° | 3762.1 | 3736.5 | 3278.2 | 2460.2 | 1926.6 | 1737.1 | 1667.7 | 1639.3 | 1625.1 | 1640.7 | 1652.1 |
| 37.5° | 4288.5 | 4302.7 | 3507.3 | 2353.4 | 1811.3 | 1647.8 | 1589.2 | 1556.6 | 1535.4 | 1548.1 | 1560.9 |
| 40° | 5034.2 | 5044.1 | 3760.6 | 2202.6 | 1711.6 | 1594.9 | 1532.5 | 1502.7 | 1472.5 | 1449.8 | 1448.4 |
| 42.5° | 6012.9 | 5912.2 | 4009.7 | 2039.1 | 1596.3 | 1562.3 | 1492.8 | 1455.5 | 1410.1 | 1347.3 | 1334.5 |
| 45° | 7173.9 | 6820.0 | 4198.7 | 1851.0 | 1466.8 | 1522.6 | 1448.4 | 1397.4 | 1326.0 | 1258.0 | 1250.9 |
| 47.5° | 8511.8 | 7794.4 | 4291.3 | 1656.3 | 1345.9 | 1464.0 | 1394.5 | 1313.2 | 1223.5 | 1189.4 | 1185.2 |
| 50° | 10144.9 | 8951.2 | 4335.3 | 1466.8 | 1240.9 | 1387.4 | 1316.1 | 1220.6 | 1145.5 | 1138.4 | 1134.1 |
| 52.5° | 12004.9 | 10342.9 | 4349.9 | 1311.8 | 1154.0 | 1287.7 | 1252.3 | 1159.7 | 1099.6 | 1105.8 | 1105.8 |
| 55° | 13951.4 | 11780.0 | 4156.2 | 1199.4 | 1074.1 | 1185.2 | 1209.3 | 1135.6 | 1085.5 | 1108.6 | 1117.1 |
| 57.5° | 15738.2 | 13053.5 | 3547.0 | 1112.9 | 999.0 | 1107.2 | 1193.7 | 1158.2 | 1124.2 | 1216.4 | 1222.0 |
| 60° | 17110.0 | 13805.9 | 2649.2 | 1034.4 | 943.2 | 1079.8 | 1235.3 | 1245.2 | 1253.7 | 1473.9 | 1504.2 |
| 62.5° | 17397.3 | 13555.9 | 1821.2 | 973.5 | 917.7 | 1103.0 | 1310.4 | 1311.8 | 1301.9 | 1455.5 | 1473.9 |
| 65° | 16078.4 | 11971.9 | 1324.6 | 939.0 | 896.4 | 1144.1 | 1374.7 | 1344.4 | 1279.2 | 1395.9 | 1361.4 |
| 67.5° | 12768.6 | 9019.8 | 1103.0 | 913.5 | 865.3 | 1141.2 | 1442.7 | 1374.7 | 1266.5 | 1367.6 | 1311.8 |
| 70° | 8288.2 | 5453.8 | 982.0 | 892.2 | 827.9 | 1086.9 | 1482.4 | 1371.8 | 1229.1 | 1272.1 | 1206.4 |
| 72.5° | 4043.7 | 2438.9 | 900.7 | 861.0 | 789.6 | 1011.8 | 1481.0 | 1345.9 | 1190.9 | 1188.0 | 1152.6 |
| 75° | 1582.1 | 1117.1 | 826.5 | 813.7 | 724.4 | 926.2 | 1441.3 | 1309.0 | 1145.5 | 1099.6 | 1086.9 |
| 77.5° | 926.2 | 796.7 | 732.9 | 744.3 | 646.0 | 840.7 | 1383.2 | 1245.2 | 1082.6 | 1028.8 | 1014.6 |
| 80° | 674.3 | 596.4 | 624.7 | 643.2 | 552.0 | 755.6 | 1304.7 | 1166.8 | 1013.2 | 1040.1 | 1020.3 |
| 82.5° | 432.4 | 384.2 | 506.6 | 525.0 | 459.8 | 668.7 | 1219.2 | 1084.1 | 914.9 | 830.8 | 810.9 |
| 85° | 220.7 | 243.4 | 377.1 | 399.8 | 354.4 | 549.1 | 1115.7 | 974.9 | 803.8 | 691.4 | 702.7 |
| 87.5° | 123.8 | 166.3 | 240.5 | 268.9 | 250.5 | 422.5 | 905.0 | 803.8 | 655.9 | 533.5 | 469.7 |
| 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)