

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: P300427

Luminaire Tested: **GAA-AF-03-LED-U-AFL-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300427
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-03-LED-U-AFL-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10634.2 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

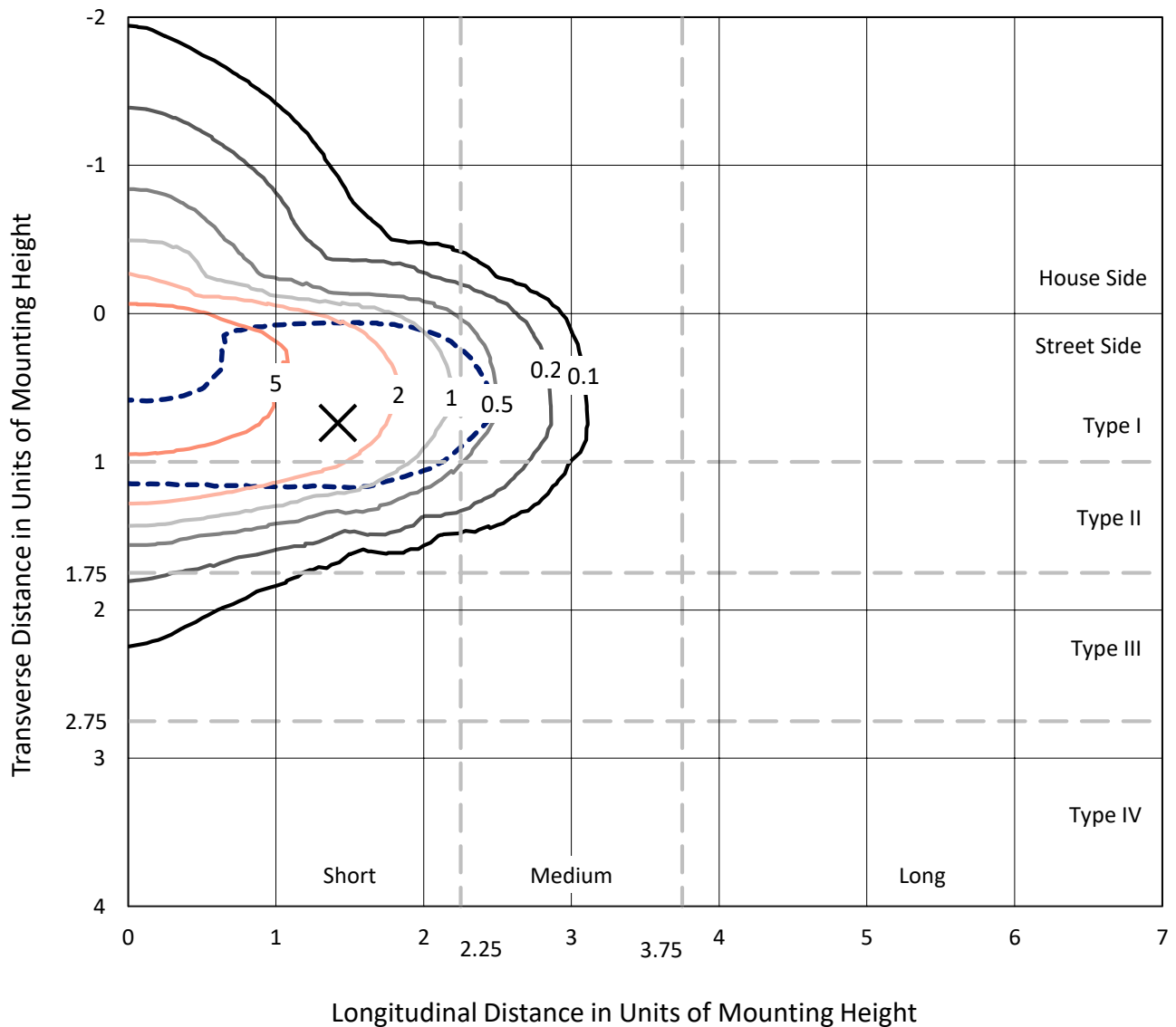
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

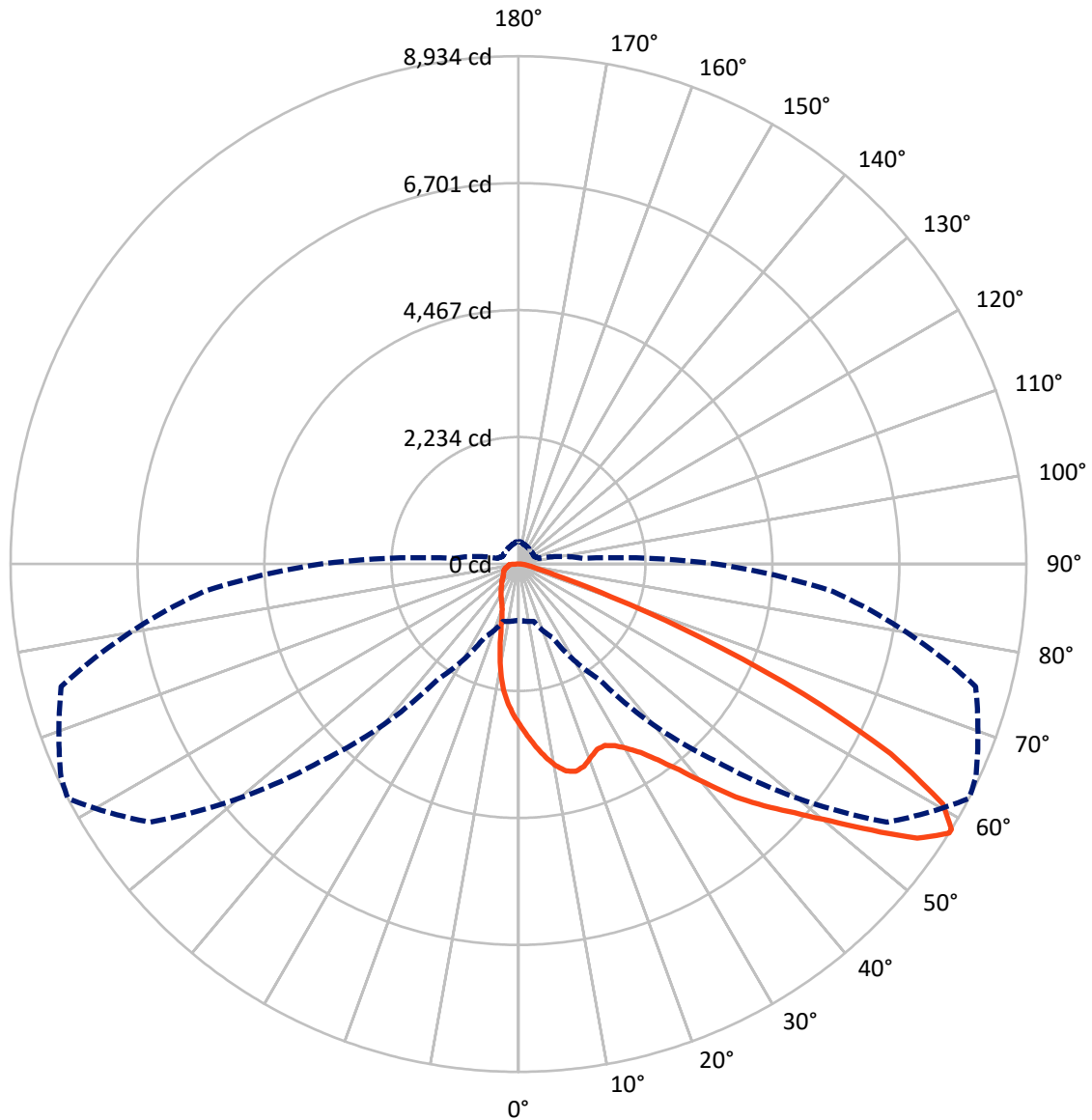
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.6 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1621.8 | 0.0 | 1621.8 |
| | % Fixture | 15.3 | 0.0 | 15.3 |
| Street Side | Lumens | 9012.5 | 0.0 | 9012.5 |
| | % Fixture | 84.7 | 0.0 | 84.7 |
| Total | Lumens | 10634.2 | 0.0 | 10634.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 252.6 | 2.4 |
| 10°-20° | 645.8 | 6.1 |
| 20°-30° | 1043.9 | 9.8 |
| 30°-40° | 1657.2 | 15.6 |
| 40°-50° | 2424.8 | 22.8 |
| 50°-60° | 2536.2 | 23.8 |
| 60°-70° | 1498.4 | 14.1 |
| 70°-80° | 422.1 | 4.0 |
| 80°-90° | 153.2 | 1.4 |
| 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° | 10634.2 | 100.0 |
| 0°-180° | 10634.2 | 100.0 |

Coefficient of Utilization



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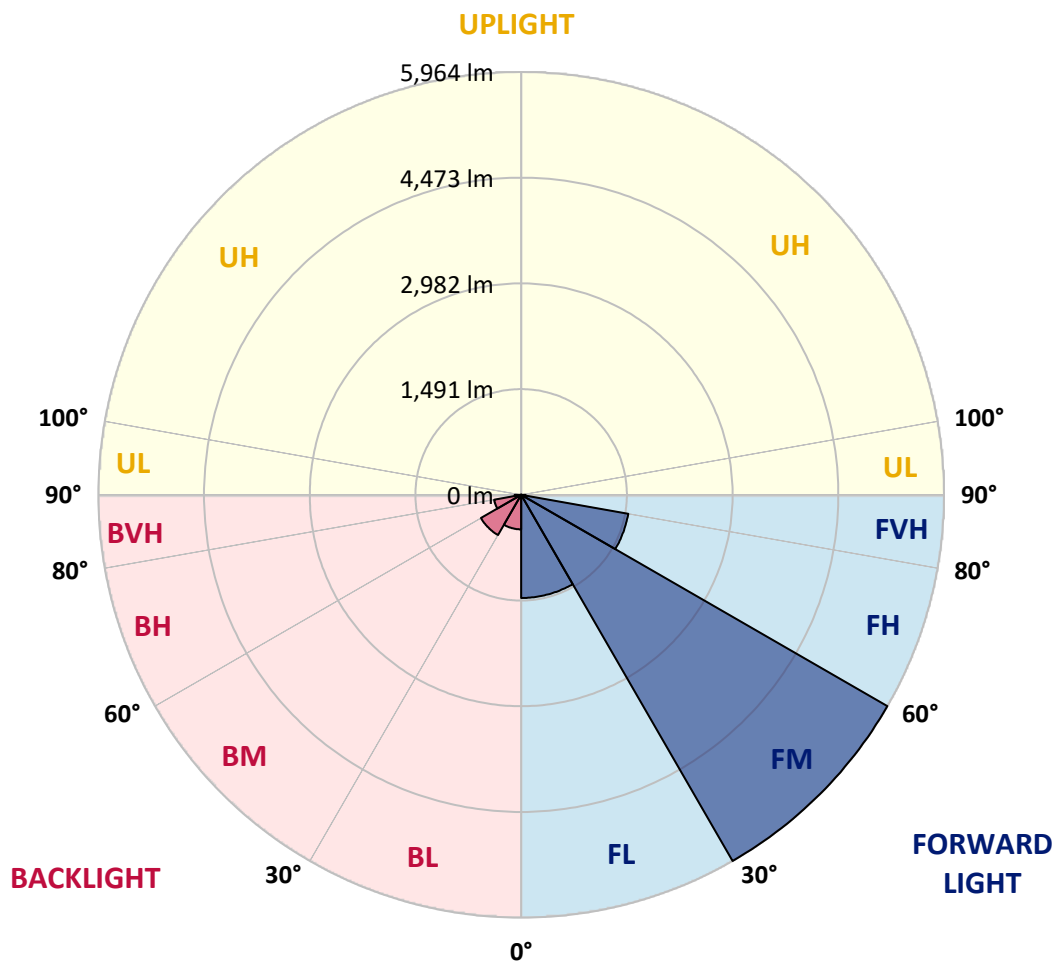
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1454.9 | 13.7 | | | |
| FM | (30°-60°) | 5963.6 | 56.1 | | | |
| FH | (60°-80°) | 1533.5 | 14.4 | | | G1/1800 |
| FVH | (80°-90°) | 60.5 | 0.6 | | | G1/100 |
| BL | (0°-30°) | 487.4 | 4.6 | B1/500 | | |
| BM | (30°-60°) | 654.6 | 6.2 | B1/1000 | | |
| BH | (60°-80°) | 387.0 | 3.6 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 92.8 | 0.9 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 62.5° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 |
| 2.5° | 3227.9 | 3201.8 | 3185.3 | 3170.8 | 3151.8 | 3111.2 | 3056.6 | 3022.1 | 3004.5 | 2944.9 | 2874.3 |
| 5° | 3544.4 | 3521.3 | 3504.3 | 3484.8 | 3450.7 | 3387.1 | 3299.0 | 3228.9 | 3194.3 | 3075.1 | 2933.9 |
| 7.5° | 3470.2 | 3479.8 | 3509.3 | 3560.9 | 3604.9 | 3596.4 | 3517.8 | 3428.7 | 3383.1 | 3217.4 | 3003.0 |
| 10° | 3023.6 | 3040.1 | 3091.2 | 3211.8 | 3407.1 | 3607.4 | 3668.5 | 3606.9 | 3560.9 | 3358.1 | 3074.1 |
| 12.5° | 2933.9 | 2933.4 | 2937.4 | 2969.5 | 3085.7 | 3367.6 | 3673.5 | 3735.6 | 3708.1 | 3492.3 | 3146.7 |
| 15° | 2970.5 | 2971.5 | 2968.5 | 2982.0 | 3018.1 | 3129.7 | 3520.3 | 3785.2 | 3804.7 | 3627.5 | 3221.9 |
| 17.5° | 3066.6 | 3064.1 | 3052.6 | 3052.6 | 3065.6 | 3109.2 | 3340.0 | 3739.1 | 3829.3 | 3747.2 | 3288.0 |
| 20° | 3227.9 | 3216.4 | 3185.8 | 3157.8 | 3143.7 | 3167.3 | 3265.9 | 3633.0 | 3786.7 | 3851.8 | 3342.5 |
| 22.5° | 3423.2 | 3414.2 | 3364.6 | 3304.5 | 3255.9 | 3255.4 | 3304.0 | 3540.3 | 3713.1 | 3950.5 | 3388.6 |
| 25° | 3675.5 | 3661.0 | 3587.4 | 3491.3 | 3406.1 | 3373.6 | 3387.1 | 3535.8 | 3673.0 | 4057.6 | 3429.7 |
| 27.5° | 3972.0 | 3945.5 | 3858.3 | 3719.6 | 3594.4 | 3528.8 | 3509.3 | 3617.5 | 3709.6 | 4190.3 | 3486.8 |
| 30° | 4331.5 | 4301.0 | 4189.3 | 4008.6 | 3831.8 | 3724.1 | 3682.6 | 3762.2 | 3830.8 | 4352.1 | 3578.4 |
| 32.5° | 4740.7 | 4696.6 | 4567.4 | 4368.1 | 4135.7 | 3971.5 | 3903.9 | 3953.5 | 4008.1 | 4546.9 | 3693.1 |
| 35° | 5306.0 | 5253.4 | 5066.6 | 4791.7 | 4529.3 | 4303.5 | 4195.3 | 4231.4 | 4284.5 | 4837.3 | 3858.8 |
| 37.5° | 5691.6 | 5668.1 | 5543.9 | 5285.5 | 5000.0 | 4740.2 | 4572.9 | 4593.9 | 4624.0 | 5200.3 | 4071.1 |
| 40° | 5688.1 | 5697.6 | 5700.1 | 5702.6 | 5508.3 | 5259.4 | 5079.7 | 5057.6 | 5051.6 | 5599.0 | 4312.5 |
| 42.5° | 5403.2 | 5442.2 | 5568.4 | 5824.3 | 5942.5 | 5828.3 | 5663.5 | 5600.0 | 5568.4 | 6068.7 | 4568.4 |
| 45° | 4967.0 | 4988.0 | 5224.4 | 5724.1 | 6164.8 | 6391.6 | 6267.0 | 6066.7 | 6009.6 | 6500.3 | 4780.7 |
| 47.5° | 4742.2 | 4765.2 | 4913.9 | 5458.7 | 6162.3 | 6846.8 | 6918.9 | 6537.4 | 6435.2 | 6875.9 | 4964.0 |
| 50° | 4206.9 | 4254.9 | 4442.2 | 4997.0 | 5937.5 | 7056.2 | 7600.5 | 7098.2 | 6886.9 | 7241.4 | 5147.8 |
| 52.5° | 3223.9 | 3298.0 | 3507.8 | 4237.9 | 5367.1 | 6952.5 | 8145.8 | 7778.2 | 7479.8 | 7620.0 | 5305.5 |
| 55° | 2033.6 | 2088.7 | 2264.9 | 2993.0 | 4293.5 | 6413.2 | 8352.6 | 8513.9 | 8248.5 | 7978.5 | 5442.2 |
| 57.5° | 1105.7 | 1130.2 | 1196.3 | 1652.5 | 2792.7 | 5220.9 | 8051.2 | 8932.5 | 8822.3 | 8283.0 | 5545.4 |
| 58° | 989.5 | 1006.0 | 1047.1 | 1432.2 | 2476.7 | 4894.9 | 7917.5 | 8934.0 | 8878.9 | 8327.6 | 5553.4 |
| 60° | 734.1 | 725.6 | 689.0 | 817.2 | 1378.6 | 3381.6 | 7109.2 | 8576.4 | 8738.2 | 8382.2 | 5514.3 |
| 62.5° | 645.0 | 624.4 | 549.8 | 541.3 | 670.5 | 1557.9 | 5439.7 | 7346.6 | 7728.7 | 8070.7 | 5277.0 |
| 65° | 605.9 | 583.9 | 487.7 | 456.7 | 483.7 | 659.0 | 3204.3 | 5509.8 | 5989.0 | 7126.3 | 4670.0 |
| 67.5° | 576.9 | 548.3 | 448.2 | 405.6 | 407.6 | 435.7 | 1284.4 | 3470.2 | 4009.6 | 5410.7 | 3632.5 |
| 70° | 548.8 | 517.8 | 414.6 | 365.6 | 354.0 | 344.5 | 510.8 | 1737.1 | 2226.4 | 3417.7 | 2316.0 |
| 72.5° | 518.8 | 488.2 | 385.1 | 334.0 | 311.5 | 279.9 | 333.5 | 710.6 | 992.5 | 1616.9 | 1050.6 |
| 75° | 475.2 | 447.7 | 355.5 | 306.0 | 273.9 | 231.8 | 251.9 | 371.1 | 445.2 | 644.0 | 506.3 |
| 77.5° | 421.6 | 399.1 | 322.5 | 282.9 | 242.9 | 188.3 | 193.8 | 257.4 | 285.4 | 368.6 | 301.0 |
| 80° | 303.0 | 311.0 | 286.9 | 254.4 | 216.3 | 152.7 | 148.7 | 187.8 | 202.8 | 236.9 | 195.8 |
| 82.5° | 212.8 | 217.3 | 237.4 | 207.8 | 178.8 | 120.2 | 109.7 | 132.2 | 141.2 | 155.7 | 105.7 |
| 85° | 146.7 | 141.7 | 162.7 | 144.7 | 129.2 | 80.1 | 75.1 | 89.6 | 95.1 | 96.6 | 54.6 |
| 87.5° | 88.1 | 88.1 | 94.1 | 77.6 | 69.6 | 41.6 | 40.6 | 51.1 | 54.6 | 52.1 | 30.0 |
| 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: GAA-AF-03-LED-U-AFL-7027-600

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 | 2824.8 |
| 2.5° | 2832.3 | 2796.7 | 2721.1 | 2660.5 | 2583.9 | 2504.3 | 2459.7 | 2412.1 | 2379.6 | 2356.1 | 2393.6 |
| 5° | 2853.8 | 2781.2 | 2625.0 | 2476.7 | 2313.0 | 2142.7 | 2013.5 | 1893.4 | 1809.7 | 1757.7 | 1806.7 |
| 7.5° | 2887.9 | 2776.2 | 2527.3 | 2273.9 | 1980.0 | 1696.6 | 1443.2 | 1284.4 | 1191.8 | 1146.2 | 1174.8 |
| 10° | 2926.9 | 2768.2 | 2412.6 | 1999.0 | 1578.4 | 1221.3 | 1032.1 | 968.0 | 946.9 | 938.4 | 942.4 |
| 12.5° | 2959.5 | 2751.2 | 2271.9 | 1666.5 | 1185.3 | 964.5 | 909.9 | 908.4 | 912.9 | 913.9 | 915.4 |
| 15° | 2982.5 | 2726.1 | 2063.1 | 1320.0 | 947.9 | 878.8 | 875.8 | 884.8 | 893.3 | 896.9 | 898.9 |
| 17.5° | 2998.0 | 2674.5 | 1827.3 | 1043.6 | 849.3 | 837.3 | 844.3 | 855.8 | 864.8 | 867.3 | 869.3 |
| 20° | 2996.5 | 2598.9 | 1546.3 | 870.3 | 795.7 | 795.7 | 807.7 | 816.7 | 817.2 | 814.2 | 815.7 |
| 22.5° | 2981.0 | 2495.3 | 1273.9 | 778.2 | 748.1 | 756.6 | 768.7 | 760.1 | 725.1 | 702.1 | 703.6 |
| 25° | 2955.0 | 2371.6 | 1040.6 | 719.6 | 704.1 | 719.1 | 715.6 | 651.5 | 601.4 | 578.9 | 578.9 |
| 27.5° | 2931.9 | 2225.4 | 861.3 | 668.5 | 660.0 | 678.5 | 616.4 | 558.3 | 537.3 | 526.8 | 523.3 |
| 30° | 2915.4 | 2067.6 | 741.6 | 619.4 | 618.4 | 604.9 | 534.8 | 518.8 | 515.3 | 506.8 | 503.8 |
| 32.5° | 2919.4 | 1907.9 | 665.0 | 576.4 | 579.9 | 517.8 | 495.7 | 499.3 | 496.2 | 487.2 | 483.2 |
| 35° | 2952.5 | 1756.2 | 614.9 | 537.3 | 526.8 | 467.7 | 472.7 | 479.2 | 478.2 | 465.7 | 461.7 |
| 37.5° | 3011.5 | 1612.4 | 581.9 | 504.8 | 459.7 | 442.7 | 450.7 | 460.7 | 458.2 | 449.7 | 446.7 |
| 40° | 3073.6 | 1477.2 | 554.8 | 479.2 | 420.1 | 425.6 | 432.7 | 438.2 | 440.7 | 443.2 | 441.2 |
| 42.5° | 3134.2 | 1336.0 | 521.8 | 453.2 | 403.6 | 409.6 | 412.6 | 418.1 | 431.7 | 441.2 | 440.7 |
| 45° | 3170.3 | 1203.3 | 487.7 | 416.1 | 390.6 | 394.1 | 392.1 | 403.1 | 419.6 | 435.2 | 435.7 |
| 47.5° | 3210.3 | 1100.2 | 460.7 | 382.1 | 378.1 | 380.6 | 374.6 | 385.6 | 400.6 | 419.6 | 421.6 |
| 50° | 3258.9 | 1038.6 | 439.2 | 355.0 | 361.0 | 361.0 | 359.5 | 369.6 | 390.6 | 412.6 | 416.6 |
| 52.5° | 3314.0 | 1026.5 | 421.1 | 335.5 | 344.0 | 343.5 | 345.0 | 360.0 | 383.1 | 404.6 | 408.1 |
| 55° | 3381.1 | 1059.1 | 401.6 | 321.0 | 327.5 | 329.5 | 334.5 | 351.5 | 371.1 | 395.6 | 397.1 |
| 57.5° | 3459.2 | 1125.2 | 386.1 | 309.5 | 312.5 | 319.0 | 327.0 | 342.5 | 363.5 | 390.6 | 392.1 |
| 58° | 3472.2 | 1139.2 | 383.6 | 308.5 | 309.5 | 317.0 | 326.0 | 341.0 | 362.0 | 391.6 | 393.1 |
| 60° | 3472.7 | 1185.8 | 378.1 | 304.0 | 297.9 | 310.5 | 320.5 | 335.5 | 359.5 | 395.1 | 398.6 |
| 62.5° | 3349.6 | 1185.3 | 374.1 | 297.4 | 285.9 | 301.5 | 313.0 | 330.5 | 357.0 | 403.6 | 410.6 |
| 65° | 2949.5 | 1077.1 | 355.0 | 287.4 | 276.4 | 293.4 | 306.5 | 327.0 | 364.0 | 440.7 | 445.2 |
| 67.5° | 2307.0 | 882.8 | 319.5 | 273.4 | 263.9 | 285.4 | 302.5 | 326.5 | 371.6 | 449.2 | 452.2 |
| 70° | 1525.3 | 660.5 | 280.4 | 257.4 | 250.9 | 275.9 | 304.5 | 343.5 | 363.0 | 431.2 | 423.1 |
| 72.5° | 791.7 | 463.7 | 248.9 | 237.4 | 235.9 | 267.4 | 333.5 | 341.5 | 354.5 | 405.6 | 395.6 |
| 75° | 415.6 | 322.0 | 221.3 | 215.3 | 217.8 | 265.4 | 393.6 | 332.5 | 343.5 | 388.1 | 407.1 |
| 77.5° | 254.4 | 259.9 | 197.8 | 195.3 | 200.3 | 259.4 | 393.1 | 321.0 | 327.5 | 357.0 | 378.1 |
| 80° | 170.3 | 210.8 | 179.8 | 180.3 | 183.8 | 237.4 | 353.0 | 303.0 | 308.0 | 337.5 | 359.0 |
| 82.5° | 107.7 | 124.7 | 163.2 | 171.8 | 167.3 | 195.8 | 300.0 | 275.9 | 282.9 | 386.1 | 408.1 |
| 85° | 54.6 | 78.1 | 141.7 | 165.2 | 150.7 | 137.2 | 243.4 | 241.9 | 245.4 | 278.4 | 290.9 |
| 87.5° | 25.0 | 43.1 | 110.7 | 144.2 | 113.7 | 85.6 | 176.8 | 179.3 | 193.3 | 197.8 | 197.8 |
| 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)