

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: P191033

Luminaire Tested: **GAN-AF-05-LED-U-SL2-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191033
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-05-LED-U-SL2-600-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16608.6 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G3

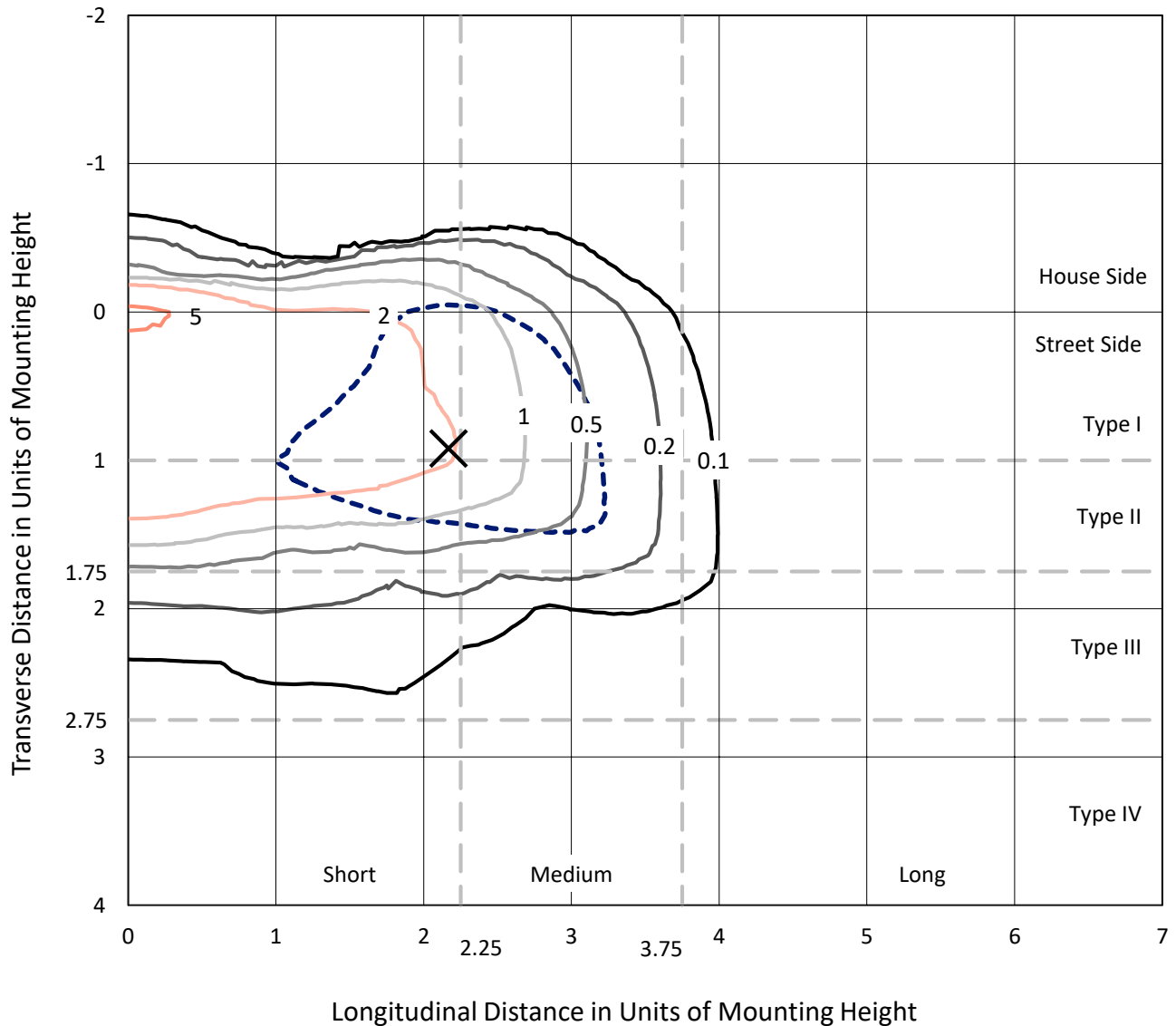
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

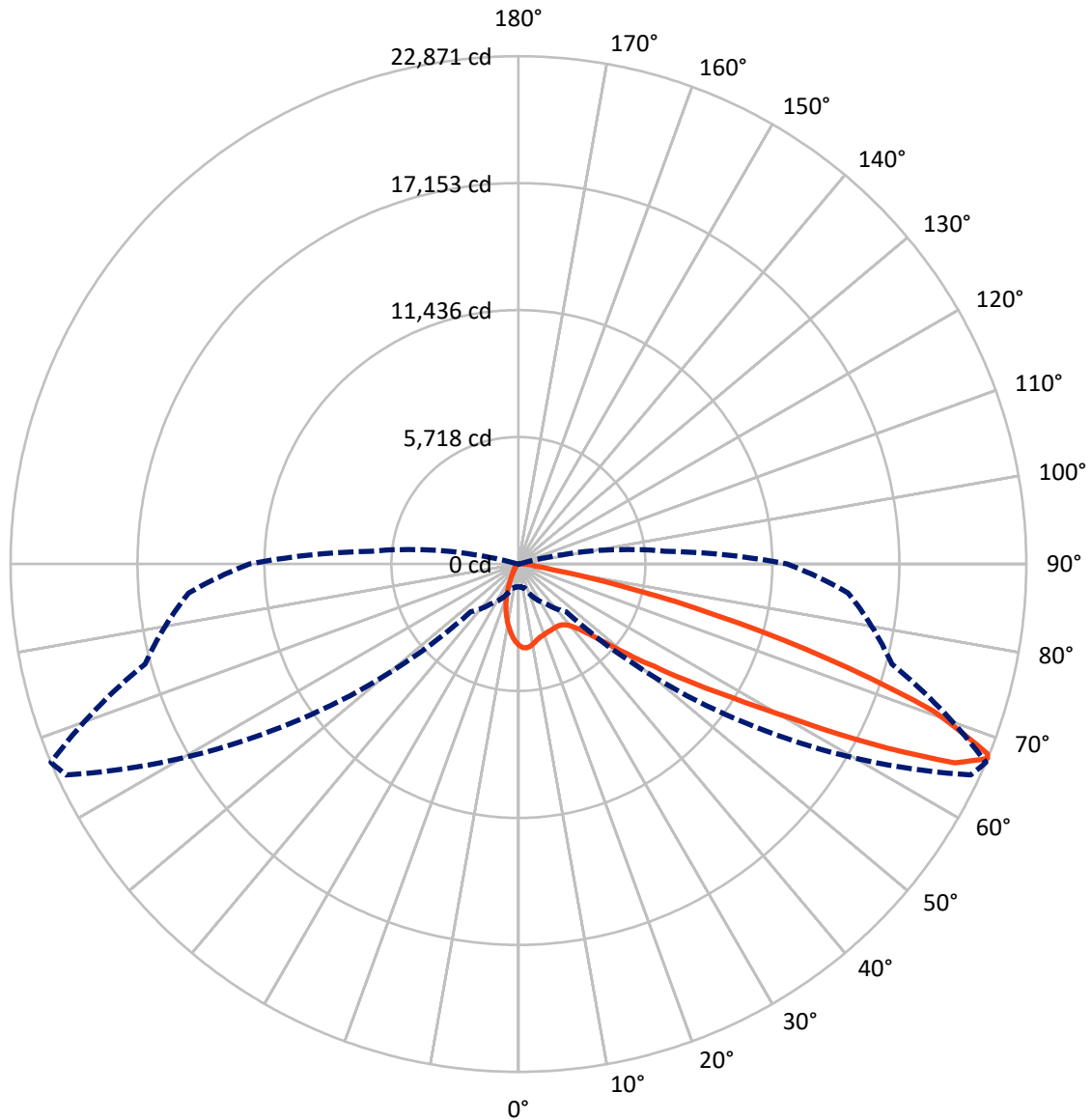
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1724.5 | 0.0 | 1724.5 |
| | % Fixture | 10.4 | 0.0 | 10.4 |
| Street Side | Lumens | 14884.2 | 0.0 | 14884.2 |
| | % Fixture | 89.6 | 0.0 | 89.6 |
| Total | Lumens | 16608.6 | 0.0 | 16608.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 298.0 | 1.8 |
| 10°-20° | 634.3 | 3.8 |
| 20°-30° | 922.3 | 5.6 |
| 30°-40° | 1438.8 | 8.7 |
| 40°-50° | 2548.7 | 15.3 |
| 50°-60° | 4033.1 | 24.3 |
| 60°-70° | 4619.4 | 27.8 |
| 70°-80° | 1916.1 | 11.5 |
| 80°-90° | 197.9 | 1.2 |
| 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° | 16608.6 | 100.0 |
| 0°-180° | 16608.6 | 100.0 |



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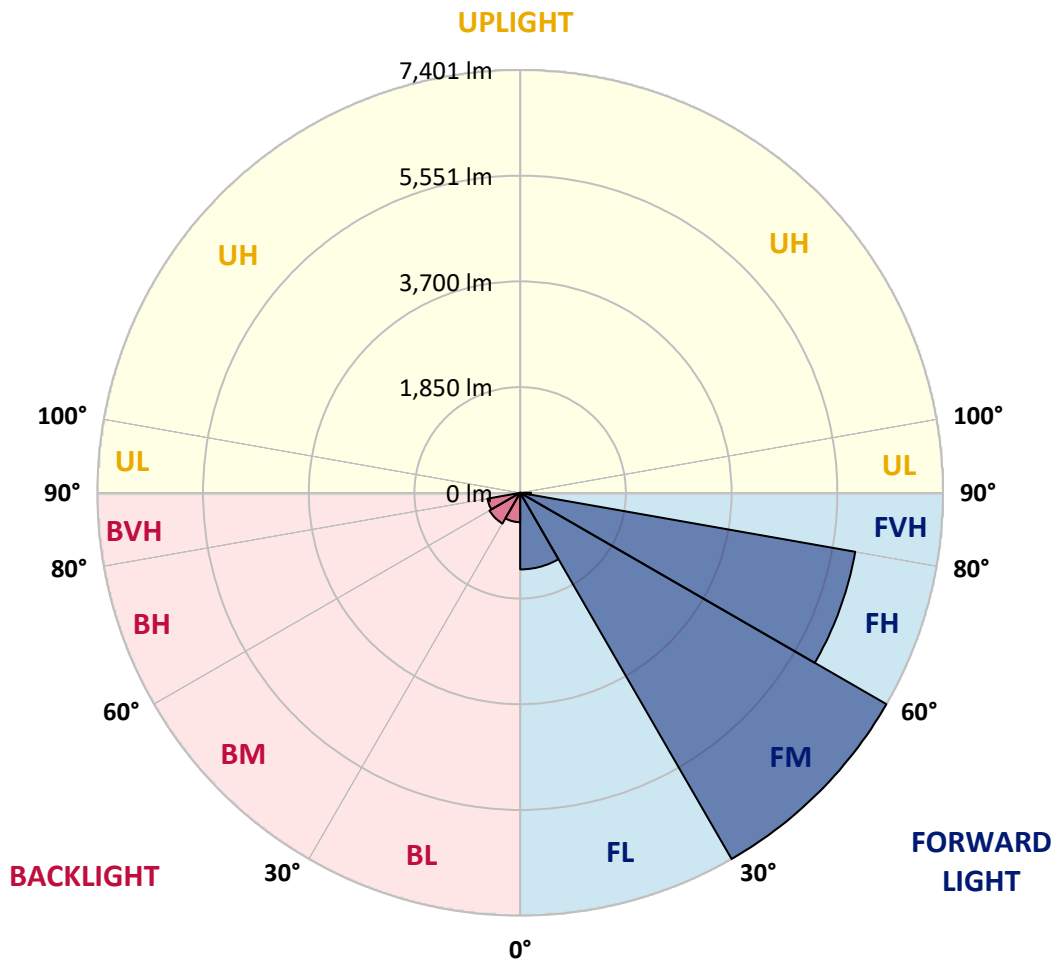
CATALOG NUMBER: GAN-AF-05-LED-U-SL2-600-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1340.1 | 8.1 | | | |
| FM | (30°-60°) | 7400.8 | 44.6 | | | |
| FH | (60°-80°) | 5954.2 | 35.9 | | | G3/7500 |
| FVH | (80°-90°) | 189.0 | 1.1 | | | G2/225 |
| BL | (0°-30°) | 514.6 | 3.1 | B2/1000 | | |
| BM | (30°-60°) | 619.8 | 3.7 | B1/1000 | | |
| BH | (60°-80°) | 581.2 | 3.5 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 8.9 | 0.1 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 67° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0° | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 |
| 2.5° | 3786.9 | 3794.5 | 3793.6 | 3799.4 | 3812.9 | 3814.0 | 3800.4 | 3774.2 | 3768.4 | 3734.5 | 3675.4 |
| 5° | 3492.4 | 3514.6 | 3528.2 | 3583.4 | 3645.4 | 3720.0 | 3776.1 | 3796.5 | 3793.6 | 3769.4 | 3680.3 |
| 7.5° | 3156.2 | 3178.4 | 3194.0 | 3258.8 | 3341.2 | 3469.0 | 3615.3 | 3735.5 | 3746.1 | 3772.2 | 3676.4 |
| 10° | 2932.4 | 2936.3 | 2957.6 | 3019.5 | 3105.8 | 3236.6 | 3410.9 | 3621.1 | 3653.2 | 3749.0 | 3666.7 |
| 12.5° | 2748.4 | 2751.2 | 2779.4 | 2846.2 | 2938.2 | 3070.0 | 3253.1 | 3496.2 | 3545.5 | 3720.0 | 3664.7 |
| 15° | 2617.5 | 2628.2 | 2653.4 | 2723.1 | 2821.0 | 2951.7 | 3139.7 | 3404.2 | 3463.3 | 3709.3 | 3682.2 |
| 17.5° | 2573.9 | 2585.6 | 2593.3 | 2643.7 | 2732.8 | 2860.7 | 3053.5 | 3344.1 | 3410.9 | 3715.2 | 3716.1 |
| 20° | 2619.5 | 2628.2 | 2610.8 | 2623.4 | 2678.6 | 2792.9 | 2980.8 | 3292.8 | 3372.2 | 3721.9 | 3759.7 |
| 22.5° | 2789.0 | 2792.9 | 2745.4 | 2690.2 | 2680.5 | 2743.5 | 2923.7 | 3252.1 | 3337.3 | 3740.3 | 3811.0 |
| 25° | 3079.6 | 3072.8 | 2995.3 | 2876.2 | 2763.8 | 2734.8 | 2889.7 | 3226.9 | 3319.9 | 3759.7 | 3864.3 |
| 27.5° | 3430.4 | 3440.0 | 3333.5 | 3160.0 | 2946.0 | 2792.9 | 2884.9 | 3216.3 | 3312.1 | 3773.3 | 3910.8 |
| 30° | 3856.5 | 3870.1 | 3748.1 | 3530.1 | 3223.0 | 2936.3 | 2929.5 | 3214.3 | 3307.3 | 3764.6 | 3914.7 |
| 32.5° | 4291.5 | 4308.0 | 4212.1 | 3987.4 | 3593.1 | 3176.5 | 3030.2 | 3235.6 | 3317.0 | 3734.5 | 3892.4 |
| 35° | 4746.8 | 4770.1 | 4706.2 | 4513.4 | 4094.9 | 3523.3 | 3207.5 | 3300.6 | 3362.5 | 3731.6 | 3870.1 |
| 37.5° | 5375.5 | 5396.9 | 5276.8 | 5072.3 | 4702.3 | 3988.3 | 3492.4 | 3422.6 | 3470.1 | 3778.1 | 3876.0 |
| 40° | 6314.3 | 6311.4 | 6001.3 | 5688.4 | 5369.8 | 4579.2 | 3892.4 | 3643.4 | 3667.7 | 3918.5 | 3947.7 |
| 42.5° | 7337.2 | 7332.4 | 6874.2 | 6398.6 | 6110.8 | 5306.8 | 4418.4 | 4025.1 | 4008.6 | 4177.2 | 4133.6 |
| 45° | 8125.8 | 8124.9 | 7750.9 | 7215.2 | 7003.0 | 6141.8 | 5098.5 | 4556.0 | 4530.9 | 4597.7 | 4476.5 |
| 47.5° | 8462.0 | 8467.8 | 8279.9 | 7903.0 | 7992.1 | 7271.3 | 5955.8 | 5325.2 | 5287.4 | 5260.3 | 5076.2 |
| 50° | 8200.4 | 8212.0 | 8227.5 | 8153.9 | 8717.7 | 8789.4 | 7105.7 | 6409.2 | 6390.8 | 6269.7 | 5982.0 |
| 52.5° | 7346.0 | 7405.0 | 7587.2 | 7820.7 | 8969.5 | 10246.4 | 8908.6 | 7755.7 | 7657.0 | 7528.1 | 7211.3 |
| 55° | 5906.4 | 5971.4 | 6317.1 | 6883.8 | 8594.7 | 11203.5 | 11435.1 | 9491.8 | 9327.1 | 8942.4 | 8485.2 |
| 57.5° | 3908.9 | 4009.7 | 4511.4 | 5232.2 | 7505.8 | 11357.5 | 13955.7 | 11901.0 | 11327.5 | 10274.5 | 9759.2 |
| 60° | 2153.5 | 2250.4 | 2794.8 | 3447.8 | 5421.1 | 10596.1 | 15651.0 | 15037.8 | 14024.5 | 11763.4 | 11306.2 |
| 62.5° | 1326.3 | 1378.5 | 1780.5 | 2388.0 | 3251.1 | 8363.1 | 16001.7 | 18979.6 | 17806.5 | 13680.5 | 13174.9 |
| 65° | 1055.9 | 1078.2 | 1274.9 | 1952.0 | 2330.8 | 4974.5 | 14869.2 | 21984.6 | 21593.3 | 16001.7 | 14847.9 |
| 67° | 1024.9 | 1033.7 | 1126.7 | 1675.9 | 2197.1 | 3049.6 | 12457.1 | 22473.8 | 22871.0 | 17406.3 | 14900.2 |
| 67.5° | 1031.7 | 1041.4 | 1129.5 | 1599.4 | 2193.2 | 2802.6 | 11625.8 | 22281.1 | 22782.9 | 17517.7 | 14668.7 |
| 70° | 994.9 | 1024.9 | 1293.3 | 1598.5 | 2085.7 | 2328.8 | 6962.3 | 19305.1 | 19827.2 | 16276.8 | 12446.4 |
| 72.5° | 352.6 | 354.6 | 558.9 | 1293.3 | 2267.8 | 2354.0 | 3496.2 | 14152.3 | 14538.9 | 12451.3 | 8973.4 |
| 75° | 209.3 | 178.2 | 186.0 | 368.2 | 2167.1 | 2286.2 | 2017.0 | 9043.2 | 9187.5 | 7134.8 | 4544.4 |
| 77.5° | 144.3 | 125.9 | 129.8 | 162.8 | 825.4 | 2254.3 | 1602.4 | 4715.8 | 4561.8 | 2502.2 | 967.8 |
| 80° | 82.3 | 72.6 | 77.5 | 142.4 | 300.3 | 2103.2 | 1511.2 | 1912.3 | 1630.4 | 424.3 | 267.4 |
| 82.5° | 43.6 | 36.8 | 44.6 | 117.2 | 209.3 | 1310.7 | 1514.2 | 924.1 | 732.3 | 143.4 | 182.1 |
| 85° | 15.5 | 12.6 | 21.3 | 80.4 | 139.5 | 402.0 | 1403.7 | 776.9 | 610.3 | 69.8 | 138.5 |
| 87.5° | 2.9 | 2.9 | 8.7 | 32.9 | 56.2 | 123.1 | 830.2 | 461.1 | 309.0 | 41.6 | 94.9 |
| 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: GAN-AF-05-LED-U-SL2-600-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 | 3662.8 |
| 2.5° | 3651.2 | 3609.6 | 3553.3 | 3484.6 | 3403.2 | 3331.5 | 3278.3 | 3223.0 | 3211.3 | 3192.0 | 3189.2 |
| 5° | 3627.0 | 3555.3 | 3415.8 | 3256.0 | 3085.4 | 2931.4 | 2806.5 | 2695.1 | 2645.7 | 2603.0 | 2598.2 |
| 7.5° | 3591.2 | 3483.6 | 3246.2 | 2988.6 | 2722.2 | 2479.9 | 2274.6 | 2129.3 | 1995.6 | 1931.6 | 1922.0 |
| 10° | 3549.4 | 3395.5 | 3055.5 | 2697.9 | 2329.9 | 1987.9 | 1682.8 | 1426.9 | 1271.9 | 1180.0 | 1168.3 |
| 12.5° | 3510.8 | 3309.2 | 2860.7 | 2396.7 | 1907.5 | 1450.2 | 1057.8 | 813.8 | 651.0 | 585.1 | 577.4 |
| 15° | 3492.4 | 3239.5 | 2678.6 | 2088.6 | 1465.7 | 923.2 | 578.4 | 447.5 | 394.2 | 378.8 | 377.8 |
| 17.5° | 3490.4 | 3180.4 | 2500.3 | 1769.9 | 1026.8 | 536.6 | 376.9 | 343.9 | 333.3 | 329.4 | 329.4 |
| 20° | 3489.4 | 3124.2 | 2322.1 | 1439.6 | 651.9 | 357.4 | 313.8 | 306.2 | 298.4 | 293.5 | 293.5 |
| 22.5° | 3500.0 | 3073.9 | 2136.1 | 1102.4 | 410.7 | 289.7 | 276.1 | 268.3 | 258.7 | 251.9 | 250.9 |
| 25° | 3510.8 | 3035.1 | 1946.2 | 784.7 | 297.4 | 251.9 | 238.3 | 227.6 | 214.1 | 205.4 | 204.4 |
| 27.5° | 3512.7 | 2986.6 | 1742.8 | 525.1 | 249.0 | 219.9 | 202.4 | 186.0 | 170.5 | 161.8 | 160.8 |
| 30° | 3483.6 | 2905.3 | 1517.0 | 354.6 | 219.9 | 190.9 | 167.6 | 150.2 | 135.6 | 128.9 | 128.9 |
| 32.5° | 3426.5 | 2804.5 | 1269.1 | 267.4 | 195.7 | 163.7 | 138.5 | 122.0 | 112.4 | 109.5 | 108.5 |
| 35° | 3375.1 | 2696.0 | 1014.3 | 226.7 | 175.3 | 138.5 | 113.3 | 102.7 | 96.9 | 96.0 | 94.9 |
| 37.5° | 3345.0 | 2608.8 | 775.0 | 205.4 | 156.0 | 116.2 | 96.0 | 88.2 | 85.2 | 83.3 | 84.3 |
| 40° | 3368.3 | 2536.2 | 572.5 | 187.9 | 136.6 | 96.9 | 81.3 | 77.5 | 74.6 | 73.7 | 73.7 |
| 42.5° | 3470.1 | 2523.6 | 425.2 | 172.5 | 118.2 | 80.4 | 70.7 | 67.8 | 65.9 | 64.9 | 65.9 |
| 45° | 3737.5 | 2601.1 | 330.3 | 157.9 | 99.7 | 67.8 | 60.0 | 59.1 | 58.1 | 58.1 | 58.1 |
| 47.5° | 4139.5 | 2760.9 | 275.2 | 141.5 | 83.3 | 58.1 | 52.3 | 51.4 | 50.3 | 51.4 | 51.4 |
| 50° | 4820.5 | 3053.5 | 246.0 | 125.0 | 68.7 | 49.4 | 44.6 | 44.6 | 44.6 | 44.6 | 45.5 |
| 52.5° | 5856.1 | 3628.9 | 226.7 | 108.5 | 56.2 | 41.6 | 37.7 | 37.7 | 38.8 | 38.8 | 39.7 |
| 55° | 7009.9 | 4392.2 | 209.3 | 92.1 | 47.5 | 34.9 | 31.0 | 32.0 | 32.9 | 33.9 | 33.9 |
| 57.5° | 8261.5 | 5238.0 | 194.7 | 75.6 | 40.7 | 28.1 | 26.2 | 27.1 | 28.1 | 30.1 | 30.1 |
| 60° | 9771.7 | 6153.5 | 173.4 | 59.1 | 33.9 | 22.3 | 20.4 | 22.3 | 25.2 | 27.1 | 28.1 |
| 62.5° | 11430.1 | 7038.9 | 146.3 | 46.5 | 28.1 | 17.4 | 16.5 | 20.4 | 24.2 | 26.2 | 27.1 |
| 65° | 12563.6 | 7317.0 | 112.4 | 37.7 | 21.3 | 12.6 | 13.6 | 18.4 | 23.2 | 26.2 | 26.2 |
| 67° | 12104.5 | 6633.9 | 92.1 | 32.0 | 17.4 | 9.7 | 12.6 | 18.4 | 23.2 | 25.2 | 26.2 |
| 67.5° | 11785.7 | 6366.5 | 88.2 | 31.0 | 16.5 | 9.7 | 12.6 | 18.4 | 23.2 | 26.2 | 26.2 |
| 70° | 9589.6 | 4782.7 | 73.7 | 23.2 | 13.6 | 8.7 | 10.6 | 17.4 | 22.3 | 25.2 | 25.2 |
| 72.5° | 6663.0 | 2948.9 | 65.9 | 16.5 | 11.7 | 7.8 | 9.7 | 16.5 | 21.3 | 24.2 | 25.2 |
| 75° | 3167.8 | 1067.6 | 56.2 | 12.6 | 10.6 | 6.8 | 8.7 | 16.5 | 21.3 | 24.2 | 24.2 |
| 77.5° | 646.2 | 248.0 | 45.5 | 10.6 | 8.7 | 6.8 | 7.8 | 15.5 | 20.4 | 23.2 | 23.2 |
| 80° | 212.2 | 96.0 | 33.9 | 9.7 | 8.7 | 6.8 | 7.8 | 14.5 | 20.4 | 22.3 | 23.2 |
| 82.5° | 153.0 | 48.5 | 22.3 | 9.7 | 8.7 | 6.8 | 6.8 | 14.5 | 19.3 | 22.3 | 22.3 |
| 85° | 117.2 | 33.9 | 14.5 | 9.7 | 8.7 | 6.8 | 6.8 | 13.6 | 18.4 | 21.3 | 21.3 |
| 87.5° | 77.5 | 13.6 | 11.7 | 9.7 | 8.7 | 6.8 | 6.8 | 13.6 | 17.4 | 20.4 | 21.3 |
| 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)