

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: P192357

Luminaire Tested: **GAN-AF-09-LED-U-T4W-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192357
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24147)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-09-LED-U-T4W-7050-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34816 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 290
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

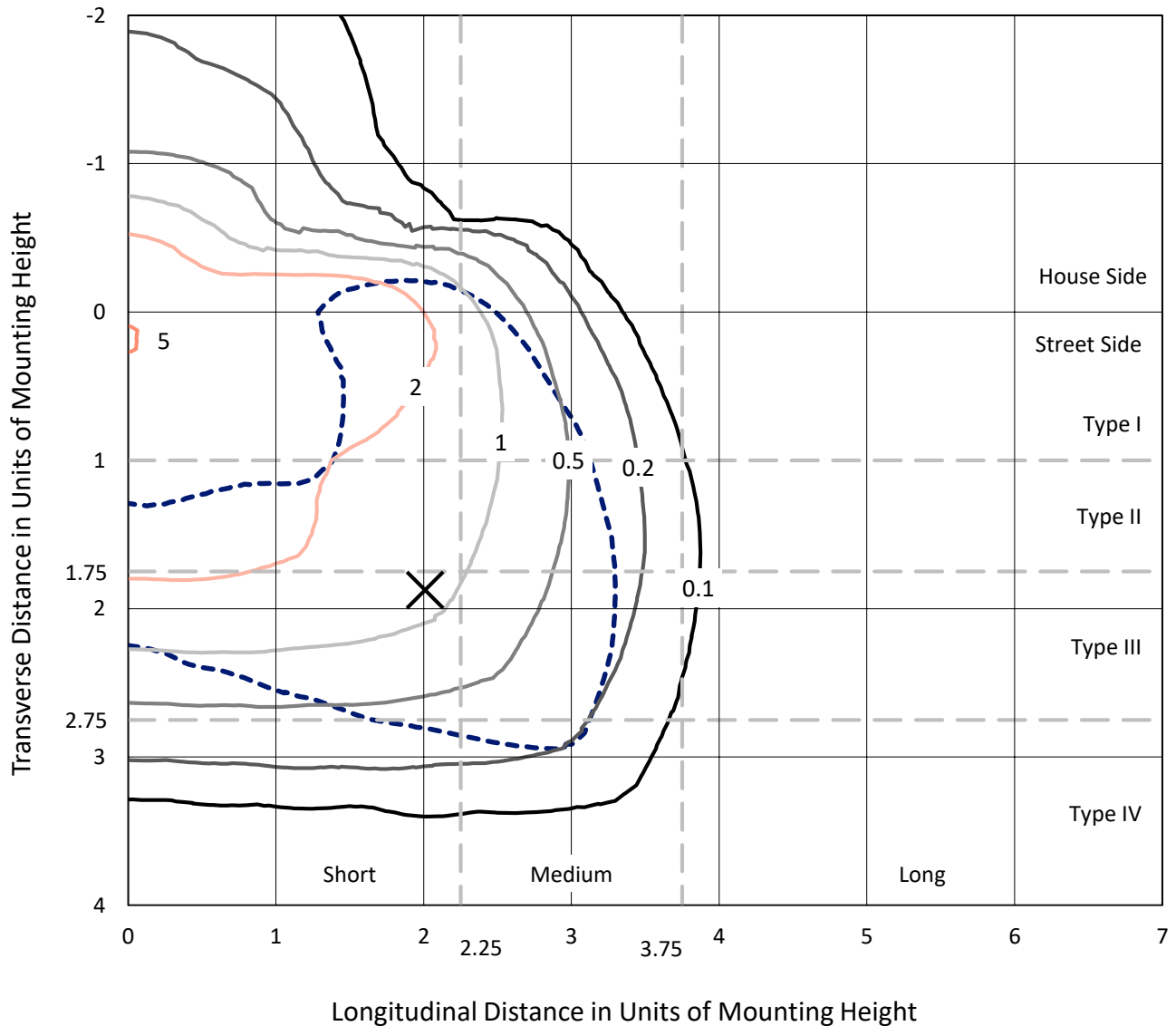


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

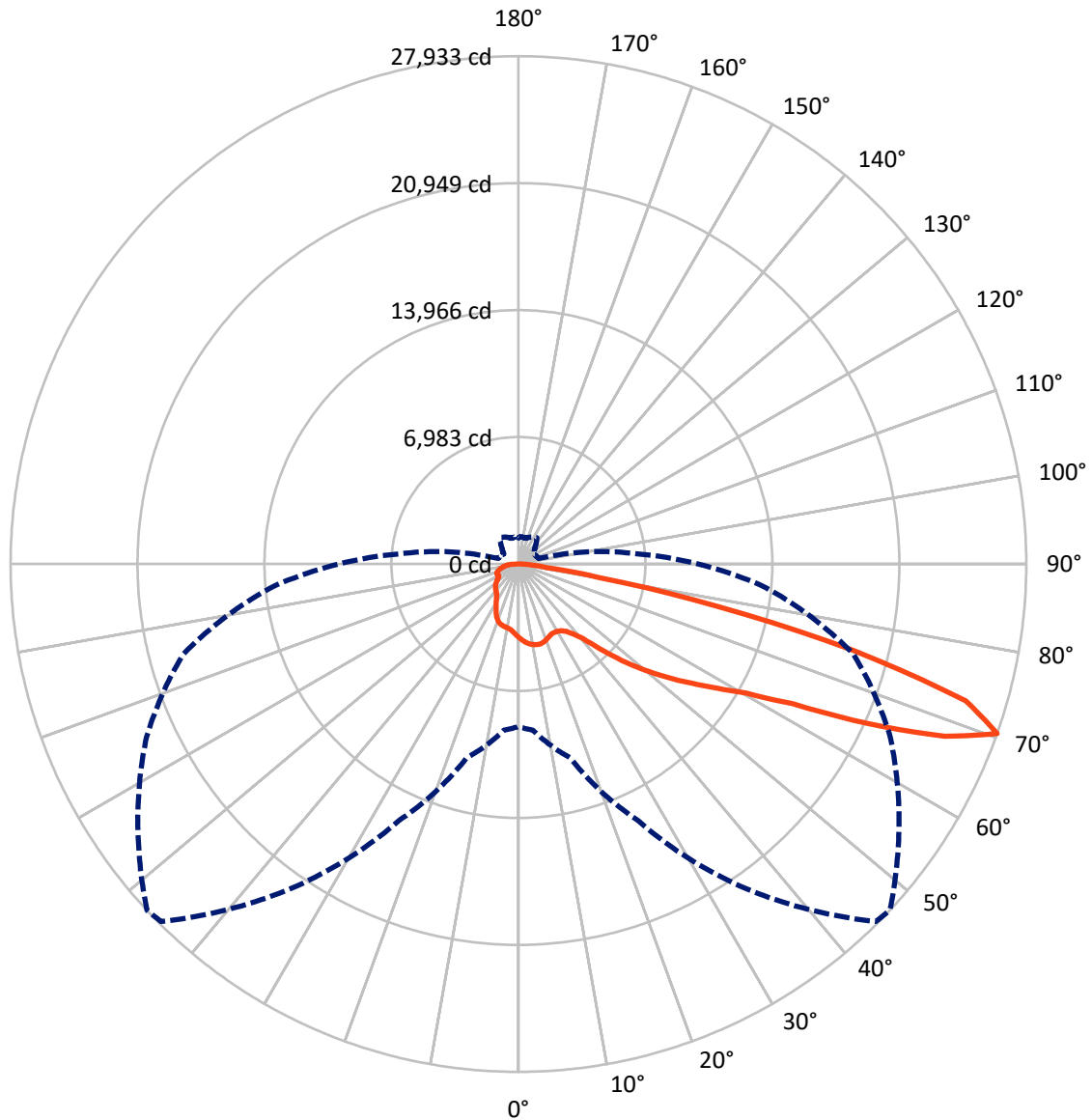


Based on 30 foot mounting height. Maximum calculated value = 5.2 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7263.3 | 0.0 | 7263.3 |
| | % Fixture | 20.9 | 0.0 | 20.9 |
| Street Side | Lumens | 27552.7 | 0.0 | 27552.7 |
| | % Fixture | 79.1 | 0.0 | 79.1 |
| Total | Lumens | 34816.0 | 0.0 | 34816.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 387.1 | 1.1 |
| 10°-20° | 1135.6 | 3.3 |
| 20°-30° | 1676.9 | 4.8 |
| 30°-40° | 2437.4 | 7.0 |
| 40°-50° | 4386.5 | 12.6 |
| 50°-60° | 7599.1 | 21.8 |
| 60°-70° | 10846.1 | 31.2 |
| 70°-80° | 5567.8 | 16.0 |
| 80°-90° | 779.5 | 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° | 34816.0 | 100.0 |
| 0°-180° | 34816.0 | 100.0 |



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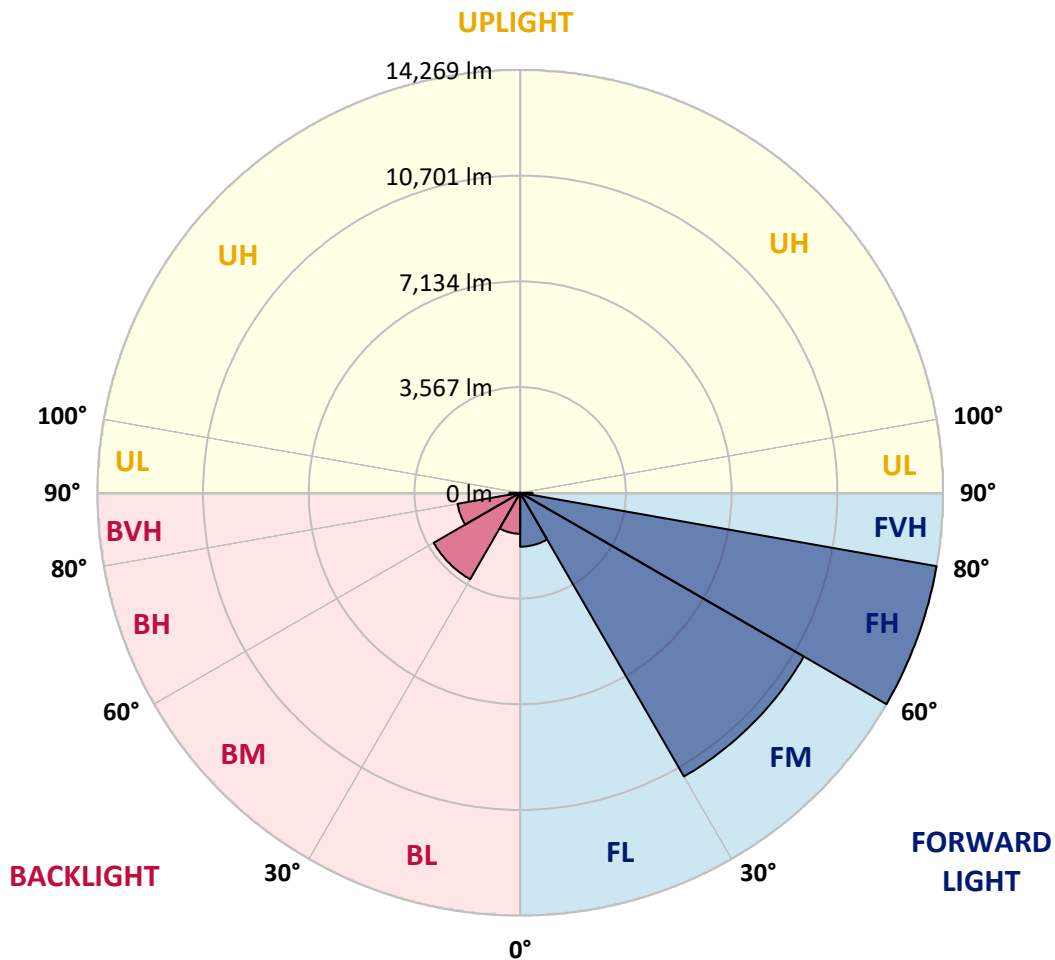
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1816.6 | 5.2 | | | |
| FM | (30°-60°) | 11051.6 | 31.7 | | | |
| FH | (60°-80°) | 14268.6 | 41.0 | | | G5 |
| FVH | (80°-90°) | 415.9 | 1.2 | | | G3/500 |
| BL | (0°-30°) | 1383.0 | 4.0 | B3/2500 | | |
| BM | (30°-60°) | 3371.4 | 9.7 | B3/5000 | | |
| BH | (60°-80°) | 2145.4 | 6.2 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 363.6 | 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-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 47° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 |
| 2.5° | 4276.9 | 4268.4 | 4265.0 | 4258.2 | 4249.8 | 4207.4 | 4199.0 | 4168.5 | 4126.1 | 4082.1 | 4036.4 |
| 5° | 4558.0 | 4556.4 | 4537.7 | 4503.8 | 4449.6 | 4356.5 | 4334.5 | 4259.9 | 4160.0 | 4063.5 | 3966.9 |
| 7.5° | 4805.3 | 4790.1 | 4754.5 | 4686.8 | 4591.9 | 4464.9 | 4434.4 | 4331.1 | 4193.9 | 4061.8 | 3931.3 |
| 10° | 4986.6 | 4978.1 | 4900.2 | 4807.0 | 4683.4 | 4542.8 | 4507.2 | 4392.1 | 4241.3 | 4073.6 | 3911.0 |
| 12.5° | 5089.9 | 5073.0 | 4983.2 | 4871.4 | 4724.0 | 4586.8 | 4551.3 | 4434.4 | 4265.0 | 4073.6 | 3882.2 |
| 15° | 5083.1 | 5071.3 | 4981.5 | 4859.5 | 4710.5 | 4590.2 | 4558.0 | 4441.2 | 4259.9 | 4056.7 | 3845.0 |
| 17.5° | 4947.6 | 4952.7 | 4876.5 | 4756.2 | 4634.3 | 4542.8 | 4514.0 | 4405.6 | 4226.1 | 4022.8 | 3800.9 |
| 20° | 4710.5 | 4734.2 | 4683.4 | 4576.7 | 4508.9 | 4446.3 | 4427.6 | 4336.2 | 4173.6 | 3973.7 | 3753.5 |
| 22.5° | 4473.4 | 4495.4 | 4475.0 | 4385.3 | 4375.1 | 4337.9 | 4327.7 | 4261.6 | 4127.8 | 3943.2 | 3724.7 |
| 25° | 4298.9 | 4319.2 | 4315.8 | 4237.9 | 4268.4 | 4266.7 | 4258.2 | 4226.1 | 4117.7 | 3943.2 | 3729.8 |
| 27.5° | 4251.5 | 4258.2 | 4251.5 | 4180.3 | 4222.7 | 4256.5 | 4249.8 | 4244.7 | 4148.1 | 3992.3 | 3794.1 |
| 30° | 4414.1 | 4403.9 | 4351.4 | 4207.4 | 4246.4 | 4293.8 | 4287.0 | 4290.4 | 4239.6 | 4121.0 | 3938.1 |
| 32.5° | 5062.8 | 5017.1 | 4851.1 | 4446.3 | 4342.9 | 4368.3 | 4371.7 | 4427.6 | 4436.1 | 4319.2 | 4161.7 |
| 35° | 6033.4 | 5982.5 | 5767.4 | 5086.5 | 4642.7 | 4554.7 | 4554.7 | 4639.3 | 4690.2 | 4603.8 | 4508.9 |
| 37.5° | 7061.5 | 7005.6 | 6890.4 | 5974.1 | 5272.8 | 4878.2 | 4869.7 | 4929.0 | 5001.8 | 5022.2 | 5045.9 |
| 40° | 8230.2 | 8170.9 | 8203.1 | 6970.0 | 6151.9 | 5438.8 | 5318.6 | 5276.2 | 5472.7 | 5603.1 | 5792.8 |
| 42.5° | 9509.1 | 9482.0 | 9493.8 | 8079.5 | 7153.0 | 6277.3 | 6106.2 | 5887.7 | 6124.8 | 6356.9 | 6754.9 |
| 45° | 10693.0 | 10716.7 | 10704.9 | 9266.8 | 8267.5 | 7300.3 | 7119.1 | 6695.6 | 6927.7 | 7325.7 | 7974.5 |
| 47.5° | 11729.6 | 11631.4 | 11783.8 | 10564.3 | 9515.8 | 8445.3 | 8221.8 | 7654.3 | 7889.8 | 8381.0 | 9478.6 |
| 50° | 12988.1 | 12974.6 | 12751.0 | 12295.4 | 11025.0 | 9595.4 | 9302.4 | 8645.2 | 9011.1 | 9693.7 | 11373.9 |
| 52.5° | 14311.0 | 14065.4 | 13860.5 | 13642.0 | 12625.7 | 10774.3 | 10415.2 | 9632.7 | 10328.9 | 11187.6 | 13684.3 |
| 55° | 14582.0 | 14471.9 | 14726.0 | 15093.6 | 14168.7 | 11999.0 | 11580.6 | 10870.9 | 11812.6 | 12895.0 | 16348.7 |
| 57.5° | 15161.3 | 15159.6 | 15684.7 | 16340.2 | 15757.5 | 13298.1 | 12876.4 | 12366.5 | 13481.0 | 14851.3 | 19177.3 |
| 60° | 15552.6 | 15662.7 | 16638.3 | 17910.4 | 17317.5 | 14798.8 | 14410.9 | 14092.5 | 15378.1 | 17038.0 | 21812.9 |
| 62.5° | 15757.5 | 15906.6 | 17237.9 | 18547.2 | 19522.9 | 17297.2 | 16909.3 | 16450.3 | 17888.3 | 19436.5 | 23354.3 |
| 65° | 14905.5 | 15198.6 | 17144.8 | 19097.7 | 21453.8 | 21347.1 | 21172.6 | 20366.4 | 21027.0 | 21331.9 | 22797.0 |
| 67.5° | 12547.8 | 12847.6 | 15113.9 | 18584.5 | 22832.6 | 25253.0 | 25290.3 | 23913.2 | 22957.9 | 21494.5 | 19167.2 |
| 70° | 8939.9 | 9175.4 | 11050.4 | 15581.4 | 21782.4 | 27805.6 | 27932.6 | 25547.8 | 22573.4 | 19062.2 | 13391.3 |
| 72.5° | 4244.7 | 4388.7 | 6163.8 | 10140.8 | 17285.3 | 25476.6 | 25722.2 | 23461.0 | 19194.3 | 14112.8 | 7305.4 |
| 75° | 1560.0 | 1604.0 | 2083.4 | 4314.1 | 10025.7 | 18787.8 | 19077.4 | 16817.9 | 12723.9 | 7025.9 | 2782.9 |
| 77.5° | 935.0 | 963.8 | 1168.7 | 1820.8 | 3943.2 | 10738.8 | 11167.3 | 9146.6 | 5560.8 | 2615.2 | 1368.6 |
| 80° | 653.8 | 674.1 | 838.4 | 1133.2 | 1863.2 | 4092.2 | 4473.4 | 3733.2 | 2215.5 | 1654.9 | 996.0 |
| 82.5° | 442.1 | 452.2 | 589.4 | 765.6 | 1238.2 | 1461.8 | 1576.9 | 1659.9 | 1493.9 | 1231.4 | 631.8 |
| 85° | 289.6 | 299.8 | 399.7 | 504.8 | 787.6 | 755.4 | 772.4 | 977.3 | 1090.8 | 836.7 | 350.6 |
| 87.5° | 166.0 | 172.8 | 240.5 | 269.3 | 386.2 | 320.1 | 323.5 | 514.9 | 697.9 | 564.0 | 213.4 |
| 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-09-LED-U-T4W-7050-600

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 | 4039.7 |
| 2.5° | 4024.5 | 4002.5 | 3953.4 | 3922.9 | 3894.1 | 3887.3 | 3875.4 | 3873.7 | 3872.1 | 3872.1 | 3867.0 |
| 5° | 3934.7 | 3897.5 | 3821.2 | 3778.9 | 3743.3 | 3739.9 | 3738.2 | 3746.7 | 3750.1 | 3753.5 | 3748.4 |
| 7.5° | 3877.1 | 3826.3 | 3731.5 | 3670.5 | 3628.1 | 3618.0 | 3634.9 | 3673.9 | 3699.3 | 3709.4 | 3704.4 |
| 10° | 3841.6 | 3778.9 | 3668.8 | 3602.7 | 3567.2 | 3562.1 | 3584.1 | 3629.8 | 3682.3 | 3702.7 | 3701.0 |
| 12.5° | 3800.9 | 3729.8 | 3612.9 | 3543.5 | 3523.1 | 3533.3 | 3562.1 | 3604.4 | 3658.6 | 3690.8 | 3692.5 |
| 15° | 3760.3 | 3677.3 | 3557.0 | 3496.0 | 3487.6 | 3501.1 | 3528.2 | 3560.4 | 3602.7 | 3634.9 | 3638.3 |
| 17.5° | 3711.1 | 3624.8 | 3504.5 | 3441.8 | 3435.0 | 3441.8 | 3443.5 | 3460.5 | 3487.6 | 3518.0 | 3526.5 |
| 20° | 3658.6 | 3570.6 | 3445.2 | 3382.5 | 3352.1 | 3325.0 | 3294.5 | 3297.9 | 3306.3 | 3336.8 | 3343.6 |
| 22.5° | 3621.4 | 3533.3 | 3399.5 | 3313.1 | 3231.8 | 3150.5 | 3089.5 | 3081.0 | 3084.4 | 3109.8 | 3118.3 |
| 25° | 3624.8 | 3531.6 | 3387.6 | 3238.6 | 3060.7 | 2930.3 | 2849.0 | 2835.4 | 2833.7 | 2852.4 | 2864.2 |
| 27.5° | 3690.8 | 3597.7 | 3431.7 | 3162.3 | 2874.4 | 2681.3 | 2594.9 | 2584.8 | 2571.2 | 2576.3 | 2589.8 |
| 30° | 3838.2 | 3751.8 | 3538.4 | 3084.4 | 2672.8 | 2437.4 | 2347.6 | 2337.5 | 2318.8 | 2310.4 | 2320.5 |
| 32.5° | 4078.7 | 4007.6 | 3694.2 | 3009.9 | 2471.3 | 2229.1 | 2137.6 | 2115.6 | 2103.7 | 2093.6 | 2102.0 |
| 35° | 4478.4 | 4447.9 | 3902.5 | 2928.6 | 2293.4 | 2068.1 | 1985.1 | 1951.3 | 1934.3 | 1953.0 | 1966.5 |
| 37.5° | 5105.1 | 5122.1 | 4175.2 | 2801.6 | 2156.2 | 1961.4 | 1892.0 | 1853.0 | 1827.6 | 1842.9 | 1858.1 |
| 40° | 5992.7 | 6004.6 | 4476.7 | 2622.0 | 2037.7 | 1898.8 | 1824.2 | 1788.7 | 1753.1 | 1726.0 | 1724.3 |
| 42.5° | 7158.0 | 7037.8 | 4773.2 | 2427.2 | 1900.5 | 1859.8 | 1776.8 | 1732.8 | 1678.6 | 1604.0 | 1588.8 |
| 45° | 8540.2 | 8118.4 | 4998.4 | 2203.6 | 1746.3 | 1812.4 | 1724.3 | 1663.3 | 1578.6 | 1497.3 | 1488.9 |
| 47.5° | 10132.4 | 9278.7 | 5108.5 | 1971.6 | 1602.3 | 1742.9 | 1659.9 | 1563.4 | 1456.7 | 1416.0 | 1410.9 |
| 50° | 12076.9 | 10655.8 | 5161.0 | 1746.3 | 1477.0 | 1651.5 | 1566.8 | 1453.3 | 1363.5 | 1355.0 | 1350.0 |
| 52.5° | 14290.7 | 12312.3 | 5178.0 | 1561.7 | 1373.7 | 1532.9 | 1490.6 | 1380.5 | 1309.3 | 1316.1 | 1316.1 |
| 55° | 16607.8 | 14023.1 | 4947.6 | 1427.9 | 1278.8 | 1410.9 | 1439.7 | 1351.7 | 1292.4 | 1319.5 | 1329.6 |
| 57.5° | 18735.2 | 15539.0 | 4222.7 | 1324.6 | 1189.1 | 1317.8 | 1421.1 | 1378.8 | 1338.1 | 1448.2 | 1455.0 |
| 60° | 20368.1 | 16435.1 | 3153.9 | 1231.4 | 1123.0 | 1285.6 | 1470.2 | 1482.1 | 1492.2 | 1754.8 | 1790.4 |
| 62.5° | 20710.2 | 16136.9 | 2168.1 | 1158.6 | 1092.5 | 1312.7 | 1560.0 | 1561.7 | 1549.8 | 1732.8 | 1754.8 |
| 65° | 19140.1 | 14251.7 | 1576.9 | 1117.9 | 1067.1 | 1361.8 | 1636.2 | 1600.7 | 1522.7 | 1661.6 | 1621.0 |
| 67.5° | 15200.3 | 10737.1 | 1312.7 | 1087.4 | 1029.8 | 1358.4 | 1717.5 | 1636.2 | 1507.5 | 1627.8 | 1561.7 |
| 70° | 9866.5 | 6492.4 | 1168.7 | 1062.0 | 985.8 | 1294.1 | 1765.0 | 1632.8 | 1463.5 | 1514.3 | 1436.4 |
| 72.5° | 4813.8 | 2903.2 | 1072.2 | 1024.8 | 940.1 | 1204.3 | 1763.3 | 1602.3 | 1417.7 | 1414.3 | 1372.0 |
| 75° | 1883.5 | 1329.6 | 984.1 | 968.9 | 862.1 | 1102.7 | 1715.8 | 1558.3 | 1363.5 | 1309.3 | 1294.1 |
| 77.5° | 1102.7 | 948.5 | 872.3 | 885.9 | 769.0 | 1001.0 | 1646.4 | 1482.1 | 1289.0 | 1224.6 | 1207.7 |
| 80° | 802.9 | 709.7 | 743.6 | 765.6 | 657.2 | 899.4 | 1553.2 | 1388.9 | 1206.0 | 1238.2 | 1214.5 |
| 82.5° | 514.9 | 457.3 | 603.0 | 625.0 | 547.1 | 796.1 | 1451.6 | 1290.7 | 1089.1 | 989.2 | 965.5 |
| 85° | 262.5 | 289.6 | 448.9 | 476.0 | 421.8 | 653.8 | 1327.9 | 1160.3 | 957.0 | 823.2 | 836.7 |
| 87.5° | 147.4 | 198.2 | 286.3 | 320.1 | 298.1 | 503.1 | 1077.3 | 957.0 | 780.8 | 635.2 | 559.0 |
| 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)