

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: P197301

Luminaire Tested: **NVN-AF-03-LED-U-T3R-8030-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197301
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24250)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-AF-03-LED-U-T3R-8030-1200
Description: NAVION ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 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: 16492 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Full Cutoff
BUG Rating: B2 - U0 - G3

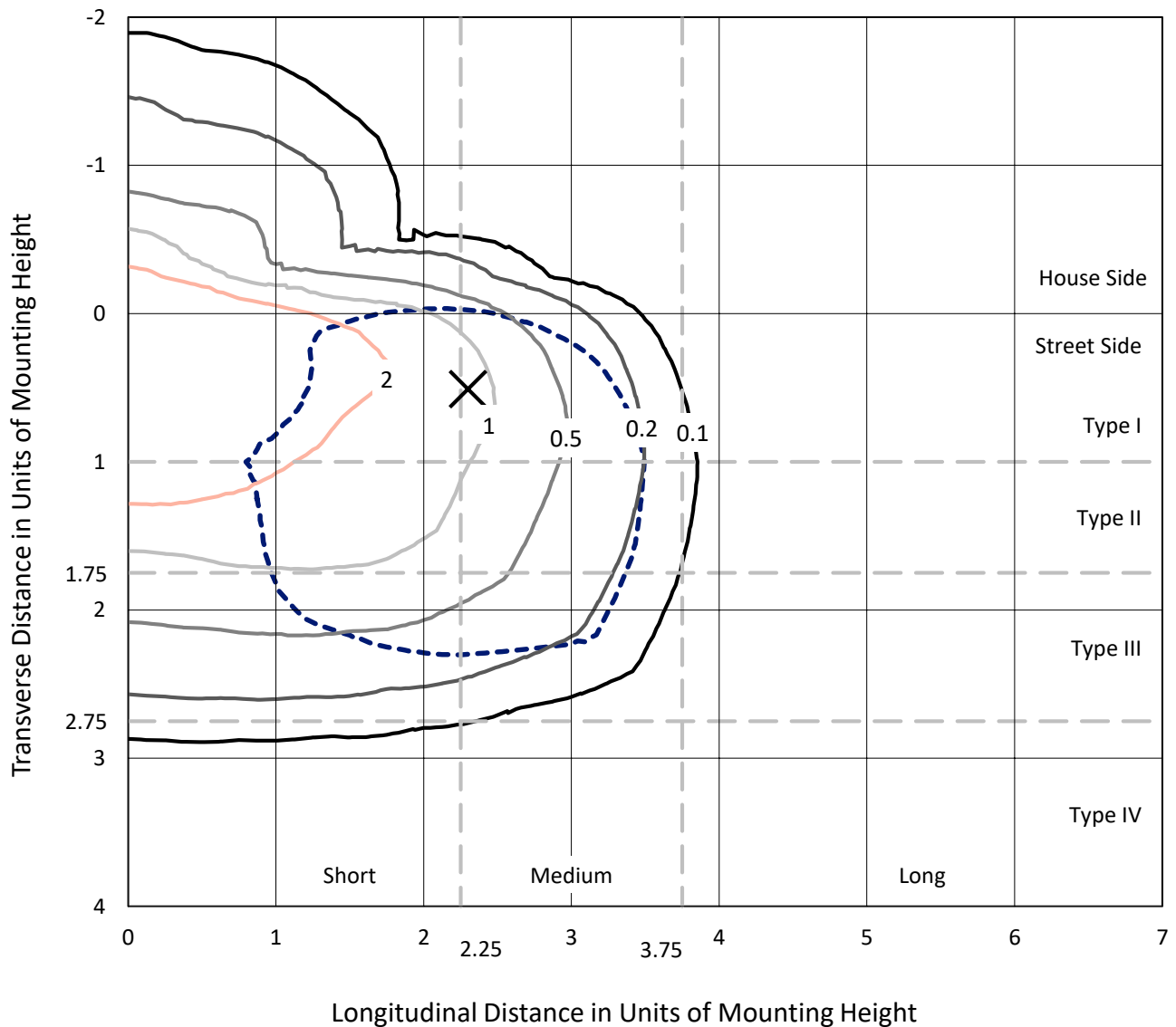
Input Watts (W): 191
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P197301
 CATALOG NUMBER: NVN-AF-03-LED-U-T3R-8030-1200

Iso-Footcandle Lines of Horizontal Illumination

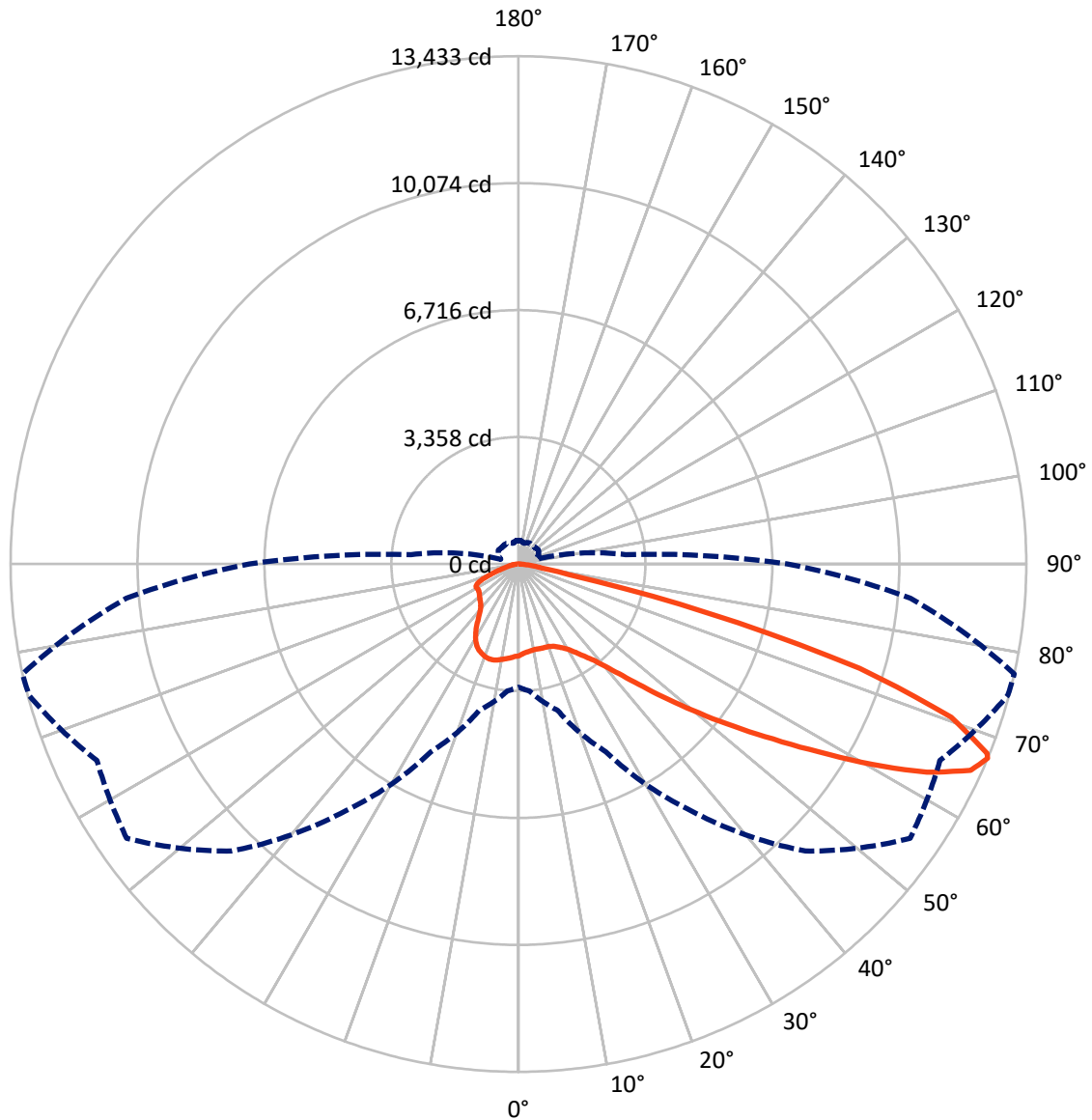
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type III - Medium - Full Cutoff

REPORT NUMBER: P197301
CATALOG NUMBER: NVN-AF-03-LED-U-T3R-8030-1200

Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical



REPORT NUMBER: P197301

CATALOG NUMBER: NVN-AF-03-LED-U-T3R-8030-1200

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2834.1 | 0.0 | 2834.1 |
| | % Fixture | 17.2 | 0.0 | 17.2 |
| Street Side | Lumens | 13657.9 | 0.0 | 13657.9 |
| | % Fixture | 82.8 | 0.0 | 82.8 |
| Total | Lumens | 16492.0 | 0.0 | 16492.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 216.2 | 1.3 |
| 10°-20° | 598.7 | 3.6 |
| 20°-30° | 1017.2 | 6.2 |
| 30°-40° | 1627.3 | 9.9 |
| 40°-50° | 2505.2 | 15.2 |
| 50°-60° | 3475.7 | 21.1 |
| 60°-70° | 4636.4 | 28.1 |
| 70°-80° | 2206.4 | 13.4 |
| 80°-90° | 208.9 | 1.3 |
| 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° | 16492.0 | 100.0 |
| 0°-180° | 16492.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P197301

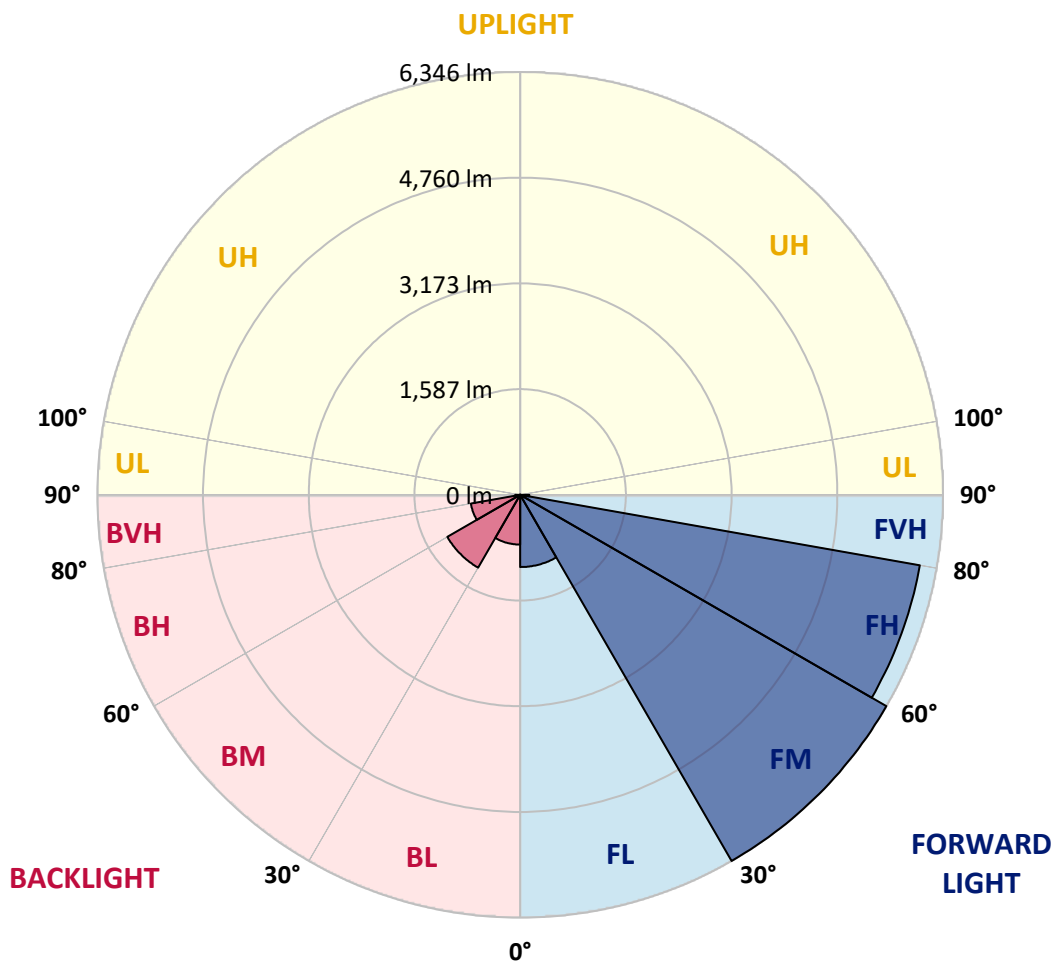
CATALOG NUMBER: NVN-AF-03-LED-U-T3R-8030-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1084.5 | 6.6 | | | |
| FM | (30°-60°) | 6346.3 | 38.5 | | | |
| FH | (60°-80°) | 6091.4 | 36.9 | | | G3/7500 |
| FVH | (80°-90°) | 135.7 | 0.8 | | | G2/225 |
| BL | (0°-30°) | 747.5 | 4.5 | B2/1000 | | |
| BM | (30°-60°) | 1261.9 | 7.7 | B2/2500 | | |
| BH | (60°-80°) | 751.5 | 4.6 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 73.2 | 0.4 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type III Medium





REPORT NUMBER: P197301

CATALOG NUMBER: NVN-AF-03-LED-U-T3R-8030-1200

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77.5° | 85° |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0° | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 |
| 2.5° | 2176.4 | 2186.6 | 2187.6 | 2217.2 | 2230.4 | 2264.1 | 2300.8 | 2333.4 | 2361.9 | 2372.1 | 2390.5 |
| 5° | 1958.3 | 1958.3 | 1961.3 | 1980.7 | 2018.4 | 2072.4 | 2148.9 | 2232.5 | 2320.2 | 2341.6 | 2395.6 |
| 7.5° | 1844.1 | 1846.1 | 1848.2 | 1867.5 | 1897.1 | 1945.0 | 2021.5 | 2135.6 | 2281.4 | 2317.1 | 2411.9 |
| 10° | 1854.3 | 1851.2 | 1841.0 | 1837.0 | 1849.2 | 1879.8 | 1946.0 | 2063.3 | 2248.8 | 2303.8 | 2441.5 |
| 12.5° | 2014.3 | 2008.2 | 1974.6 | 1925.6 | 1880.8 | 1869.6 | 1915.5 | 2026.6 | 2233.5 | 2303.8 | 2491.4 |
| 15° | 2288.6 | 2292.6 | 2226.4 | 2124.4 | 2007.2 | 1927.7 | 1921.6 | 2013.3 | 2228.4 | 2310.0 | 2549.5 |
| 17.5° | 2645.3 | 2647.4 | 2555.6 | 2407.8 | 2213.1 | 2049.0 | 1963.4 | 2013.3 | 2228.4 | 2316.1 | 2605.6 |
| 20° | 3024.6 | 3010.3 | 2906.3 | 2720.8 | 2468.0 | 2217.2 | 2039.8 | 2025.5 | 2234.5 | 2325.2 | 2658.6 |
| 22.5° | 3349.7 | 3336.5 | 3227.4 | 3032.7 | 2743.2 | 2416.0 | 2142.8 | 2066.3 | 2268.2 | 2363.0 | 2733.0 |
| 25° | 3634.2 | 3642.3 | 3536.3 | 3317.1 | 3017.4 | 2640.2 | 2296.7 | 2160.1 | 2338.5 | 2431.3 | 2824.8 |
| 27.5° | 3979.7 | 3964.4 | 3842.1 | 3633.1 | 3299.8 | 2872.7 | 2489.4 | 2278.4 | 2422.1 | 2513.8 | 2936.9 |
| 30° | 4379.3 | 4372.2 | 4207.1 | 3992.0 | 3610.7 | 3132.6 | 2680.0 | 2405.8 | 2531.2 | 2627.0 | 3077.6 |
| 32.5° | 4864.6 | 4863.6 | 4686.2 | 4422.2 | 3960.4 | 3426.2 | 2905.3 | 2580.1 | 2690.2 | 2787.0 | 3264.1 |
| 35° | 5414.0 | 5413.0 | 5229.5 | 4880.9 | 4363.0 | 3751.4 | 3170.3 | 2792.1 | 2886.9 | 2988.9 | 3486.3 |
| 37.5° | 5795.3 | 5789.2 | 5693.3 | 5354.9 | 4808.5 | 4129.6 | 3501.6 | 3077.6 | 3110.2 | 3224.4 | 3754.4 |
| 40° | 5868.7 | 5905.4 | 5987.9 | 5788.1 | 5294.8 | 4549.6 | 3834.0 | 3384.4 | 3415.0 | 3561.8 | 4091.9 |
| 42.5° | 5789.2 | 5837.1 | 6111.3 | 6167.4 | 5781.0 | 5058.3 | 4249.9 | 3809.5 | 3848.2 | 4030.7 | 4488.4 |
| 45° | 5719.8 | 5761.6 | 6105.2 | 6377.4 | 6261.1 | 5612.8 | 4768.7 | 4328.4 | 4401.8 | 4628.1 | 4941.0 |
| 47.5° | 5601.6 | 5640.3 | 5984.9 | 6415.1 | 6535.4 | 6147.0 | 5393.6 | 4952.2 | 5078.6 | 5352.9 | 5456.8 |
| 50° | 5595.5 | 5612.8 | 5820.8 | 6288.7 | 6630.2 | 6552.7 | 6085.8 | 5682.1 | 5875.8 | 6191.8 | 6027.7 |
| 52.5° | 5440.5 | 5561.8 | 5750.4 | 6086.8 | 6632.2 | 6789.2 | 6767.8 | 6482.4 | 6781.0 | 7130.7 | 6653.6 |
| 55° | 4492.5 | 4632.1 | 5516.0 | 5987.9 | 6620.0 | 6992.1 | 7390.6 | 7333.6 | 7800.4 | 8168.4 | 7355.0 |
| 57.5° | 4194.8 | 4254.0 | 4839.1 | 6017.5 | 6721.9 | 7327.4 | 8013.5 | 8248.0 | 8966.6 | 9368.3 | 8196.0 |
| 60° | 4113.3 | 4175.5 | 4703.5 | 6031.8 | 6998.2 | 7938.1 | 8858.6 | 9280.6 | 10337.7 | 10763.8 | 9151.1 |
| 62.5° | 4022.5 | 4103.1 | 4713.7 | 6045.0 | 7483.4 | 8841.2 | 9979.9 | 10400.9 | 11745.5 | 12125.8 | 10046.2 |
| 65° | 3757.5 | 3864.5 | 4525.1 | 5961.4 | 8014.5 | 9974.8 | 11462.1 | 11569.2 | 12908.6 | 13150.2 | 10586.5 |
| 67° | 3254.9 | 3372.2 | 4007.3 | 5478.3 | 7965.6 | 10738.3 | 12647.7 | 12300.1 | 13403.1 | 13432.6 | 10411.1 |
| 67.5° | 3095.9 | 3217.2 | 3831.9 | 5277.4 | 7825.9 | 10838.3 | 12857.7 | 12401.0 | 13399.0 | 13366.4 | 10248.0 |
| 70° | 2084.7 | 2221.3 | 2713.6 | 3874.7 | 6277.5 | 10087.0 | 12806.7 | 12090.1 | 12520.3 | 12146.1 | 8804.5 |
| 72.5° | 1034.7 | 1038.8 | 1353.8 | 2122.4 | 3803.4 | 7234.7 | 10683.3 | 10342.8 | 10149.1 | 9442.7 | 6461.0 |
| 75° | 498.5 | 507.7 | 639.2 | 937.8 | 1603.5 | 3735.1 | 7285.6 | 6978.8 | 5942.1 | 5144.9 | 3233.5 |
| 77.5° | 380.2 | 389.4 | 496.4 | 610.6 | 668.7 | 1218.2 | 3608.7 | 2916.5 | 1721.8 | 1375.2 | 911.3 |
| 80° | 293.6 | 310.9 | 419.0 | 468.9 | 442.4 | 488.3 | 1134.6 | 893.0 | 669.7 | 614.7 | 451.6 |
| 82.5° | 229.4 | 239.6 | 355.8 | 355.8 | 305.8 | 327.2 | 528.0 | 515.8 | 415.9 | 375.1 | 242.6 |
| 85° | 162.1 | 182.5 | 286.5 | 265.0 | 200.8 | 202.9 | 316.0 | 302.8 | 214.1 | 172.3 | 94.8 |
| 87.5° | 72.4 | 92.8 | 203.9 | 173.3 | 107.0 | 82.6 | 129.5 | 111.1 | 84.6 | 65.2 | 43.8 |
| 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: P197301

CATALOG NUMBER: NVN-AF-03-LED-U-T3R-8030-1200

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 | 2427.2 |
| 2.5° | 2410.9 | 2427.2 | 2452.7 | 2468.0 | 2488.4 | 2496.5 | 2504.7 | 2518.9 | 2530.1 | 2527.1 | 2522.0 |
| 5° | 2433.3 | 2460.8 | 2492.4 | 2502.6 | 2502.6 | 2492.4 | 2486.3 | 2487.3 | 2484.3 | 2482.2 | 2476.1 |
| 7.5° | 2465.9 | 2503.6 | 2526.1 | 2515.9 | 2484.3 | 2444.5 | 2406.8 | 2384.4 | 2363.0 | 2349.7 | 2353.8 |
| 10° | 2511.8 | 2553.6 | 2554.6 | 2509.8 | 2434.3 | 2347.7 | 2273.3 | 2225.3 | 2179.5 | 2159.1 | 2165.2 |
| 12.5° | 2578.1 | 2619.9 | 2584.2 | 2487.3 | 2354.8 | 2219.2 | 2082.6 | 1983.8 | 1895.1 | 1873.7 | 1867.5 |
| 15° | 2649.4 | 2682.0 | 2602.5 | 2439.4 | 2240.6 | 2017.4 | 1788.0 | 1640.2 | 1541.3 | 1524.0 | 1517.9 |
| 17.5° | 2711.6 | 2730.0 | 2593.4 | 2353.8 | 2060.2 | 1708.5 | 1441.4 | 1341.5 | 1321.1 | 1331.3 | 1331.3 |
| 20° | 2766.6 | 2760.5 | 2553.6 | 2221.3 | 1775.8 | 1366.0 | 1211.0 | 1210.0 | 1237.6 | 1263.0 | 1265.1 |
| 22.5° | 2836.0 | 2788.1 | 2490.4 | 2024.5 | 1436.3 | 1139.7 | 1113.2 | 1139.7 | 1170.3 | 1198.8 | 1201.9 |
| 25° | 2918.5 | 2818.6 | 2405.8 | 1744.2 | 1155.0 | 1034.7 | 1045.9 | 1068.3 | 1087.7 | 1110.1 | 1111.1 |
| 27.5° | 3001.1 | 2842.1 | 2286.5 | 1414.9 | 1002.1 | 967.4 | 979.6 | 988.8 | 993.9 | 1008.2 | 1008.2 |
| 30° | 3096.9 | 2860.4 | 2114.2 | 1133.6 | 931.7 | 908.3 | 901.1 | 897.1 | 901.1 | 920.5 | 921.5 |
| 32.5° | 3217.2 | 2893.1 | 1878.8 | 972.5 | 899.1 | 866.5 | 829.8 | 809.4 | 823.7 | 858.3 | 864.5 |
| 35° | 3353.8 | 2931.8 | 1596.4 | 908.3 | 887.9 | 846.1 | 778.8 | 747.2 | 752.3 | 783.9 | 789.0 |
| 37.5° | 3525.1 | 2981.7 | 1318.1 | 893.0 | 899.1 | 844.1 | 755.4 | 710.5 | 688.1 | 689.1 | 688.1 |
| 40° | 3744.3 | 3031.7 | 1097.9 | 897.1 | 923.6 | 849.2 | 744.2 | 673.8 | 626.9 | 629.0 | 633.0 |
| 42.5° | 3973.6 | 3064.3 | 958.2 | 909.3 | 953.1 | 856.3 | 740.1 | 638.1 | 597.4 | 632.0 | 663.6 |
| 45° | 4241.7 | 3055.1 | 885.9 | 920.5 | 975.6 | 859.4 | 724.8 | 634.1 | 600.4 | 704.4 | 763.5 |
| 47.5° | 4549.6 | 3015.4 | 845.1 | 925.6 | 981.7 | 858.3 | 713.6 | 647.3 | 625.9 | 806.3 | 873.6 |
| 50° | 4883.9 | 2953.2 | 812.5 | 917.5 | 978.6 | 854.3 | 725.8 | 663.6 | 636.1 | 828.8 | 880.8 |
| 52.5° | 5249.9 | 2896.1 | 778.8 | 899.1 | 963.3 | 842.0 | 741.1 | 656.5 | 607.6 | 763.5 | 803.3 |
| 55° | 5683.1 | 2882.9 | 741.1 | 867.5 | 937.8 | 828.8 | 732.9 | 634.1 | 576.0 | 676.9 | 701.3 |
| 57.5° | 6178.6 | 2965.4 | 692.2 | 828.8 | 903.2 | 802.3 | 713.6 | 621.8 | 564.7 | 615.7 | 629.0 |
| 60° | 6807.5 | 3147.9 | 640.2 | 788.0 | 860.4 | 762.5 | 696.2 | 624.9 | 567.8 | 606.5 | 609.6 |
| 62.5° | 7298.9 | 3312.0 | 593.3 | 738.0 | 803.3 | 714.6 | 677.9 | 627.9 | 577.0 | 618.8 | 613.7 |
| 65° | 7477.3 | 3231.5 | 535.2 | 663.6 | 722.8 | 661.6 | 652.4 | 630.0 | 577.0 | 625.9 | 614.7 |
| 67° | 7111.3 | 2847.2 | 480.1 | 589.2 | 646.3 | 614.7 | 627.9 | 621.8 | 566.8 | 624.9 | 605.5 |
| 67.5° | 6937.0 | 2711.6 | 465.9 | 577.0 | 625.9 | 600.4 | 621.8 | 617.8 | 563.7 | 622.9 | 600.4 |
| 70° | 5720.9 | 1945.0 | 393.5 | 484.2 | 524.0 | 529.1 | 584.1 | 591.3 | 539.3 | 585.1 | 544.4 |
| 72.5° | 4070.5 | 1217.2 | 339.5 | 375.1 | 423.1 | 452.6 | 533.1 | 555.6 | 506.6 | 508.7 | 475.0 |
| 75° | 2014.3 | 653.4 | 302.8 | 289.5 | 329.3 | 377.2 | 464.8 | 506.6 | 458.7 | 424.1 | 412.9 |
| 77.5° | 679.9 | 370.0 | 255.9 | 233.4 | 255.9 | 302.8 | 385.3 | 442.4 | 404.7 | 358.8 | 351.7 |
| 80° | 351.7 | 269.1 | 199.8 | 187.6 | 201.8 | 234.5 | 301.7 | 368.0 | 345.6 | 347.6 | 286.5 |
| 82.5° | 219.2 | 164.1 | 143.7 | 142.7 | 152.9 | 179.4 | 222.2 | 298.7 | 296.6 | 253.8 | 184.5 |
| 85° | 101.9 | 94.8 | 91.7 | 94.8 | 97.9 | 101.9 | 144.8 | 213.1 | 225.3 | 136.6 | 121.3 |
| 87.5° | 42.8 | 41.8 | 36.7 | 39.8 | 43.8 | 42.8 | 58.1 | 90.7 | 126.4 | 85.6 | 78.5 |
| 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)