

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: P195573

Luminaire Tested: **NVN-AF-03-LED-U-RW-7050-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P195573
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24161)
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-RW-7050-1200
Description: NAVION ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20305 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type V - Medium - Full Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 191
Input Voltage (V): NR
Input Current (A_{in}): 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

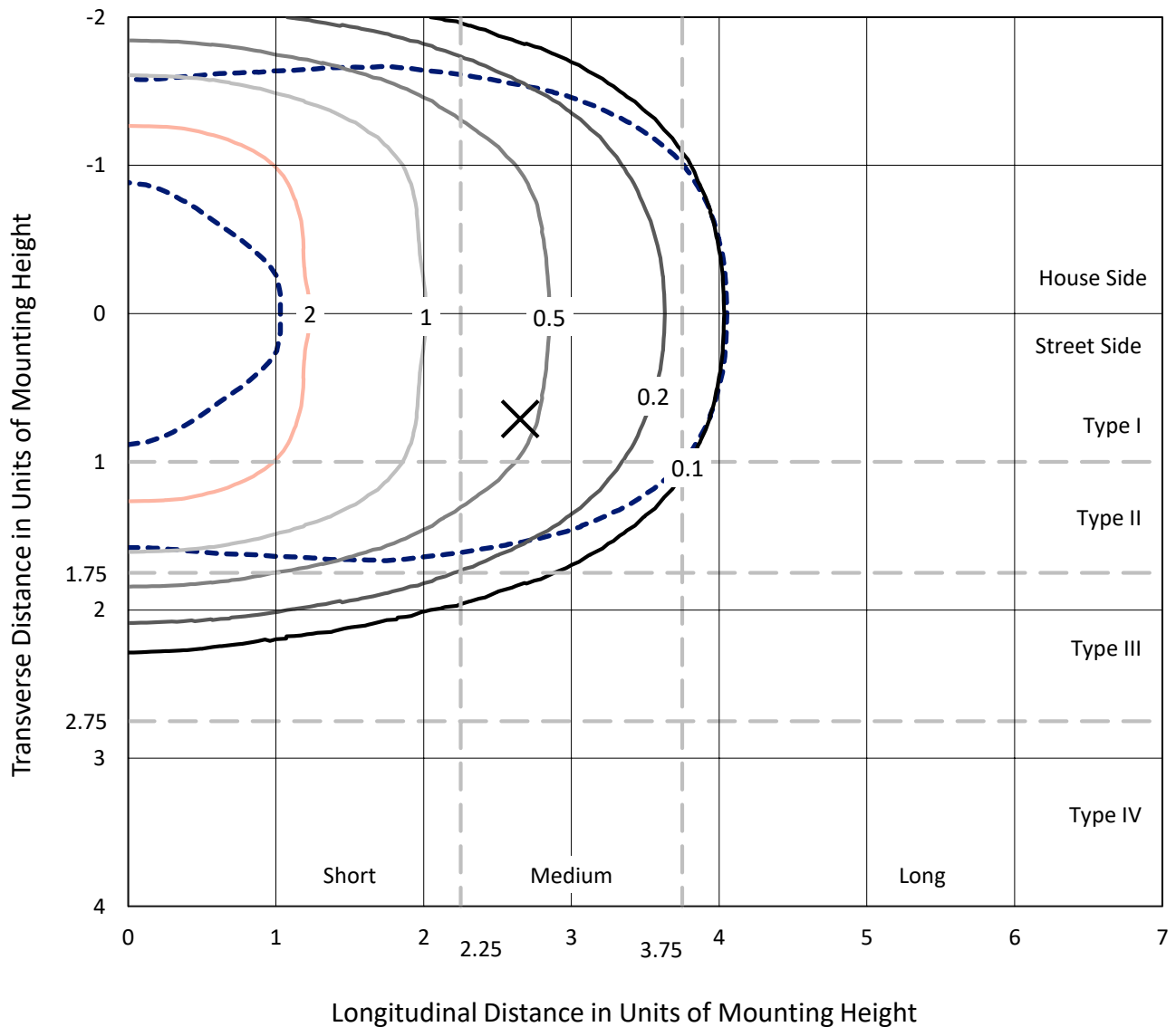


REPORT NUMBER: P195573

CATALOG NUMBER: NVN-AF-03-LED-U-RW-7050-1200

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

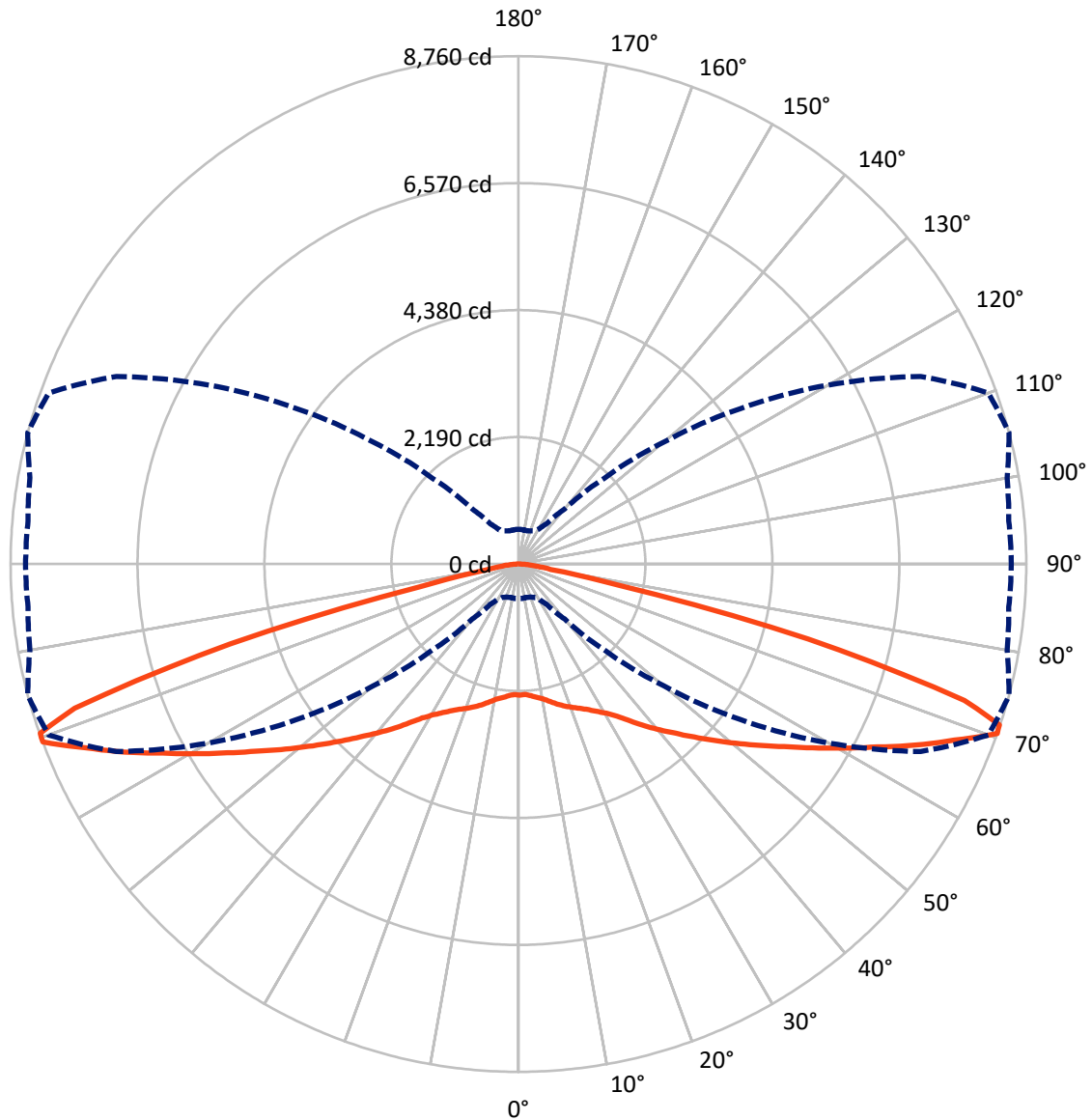


Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type V - Medium - Full Cutoff

REPORT NUMBER: P195573

CATALOG NUMBER: NVN-AF-03-LED-U-RW-7050-1200

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P195573

CATALOG NUMBER: NVN-AF-03-LED-U-RW-7050-1200

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 10152.5 | 0.0 | 10152.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 10152.5 | 0.0 | 10152.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 20305.0 | 0.0 | 20305.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 216.9 | 1.1 |
| 10°-20° | 672.6 | 3.3 |
| 20°-30° | 1263.3 | 6.2 |
| 30°-40° | 2225.4 | 11.0 |
| 40°-50° | 3688.2 | 18.2 |
| 50°-60° | 5130.8 | 25.3 |
| 60°-70° | 4843.6 | 23.9 |
| 70°-80° | 2068.7 | 10.2 |
| 80°-90° | 195.5 | 1.0 |
| 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° | 20305.0 | 100.0 |
| 0°-180° | 20305.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P195573

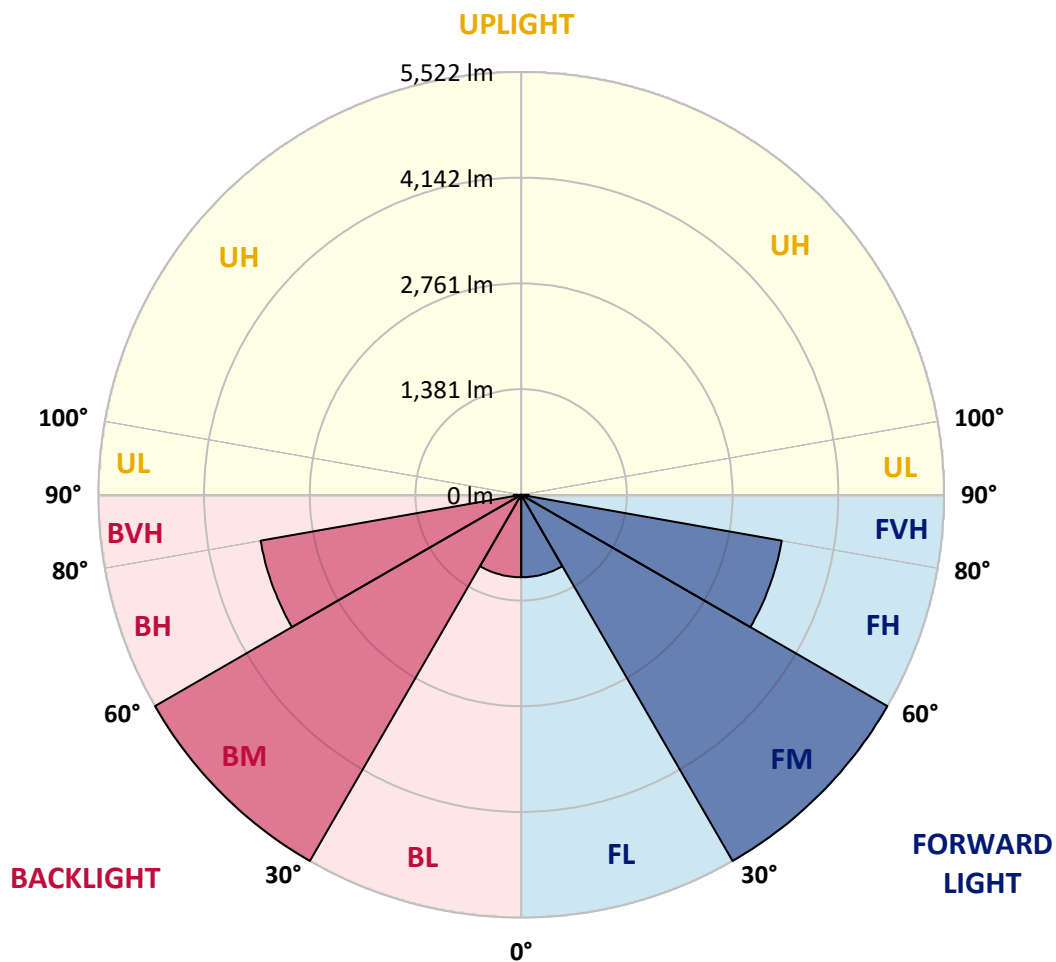
CATALOG NUMBER: NVN-AF-03-LED-U-RW-7050-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1076.4 | 5.3 | | | |
| FM | (30°-60°) | 5522.2 | 27.2 | | | |
| FH | (60°-80°) | 3456.2 | 17.0 | | | G2/5000 |
| FVH | (80°-90°) | 97.7 | 0.5 | | | G1/100 |
| BL | (0°-30°) | 1076.4 | 5.3 | B3/2500 | | |
| BM | (30°-60°) | 5522.2 | 27.2 | B4/8500 | | |
| BH | (60°-80°) | 3456.2 | 17.0 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 97.7 | 0.5 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G2

Type V Medium





REPORT NUMBER: P195573

CATALOG NUMBER: NVN-AF-03-LED-U-RW-7050-1200

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2261.2 | 2261.2 | 2261.2 | 2261.2 | 2261.2 | 2261.2 | 2261.2 | 2261.2 | 2261.2 | 2261.2 | 2261.2 |
| 2.5° | 2275.2 | 2273.9 | 2275.2 | 2271.3 | 2272.6 | 2271.3 | 2271.3 | 2266.2 | 2266.2 | 2263.7 | 2259.9 |
| 5° | 2249.7 | 2252.3 | 2252.3 | 2252.3 | 2256.1 | 2256.1 | 2261.2 | 2262.4 | 2266.2 | 2270.1 | 2272.6 |
| 7.5° | 2207.7 | 2209.0 | 2212.8 | 2215.4 | 2223.0 | 2233.2 | 2243.3 | 2254.8 | 2265.0 | 2277.7 | 2291.7 |
| 10° | 2172.1 | 2174.6 | 2181.0 | 2187.4 | 2201.4 | 2214.1 | 2231.9 | 2249.7 | 2267.5 | 2289.2 | 2310.8 |
| 12.5° | 2153.0 | 2156.8 | 2167.0 | 2177.2 | 2198.8 | 2215.4 | 2239.5 | 2267.5 | 2291.7 | 2312.1 | 2336.2 |
| 15° | 2155.5 | 2156.8 | 2170.8 | 2184.8 | 2215.4 | 2238.3 | 2272.6 | 2305.7 | 2335.0 | 2357.9 | 2385.9 |
| 17.5° | 2192.4 | 2195.0 | 2209.0 | 2229.3 | 2258.6 | 2287.9 | 2324.8 | 2359.1 | 2398.6 | 2425.3 | 2458.4 |
| 20° | 2265.0 | 2268.8 | 2284.1 | 2305.7 | 2337.5 | 2368.0 | 2406.2 | 2441.8 | 2482.6 | 2514.4 | 2547.5 |
| 22.5° | 2359.1 | 2365.5 | 2382.0 | 2408.8 | 2440.6 | 2477.5 | 2516.9 | 2553.8 | 2592.0 | 2623.8 | 2651.8 |
| 25° | 2485.1 | 2492.7 | 2510.6 | 2537.3 | 2569.1 | 2608.5 | 2649.3 | 2687.4 | 2726.9 | 2751.1 | 2774.0 |
| 27.5° | 2654.3 | 2667.1 | 2686.2 | 2707.8 | 2735.8 | 2777.8 | 2816.0 | 2847.8 | 2885.9 | 2912.7 | 2927.9 |
| 30° | 2882.1 | 2899.9 | 2915.2 | 2938.1 | 2958.5 | 3003.0 | 3033.5 | 3059.0 | 3088.3 | 3103.5 | 3107.3 |
| 32.5° | 3160.8 | 3177.3 | 3192.6 | 3209.1 | 3237.1 | 3277.9 | 3307.1 | 3321.1 | 3336.4 | 3333.8 | 3319.8 |
| 35° | 3475.1 | 3487.8 | 3496.7 | 3526.0 | 3571.8 | 3598.5 | 3620.1 | 3625.2 | 3627.8 | 3601.1 | 3574.3 |
| 37.5° | 3805.9 | 3821.2 | 3828.8 | 3874.6 | 3917.9 | 3948.4 | 3958.6 | 3970.1 | 3962.4 | 3917.9 | 3869.5 |
| 40° | 4163.5 | 4180.0 | 4202.9 | 4242.4 | 4293.3 | 4322.5 | 4335.3 | 4334.0 | 4327.6 | 4275.5 | 4196.6 |
| 42.5° | 4514.7 | 4535.0 | 4554.1 | 4622.8 | 4664.8 | 4714.5 | 4720.8 | 4719.6 | 4705.6 | 4645.7 | 4554.1 |
| 45° | 4812.4 | 4836.6 | 4876.1 | 4952.4 | 5019.9 | 5079.7 | 5103.8 | 5112.7 | 5098.7 | 5035.1 | 4930.8 |
| 47.5° | 5058.0 | 5074.6 | 5124.2 | 5217.1 | 5303.6 | 5391.4 | 5439.8 | 5474.1 | 5472.8 | 5427.0 | 5316.3 |
| 50° | 5226.0 | 5245.1 | 5306.2 | 5410.5 | 5518.7 | 5621.7 | 5717.2 | 5794.8 | 5831.7 | 5798.6 | 5695.5 |
| 52.5° | 5274.3 | 5298.5 | 5378.7 | 5503.4 | 5629.4 | 5768.1 | 5910.6 | 6048.0 | 6130.7 | 6151.1 | 6070.9 |
| 55° | 5070.7 | 5097.5 | 5214.5 | 5387.6 | 5595.0 | 5799.9 | 6016.2 | 6212.1 | 6382.7 | 6461.5 | 6429.7 |
| 57.5° | 4477.8 | 4496.9 | 4645.7 | 4869.7 | 5166.2 | 5526.3 | 5890.2 | 6249.0 | 6541.7 | 6746.6 | 6782.2 |
| 60° | 3541.3 | 3565.4 | 3728.3 | 3965.0 | 4302.2 | 4757.7 | 5266.7 | 5854.6 | 6428.5 | 6898.0 | 7130.9 |
| 62.5° | 2389.7 | 2406.2 | 2562.7 | 2779.1 | 3148.1 | 3587.1 | 4154.6 | 4899.0 | 5717.2 | 6555.7 | 7212.3 |
| 65° | 1254.6 | 1254.6 | 1360.3 | 1511.7 | 1805.6 | 2198.8 | 2780.3 | 3543.8 | 4517.2 | 5564.5 | 6662.6 |
| 67.5° | 727.8 | 726.6 | 750.8 | 785.1 | 878.0 | 1037.1 | 1357.7 | 1918.9 | 2840.1 | 4059.1 | 5308.7 |
| 70° | 600.6 | 596.8 | 593.0 | 593.0 | 607.0 | 631.1 | 692.2 | 846.2 | 1238.1 | 2093.2 | 3266.4 |
| 71° | 573.9 | 571.3 | 561.2 | 557.3 | 563.7 | 576.4 | 603.1 | 674.4 | 879.3 | 1427.7 | 2439.3 |
| 72.5° | 542.1 | 535.7 | 520.4 | 514.1 | 515.3 | 520.4 | 528.1 | 556.1 | 618.4 | 811.8 | 1390.8 |
| 75° | 493.7 | 478.4 | 459.4 | 450.5 | 446.6 | 445.4 | 445.4 | 453.0 | 467.0 | 489.9 | 570.1 |
| 77.5° | 437.7 | 416.1 | 395.7 | 386.8 | 380.5 | 376.6 | 374.1 | 369.0 | 366.5 | 376.6 | 405.9 |
| 80° | 370.3 | 347.4 | 330.8 | 325.7 | 321.9 | 314.3 | 304.1 | 293.9 | 287.6 | 292.7 | 310.5 |
| 82.5° | 286.3 | 263.4 | 265.9 | 267.2 | 260.9 | 248.1 | 237.9 | 226.5 | 215.0 | 212.5 | 221.4 |
| 85° | 227.8 | 216.3 | 208.7 | 225.2 | 211.2 | 196.0 | 182.0 | 162.9 | 136.2 | 112.0 | 122.2 |
| 87.5° | 98.0 | 99.3 | 142.5 | 215.0 | 188.3 | 151.4 | 126.0 | 101.8 | 64.9 | 48.4 | 49.6 |
| 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: P195573

CATALOG NUMBER: NVN-AF-03-LED-U-RW-7050-1200

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2261.2 | 2261.2 | 2261.2 | 2261.2 | 2261.2 | 2261.2 | 2261.2 | 2261.2 |
| 2.5° | 2258.6 | 2258.6 | 2254.8 | 2252.3 | 2252.3 | 2252.3 | 2249.7 | 2251.0 |
| 5° | 2273.9 | 2276.4 | 2279.0 | 2277.7 | 2281.5 | 2285.3 | 2284.1 | 2282.8 |
| 7.5° | 2299.3 | 2307.0 | 2314.6 | 2318.4 | 2323.5 | 2328.6 | 2329.9 | 2326.1 |
| 10° | 2324.8 | 2340.1 | 2351.5 | 2361.7 | 2368.0 | 2373.1 | 2377.0 | 2375.7 |
| 12.5° | 2356.6 | 2378.2 | 2398.6 | 2418.9 | 2432.9 | 2440.6 | 2448.2 | 2445.7 |
| 15° | 2408.8 | 2432.9 | 2458.4 | 2485.1 | 2506.7 | 2518.2 | 2529.6 | 2527.1 |
| 17.5° | 2480.0 | 2501.7 | 2522.0 | 2548.7 | 2575.5 | 2588.2 | 2600.9 | 2599.6 |
| 20° | 2569.1 | 2585.6 | 2597.1 | 2612.4 | 2637.8 | 2651.8 | 2663.3 | 2659.4 |
| 22.5° | 2670.9 | 2676.0 | 2677.3 | 2682.3 | 2702.7 | 2719.2 | 2734.5 | 2738.3 |
| 25° | 2781.6 | 2777.8 | 2770.1 | 2766.3 | 2780.3 | 2798.1 | 2817.2 | 2822.3 |
| 27.5° | 2919.0 | 2906.3 | 2887.2 | 2871.9 | 2875.8 | 2898.7 | 2920.3 | 2925.4 |
| 30° | 3092.1 | 3062.8 | 3022.1 | 2992.8 | 2987.7 | 3011.9 | 3034.8 | 3042.4 |
| 32.5° | 3289.3 | 3249.9 | 3193.9 | 3149.3 | 3130.2 | 3151.9 | 3172.2 | 3183.7 |
| 35° | 3523.4 | 3480.2 | 3412.7 | 3355.5 | 3324.9 | 3338.9 | 3374.6 | 3387.3 |
| 37.5° | 3800.8 | 3741.0 | 3666.0 | 3593.4 | 3542.5 | 3545.1 | 3583.2 | 3598.5 |
| 40° | 4107.5 | 4021.0 | 3925.5 | 3835.2 | 3761.4 | 3756.3 | 3790.7 | 3802.1 |
| 42.5° | 4426.9 | 4316.2 | 4204.2 | 4085.9 | 3994.2 | 3977.7 | 4022.2 | 4023.5 |
| 45° | 4770.4 | 4627.9 | 4489.2 | 4351.8 | 4256.4 | 4227.1 | 4270.4 | 4275.5 |
| 47.5° | 5136.9 | 4958.8 | 4794.6 | 4645.7 | 4542.7 | 4496.9 | 4538.9 | 4546.5 |
| 50° | 5518.7 | 5334.1 | 5143.3 | 4977.9 | 4857.0 | 4801.0 | 4850.6 | 4855.7 |
| 52.5° | 5896.6 | 5722.2 | 5532.7 | 5343.1 | 5196.7 | 5133.1 | 5191.6 | 5209.4 |
| 55° | 6277.0 | 6109.1 | 5930.9 | 5741.3 | 5556.8 | 5500.8 | 5564.5 | 5583.6 |
| 57.5° | 6672.8 | 6511.2 | 6349.6 | 6158.7 | 5979.3 | 5894.0 | 5962.7 | 5989.5 |
| 60° | 7109.2 | 6966.7 | 6814.0 | 6621.9 | 6445.0 | 6345.8 | 6404.3 | 6434.8 |
| 62.5° | 7538.0 | 7508.8 | 7370.1 | 7170.3 | 6946.4 | 6847.1 | 6896.7 | 6918.4 |
| 65° | 7573.7 | 8048.3 | 8041.9 | 7843.4 | 7530.4 | 7363.7 | 7377.7 | 7387.9 |
| 67.5° | 6610.4 | 7699.6 | 8395.7 | 8458.0 | 8109.4 | 7848.5 | 7818.0 | 7824.4 |
| 70° | 4680.1 | 6175.2 | 7652.6 | 8622.2 | 8759.6 | 8557.3 | 8491.1 | 8501.3 |
| 71° | 3749.9 | 5298.5 | 6924.7 | 8229.0 | 8749.4 | 8690.9 | 8654.0 | 8680.7 |
| 72.5° | 2393.5 | 3903.9 | 5486.8 | 7046.9 | 8045.8 | 8332.1 | 8374.1 | 8390.6 |
| 75° | 869.1 | 1679.6 | 2842.7 | 4073.1 | 5162.4 | 5911.8 | 6324.1 | 6357.2 |
| 77.5° | 467.0 | 601.9 | 930.2 | 1389.5 | 1745.8 | 1936.7 | 1959.6 | 1968.5 |
| 80° | 343.6 | 398.3 | 455.5 | 520.4 | 561.2 | 568.8 | 554.8 | 525.5 |
| 82.5° | 243.0 | 274.9 | 297.8 | 320.7 | 337.2 | 323.2 | 268.5 | 204.9 |
| 85° | 141.2 | 155.2 | 168.0 | 179.4 | 182.0 | 171.8 | 113.2 | 92.9 |
| 87.5° | 56.0 | 61.1 | 59.8 | 67.4 | 64.9 | 59.8 | 44.5 | 38.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)