

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: P195148

Luminaire Tested: **NVN-AF-04-LED-U-SL3-7060-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P195148
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24263)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-AF-04-LED-U-SL3-7060-600-HSS
Description: NAVION ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 5700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13645 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 129
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

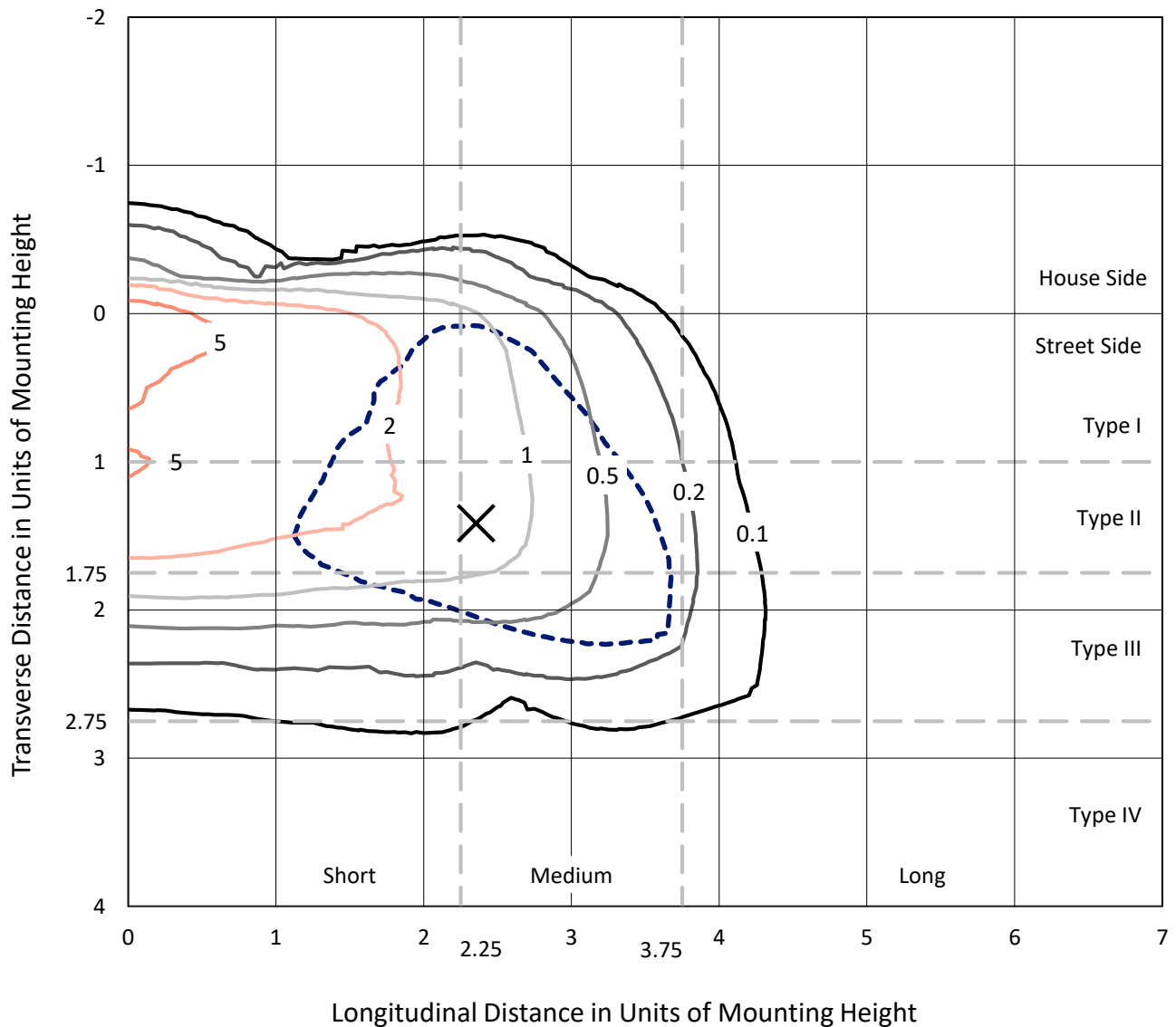


REPORT NUMBER: P195148

CATALOG NUMBER: NVN-AF-04-LED-U-SL3-7060-600-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

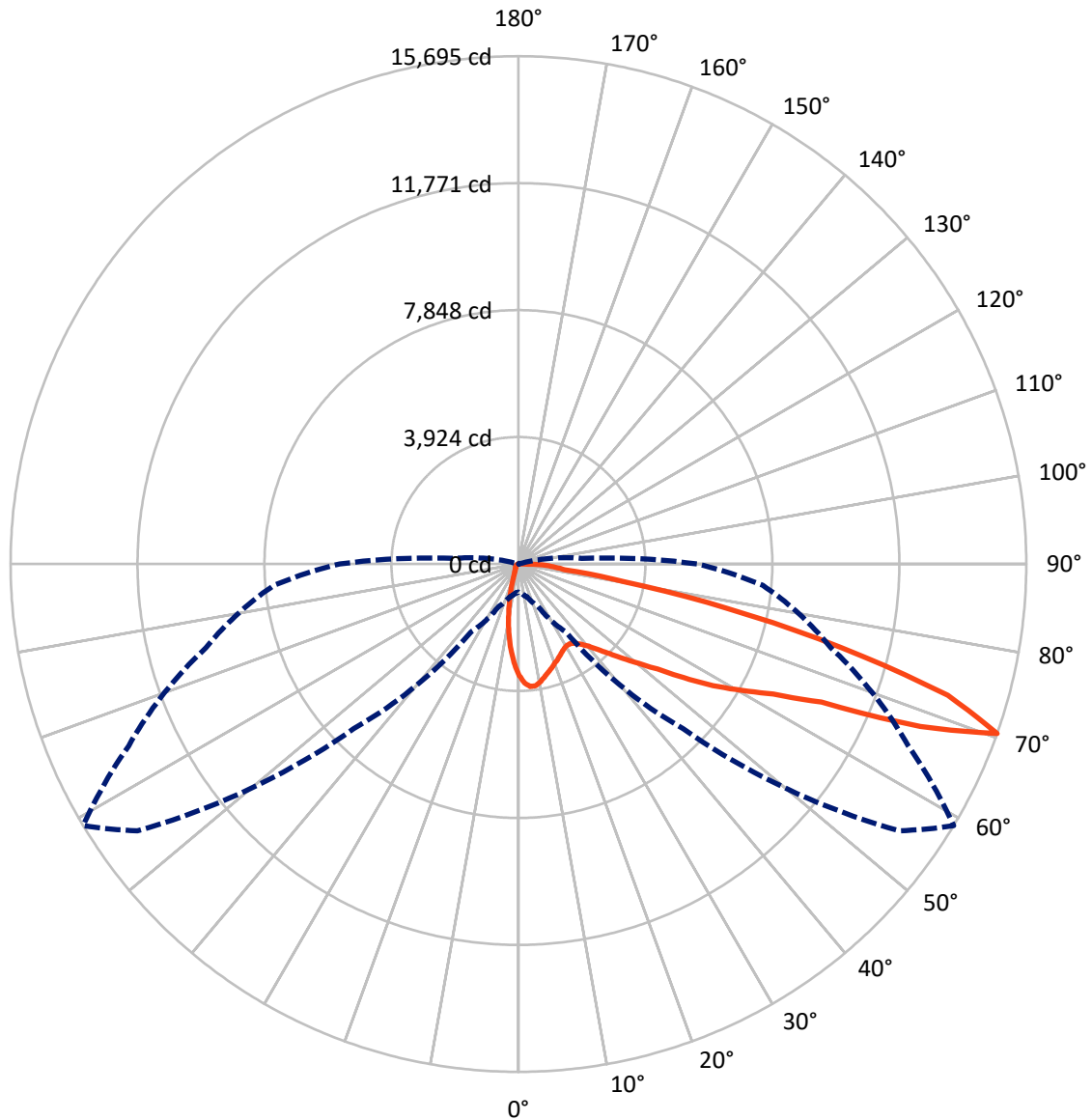


Based on 20 foot mounting height. Maximum calculated value = 9.2 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P195148

CATALOG NUMBER: NVN-AF-04-LED-U-SL3-7060-600-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



REPORT NUMBER: P195148

CATALOG NUMBER: NVN-AF-04-LED-U-SL3-7060-600-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1048.9 | 0.0 | 1048.9 |
| | % Fixture | 7.7 | 0.0 | 7.7 |
| Street Side | Lumens | 12596.1 | 0.0 | 12596.1 |
| | % Fixture | 92.3 | 0.0 | 92.3 |
| Total | Lumens | 13645.0 | 0.0 | 13645.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 283.7 | 2.1 |
| 10°-20° | 595.1 | 4.4 |
| 20°-30° | 805.6 | 5.9 |
| 30°-40° | 1162.5 | 8.5 |
| 40°-50° | 1930.7 | 14.1 |
| 50°-60° | 2953.2 | 21.6 |
| 60°-70° | 3673.1 | 26.9 |
| 70°-80° | 2030.5 | 14.9 |
| 80°-90° | 210.5 | 1.5 |
| 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° | 13645.0 | 100.0 |
| 0°-180° | 13645.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P195148

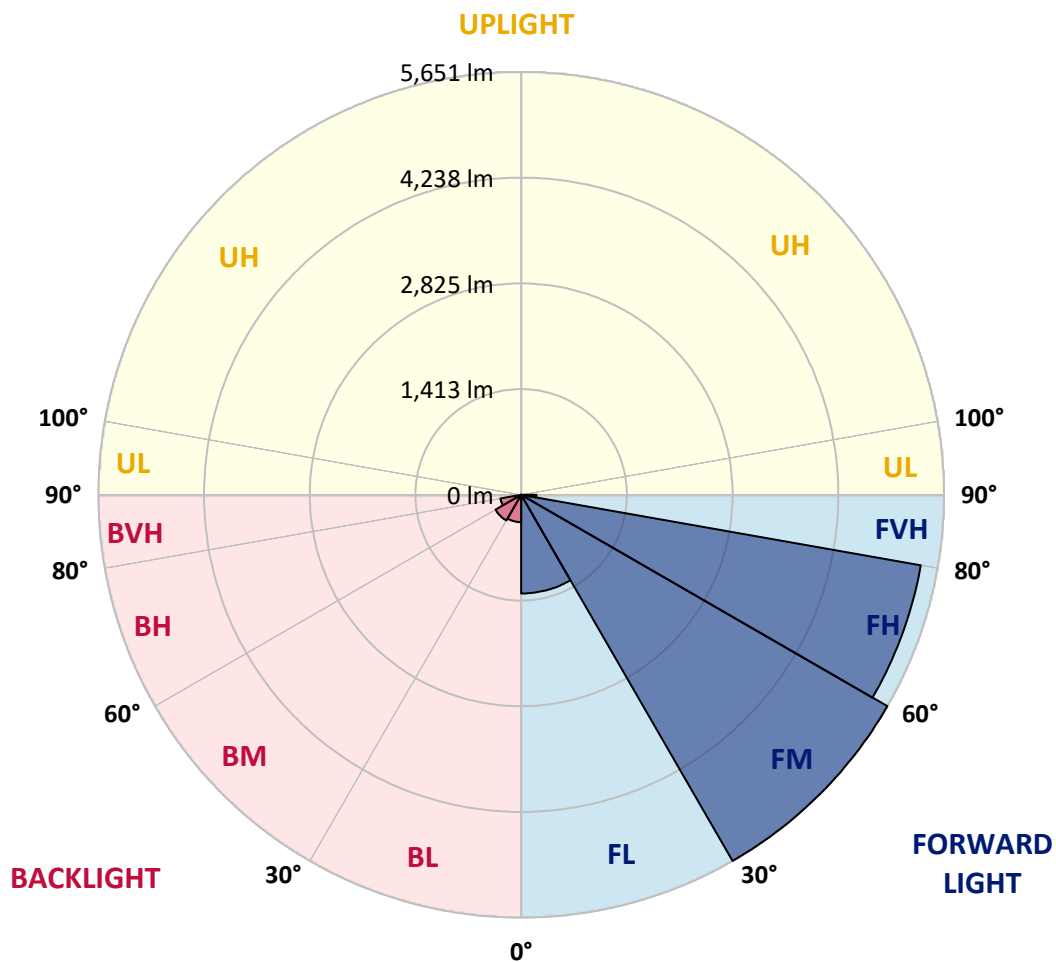
CATALOG NUMBER: NVN-AF-04-LED-U-SL3-7060-600-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1318.8 | 9.7 | | | |
| FM | (30°-60°) | 5650.5 | 41.4 | | | |
| FH | (60°-80°) | 5422.2 | 39.7 | | | G3/7500 |
| FVH | (80°-90°) | 204.5 | 1.5 | | | G2/225 |
| BL | (0°-30°) | 365.5 | 2.7 | B1/500 | | |
| BM | (30°-60°) | 395.9 | 2.9 | B1/1000 | | |
| BH | (60°-80°) | 281.4 | 2.1 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 6.1 | 0.0 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G3

Type III Medium





REPORT NUMBER: P195148

CATALOG NUMBER: NVN-AF-04-LED-U-SL3-7060-600-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 59° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|
| 0° | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 |
| 2.5° | 3900.1 | 3894.0 | 3868.2 | 3863.1 | 3834.3 | 3776.6 | 3709.7 | 3683.0 | 3628.4 | 3541.9 | 3446.2 |
| 5° | 3965.0 | 3968.1 | 3970.1 | 3958.8 | 3954.7 | 3907.4 | 3833.2 | 3801.3 | 3728.2 | 3586.2 | 3411.2 |
| 7.5° | 3722.1 | 3730.3 | 3756.0 | 3767.4 | 3816.8 | 3835.3 | 3819.9 | 3799.3 | 3741.6 | 3573.8 | 3327.8 |
| 10° | 3465.8 | 3481.2 | 3509.0 | 3527.5 | 3588.3 | 3637.7 | 3700.5 | 3705.6 | 3693.3 | 3532.7 | 3234.2 |
| 12.5° | 3245.5 | 3259.9 | 3290.8 | 3327.8 | 3389.6 | 3453.4 | 3547.1 | 3580.0 | 3621.2 | 3505.9 | 3167.3 |
| 15° | 3056.1 | 3060.2 | 3090.1 | 3136.4 | 3217.7 | 3305.2 | 3416.4 | 3464.7 | 3545.0 | 3495.6 | 3115.8 |
| 17.5° | 2890.4 | 2891.4 | 2911.0 | 2953.2 | 3052.0 | 3167.3 | 3297.0 | 3360.8 | 3462.7 | 3481.2 | 3070.5 |
| 20° | 2781.3 | 2780.2 | 2781.3 | 2803.9 | 2891.4 | 3028.3 | 3185.8 | 3252.7 | 3383.4 | 3463.7 | 3024.2 |
| 22.5° | 2744.2 | 2739.1 | 2715.4 | 2707.1 | 2762.7 | 2883.2 | 3071.5 | 3159.0 | 3312.4 | 3458.6 | 2990.2 |
| 25° | 2789.5 | 2786.4 | 2736.0 | 2688.6 | 2693.8 | 2768.9 | 2955.2 | 3062.3 | 3256.8 | 3477.1 | 2982.0 |
| 27.5° | 2935.7 | 2929.5 | 2852.3 | 2759.6 | 2701.0 | 2714.4 | 2868.8 | 2981.0 | 3212.6 | 3522.4 | 2993.3 |
| 30° | 3127.1 | 3128.1 | 3045.8 | 2933.6 | 2795.7 | 2719.5 | 2822.4 | 2928.5 | 3182.7 | 3590.3 | 3018.0 |
| 32.5° | 3340.2 | 3339.2 | 3280.5 | 3150.8 | 2974.8 | 2814.2 | 2843.0 | 2932.6 | 3186.8 | 3690.2 | 3065.4 |
| 35° | 3560.5 | 3549.1 | 3529.6 | 3415.3 | 3209.5 | 2979.9 | 2936.7 | 3002.6 | 3230.1 | 3821.9 | 3145.6 |
| 37.5° | 3814.7 | 3810.6 | 3830.2 | 3709.7 | 3499.7 | 3223.9 | 3101.4 | 3145.6 | 3339.2 | 4016.5 | 3275.3 |
| 40° | 4219.2 | 4196.6 | 4205.9 | 4042.2 | 3827.1 | 3552.2 | 3332.0 | 3343.3 | 3513.1 | 4273.8 | 3480.2 |
| 42.5° | 4990.2 | 4898.6 | 4726.7 | 4420.0 | 4187.3 | 3916.6 | 3633.6 | 3614.0 | 3759.1 | 4585.7 | 3749.9 |
| 45° | 5911.5 | 5806.5 | 5373.1 | 4836.8 | 4547.6 | 4307.8 | 4006.2 | 3953.7 | 4061.8 | 4957.3 | 4097.8 |
| 47.5° | 6680.4 | 6567.2 | 5992.8 | 5272.3 | 4914.0 | 4711.3 | 4418.9 | 4357.2 | 4424.1 | 5388.6 | 4515.7 |
| 50° | 6942.9 | 6880.1 | 6375.7 | 5634.6 | 5283.6 | 5164.2 | 4936.7 | 4833.8 | 4850.2 | 5853.8 | 5003.6 |
| 52.5° | 6822.4 | 6800.8 | 6463.2 | 5882.6 | 5625.3 | 5664.4 | 5503.9 | 5395.8 | 5377.2 | 6362.3 | 5543.0 |
| 55° | 6568.2 | 6557.9 | 6393.2 | 6020.6 | 5926.9 | 6122.5 | 6299.5 | 6205.9 | 6030.9 | 6902.7 | 5988.7 |
| 57.5° | 6204.8 | 6243.9 | 6362.3 | 6286.1 | 6297.5 | 6606.3 | 7038.6 | 7087.0 | 6825.5 | 7333.0 | 6319.1 |
| 60° | 5234.2 | 5339.2 | 5881.6 | 6571.3 | 7099.3 | 7411.2 | 7830.1 | 7920.7 | 7498.7 | 7627.4 | 6701.0 |
| 62.5° | 3869.3 | 4019.6 | 4792.6 | 6059.7 | 7540.9 | 8941.8 | 8883.2 | 8843.0 | 8141.0 | 8021.6 | 7395.8 |
| 65° | 2272.8 | 2448.8 | 3102.4 | 4734.9 | 6874.9 | 9925.9 | 10849.2 | 10293.3 | 9119.9 | 8841.0 | 8502.3 |
| 67.5° | 1132.3 | 1133.3 | 1428.7 | 2499.2 | 5080.8 | 9239.3 | 13719.0 | 13397.8 | 11201.2 | 10048.4 | 8938.7 |
| 70° | 870.8 | 894.5 | 1057.1 | 1452.4 | 2569.2 | 7196.1 | 14376.7 | 15695.3 | 13292.8 | 9994.8 | 7584.1 |
| 72.5° | 738.0 | 753.5 | 940.8 | 1264.0 | 1920.7 | 3950.6 | 12445.7 | 13873.4 | 12684.5 | 8444.7 | 5590.3 |
| 75° | 531.1 | 543.5 | 832.7 | 1146.7 | 1768.4 | 1959.9 | 8537.3 | 10289.2 | 9517.2 | 5940.3 | 3076.7 |
| 77.5° | 131.8 | 130.7 | 290.3 | 930.5 | 1582.1 | 1632.5 | 4898.6 | 6598.0 | 5460.6 | 2432.3 | 790.5 |
| 80° | 58.7 | 56.6 | 65.9 | 195.6 | 1471.9 | 1540.9 | 2154.4 | 3332.0 | 2094.7 | 394.2 | 241.9 |
| 82.5° | 41.2 | 39.1 | 41.2 | 72.1 | 492.0 | 1429.7 | 1302.1 | 1444.2 | 766.9 | 134.8 | 102.9 |
| 85° | 13.4 | 12.4 | 22.6 | 60.7 | 137.9 | 824.5 | 1270.2 | 1078.7 | 570.3 | 57.6 | 69.0 |
| 87.5° | 2.1 | 2.1 | 8.2 | 32.9 | 40.1 | 274.8 | 745.2 | 747.3 | 256.3 | 34.0 | 30.9 |
| 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: P195148

CATALOG NUMBER: NVN-AF-04-LED-U-SL3-7060-600-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 | 3450.3 |
| 2.5° | 3397.8 | 3337.1 | 3251.7 | 3166.2 | 3089.0 | 3009.8 | 2946.0 | 2916.1 | 2902.7 | 2884.2 | 2844.1 |
| 5° | 3319.6 | 3209.5 | 3022.1 | 2837.9 | 2666.0 | 2501.3 | 2360.3 | 2280.0 | 2193.5 | 2189.4 | 2147.2 |
| 7.5° | 3194.0 | 3037.6 | 2742.1 | 2456.0 | 2193.5 | 1942.4 | 1726.2 | 1586.2 | 1490.5 | 1430.8 | 1389.6 |
| 10° | 3054.0 | 2853.3 | 2462.2 | 2059.7 | 1702.5 | 1367.0 | 1089.0 | 907.9 | 797.7 | 742.2 | 710.2 |
| 12.5° | 2942.9 | 2690.7 | 2186.3 | 1679.9 | 1232.1 | 847.1 | 588.8 | 457.0 | 398.4 | 375.7 | 365.4 |
| 15° | 2847.1 | 2541.4 | 1927.9 | 1340.2 | 822.4 | 486.9 | 340.7 | 297.5 | 288.2 | 288.2 | 287.2 |
| 17.5° | 2750.4 | 2397.3 | 1676.8 | 1006.7 | 517.8 | 319.1 | 268.7 | 262.5 | 263.5 | 266.6 | 266.6 |
| 20° | 2658.8 | 2260.4 | 1434.9 | 717.4 | 339.7 | 255.3 | 244.0 | 241.9 | 245.0 | 249.1 | 248.1 |
| 22.5° | 2584.7 | 2140.0 | 1208.4 | 493.1 | 261.5 | 231.6 | 224.4 | 221.3 | 223.4 | 226.5 | 225.4 |
| 25° | 2532.2 | 2037.1 | 1000.5 | 343.8 | 227.5 | 211.0 | 202.8 | 198.7 | 196.6 | 198.7 | 197.6 |
| 27.5° | 2500.3 | 1950.6 | 804.9 | 258.4 | 203.8 | 190.4 | 180.1 | 171.9 | 166.8 | 166.8 | 164.7 |
| 30° | 2479.7 | 1869.3 | 631.0 | 214.1 | 184.3 | 169.8 | 155.4 | 144.1 | 135.9 | 133.8 | 132.8 |
| 32.5° | 2478.6 | 1799.3 | 471.4 | 189.4 | 165.7 | 149.3 | 131.8 | 117.3 | 108.1 | 106.0 | 105.0 |
| 35° | 2504.4 | 1742.7 | 346.9 | 170.9 | 149.3 | 129.7 | 110.1 | 94.7 | 86.5 | 86.5 | 85.4 |
| 37.5° | 2571.3 | 1709.7 | 262.5 | 156.5 | 135.9 | 113.2 | 92.6 | 78.2 | 71.0 | 73.1 | 73.1 |
| 40° | 2695.8 | 1703.5 | 214.1 | 145.1 | 124.5 | 98.8 | 75.1 | 63.8 | 60.7 | 63.8 | 63.8 |
| 42.5° | 2886.3 | 1736.5 | 190.4 | 136.9 | 114.3 | 84.4 | 62.8 | 54.6 | 53.5 | 56.6 | 56.6 |
| 45° | 3134.3 | 1801.3 | 177.0 | 129.7 | 102.9 | 70.0 | 52.5 | 47.3 | 46.3 | 50.4 | 50.4 |
| 47.5° | 3434.9 | 1888.8 | 164.7 | 121.5 | 91.6 | 57.6 | 44.3 | 40.1 | 40.1 | 44.3 | 45.3 |
| 50° | 3791.0 | 2007.2 | 152.3 | 113.2 | 82.3 | 48.4 | 37.1 | 34.0 | 35.0 | 39.1 | 40.1 |
| 52.5° | 4200.7 | 2152.3 | 141.0 | 106.0 | 72.1 | 39.1 | 30.9 | 28.8 | 29.9 | 34.0 | 35.0 |
| 55° | 4553.8 | 2278.9 | 127.6 | 98.8 | 58.7 | 31.9 | 25.7 | 24.7 | 25.7 | 30.9 | 30.9 |
| 57.5° | 4861.5 | 2400.4 | 115.3 | 87.5 | 46.3 | 25.7 | 20.6 | 20.6 | 22.6 | 27.8 | 28.8 |
| 60° | 5270.2 | 2591.9 | 105.0 | 74.1 | 35.0 | 19.6 | 16.5 | 17.5 | 20.6 | 24.7 | 25.7 |
| 62.5° | 5993.8 | 2917.1 | 91.6 | 61.8 | 25.7 | 15.4 | 13.4 | 14.4 | 18.5 | 23.7 | 24.7 |
| 65° | 6899.6 | 3224.9 | 76.2 | 51.5 | 19.6 | 11.3 | 10.3 | 13.4 | 18.5 | 23.7 | 24.7 |
| 67.5° | 6807.0 | 2804.9 | 59.7 | 41.2 | 14.4 | 9.3 | 8.2 | 12.4 | 17.5 | 23.7 | 24.7 |
| 70° | 5520.3 | 1966.0 | 44.3 | 27.8 | 11.3 | 8.2 | 8.2 | 12.4 | 17.5 | 22.6 | 23.7 |
| 72.5° | 3829.1 | 1094.2 | 34.0 | 18.5 | 10.3 | 8.2 | 7.2 | 11.3 | 16.5 | 22.6 | 23.7 |
| 75° | 1821.9 | 335.6 | 26.8 | 13.4 | 9.3 | 7.2 | 6.2 | 11.3 | 16.5 | 22.6 | 23.7 |
| 77.5° | 350.0 | 85.4 | 21.6 | 11.3 | 8.2 | 7.2 | 6.2 | 10.3 | 16.5 | 21.6 | 22.6 |
| 80° | 118.4 | 38.1 | 17.5 | 10.3 | 8.2 | 7.2 | 6.2 | 10.3 | 15.4 | 20.6 | 21.6 |
| 82.5° | 64.8 | 21.6 | 15.4 | 9.3 | 8.2 | 6.2 | 5.1 | 9.3 | 14.4 | 20.6 | 21.6 |
| 85° | 50.4 | 15.4 | 12.4 | 9.3 | 8.2 | 6.2 | 5.1 | 9.3 | 14.4 | 19.6 | 20.6 |
| 87.5° | 25.7 | 11.3 | 10.3 | 9.3 | 8.2 | 6.2 | 5.1 | 8.2 | 13.4 | 18.5 | 20.6 |
| 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)