

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: STREETWORKS

Report Number: P363938

Luminaire Tested: NVN-SA4D-760-U-SLL-HSS

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2019
Report Number: P363938
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: NVN-SA4D-760-U-SLL-HSS
Description: NAVION ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 5700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23695 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

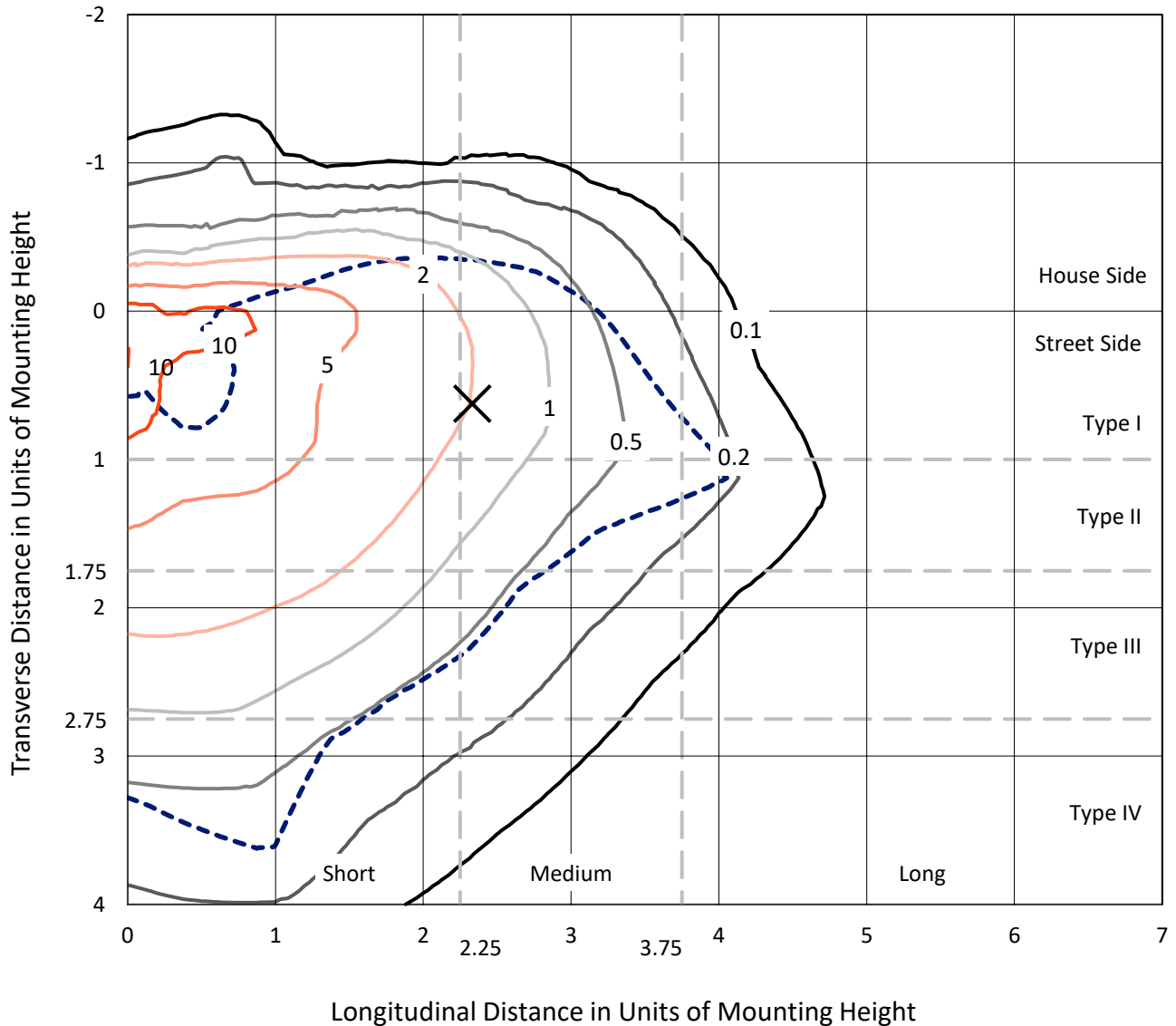
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P363938
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Iso-Footcandle Lines of Horizontal Illumination

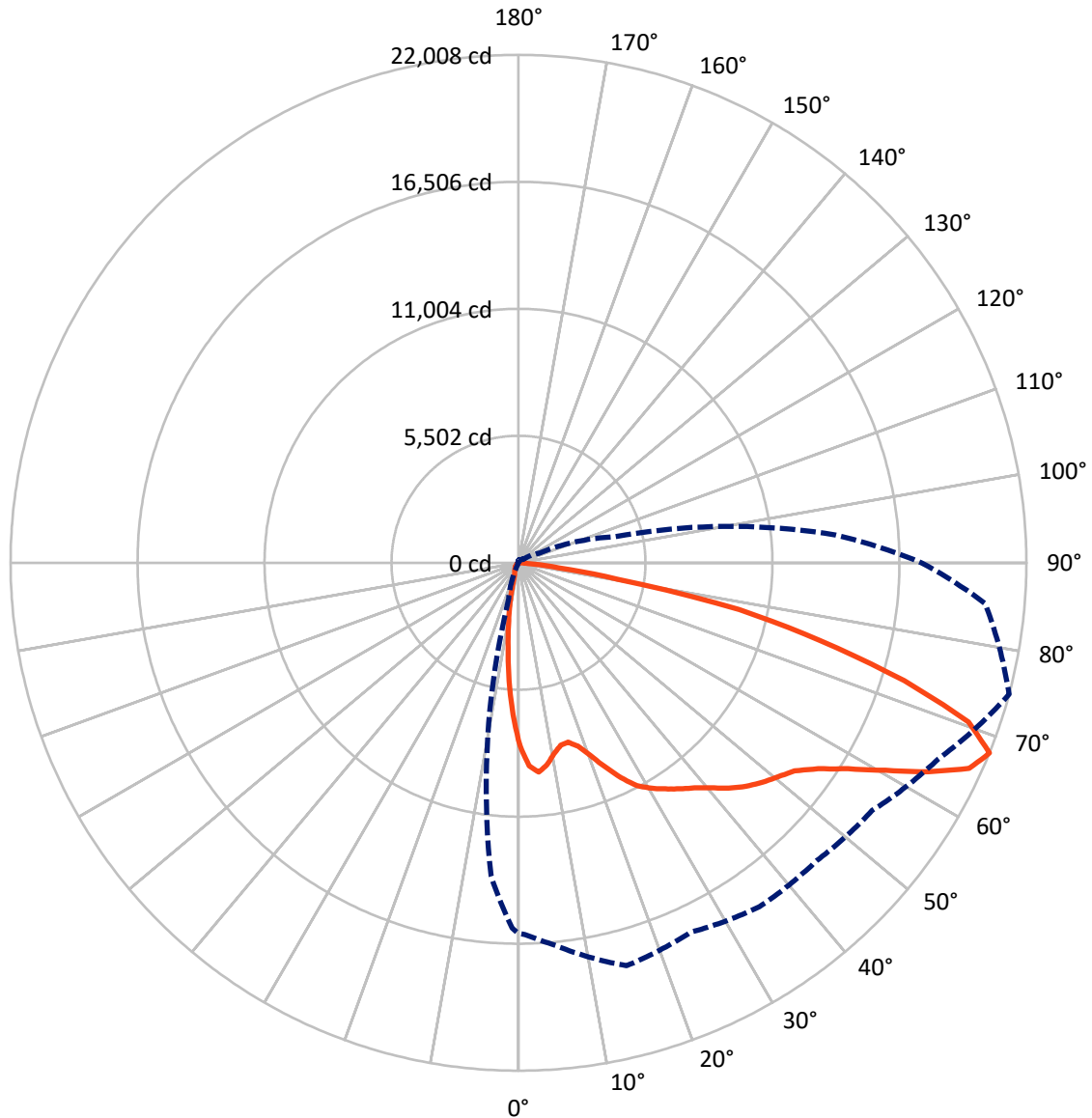
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.5 fc
 Type III - Medium - N/A

REPORT NUMBER: P363938
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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3555.7 | 0.0 | 3555.7 |
| | % Fixture | 15.0 | 0.0 | 15.0 |
| Street Side | Lumens | 20139.3 | 0.0 | 20139.3 |
| | % Fixture | 85.0 | 0.0 | 85.0 |
| Total | Lumens | 23695.0 | 0.0 | 23695.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 603.0 | 2.5 |
| 10°-20° | 1187.3 | 5.0 |
| 20°-30° | 1679.7 | 7.1 |
| 30°-40° | 2469.6 | 10.4 |
| 40°-50° | 3549.6 | 15.0 |
| 50°-60° | 4997.0 | 21.1 |
| 60°-70° | 5836.0 | 24.6 |
| 70°-80° | 2977.3 | 12.6 |
| 80°-90° | 395.5 | 1.7 |
| 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° | 23695.0 | 100.0 |
| 0°-180° | 23695.0 | 100.0 |

Coefficient of Utilization

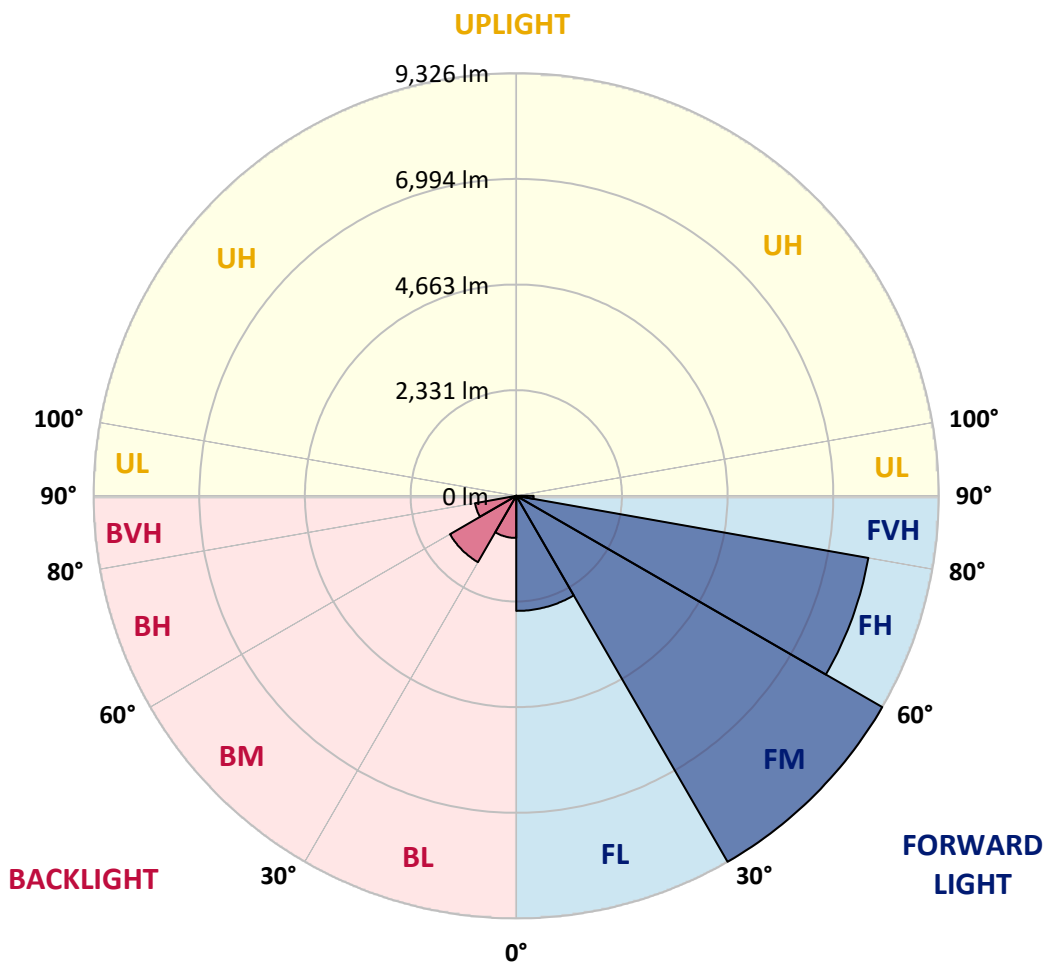


REPORT NUMBER: P363938
 CATALOG NUMBER: NVN-SA4D-760-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 2540.1 | 10.7 | | | |
| FM (30°-60°) | 9325.9 | 39.4 | | | |
| FH (60°-80°) | 7889.8 | 33.3 | | | G4/12000 |
| FVH (80°-90°) | 383.5 | 1.6 | | | G3/500 |
| BL (0°-30°) | 929.9 | 3.9 | B2/1000 | | |
| BM (30°-60°) | 1690.3 | 7.1 | B2/2500 | | |
| BH (60°-80°) | 923.6 | 3.9 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 12.0 | 0.1 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G4
 Type III Medium





REPORT NUMBER: P363938

CATALOG NUMBER: NVN-SA4D-760-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 1° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 |
| 2.5° | 8617.1 | 8630.6 | 8700.2 | 8861.8 | 9038.1 | 9051.5 | 9170.5 | 9048.2 | 9006.6 | 8809.1 | 8604.8 |
| 5° | 8682.2 | 8733.9 | 8973.0 | 9447.8 | 9859.7 | 9992.1 | 10086.4 | 9846.2 | 9593.7 | 9111.0 | 8595.8 |
| 7.5° | 8158.0 | 8244.5 | 8620.5 | 9511.7 | 10248.1 | 10573.6 | 10635.3 | 10259.3 | 9640.8 | 8846.1 | 8071.6 |
| 10° | 7486.8 | 7585.6 | 8039.1 | 9134.6 | 10145.9 | 10703.8 | 10789.1 | 10296.3 | 9407.3 | 8417.3 | 7504.8 |
| 12.5° | 6943.5 | 7059.2 | 7522.7 | 8710.3 | 9794.6 | 10411.9 | 10580.3 | 10171.7 | 9205.3 | 8113.1 | 7117.5 |
| 15° | 6693.2 | 6825.7 | 7312.8 | 8436.4 | 9405.1 | 9891.1 | 10030.3 | 9854.1 | 9093.1 | 8064.9 | 7027.7 |
| 17.5° | 6836.9 | 6980.6 | 7483.4 | 8460.0 | 9039.2 | 9246.8 | 9359.1 | 9430.9 | 9093.1 | 8355.6 | 7290.4 |
| 20° | 7426.2 | 7581.1 | 8113.1 | 8699.1 | 8736.1 | 8658.7 | 8778.8 | 9031.3 | 9198.6 | 8907.8 | 7921.2 |
| 22.5° | 8241.1 | 8422.9 | 9023.5 | 9108.8 | 8587.9 | 8295.0 | 8310.7 | 8706.9 | 9390.5 | 9608.3 | 8796.7 |
| 25° | 9234.5 | 9456.7 | 10067.4 | 9719.4 | 8649.7 | 8078.4 | 8072.7 | 8439.8 | 9578.0 | 10309.8 | 9772.1 |
| 27.5° | 10221.1 | 10465.8 | 11002.4 | 10464.7 | 8904.5 | 8039.1 | 8027.8 | 8359.0 | 9760.9 | 10933.9 | 10837.4 |
| 30° | 11048.4 | 11286.3 | 11748.8 | 11004.6 | 9179.5 | 8131.1 | 8077.2 | 8445.4 | 9869.8 | 11339.1 | 11614.1 |
| 32.5° | 11721.9 | 11912.7 | 12286.5 | 11376.1 | 9473.6 | 8309.6 | 8192.8 | 8676.6 | 10055.0 | 11681.4 | 12328.0 |
| 35° | 12462.7 | 12663.6 | 12812.9 | 11729.7 | 9803.6 | 8566.6 | 8399.4 | 9043.7 | 10340.1 | 12029.4 | 13110.3 |
| 37.5° | 13307.9 | 13507.7 | 13489.7 | 12053.0 | 10222.3 | 8992.0 | 8885.4 | 9625.1 | 10783.5 | 12374.0 | 13983.6 |
| 40° | 14135.1 | 14339.4 | 14193.5 | 12406.6 | 10713.9 | 9693.6 | 9615.0 | 10498.4 | 11377.3 | 12815.1 | 15007.3 |
| 42.5° | 14909.6 | 15130.8 | 14818.7 | 12741.1 | 11299.8 | 10578.1 | 10712.8 | 11623.1 | 12120.3 | 13358.4 | 15889.6 |
| 45° | 15533.7 | 15759.3 | 15342.9 | 13066.6 | 11917.2 | 11651.1 | 12056.4 | 12869.0 | 13013.8 | 13817.5 | 16485.6 |
| 47.5° | 15987.2 | 16200.5 | 15706.6 | 13392.1 | 12707.4 | 12963.3 | 13669.3 | 14175.6 | 13820.9 | 14216.0 | 16908.7 |
| 50° | 16276.8 | 16442.9 | 15813.2 | 13799.5 | 13744.5 | 14494.3 | 15349.7 | 15596.6 | 14580.8 | 14575.2 | 17422.8 |
| 52.5° | 16460.9 | 16536.1 | 15891.8 | 14224.9 | 14826.6 | 16161.2 | 16995.2 | 17072.6 | 15363.1 | 14970.3 | 18115.4 |
| 55° | 17095.1 | 17155.7 | 16448.5 | 14740.2 | 15721.2 | 17621.5 | 18483.6 | 18411.7 | 16248.7 | 15743.6 | 18932.5 |
| 57.5° | 18177.1 | 18241.1 | 17599.1 | 15481.0 | 16445.2 | 18524.0 | 19562.2 | 19691.3 | 17287.0 | 16830.2 | 19808.1 |
| 60° | 18720.4 | 18839.4 | 18610.4 | 16419.4 | 17146.7 | 19100.9 | 20297.5 | 20709.4 | 18584.6 | 18262.4 | 20656.6 |
| 62.5° | 18227.6 | 18400.5 | 18732.7 | 17459.9 | 17843.8 | 19418.6 | 20526.4 | 21074.2 | 19913.6 | 19931.5 | 21179.7 |
| 65° | 17244.4 | 17382.4 | 17945.9 | 18030.1 | 18247.8 | 19379.3 | 19960.7 | 20564.6 | 20727.4 | 21464.8 | 21151.7 |
| 67.5° | 16056.8 | 16108.4 | 16586.6 | 18075.0 | 17661.9 | 18198.5 | 18261.3 | 18708.1 | 20084.2 | 22008.1 | 20301.9 |
| 70° | 14347.3 | 14375.4 | 14792.9 | 16572.0 | 15177.9 | 15295.8 | 15202.6 | 15293.5 | 17266.8 | 20684.7 | 18156.9 |
| 72.5° | 11546.8 | 11617.5 | 12211.3 | 13762.5 | 11057.4 | 10717.3 | 11449.1 | 11408.7 | 13297.8 | 17475.6 | 13485.2 |
| 75° | 8501.5 | 8623.9 | 9520.7 | 11085.4 | 7760.7 | 7019.9 | 7554.2 | 7696.7 | 9453.4 | 13517.8 | 8433.0 |
| 77.5° | 5952.4 | 6043.3 | 6912.1 | 8149.1 | 5616.8 | 5019.6 | 4826.6 | 4996.1 | 6239.8 | 9778.9 | 4248.5 |
| 80° | 3429.1 | 3462.8 | 4017.3 | 4705.4 | 3784.9 | 4330.5 | 3923.0 | 4039.7 | 3738.9 | 4350.7 | 1827.4 |
| 82.5° | 2243.8 | 2249.4 | 2466.0 | 2800.5 | 2357.2 | 2738.8 | 2027.2 | 2591.8 | 2299.9 | 1747.7 | 594.9 |
| 85° | 1212.3 | 1219.0 | 1430.0 | 1987.9 | 1334.6 | 754.3 | 443.4 | 910.3 | 1422.2 | 400.7 | 162.8 |
| 87.5° | 133.6 | 122.3 | 431.0 | 722.9 | 370.4 | 68.5 | 23.6 | 102.1 | 227.9 | 25.8 | 0.0 |
| 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: P363938
 CATALOG NUMBER: NVN-SA4D-760-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 |
| 2.5° | 8500.4 | 8407.2 | 8174.9 | 7929.1 | 7731.5 | 7546.3 | 7360.0 | 7132.1 | 6955.9 | 6920.0 | 6861.6 |
| 5° | 8318.6 | 8023.3 | 7536.2 | 7046.8 | 6652.8 | 6155.6 | 5840.2 | 5594.3 | 5354.1 | 5339.5 | 5291.3 |
| 7.5° | 7683.2 | 7294.9 | 6609.0 | 5932.2 | 5377.7 | 4904.0 | 4425.9 | 4106.0 | 3854.5 | 3765.9 | 3713.1 |
| 10° | 7072.6 | 6636.0 | 5779.6 | 5007.3 | 4512.3 | 4093.6 | 3756.9 | 3422.4 | 3119.3 | 2910.5 | 2816.3 |
| 12.5° | 6646.1 | 6163.4 | 5219.4 | 4553.8 | 4199.1 | 3801.8 | 3391.0 | 2973.4 | 2624.3 | 2372.9 | 2219.1 |
| 15° | 6481.1 | 5965.9 | 5032.0 | 4374.2 | 3936.5 | 3433.6 | 2908.3 | 2431.3 | 2044.0 | 1816.1 | 1678.1 |
| 17.5° | 6677.5 | 6078.1 | 5017.4 | 4155.3 | 3543.6 | 2918.4 | 2338.1 | 1774.6 | 1409.8 | 1237.0 | 1148.3 |
| 20° | 7175.9 | 6435.1 | 5011.8 | 3887.1 | 3076.7 | 2307.8 | 1583.8 | 1167.4 | 946.2 | 849.7 | 808.2 |
| 22.5° | 7880.8 | 6890.8 | 5056.7 | 3622.2 | 2590.6 | 1648.9 | 1093.3 | 857.6 | 744.2 | 692.6 | 669.0 |
| 25° | 8787.7 | 7530.6 | 5183.5 | 3382.0 | 2133.8 | 1230.2 | 851.9 | 718.4 | 638.7 | 598.3 | 581.4 |
| 27.5° | 9754.2 | 8266.9 | 5381.1 | 3173.2 | 1762.3 | 981.0 | 729.6 | 615.1 | 557.9 | 529.8 | 514.1 |
| 30° | 10551.1 | 9120.0 | 5580.9 | 2940.8 | 1492.9 | 855.3 | 667.9 | 561.2 | 495.0 | 477.0 | 462.5 |
| 32.5° | 11248.2 | 9765.4 | 5722.3 | 2730.9 | 1316.6 | 759.9 | 603.9 | 501.7 | 456.8 | 422.0 | 406.3 |
| 35° | 11969.9 | 10303.1 | 5717.8 | 2583.9 | 1195.4 | 688.1 | 550.0 | 449.0 | 395.1 | 354.7 | 342.4 |
| 37.5° | 12751.2 | 10910.3 | 5620.2 | 2458.2 | 1142.7 | 630.8 | 519.7 | 420.9 | 367.0 | 326.6 | 310.9 |
| 40° | 13666.0 | 11547.9 | 5520.3 | 2340.3 | 1128.1 | 584.8 | 498.4 | 398.5 | 341.2 | 301.9 | 286.2 |
| 42.5° | 14557.2 | 12122.6 | 5432.7 | 2252.8 | 1065.2 | 583.7 | 479.3 | 381.6 | 321.0 | 282.9 | 264.9 |
| 45° | 15270.0 | 12658.0 | 5415.9 | 2200.0 | 999.0 | 603.9 | 469.2 | 370.4 | 305.3 | 267.1 | 250.3 |
| 47.5° | 15862.6 | 13239.4 | 5523.6 | 2163.0 | 936.1 | 551.1 | 493.9 | 362.6 | 290.7 | 253.7 | 234.6 |
| 50° | 16567.5 | 13953.3 | 5777.3 | 2102.4 | 869.9 | 496.1 | 565.7 | 364.8 | 278.4 | 240.2 | 220.0 |
| 52.5° | 17550.8 | 14941.1 | 6150.0 | 2000.2 | 779.0 | 445.6 | 556.7 | 367.0 | 264.9 | 225.6 | 205.4 |
| 55° | 18653.1 | 16174.7 | 6550.7 | 1830.7 | 652.1 | 379.4 | 477.0 | 351.3 | 239.1 | 209.9 | 190.8 |
| 57.5° | 19811.4 | 17293.8 | 6788.6 | 1628.7 | 518.6 | 327.8 | 381.6 | 319.9 | 211.0 | 188.6 | 176.2 |
| 60° | 19993.3 | 17719.2 | 6679.8 | 1380.6 | 411.9 | 285.1 | 282.9 | 325.5 | 188.6 | 166.1 | 157.1 |
| 62.5° | 19540.9 | 17184.9 | 6153.3 | 1159.5 | 344.6 | 250.3 | 232.3 | 284.0 | 170.6 | 148.2 | 139.2 |
| 65° | 18671.0 | 15740.3 | 5300.3 | 1045.0 | 319.9 | 214.4 | 193.1 | 199.8 | 149.3 | 129.1 | 121.2 |
| 67.5° | 17461.0 | 13811.9 | 4351.8 | 979.9 | 316.5 | 184.1 | 165.0 | 151.5 | 129.1 | 112.2 | 105.5 |
| 70° | 14987.1 | 11506.3 | 3471.8 | 944.0 | 307.6 | 154.9 | 139.2 | 123.5 | 107.8 | 95.4 | 89.8 |
| 72.5° | 11030.4 | 8153.6 | 2700.6 | 904.7 | 309.8 | 123.5 | 121.2 | 102.1 | 86.4 | 74.1 | 71.8 |
| 75° | 6373.3 | 4658.2 | 1771.2 | 733.0 | 295.2 | 95.4 | 101.0 | 71.8 | 60.6 | 51.6 | 51.6 |
| 77.5° | 3396.6 | 2840.9 | 674.6 | 305.3 | 107.8 | 60.6 | 57.2 | 42.7 | 38.2 | 31.4 | 30.3 |
| 80° | 1480.5 | 1250.4 | 203.2 | 85.3 | 59.5 | 32.6 | 21.3 | 19.1 | 16.8 | 13.5 | 12.3 |
| 82.5° | 524.2 | 452.4 | 66.2 | 41.5 | 25.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 119.0 | 85.3 | 0.0 | 10.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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: NVN-SA4D-760-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

| | 185° | 195° | 205° | 215° | 225° | 235° | 245° | 255° | 265° | 270° | 275° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 |
| 2.5° | 6742.6 | 6717.9 | 6572.0 | 6577.6 | 6603.4 | 6640.5 | 6552.9 | 6593.3 | 6702.2 | 6806.6 | 6845.9 |
| 5° | 5213.8 | 5219.4 | 5130.8 | 5185.8 | 5235.2 | 5268.8 | 5127.4 | 5129.6 | 5216.1 | 5333.9 | 5395.7 |
| 7.5° | 3673.8 | 3664.8 | 3669.3 | 3800.7 | 3893.8 | 3826.5 | 3879.2 | 3696.3 | 3707.5 | 3791.7 | 3728.8 |
| 10° | 2730.9 | 2607.5 | 2537.9 | 2636.7 | 2738.8 | 2701.8 | 2610.8 | 2551.4 | 2592.9 | 2686.0 | 2679.3 |
| 12.5° | 2146.1 | 1968.8 | 1864.4 | 1793.7 | 1877.9 | 1808.3 | 1806.0 | 1754.4 | 1698.3 | 1708.4 | 1857.7 |
| 15° | 1614.1 | 1485.0 | 1361.5 | 1248.2 | 1245.9 | 1222.4 | 1102.3 | 967.6 | 956.3 | 963.1 | 1040.5 |
| 17.5° | 1110.1 | 1066.3 | 1015.8 | 918.2 | 892.4 | 793.6 | 676.8 | 623.0 | 596.0 | 608.4 | 634.2 |
| 20° | 780.1 | 763.3 | 768.9 | 716.1 | 679.1 | 584.8 | 516.3 | 495.0 | 490.5 | 502.9 | 515.2 |
| 22.5° | 646.5 | 616.2 | 612.9 | 589.3 | 552.3 | 483.8 | 446.7 | 434.4 | 428.8 | 440.0 | 449.0 |
| 25° | 565.7 | 535.4 | 523.1 | 508.5 | 469.2 | 422.0 | 399.6 | 388.4 | 382.8 | 389.5 | 395.1 |
| 27.5° | 498.4 | 470.3 | 459.1 | 449.0 | 410.8 | 377.1 | 359.2 | 349.1 | 344.6 | 346.8 | 352.5 |
| 30° | 447.9 | 423.2 | 408.6 | 396.2 | 363.7 | 340.1 | 324.4 | 314.3 | 309.8 | 309.8 | 315.4 |
| 32.5° | 395.1 | 381.6 | 368.2 | 352.5 | 322.1 | 306.4 | 290.7 | 279.5 | 275.0 | 276.1 | 280.6 |
| 35° | 328.9 | 324.4 | 327.8 | 313.2 | 287.3 | 273.9 | 258.2 | 245.8 | 242.5 | 243.6 | 248.1 |
| 37.5° | 291.8 | 271.6 | 284.0 | 276.1 | 261.5 | 243.6 | 223.4 | 212.1 | 206.5 | 209.9 | 212.1 |
| 40° | 268.3 | 243.6 | 234.6 | 242.5 | 240.2 | 211.0 | 193.1 | 181.8 | 177.3 | 178.5 | 180.7 |
| 42.5° | 248.1 | 218.9 | 198.7 | 197.6 | 211.0 | 184.1 | 165.0 | 154.9 | 149.3 | 149.3 | 151.5 |
| 45° | 229.0 | 197.6 | 172.9 | 153.8 | 177.3 | 156.0 | 138.1 | 129.1 | 122.3 | 122.3 | 123.5 |
| 47.5° | 214.4 | 179.6 | 150.4 | 125.7 | 133.6 | 128.0 | 113.4 | 104.4 | 97.7 | 97.7 | 98.8 |
| 50° | 200.9 | 161.6 | 130.2 | 105.5 | 99.9 | 105.5 | 92.0 | 81.9 | 77.4 | 76.3 | 78.6 |
| 52.5° | 186.3 | 143.7 | 111.1 | 89.8 | 78.6 | 79.7 | 71.8 | 65.1 | 59.5 | 59.5 | 61.7 |
| 55° | 171.7 | 129.1 | 96.5 | 76.3 | 65.1 | 59.5 | 57.2 | 52.8 | 48.3 | 48.3 | 50.5 |
| 57.5° | 157.1 | 113.4 | 81.9 | 62.9 | 51.6 | 47.1 | 47.1 | 43.8 | 40.4 | 40.4 | 42.7 |
| 60° | 143.7 | 97.7 | 67.3 | 51.6 | 40.4 | 39.3 | 40.4 | 37.0 | 34.8 | 34.8 | 37.0 |
| 62.5° | 128.0 | 83.1 | 55.0 | 42.7 | 32.6 | 31.4 | 34.8 | 32.6 | 30.3 | 30.3 | 32.6 |
| 65° | 108.9 | 70.7 | 43.8 | 32.6 | 24.7 | 24.7 | 29.2 | 26.9 | 24.7 | 24.7 | 26.9 |
| 67.5° | 92.0 | 59.5 | 33.7 | 23.6 | 18.0 | 19.1 | 24.7 | 22.4 | 21.3 | 21.3 | 23.6 |
| 70° | 76.3 | 46.0 | 23.6 | 14.6 | 10.1 | 14.6 | 19.1 | 19.1 | 19.1 | 19.1 | 21.3 |
| 72.5° | 57.2 | 31.4 | 13.5 | 5.6 | 4.5 | 10.1 | 15.7 | 18.0 | 16.8 | 16.8 | 20.2 |
| 75° | 37.0 | 18.0 | 4.5 | 0.0 | 0.0 | 5.6 | 12.3 | 14.6 | 14.6 | 13.5 | 16.8 |
| 77.5° | 21.3 | 5.6 | 0.0 | 0.0 | 0.0 | 0.0 | 7.9 | 6.7 | 5.6 | 4.5 | 7.9 |
| 80° | 5.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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: P363938
 CATALOG NUMBER: NVN-SA4D-760-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

| | 285° | 295° | 305° | 315° | 325° | 335° | 345° | 355° | 359° | 360° |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0° | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 | 7949.3 |
| 2.5° | 7004.2 | 7136.6 | 7322.9 | 7520.5 | 7824.7 | 8066.0 | 8302.8 | 8506.0 | 8584.6 | 8617.1 |
| 5° | 5543.8 | 5738.0 | 6010.8 | 6361.0 | 6909.9 | 7403.8 | 7904.4 | 8408.4 | 8627.2 | 8682.2 |
| 7.5° | 3978.0 | 4226.1 | 4572.9 | 5011.8 | 5655.0 | 6294.8 | 6994.1 | 7733.8 | 8072.7 | 8158.0 |
| 10° | 2944.2 | 3247.3 | 3644.6 | 4107.1 | 4721.1 | 5378.8 | 6141.0 | 6986.2 | 7373.4 | 7486.8 |
| 12.5° | 2088.9 | 2498.6 | 3030.6 | 3593.0 | 4125.0 | 4712.1 | 5483.2 | 6414.9 | 6821.2 | 6943.5 |
| 15° | 1226.8 | 1623.1 | 2252.8 | 3005.9 | 3687.3 | 4282.2 | 5065.7 | 6121.9 | 6569.8 | 6693.2 |
| 17.5° | 703.8 | 901.3 | 1377.3 | 2216.9 | 3141.8 | 3965.7 | 4934.3 | 6194.9 | 6722.4 | 6836.9 |
| 20° | 537.7 | 600.5 | 793.6 | 1427.8 | 2504.2 | 3654.7 | 4934.3 | 6607.9 | 7257.8 | 7426.2 |
| 22.5° | 470.3 | 516.3 | 594.9 | 851.9 | 1843.1 | 3321.4 | 4991.6 | 7205.1 | 8054.8 | 8241.1 |
| 25° | 417.6 | 459.1 | 526.4 | 640.9 | 1257.2 | 2925.1 | 5127.4 | 7938.0 | 8993.2 | 9234.5 |
| 27.5° | 373.8 | 413.1 | 473.7 | 561.2 | 859.8 | 2447.0 | 5310.4 | 8797.8 | 10028.1 | 10221.1 |
| 30° | 334.5 | 371.5 | 426.5 | 488.3 | 663.4 | 1904.8 | 5466.4 | 9608.3 | 10840.7 | 11048.4 |
| 32.5° | 297.5 | 331.1 | 380.5 | 426.5 | 543.3 | 1408.7 | 5483.2 | 10250.3 | 11515.3 | 11721.9 |
| 35° | 262.7 | 293.0 | 337.9 | 373.8 | 450.1 | 1112.4 | 5221.7 | 10807.1 | 12189.9 | 12462.7 |
| 37.5° | 229.0 | 258.2 | 297.5 | 324.4 | 396.2 | 906.9 | 4822.1 | 11427.8 | 13055.3 | 13307.9 |
| 40° | 197.6 | 223.4 | 263.8 | 281.7 | 374.9 | 697.0 | 4387.7 | 12078.8 | 13903.9 | 14135.1 |
| 42.5° | 168.4 | 193.1 | 232.3 | 267.1 | 328.9 | 520.8 | 3918.5 | 12689.4 | 14667.2 | 14909.6 |
| 45° | 140.3 | 166.1 | 205.4 | 282.9 | 272.8 | 389.5 | 3416.8 | 13094.6 | 15270.0 | 15533.7 |
| 47.5° | 113.4 | 142.6 | 196.4 | 269.4 | 217.8 | 286.2 | 3019.4 | 13478.5 | 15726.8 | 15987.2 |
| 50° | 90.9 | 120.1 | 221.1 | 240.2 | 178.5 | 218.9 | 2853.3 | 13822.0 | 16026.5 | 16276.8 |
| 52.5° | 74.1 | 101.0 | 208.8 | 184.1 | 149.3 | 180.7 | 2943.1 | 14378.7 | 16303.7 | 16460.9 |
| 55° | 61.7 | 79.7 | 125.7 | 128.0 | 126.8 | 153.8 | 3054.2 | 15177.9 | 17021.0 | 17095.1 |
| 57.5° | 53.9 | 64.0 | 87.6 | 98.8 | 106.6 | 136.9 | 3056.5 | 16325.1 | 18131.1 | 18177.1 |
| 60° | 46.0 | 56.1 | 73.0 | 79.7 | 92.0 | 122.3 | 2945.3 | 16725.8 | 18567.7 | 18720.4 |
| 62.5° | 40.4 | 49.4 | 60.6 | 66.2 | 77.4 | 110.0 | 2684.9 | 16145.5 | 17968.4 | 18227.6 |
| 65° | 35.9 | 44.9 | 50.5 | 56.1 | 68.5 | 98.8 | 2256.1 | 14984.9 | 16973.9 | 17244.4 |
| 67.5° | 31.4 | 39.3 | 44.9 | 50.5 | 61.7 | 87.6 | 1661.2 | 13636.8 | 15832.3 | 16056.8 |
| 70° | 28.1 | 34.8 | 40.4 | 44.9 | 53.9 | 74.1 | 1008.0 | 11571.4 | 14254.1 | 14347.3 |
| 72.5° | 26.9 | 31.4 | 37.0 | 40.4 | 47.1 | 65.1 | 510.7 | 8503.8 | 11395.2 | 11546.8 |
| 75° | 23.6 | 28.1 | 33.7 | 35.9 | 41.5 | 56.1 | 207.7 | 5585.4 | 8257.9 | 8501.5 |
| 77.5° | 19.1 | 25.8 | 30.3 | 32.6 | 35.9 | 46.0 | 105.5 | 3569.4 | 5795.3 | 5952.4 |
| 80° | 6.7 | 19.1 | 25.8 | 26.9 | 30.3 | 33.7 | 69.6 | 1954.2 | 3361.8 | 3429.1 |
| 82.5° | 0.0 | 12.3 | 20.2 | 19.1 | 21.3 | 25.8 | 44.9 | 929.4 | 2219.1 | 2243.8 |
| 85° | 0.0 | 5.6 | 15.7 | 12.3 | 9.0 | 18.0 | 15.7 | 203.2 | 1164.0 | 1212.3 |
| 87.5° | 0.0 | 0.0 | 1.1 | 5.6 | 4.5 | 6.7 | 2.2 | 1.1 | 105.5 | 133.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



LM-79-2008: Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGRAW-EDISON

Report Number: SP1-1908-441-9-R4

Test Date: 10/23/2019

Luminaire Tested: SA1C-760-U-5WQ

Data in this report applies to families of products SA1C-760-U-5WQ .

Test Information

Test Method: LM-79-2008
 Report Number: SP1-1908-441-9-R4
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 10/28/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: McGRAW-EDISON
 Catalog Number: **SA1C-760-U-5WQ**
 Description: McGRAW EDISON ROADWAY AND AREA LUMINAIRE

THIS IS A REVISION OF SP1-1908-441-4-R3. TO UPDATE THE CATALOG INFORMATION.TESTED IN SITU. ROADWAY AND AREA LUMINAIRE. (1) 70 CRI, 5000K, 1050MA LIGHTSQUARE WITH 16 LEDS AND TYPE V WIDE OPTICS.

Spectral Parameters

CCT (K): 5474
 CIE u': 0.2052
 CIE v': 0.4804
 Duv: 0.0025
 CIE x: 0.3330
 CIE y: 0.3466
 CIE z: 0.3204
 Peak Wavelength (nm): 442
 Dominant Wavelength (nm): 554
 Purity: 4.1

| | | | |
|-----------|------|------|-------|
| CRI (Ra): | 71.7 | | |
| R1: | 70.6 | R9: | -27.1 |
| R2: | 74.6 | R10: | 40.8 |
| R3: | 78.3 | R11: | 74.6 |
| R4: | 73.8 | R12: | 50.4 |
| R5: | 72.4 | R13: | 70.0 |
| R6: | 67.5 | R14: | 87.8 |
| R7: | 77.5 | | |
| R8: | 58.9 | | |

Rf: 72.1
 Rg: 97.2



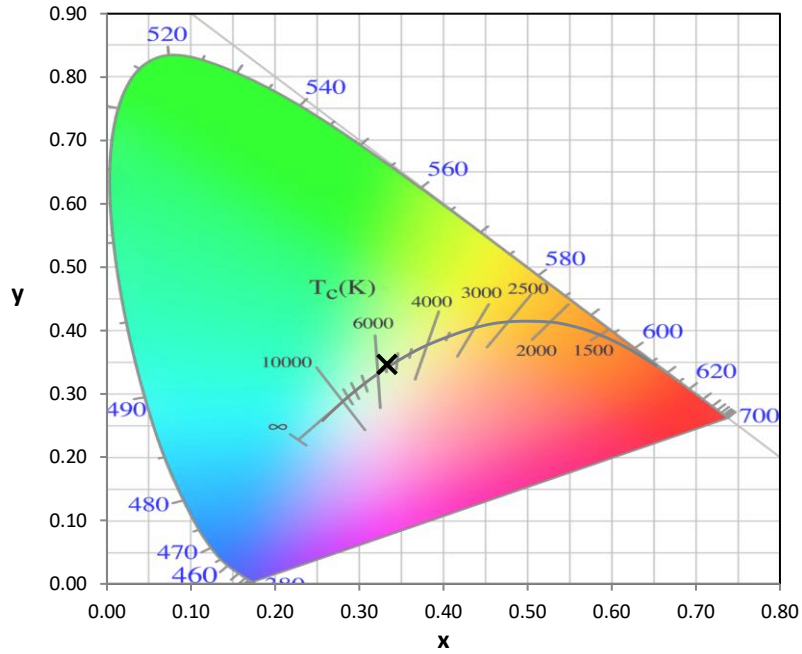
Test Conditions
 Stabilization Time: 240M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 24.6/31%
 Sphere Temperature (°C): 25.9

REPORT NUMBER: SP1-1908-441-9-R4

| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/28/2019 | 12/28/2019 |
| Power Meter | IN0071 | 12/5/2018 | 12/5/2019 |
| AC Power Source | IN0063 | 12/5/2018 | 12/5/2019 |
| DC Power Source | IN0208 | 12/5/2018 | 12/5/2019 |
| Sphere Thermometer | IN0085 | 12/5/2018 | 12/5/2019 |
| Room Thermometer | IN0046 | 12/5/2018 | 12/5/2019 |

REPORT NUMBER: SP1-1908-441-9-R4

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5700K 4-step quadrangle

REPORT NUMBER: SP1-1908-441-9-R4

Photopic Flux vs. Wavelength



#####

| λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360 | 3540 | NR | 490 | 33363 | NR | 620 | 80193 | NR | 750 | 4663 | NR | 880 | 4678 | NR |
| 365 | 2862 | NR | 495 | 44177 | NR | 625 | 73091 | NR | 755 | 4147 | NR | 885 | 4128 | NR |
| 370 | 2865 | NR | 500 | 57019 | NR | 630 | 66269 | NR | 760 | 4040 | NR | 890 | 4504 | NR |
| 375 | 3254 | NR | 505 | 70030 | NR | 635 | 60012 | NR | 765 | 3474 | NR | 895 | 4371 | NR |
| 380 | 3076 | NR | 510 | 81972 | NR | 640 | 53914 | NR | 770 | 3469 | NR | 900 | 4082 | NR |
| 385 | 2904 | NR | 515 | 92590 | NR | 645 | 48385 | NR | 775 | 3181 | NR | 905 | 2982 | NR |
| 390 | 2689 | NR | 520 | 100305 | NR | 650 | 43219 | NR | 780 | 2969 | NR | 910 | 4351 | NR |
| 395 | 2619 | NR | 525 | 107452 | NR | 655 | 38562 | NR | 785 | 3132 | NR | 915 | 3365 | NR |
| 400 | 2679 | NR | 530 | 111373 | NR | 660 | 34110 | NR | 790 | 2507 | NR | 920 | 3430 | NR |
| 405 | 3515 | NR | 535 | 114505 | NR | 665 | 30085 | NR | 795 | 2968 | NR | 925 | 4264 | NR |
| 410 | 6934 | NR | 540 | 116408 | NR | 670 | 26205 | NR | 800 | 2758 | NR | 930 | 4095 | NR |
| 415 | 14943 | NR | 545 | 118700 | NR | 675 | 22906 | NR | 805 | 2872 | NR | 935 | 5048 | NR |
| 420 | 31939 | NR | 550 | 119209 | NR | 680 | 20058 | NR | 810 | 3094 | NR | 940 | 4074 | NR |
| 425 | 64701 | NR | 555 | 120742 | NR | 685 | 17413 | NR | 815 | 3222 | NR | 945 | 4949 | NR |
| 430 | 110939 | NR | 560 | 121594 | NR | 690 | 15447 | NR | 820 | 3238 | NR | 950 | 4387 | NR |
| 435 | 164597 | NR | 565 | 121913 | NR | 695 | 13398 | NR | 825 | 3524 | NR | 955 | 4978 | NR |
| 440 | 207696 | NR | 570 | 122147 | NR | 700 | 11777 | NR | 830 | 2921 | NR | 960 | 4706 | NR |
| 445 | 201830 | NR | 575 | 121605 | NR | 705 | 10412 | NR | 835 | 3595 | NR | 965 | 5083 | NR |
| 450 | 145410 | NR | 580 | 120248 | NR | 710 | 9544 | NR | 840 | 3016 | NR | 970 | 4522 | NR |
| 455 | 89594 | NR | 585 | 117717 | NR | 715 | 8940 | NR | 845 | 4032 | NR | 975 | 4740 | NR |
| 460 | 58321 | NR | 590 | 114359 | NR | 720 | 7897 | NR | 850 | 3579 | NR | 980 | 6122 | NR |
| 465 | 39318 | NR | 595 | 109974 | NR | 725 | 7045 | NR | 855 | 4571 | NR | 985 | 6450 | NR |
| 470 | 27693 | NR | 600 | 105269 | NR | 730 | 6483 | NR | 860 | 4485 | NR | 990 | 4875 | NR |
| 475 | 23081 | NR | 605 | 99453 | NR | 735 | 5838 | NR | 865 | 3978 | NR | 995 | 4764 | NR |
| 480 | 23002 | NR | 610 | 92921 | NR | 740 | 5261 | NR | 870 | 4298 | NR | 1000 | 3640 | NR |
| 485 | 26201 | NR | 615 | 86989 | NR | 745 | 4760 | NR | 875 | 4356 | NR | | | |

REPORT NUMBER: SP1-1908-441-9-R4

Scotopic Flux vs. Wavelength



Scotopic Lumens: 13759.3 S/P: 1.85

| λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360 | 3540 | NR | 490 | 33363 | NR | 620 | 80193 | NR | 750 | 4663 | NR | 880 | 4678 | NR |
| 365 | 2862 | NR | 495 | 44177 | NR | 625 | 73091 | NR | 755 | 4147 | NR | 885 | 4128 | NR |
| 370 | 2865 | NR | 500 | 57019 | NR | 630 | 66269 | NR | 760 | 4040 | NR | 890 | 4504 | NR |
| 375 | 3254 | NR | 505 | 70030 | NR | 635 | 60012 | NR | 765 | 3474 | NR | 895 | 4371 | NR |
| 380 | 3076 | NR | 510 | 81972 | NR | 640 | 53914 | NR | 770 | 3469 | NR | 900 | 4082 | NR |
| 385 | 2904 | NR | 515 | 92590 | NR | 645 | 48385 | NR | 775 | 3181 | NR | 905 | 2982 | NR |
| 390 | 2689 | NR | 520 | 100305 | NR | 650 | 43219 | NR | 780 | 2969 | NR | 910 | 4351 | NR |
| 395 | 2619 | NR | 525 | 107452 | NR | 655 | 38562 | NR | 785 | 3132 | NR | 915 | 3365 | NR |
| 400 | 2679 | NR | 530 | 111373 | NR | 660 | 34110 | NR | 790 | 2507 | NR | 920 | 3430 | NR |
| 405 | 3515 | NR | 535 | 114505 | NR | 665 | 30085 | NR | 795 | 2968 | NR | 925 | 4264 | NR |
| 410 | 6934 | NR | 540 | 116408 | NR | 670 | 26205 | NR | 800 | 2758 | NR | 930 | 4095 | NR |
| 415 | 14943 | NR | 545 | 118700 | NR | 675 | 22906 | NR | 805 | 2872 | NR | 935 | 5048 | NR |
| 420 | 31939 | NR | 550 | 119209 | NR | 680 | 20058 | NR | 810 | 3094 | NR | 940 | 4074 | NR |
| 425 | 64701 | NR | 555 | 120742 | NR | 685 | 17413 | NR | 815 | 3222 | NR | 945 | 4949 | NR |
| 430 | 110939 | NR | 560 | 121594 | NR | 690 | 15447 | NR | 820 | 3238 | NR | 950 | 4387 | NR |
| 435 | 164597 | NR | 565 | 121913 | NR | 695 | 13398 | NR | 825 | 3524 | NR | 955 | 4978 | NR |
| 440 | 207696 | NR | 570 | 122147 | NR | 700 | 11777 | NR | 830 | 2921 | NR | 960 | 4706 | NR |
| 445 | 201830 | NR | 575 | 121605 | NR | 705 | 10412 | NR | 835 | 3595 | NR | 965 | 5083 | NR |
| 450 | 145410 | NR | 580 | 120248 | NR | 710 | 9544 | NR | 840 | 3016 | NR | 970 | 4522 | NR |
| 455 | 89594 | NR | 585 | 117717 | NR | 715 | 8940 | NR | 845 | 4032 | NR | 975 | 4740 | NR |
| 460 | 58321 | NR | 590 | 114359 | NR | 720 | 7897 | NR | 850 | 3579 | NR | 980 | 6122 | NR |
| 465 | 39318 | NR | 595 | 109974 | NR | 725 | 7045 | NR | 855 | 4571 | NR | 985 | 6450 | NR |
| 470 | 27693 | NR | 600 | 105269 | NR | 730 | 6483 | NR | 860 | 4485 | NR | 990 | 4875 | NR |
| 475 | 23081 | NR | 605 | 99453 | NR | 735 | 5838 | NR | 865 | 3978 | NR | 995 | 4764 | NR |
| 480 | 23002 | NR | 610 | 92921 | NR | 740 | 5261 | NR | 870 | 4298 | NR | 1000 | 3640 | NR |
| 485 | 26201 | NR | 615 | 86989 | NR | 745 | 4760 | NR | 875 | 4356 | NR | | | |

REPORT NUMBER: SP1-1908-441-9-R4

Melanopic Flux vs. Wavelength



Melanopic Lumens: 5527.6 M/P: 0.74

| λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360 | 3540 | NR | 490 | 33363 | NR | 620 | 80193 | NR | 750 | 4663 | NR | 880 | 4678 | NR |
| 365 | 2862 | NR | 495 | 44177 | NR | 625 | 73091 | NR | 755 | 4147 | NR | 885 | 4128 | NR |
| 370 | 2865 | NR | 500 | 57019 | NR | 630 | 66269 | NR | 760 | 4040 | NR | 890 | 4504 | NR |
| 375 | 3254 | NR | 505 | 70030 | NR | 635 | 60012 | NR | 765 | 3474 | NR | 895 | 4371 | NR |
| 380 | 3076 | NR | 510 | 81972 | NR | 640 | 53914 | NR | 770 | 3469 | NR | 900 | 4082 | NR |
| 385 | 2904 | NR | 515 | 92590 | NR | 645 | 48385 | NR | 775 | 3181 | NR | 905 | 2982 | NR |
| 390 | 2689 | NR | 520 | 100305 | NR | 650 | 43219 | NR | 780 | 2969 | NR | 910 | 4351 | NR |
| 395 | 2619 | NR | 525 | 107452 | NR | 655 | 38562 | NR | 785 | 3132 | NR | 915 | 3365 | NR |
| 400 | 2679 | NR | 530 | 111373 | NR | 660 | 34110 | NR | 790 | 2507 | NR | 920 | 3430 | NR |
| 405 | 3515 | NR | 535 | 114505 | NR | 665 | 30085 | NR | 795 | 2968 | NR | 925 | 4264 | NR |
| 410 | 6934 | NR | 540 | 116408 | NR | 670 | 26205 | NR | 800 | 2758 | NR | 930 | 4095 | NR |
| 415 | 14943 | NR | 545 | 118700 | NR | 675 | 22906 | NR | 805 | 2872 | NR | 935 | 5048 | NR |
| 420 | 31939 | NR | 550 | 119209 | NR | 680 | 20058 | NR | 810 | 3094 | NR | 940 | 4074 | NR |
| 425 | 64701 | NR | 555 | 120742 | NR | 685 | 17413 | NR | 815 | 3222 | NR | 945 | 4949 | NR |
| 430 | 110939 | NR | 560 | 121594 | NR | 690 | 15447 | NR | 820 | 3238 | NR | 950 | 4387 | NR |
| 435 | 164597 | NR | 565 | 121913 | NR | 695 | 13398 | NR | 825 | 3524 | NR | 955 | 4978 | NR |
| 440 | 207696 | NR | 570 | 122147 | NR | 700 | 11777 | NR | 830 | 2921 | NR | 960 | 4706 | NR |
| 445 | 201830 | NR | 575 | 121605 | NR | 705 | 10412 | NR | 835 | 3595 | NR | 965 | 5083 | NR |
| 450 | 145410 | NR | 580 | 120248 | NR | 710 | 9544 | NR | 840 | 3016 | NR | 970 | 4522 | NR |
| 455 | 89594 | NR | 585 | 117717 | NR | 715 | 8940 | NR | 845 | 4032 | NR | 975 | 4740 | NR |
| 460 | 58321 | NR | 590 | 114359 | NR | 720 | 7897 | NR | 850 | 3579 | NR | 980 | 6122 | NR |
| 465 | 39318 | NR | 595 | 109974 | NR | 725 | 7045 | NR | 855 | 4571 | NR | 985 | 6450 | NR |
| 470 | 27693 | NR | 600 | 105269 | NR | 730 | 6483 | NR | 860 | 4485 | NR | 990 | 4875 | NR |
| 475 | 23081 | NR | 605 | 99453 | NR | 735 | 5838 | NR | 865 | 3978 | NR | 995 | 4764 | NR |
| 480 | 23002 | NR | 610 | 92921 | NR | 740 | 5261 | NR | 870 | 4298 | NR | 1000 | 3640 | NR |
| 485 | 26201 | NR | 615 | 86989 | NR | 745 | 4760 | NR | 875 | 4356 | NR | | | |

REPORT NUMBER: SP1-1908-441-9-R4

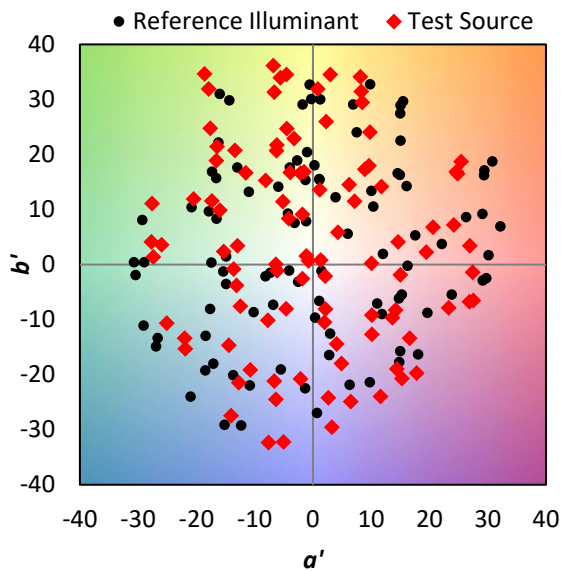
TM-30-18

Summary

$R_f = 72.1$
 $R_g = 97.2$
 CIE $R_a = 71.7$
 $R_g = -27.1$



Color Vector Graphics



REPORT NUMBER: SP1-1908-441-9-R4

TM-30-18

Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 54 | CES51 = 88 | CES76 = 43 |
| CES02 = 59 | CES27 = 79 | CES52 = 90 | CES77 = 64 |
| CES03 = 30 | CES28 = 77 | CES53 = 77 | CES78 = 46 |
| CES04 = 69 | CES29 = 50 | CES54 = 81 | CES79 = 74 |
| CES05 = 46 | CES30 = 59 | CES55 = 80 | CES80 = 70 |
| CES06 = 50 | CES31 = 55 | CES56 = 70 | CES81 = 71 |
| CES07 = 38 | CES32 = 52 | CES57 = 68 | CES82 = 88 |
| CES08 = 38 | CES33 = 63 | CES58 = 70 | CES83 = 82 |
| CES09 = 29 | CES34 = 63 | CES59 = 88 | CES84 = 87 |
| CES10 = 72 | CES35 = 79 | CES60 = 92 | CES85 = 84 |
| CES11 = 55 | CES36 = 90 | CES61 = 88 | CES86 = 76 |
| CES12 = 61 | CES37 = 72 | CES62 = 81 | CES87 = 75 |
| CES13 = 41 | CES38 = 68 | CES63 = 75 | CES88 = 77 |
| CES14 = 74 | CES39 = 91 | CES64 = 72 | CES89 = 76 |
| CES15 = 70 | CES40 = 83 | CES65 = 65 | CES90 = 76 |
| CES16 = 46 | CES41 = 84 | CES66 = 66 | CES91 = 92 |
| CES17 = 48 | CES42 = 70 | CES67 = 64 | CES92 = 70 |
| CES18 = 55 | CES43 = 69 | CES68 = 71 | CES93 = 83 |
| CES19 = 70 | CES44 = 98 | CES69 = 80 | CES94 = 60 |
| CES20 = 64 | CES45 = 79 | CES70 = 58 | CES95 = 73 |
| CES21 = 85 | CES46 = 78 | CES71 = 55 | CES96 = 79 |
| CES22 = 77 | CES47 = 76 | CES72 = 84 | CES97 = 84 |
| CES23 = 91 | CES48 = 68 | CES73 = 47 | CES98 = 73 |
| CES24 = 90 | CES49 = 78 | CES74 = 94 | CES99 = 62 |
| CES25 = 71 | CES50 = 87 | CES75 = 51 | |



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Measure Comparisons



(END OF REPORT)