

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: P579565

Luminaire Tested: **CST-CA8-480-750-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579565  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/18/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-480-750-U-T5N-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (8) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 56848 lumens  
Efficiency: N/A  
Efficacy: 118.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B5 - U2 - G5

Input Watts (W): 480.8  
Input Voltage (V): 120  
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: 24 FT

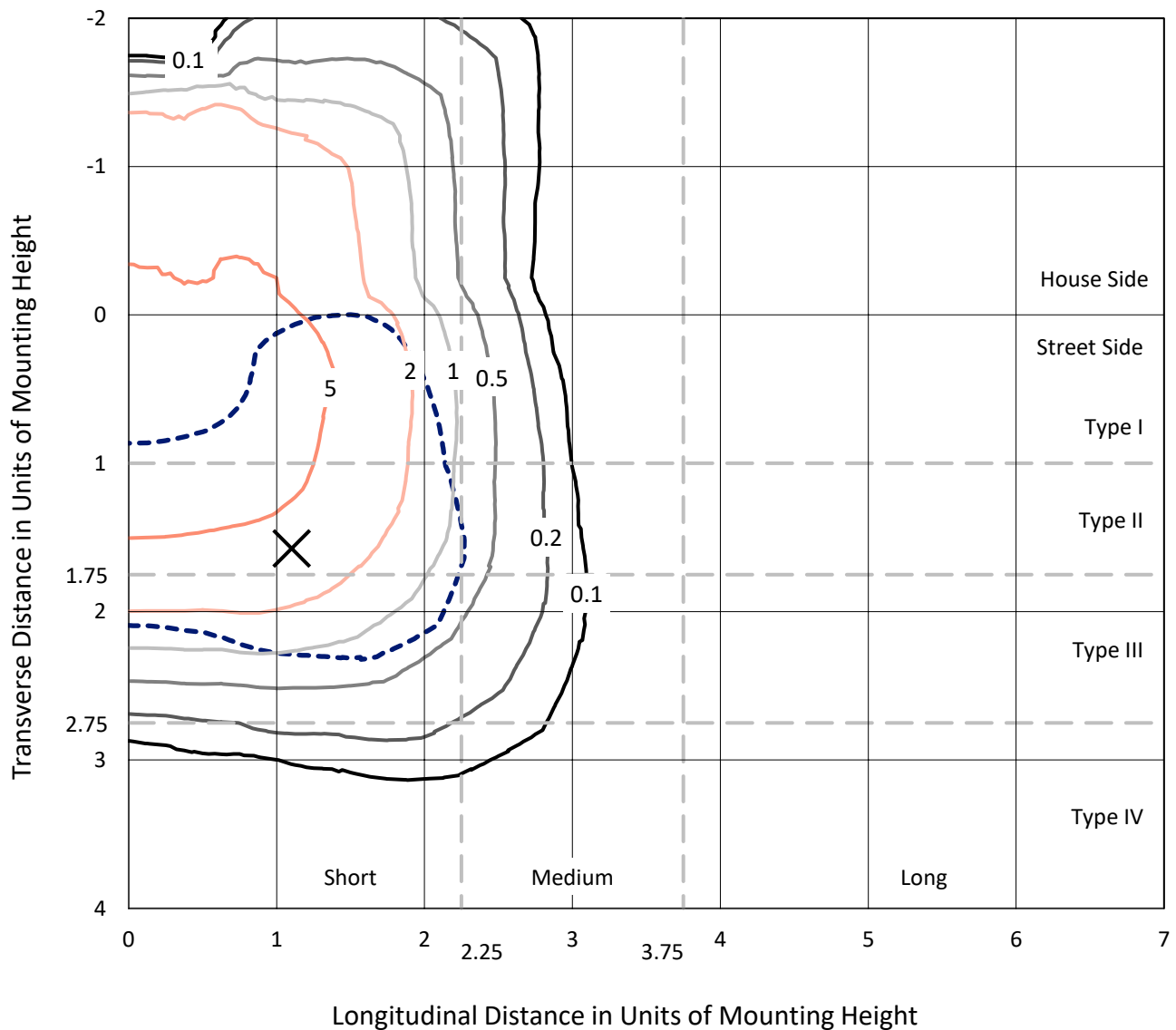


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## Iso-Footcandle Lines of Horizontal Illumination

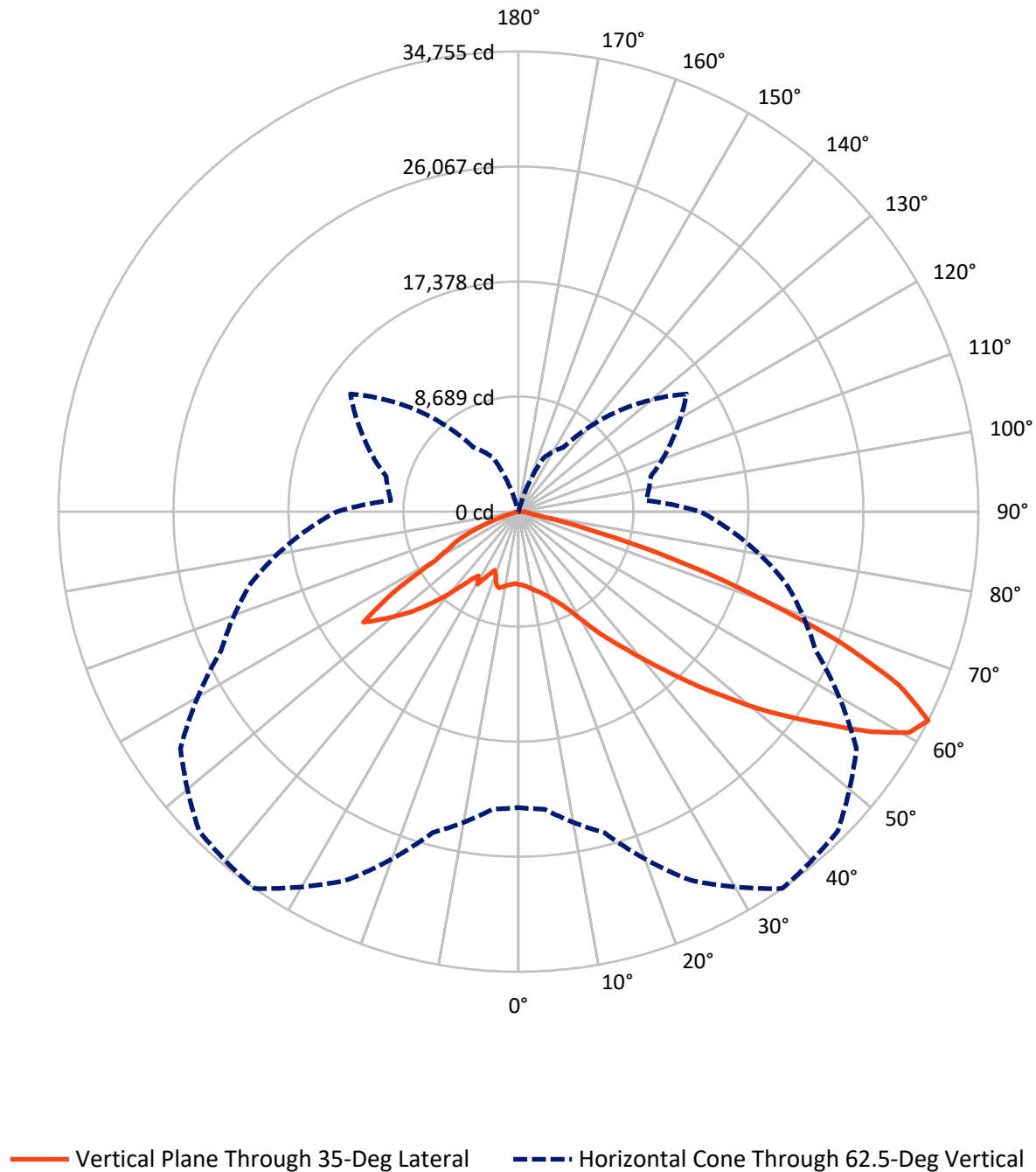
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.3 fc  
 Type III - Short - N/A

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## Luminous Intensity Polar Plot



REPORT NUMBER: P579565

CATALOG NUMBER: CST-CA8-480-750-U-T5N-HSS-HM-EX120

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 17984.3  | 0.0    | 17984.3 |
|                    | % Fixture | 31.6     | 0.0    | 31.6    |
| <b>Street Side</b> | Lumens    | 38831.3  | 32.4   | 38863.7 |
|                    | % Fixture | 68.3     | 0.1    | 68.4    |
| <b>Total</b>       | Lumens    | 56815.5  | 32.5   | 56848.0 |
|                    | % Fixture | 99.9     | 0.1    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 544.1   | 1.0       |
| 10°-20°   | 1749.5  | 3.1       |
| 20°-30°   | 3248.6  | 5.7       |
| 30°-40°   | 6404.8  | 11.3      |
| 40°-50°   | 11497.4 | 20.2      |
| 50°-60°   | 16712.7 | 29.4      |
| 60°-70°   | 13735.1 | 24.2      |
| 70°-80°   | 2610.8  | 4.6       |
| 80°-90°   | 312.5   | 0.5       |
| 90°-100°  | 29.6    | 0.1       |
| 100°-110° | 2.8     | 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°    | 56815.5 | 99.9      |
| 0°-180°   | 56848.0 | 100.0     |

**Coefficient of Utilization**



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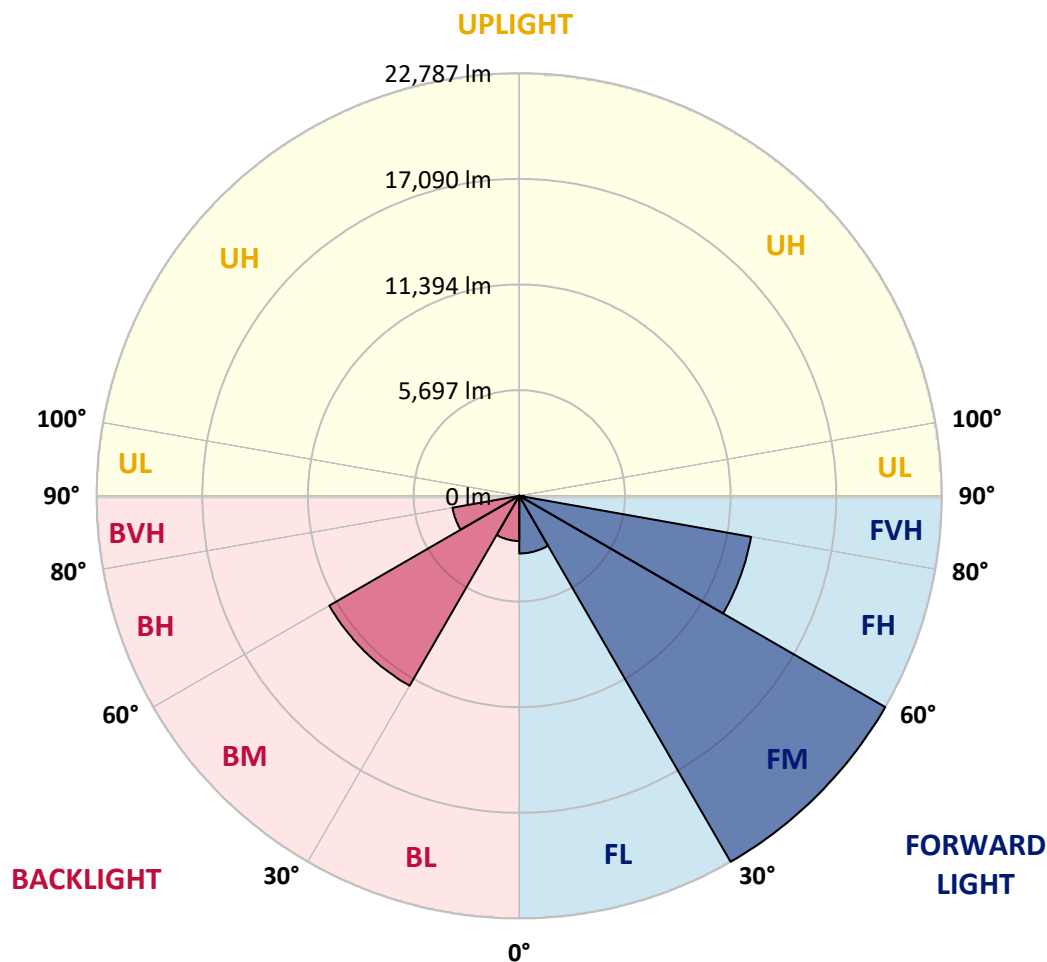
CATALOG NUMBER: CST-CA8-480-750-U-T5N-HSS-HM-EX120

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |       |         |
|------|-------------|---------|-----------|-------------------------|-------|---------|
|      |             |         |           | B                       | U     | G       |
| FL   | (0°-30°)    | 3107.1  | 5.5       |                         |       |         |
| FM   | (30°-60°)   | 22787.3 | 40.1      |                         |       |         |
| FH   | (60°-80°)   | 12689.8 | 22.3      |                         |       | G5      |
| FVH  | (80°-90°)   | 247.1   | 0.4       |                         |       | G3/500  |
| BL   | (0°-30°)    | 2435.1  | 4.3       | B3/2500                 |       |         |
| BM   | (30°-60°)   | 11827.6 | 20.8      | B5                      |       |         |
| BH   | (60°-80°)   | 3656.2  | 6.4       | B4/5000                 |       | G4/5000 |
| BVH  | (80°-90°)   | 65.4    | 0.1       |                         |       | G1/100  |
| UL   | (90°-100°)  | 29.6    | 0.1       |                         | U2/50 |         |
| UH   | (100°-180°) | 2.9     | 0.0       |                         | U1/10 |         |

**BUG Rating: B5-U2-G5**

Type III Short



REPORT NUMBER: P579565

CATALOG NUMBER: CST-CA8-480-750-U-T5N-HSS-HM-EX120

**CANDELA DISTRIBUTION (FULL):**

|        | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°     | 5518.0  | 5518.0  | 5518.0  | 5518.0  | 5518.0  | 5518.0  | 5518.0  | 5518.0  | 5518.0  | 5518.0  | 5518.0  |
| 2.5°   | 5658.9  | 5612.7  | 5617.3  | 5652.0  | 5548.0  | 5582.7  | 5534.2  | 5575.7  | 5557.3  | 5575.7  | 5587.3  |
| 5°     | 5772.2  | 5714.4  | 5712.1  | 5746.7  | 5663.6  | 5684.3  | 5628.9  | 5656.6  | 5631.2  | 5654.3  | 5654.3  |
| 7.5°   | 5910.8  | 5862.3  | 5850.7  | 5878.4  | 5804.5  | 5813.7  | 5758.3  | 5769.8  | 5739.8  | 5769.8  | 5746.7  |
| 10°    | 6084.1  | 6040.2  | 6021.7  | 6035.6  | 5968.6  | 5973.2  | 5913.1  | 5917.7  | 5873.8  | 5899.2  | 5880.8  |
| 12.5°  | 6266.6  | 6206.6  | 6197.3  | 6220.4  | 6151.1  | 6141.9  | 6091.0  | 6095.7  | 6047.1  | 6070.2  | 6056.4  |
| 15°    | 6456.1  | 6393.7  | 6396.0  | 6419.2  | 6349.8  | 6354.5  | 6301.3  | 6310.6  | 6262.0  | 6285.1  | 6266.6  |
| 17.5°  | 6708.0  | 6645.6  | 6641.0  | 6682.6  | 6624.8  | 6643.3  | 6587.8  | 6599.4  | 6564.7  | 6569.3  | 6548.6  |
| 20°    | 7068.5  | 6987.6  | 6971.4  | 7031.5  | 6955.2  | 6978.3  | 6948.3  | 6987.6  | 6973.7  | 6962.2  | 6946.0  |
| 22.5°  | 7498.3  | 7435.9  | 7403.5  | 7449.7  | 7359.6  | 7403.5  | 7419.7  | 7500.6  | 7521.4  | 7507.5  | 7253.3  |
| 25°    | 8073.6  | 8041.3  | 8008.9  | 7988.1  | 7879.5  | 7948.8  | 8032.0  | 8166.1  | 8253.9  | 8288.5  | 7935.0  |
| 27.5°  | 8850.0  | 8866.2  | 8725.2  | 8702.1  | 8579.7  | 8688.3  | 8838.5  | 9055.7  | 9233.6  | 9298.3  | 8822.3  |
| 30°    | 9848.2  | 9869.0  | 9677.3  | 9621.8  | 9547.9  | 9640.3  | 9919.9  | 10157.9 | 10421.3 | 10529.9 | 9894.5  |
| 32.5°  | 11174.6 | 11156.1 | 10874.2 | 10767.9 | 10700.9 | 10737.9 | 11031.3 | 11357.1 | 11652.9 | 11897.8 | 11116.8 |
| 35°    | 12794.4 | 12736.6 | 12436.2 | 12142.8 | 11877.1 | 11990.3 | 12205.2 | 12600.3 | 13048.6 | 13409.1 | 12323.0 |
| 37.5°  | 14675.3 | 14619.9 | 14162.3 | 13684.0 | 13159.5 | 13208.0 | 13399.8 | 14044.5 | 14622.2 | 14716.9 | 12117.4 |
| 40°    | 16618.6 | 16595.5 | 16163.4 | 15555.7 | 14740.0 | 14511.3 | 14765.4 | 15551.1 | 16161.1 | 14509.0 | 12595.7 |
| 42.5°  | 18559.6 | 18448.7 | 18206.1 | 17598.4 | 16512.3 | 16008.6 | 16350.6 | 17136.2 | 17792.5 | 15211.4 | 13704.8 |
| 45°    | 20516.8 | 20403.6 | 20197.9 | 19752.0 | 18622.0 | 17889.5 | 17988.9 | 18860.0 | 19453.9 | 16528.5 | 14860.2 |
| 47.5°  | 22254.5 | 22171.3 | 22023.4 | 21773.8 | 20766.4 | 20103.2 | 19911.4 | 20521.4 | 20925.8 | 17598.4 | 15747.5 |
| 50°    | 23751.8 | 23680.2 | 23737.9 | 23654.7 | 23359.0 | 22663.4 | 22030.3 | 21991.0 | 22185.1 | 18550.4 | 16563.2 |
| 52.5°  | 25068.9 | 24971.8 | 25219.1 | 25512.6 | 25785.2 | 25630.4 | 24098.4 | 23384.4 | 23208.8 | 19264.4 | 17110.8 |
| 55°    | 26157.2 | 26122.6 | 26547.8 | 27340.3 | 28377.8 | 28784.5 | 26309.7 | 24671.5 | 24123.8 | 19869.8 | 17161.6 |
| 57.5°  | 26808.9 | 26892.0 | 27790.9 | 29325.2 | 31354.0 | 31545.8 | 28897.7 | 26039.4 | 24930.3 | 20237.2 | 17404.3 |
| 60°    | 25695.1 | 25977.0 | 27594.5 | 30813.3 | 33886.6 | 33969.8 | 30757.9 | 26312.1 | 23874.3 | 18915.5 | 16108.0 |
| 62.5°  | 22358.4 | 22561.8 | 25105.9 | 30718.6 | 34755.4 | 34122.3 | 31173.8 | 24773.1 | 20923.5 | 16045.6 | 13700.2 |
| 65°    | 15798.3 | 16034.0 | 19100.3 | 27700.8 | 31619.8 | 31642.9 | 28555.8 | 21422.6 | 16724.9 | 12422.4 | 10578.4 |
| 67.5°  | 9529.4  | 9910.6  | 12815.2 | 20110.1 | 26034.8 | 26508.5 | 23823.4 | 16218.9 | 11969.5 | 8110.6  | 6846.6  |
| 70°    | 3126.4  | 3475.3  | 5850.7  | 11902.5 | 18767.6 | 20796.4 | 17891.8 | 10539.2 | 6250.5  | 3429.1  | 2761.3  |
| 72.5°  | 1238.5  | 1398.0  | 2061.2  | 5263.8  | 12094.3 | 13885.1 | 11024.4 | 5092.8  | 2098.1  | 910.4   | 792.6   |
| 75°    | 827.2   | 843.4   | 952.0   | 1793.1  | 5917.7  | 7593.0  | 5314.6  | 1481.2  | 778.7   | 568.4   | 499.1   |
| 77.5°  | 720.9   | 723.3   | 771.8   | 945.1   | 1927.1  | 2911.5  | 1529.7  | 794.9   | 644.7   | 466.8   | 413.6   |
| 80°    | 660.9   | 670.1   | 700.1   | 806.4   | 882.7   | 989.0   | 755.6   | 663.2   | 559.2   | 429.8   | 390.5   |
| 82.5°  | 633.1   | 640.1   | 658.6   | 730.2   | 714.0   | 741.7   | 610.0   | 526.8   | 471.4   | 395.1   | 374.3   |
| 85°    | 577.7   | 589.2   | 600.8   | 644.7   | 586.9   | 508.4   | 471.4   | 353.5   | 337.4   | 298.1   | 275.0   |
| 87.5°  | 436.7   | 434.4   | 422.9   | 429.8   | 392.8   | 321.2   | 265.7   | 198.7   | 161.7   | 134.0   | 110.9   |
| 90°    | 182.5   | 184.9   | 177.9   | 168.7   | 147.9   | 122.5   | 92.4    | 55.5    | 27.7    | 9.2     | 4.6     |
| 92.5°  | 138.6   | 141.0   | 136.3   | 122.5   | 106.3   | 85.5    | 62.4    | 32.3    | 18.5    | 6.9     | 2.3     |
| 95°    | 85.5    | 87.8    | 83.2    | 73.9    | 64.7    | 48.5    | 32.3    | 20.8    | 11.6    | 4.6     | 0.0     |
| 97.5°  | 50.8    | 53.1    | 48.5    | 43.9    | 34.7    | 23.1    | 18.5    | 13.9    | 9.2     | 4.6     | 0.0     |
| 100°   | 30.0    | 30.0    | 27.7    | 23.1    | 16.2    | 13.9    | 11.6    | 9.2     | 6.9     | 2.3     | 0.0     |
| 102.5° | 13.9    | 13.9    | 13.9    | 9.2     | 6.9     | 6.9     | 6.9     | 6.9     | 6.9     | 2.3     | 0.0     |
| 105°   | 4.6     | 4.6     | 2.3     | 2.3     | 2.3     | 4.6     | 4.6     | 4.6     | 4.6     | 2.3     | 0.0     |
| 107.5° | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 2.3     | 4.6     | 4.6     | 2.3     | 0.0     |
| 110°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 2.3     | 2.3     | 2.3     | 0.0     |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 5°  | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 135°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180°   | 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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**CANDELA DISTRIBUTION (continued):**

|        | 95°     | 105°    | 115°    | 125°    | 135°    | 145°    | 155°    | 165°    | 175°    | 180°    |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°     | 5518.0  | 5518.0  | 5518.0  | 5518.0  | 5518.0  | 5518.0  | 5518.0  | 5518.0  | 5518.0  | 5518.0  |
| 2.5°   | 5575.7  | 5531.8  | 5538.8  | 5499.5  | 5490.2  | 5448.7  | 5522.6  | 5529.5  | 5508.7  | 5529.5  |
| 5°     | 5645.1  | 5591.9  | 5605.8  | 5561.9  | 5550.3  | 5492.6  | 5552.6  | 5548.0  | 5531.8  | 5552.6  |
| 7.5°   | 5746.7  | 5686.7  | 5693.6  | 5642.8  | 5631.2  | 5566.5  | 5622.0  | 5605.8  | 5587.3  | 5612.7  |
| 10°    | 5876.1  | 5818.4  | 5820.7  | 5751.4  | 5744.4  | 5670.5  | 5742.1  | 5712.1  | 5684.3  | 5721.3  |
| 12.5°  | 6056.4  | 5975.5  | 5968.6  | 5892.3  | 5890.0  | 5813.7  | 5887.7  | 5862.3  | 5825.3  | 5883.1  |
| 15°    | 6264.3  | 6155.7  | 6128.0  | 6031.0  | 6028.6  | 5947.8  | 6021.7  | 5982.4  | 5963.9  | 6033.3  |
| 17.5°  | 6534.7  | 6398.4  | 6188.1  | 5857.7  | 5707.5  | 5732.9  | 5994.0  | 6088.7  | 5841.5  | 5878.4  |
| 20°    | 6698.7  | 6037.9  | 5730.6  | 5594.2  | 5522.6  | 5111.3  | 4554.4  | 4600.6  | 5148.3  | 5409.4  |
| 22.5°  | 6421.5  | 6225.1  | 6111.8  | 5920.0  | 4921.8  | 4780.9  | 4813.2  | 4804.0  | 4096.9  | 3886.6  |
| 25°    | 6999.1  | 6814.3  | 6608.6  | 5425.5  | 5219.9  | 5159.8  | 5176.0  | 4512.8  | 4126.9  | 4143.1  |
| 27.5°  | 7831.0  | 7593.0  | 6289.8  | 5776.8  | 5735.2  | 5647.4  | 5328.5  | 4531.3  | 4579.8  | 4612.2  |
| 30°    | 8882.4  | 8036.7  | 6698.7  | 6474.6  | 6391.4  | 6296.7  | 4944.9  | 5062.8  | 5152.9  | 5252.2  |
| 32.5°  | 9899.1  | 7817.1  | 7482.1  | 7248.7  | 7119.3  | 5716.7  | 5578.1  | 5795.3  | 5885.4  | 5970.9  |
| 35°    | 9806.7  | 8757.6  | 8323.2  | 8027.4  | 7784.8  | 6169.6  | 6292.1  | 6622.5  | 6860.5  | 6858.2  |
| 37.5°  | 10060.8 | 9781.2  | 9279.8  | 8905.5  | 6756.5  | 6911.3  | 7167.8  | 7544.5  | 7833.3  | 7831.0  |
| 40°    | 11121.4 | 10818.7 | 10347.4 | 9543.2  | 7486.7  | 7847.2  | 8198.4  | 8551.9  | 8759.9  | 8776.1  |
| 42.5°  | 12175.1 | 11941.8 | 11516.6 | 8429.5  | 8380.9  | 8880.1  | 9247.5  | 9471.6  | 9598.7  | 9642.6  |
| 45°    | 13224.2 | 13004.7 | 11315.5 | 9323.7  | 9471.6  | 9966.1  | 10190.2 | 10234.1 | 10370.5 | 10365.8 |
| 47.5°  | 14058.4 | 13871.2 | 10409.8 | 10386.6 | 10754.0 | 11096.0 | 11024.4 | 10968.9 | 11003.6 | 11022.1 |
| 50°    | 14827.8 | 12075.8 | 11223.1 | 11560.5 | 12119.7 | 12161.3 | 11863.2 | 9397.7  | 11634.4 | 11595.1 |
| 52.5°  | 13774.1 | 11784.6 | 11981.0 | 12771.3 | 13723.3 | 13240.4 | 12658.1 | 8237.7  | 10911.2 | 11948.7 |
| 55°    | 12052.7 | 12251.4 | 12695.0 | 14021.4 | 14961.9 | 14388.8 | 13416.0 | 8482.6  | 7241.8  | 5894.6  |
| 57.5°  | 12293.0 | 12607.2 | 13450.6 | 15283.0 | 16103.3 | 11396.4 | 12521.7 | 5980.1  | 4048.4  | 4046.1  |
| 60°    | 11447.3 | 11923.3 | 13434.5 | 15849.2 | 13034.7 | 7301.8  | 5016.6  | 136.3   | 785.6   | 778.7   |
| 62.5°  | 9677.3  | 10354.3 | 12817.5 | 15491.0 | 10798.0 | 5933.9  | 4468.9  | 11.6    | 4.6     | 4.6     |
| 65°    | 7484.4  | 8281.6  | 10687.0 | 13413.7 | 9566.3  | 5111.3  | 3318.2  | 0.0     | 0.0     | 0.0     |
| 67.5°  | 4907.9  | 5647.4  | 8025.1  | 11142.2 | 7941.9  | 3863.5  | 2229.8  | 0.0     | 0.0     | 0.0     |
| 70°    | 2045.0  | 2957.7  | 4986.5  | 8052.8  | 5841.5  | 2530.2  | 1058.3  | 0.0     | 0.0     | 0.0     |
| 72.5°  | 591.5   | 901.2   | 2246.0  | 4808.6  | 3625.5  | 1324.0  | 392.8   | 0.0     | 0.0     | 0.0     |
| 75°    | 390.5   | 411.3   | 679.3   | 1934.1  | 1763.1  | 485.2   | 159.4   | 0.0     | 0.0     | 0.0     |
| 77.5°  | 328.1   | 337.4   | 432.1   | 540.7   | 566.1   | 191.8   | 129.4   | 0.0     | 0.0     | 0.0     |
| 80°    | 302.7   | 305.0   | 388.2   | 402.1   | 302.7   | 159.4   | 127.1   | 0.0     | 0.0     | 0.0     |
| 82.5°  | 281.9   | 275.0   | 330.4   | 318.9   | 251.9   | 138.6   | 117.8   | 0.0     | 0.0     | 0.0     |
| 85°    | 194.1   | 198.7   | 224.1   | 284.2   | 152.5   | 69.3    | 83.2    | 0.0     | 0.0     | 0.0     |
| 87.5°  | 60.1    | 69.3    | 87.8    | 90.1    | 27.7    | 9.2     | 0.0     | 0.0     | 0.0     | 0.0     |
| 90°    | 2.3     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 92.5°  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 95°    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 97.5°  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 100°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 102.5° | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 105°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 107.5° | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 110°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |



REPORT NUMBER: P579565

CATALOG NUMBER: CST-CA8-480-750-U-T5N-HSS-HM-EX120

**CANDELA DISTRIBUTION (continued):**

|        | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|-----|------|------|------|------|------|------|------|------|------|
| 112.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 115°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 117.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 120°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 122.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 125°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 127.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 130°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 132.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 135°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 137.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 140°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 142.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 145°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 147.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 150°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 152.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 155°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 157.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 160°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 162.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 165°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 167.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 170°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 172.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 175°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 177.5° | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 180°   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |

Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

STREETWORKS

Report Number: SP1-2104-215-7

Luminaire Tested: CST-CA6-230-750-U-T4

Test Date: 04/22/2021

### Test Information

Test Method: LM-79-08  
 Report Number: SP1-2104-215-7  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1  
 Measurement Geometry:  $4\pi$   
 Issue Date: 04/22/2021  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: STREETWORKS  
 Catalog Number: **CST-CA6-230-750-U-T4**  
 Description: STREETWORKS HIGH MAST LUMINAIRE

### Spectral Parameters

|                           |        |           |      |      |       |
|---------------------------|--------|-----------|------|------|-------|
| CCT (K):                  | 4852   | CRI (Ra): | 74.1 |      |       |
| CIE u':                   | 0.2118 | R1:       | 71.0 | R9:  | -25.4 |
| CIE v':                   | 0.4888 | R2:       | 79.6 | R10: | 51.4  |
| Duv:                      | 0.0017 | R3:       | 85.8 | R11: | 70.1  |
| CIE x:                    | 0.3498 | R4:       | 73.5 | R12: | 42.9  |
| CIE y:                    | 0.3588 | R5:       | 71.4 | R13: | 72.5  |
| CIE z:                    | 0.2914 | R6:       | 71.2 | R14: | 92.1  |
| Peak Wavelength (nm):     | 449    | R7:       | 82.9 |      |       |
| Dominant Wavelength (nm): | 572    | R8:       | 57.2 |      |       |
| Purity:                   | 12.7   |           |      |      |       |
| Rf:                       | 75.2   |           |      |      |       |
| Rg:                       | 94.7   |           |      |      |       |



### Test Conditions

Stabilization Time: 72M  
 Operation Time: 12H  
 Room Temperature (°C) / RH%: 25.4/13%  
 Sphere Temperature (°C): 24.0

REPORT NUMBER: SP1-2104-215-7

| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date |
| Photometer                     | IN0058                | 1/31/2021        | 7/31/2021            |
| Power Meter                    | IN0071                | 12/1/2020        | 12/1/2021            |
| AC Power Source                | IN0063                | 12/1/2020        | 12/1/2021            |
| DC Power Source                | IN0208                | 12/1/2020        | 12/1/2021            |
| Sphere Thermometer             | IN0085                | 12/1/2020        | 12/1/2021            |
| Room Thermometer               | IN0046                | 12/1/2020        | 12/1/2021            |

REPORT NUMBER: SP1-2104-215-7

**CIE 1931 Chromaticity Diagram**



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



Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2104-215-7

### Photopic Flux vs. Wavelength



#####

| λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) |
|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|
| 360       | 15077            | 0.0              | 490       | 146327           | 20.8             | 620       | 434415           | 113.0            | 750       | 22886            | 0.0              | 880       | 20960            | 0.0              |
| 365       | 12138            | 0.0              | 495       | 188585           | 34.2             | 625       | 400670           | 88.4             | 755       | 19692            | 0.0              | 885       | 20315            | 0.0              |
| 370       | 12993            | 0.0              | 500       | 245069           | 54.1             | 630       | 360611           | 65.3             | 760       | 18199            | 0.0              | 890       | 15211            | 0.0              |
| 375       | 14513            | 0.0              | 505       | 307682           | 86.1             | 635       | 326986           | 49.1             | 765       | 19191            | 0.0              | 895       | 15502            | 0.0              |
| 380       | 15679            | 0.0              | 510       | 367102           | 126.1            | 640       | 295583           | 35.3             | 770       | 16229            | 0.0              | 900       | 15935            | 0.0              |
| 385       | 14569            | 0.0              | 515       | 416068           | 172.4            | 645       | 264664           | 25.5             | 775       | 16351            | 0.0              | 905       | 15965            | 0.0              |
| 390       | 13091            | 0.0              | 520       | 457470           | 221.8            | 650       | 238441           | 17.4             | 780       | 14567            | 0.0              | 910       | 16119            | 0.0              |
| 395       | 10927            | 0.0              | 525       | 486980           | 261.4            | 655       | 210047           | 12.1             | 785       | 13349            | 0.0              | 915       | 13972            | 0.0              |
| 400       | 9655             | 0.0              | 530       | 511184           | 301.0            | 660       | 186019           | 7.8              | 790       | 12552            | 0.0              | 920       | 14830            | 0.0              |
| 405       | 10895            | 0.0              | 535       | 527191           | 326.9            | 665       | 164001           | 5.2              | 795       | 11517            | 0.0              | 925       | 13744            | 0.0              |
| 410       | 14929            | 0.0              | 540       | 540658           | 352.3            | 670       | 142007           | 3.1              | 800       | 13250            | 0.0              | 930       | 20340            | 0.0              |
| 415       | 25993            | 0.0              | 545       | 555639           | 369.8            | 675       | 123441           | 2.1              | 805       | 15135            | 0.0              | 935       | 13272            | 0.0              |
| 420       | 49620            | 0.1              | 550       | 572229           | 388.9            | 680       | 106894           | 1.2              | 810       | 9873             | 0.0              | 940       | 16357            | 0.0              |
| 425       | 95836            | 0.5              | 555       | 589788           | 402.8            | 685       | 94026            | 0.8              | 815       | 11566            | 0.0              | 945       | 19257            | 0.0              |
| 430       | 178101           | 1.4              | 560       | 608278           | 413.4            | 690       | 82099            | 0.5              | 820       | 11216            | 0.0              | 950       | 19804            | 0.0              |
| 435       | 300144           | 3.5              | 565       | 619317           | 411.8            | 695       | 70275            | 0.3              | 825       | 15165            | 0.0              | 955       | 14877            | 0.0              |
| 440       | 512674           | 8.1              | 570       | 627176           | 407.8            | 700       | 61784            | 0.2              | 830       | 14983            | 0.0              | 960       | 9882             | 0.0              |
| 445       | 857336           | 17.9             | 575       | 631114           | 392.7            | 705       | 55550            | 0.1              | 835       | 13993            | 0.0              | 965       | 11741            | 0.0              |
| 450       | 1021494          | 26.5             | 580       | 630436           | 374.6            | 710       | 50234            | 0.1              | 840       | 15281            | 0.0              | 970       | 11068            | 0.0              |
| 455       | 730207           | 24.4             | 585       | 625204           | 347.4            | 715       | 44909            | 0.0              | 845       | 15737            | 0.0              | 975       | 18108            | 0.0              |
| 460       | 467897           | 19.2             | 590       | 612752           | 316.8            | 720       | 41441            | 0.0              | 850       | 15148            | 0.0              | 980       | 17506            | 0.0              |
| 465       | 344659           | 17.8             | 595       | 589048           | 279.2            | 725       | 36834            | 0.0              | 855       | 17198            | 0.0              | 985       | 23821            | 0.0              |
| 470       | 230541           | 14.3             | 600       | 567479           | 244.6            | 730       | 32988            | 0.0              | 860       | 19169            | 0.0              | 990       | 25862            | 0.0              |
| 475       | 157156           | 12.3             | 605       | 542722           | 210.2            | 735       | 28984            | 0.0              | 865       | 18632            | 0.0              | 995       | 21133            | 0.0              |
| 480       | 134805           | 12.8             | 610       | 507118           | 174.2            | 740       | 26177            | 0.0              | 870       | 18831            | 0.0              | 1000      | 25640            | 0.0              |
| 485       | 132031           | 15.6             | 615       | 472188           | 142.5            | 745       | 22680            | 0.0              | 875       | 16978            | 0.0              |           |                  |                  |

REPORT NUMBER: SP1-2104-215-7

### Scotopic Flux vs. Wavelength



Scotopic Lumens: 66024.8

S/P: 1.78

| $\lambda$<br>(nm) | Power<br>( $\mu\text{W/nm}$ ) | Lumens<br>( $\Phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>( $\mu\text{W/nm}$ ) | Lumens<br>( $\Phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>( $\mu\text{W/nm}$ ) | Lumens<br>( $\Phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>( $\mu\text{W/nm}$ ) | Lumens<br>( $\Phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>( $\mu\text{W/nm}$ ) | Lumens<br>( $\Phi/\text{nm}$ ) |
|-------------------|-------------------------------|--------------------------------|-------------------|-------------------------------|--------------------------------|-------------------|-------------------------------|--------------------------------|-------------------|-------------------------------|--------------------------------|-------------------|-------------------------------|--------------------------------|
| 360               | 15077                         | 0.0                            | 490               | 146327                        | 225.3                          | 620               | 434415                        | 5.4                            | 750               | 22886                         | 0.0                            | 880               | 20960                         | 0.0                            |
| 365               | 12138                         | 0.0                            | 495               | 188585                        | 304.9                          | 625               | 400670                        | 3.4                            | 755               | 19692                         | 0.0                            | 885               | 20315                         | 0.0                            |
| 370               | 12993                         | 0.0                            | 500               | 245069                        | 409.9                          | 630               | 360611                        | 2.0                            | 760               | 18199                         | 0.0                            | 890               | 15211                         | 0.0                            |
| 375               | 14513                         | 0.0                            | 505               | 307682                        | 523.1                          | 635               | 326986                        | 1.2                            | 765               | 19191                         | 0.0                            | 895               | 15502                         | 0.0                            |
| 380               | 15679                         | 0.0                            | 510               | 367102                        | 622.2                          | 640               | 295583                        | 0.8                            | 770               | 16229                         | 0.0                            | 900               | 15935                         | 0.0                            |
| 385               | 14569                         | 0.0                            | 515               | 416068                        | 689.6                          | 645               | 264664                        | 0.5                            | 775               | 16351                         | 0.0                            | 905               | 15965                         | 0.0                            |
| 390               | 13091                         | 0.0                            | 520               | 457470                        | 727.1                          | 650               | 238441                        | 0.3                            | 780               | 14567                         | 0.0                            | 910               | 16119                         | 0.0                            |
| 395               | 10927                         | 0.1                            | 525               | 486980                        | 728.5                          | 655               | 210047                        | 0.2                            | 785               | 13349                         | 0.0                            | 915               | 13972                         | 0.0                            |
| 400               | 9655                          | 0.2                            | 530               | 511184                        | 704.8                          | 660               | 186019                        | 0.1                            | 790               | 12552                         | 0.0                            | 920               | 14830                         | 0.0                            |
| 405               | 10895                         | 0.3                            | 535               | 527191                        | 656.9                          | 665               | 164001                        | 0.1                            | 795               | 11517                         | 0.0                            | 925               | 13744                         | 0.0                            |
| 410               | 14929                         | 0.9                            | 540               | 540658                        | 597.4                          | 670               | 142007                        | 0.0                            | 800               | 13250                         | 0.0                            | 930               | 20340                         | 0.0                            |
| 415               | 25993                         | 2.7                            | 545               | 555639                        | 532.7                          | 675               | 123441                        | 0.0                            | 805               | 15135                         | 0.0                            | 935               | 13272                         | 0.0                            |
| 420               | 49620                         | 8.2                            | 550               | 572229                        | 467.9                          | 680               | 106894                        | 0.0                            | 810               | 9873                          | 0.0                            | 940               | 16357                         | 0.0                            |
| 425               | 95836                         | 23.4                           | 555               | 589788                        | 403.1                          | 685               | 94026                         | 0.0                            | 815               | 11566                         | 0.0                            | 945               | 19257                         | 0.0                            |
| 430               | 178101                        | 60.6                           | 560               | 608278                        | 340.0                          | 690               | 82099                         | 0.0                            | 820               | 11216                         | 0.0                            | 950               | 19804                         | 0.0                            |
| 435               | 300144                        | 134.2                          | 565               | 619317                        | 277.8                          | 695               | 70275                         | 0.0                            | 825               | 15165                         | 0.0                            | 955               | 14877                         | 0.0                            |
| 440               | 512674                        | 286.5                          | 570               | 627176                        | 221.3                          | 700               | 61784                         | 0.0                            | 830               | 14983                         | 0.0                            | 960               | 9882                          | 0.0                            |
| 445               | 857336                        | 574.1                          | 575               | 631114                        | 171.9                          | 705               | 55550                         | 0.0                            | 835               | 13993                         | 0.0                            | 965               | 11741                         | 0.0                            |
| 450               | 1021494                       | 791.7                          | 580               | 630436                        | 129.9                          | 710               | 50234                         | 0.0                            | 840               | 15281                         | 0.0                            | 970               | 11068                         | 0.0                            |
| 455               | 730207                        | 638.1                          | 585               | 625204                        | 95.5                           | 715               | 44909                         | 0.0                            | 845               | 15737                         | 0.0                            | 975               | 18108                         | 0.0                            |
| 460               | 467897                        | 451.9                          | 590               | 612752                        | 68.2                           | 720               | 41441                         | 0.0                            | 850               | 15148                         | 0.0                            | 980               | 17506                         | 0.0                            |
| 465               | 344659                        | 364.0                          | 595               | 589048                        | 47.0                           | 725               | 36834                         | 0.0                            | 855               | 17198                         | 0.0                            | 985               | 23821                         | 0.0                            |
| 470               | 230541                        | 265.5                          | 600               | 567479                        | 32.0                           | 730               | 32988                         | 0.0                            | 860               | 19169                         | 0.0                            | 990               | 25862                         | 0.0                            |
| 475               | 157156                        | 196.5                          | 605               | 542722                        | 21.3                           | 735               | 28984                         | 0.0                            | 865               | 18632                         | 0.0                            | 995               | 21133                         | 0.0                            |
| 480               | 134805                        | 182.1                          | 610               | 507118                        | 13.7                           | 740               | 26177                         | 0.0                            | 870               | 18831                         | 0.0                            | 1000              | 25640                         | 0.0                            |
| 485               | 132031                        | 191.4                          | 615               | 472188                        | 8.7                            | 745               | 22680                         | 0.0                            | 875               | 16978                         | 0.0                            |                   |                               |                                |

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### Melanopic Flux vs. Wavelength



**Melanopic Lumens: 26696.3**      **M/P: 0.72**

| λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) |
|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|
| 360       | 15077            | 0.0              | 490       | 146327           | 121.8            | 620       | 434415           | 0.3              | 750       | 22886            | 0.0              | 880       | 20960            | 0.0              |
| 365       | 12138            | 0.0              | 495       | 188585           | 155.7            | 625       | 400670           | 0.2              | 755       | 19692            | 0.0              | 885       | 20315            | 0.0              |
| 370       | 12993            | 0.0              | 500       | 245069           | 197.0            | 630       | 360611           | 0.1              | 760       | 18199            | 0.0              | 890       | 15211            | 0.0              |
| 375       | 14513            | 0.0              | 505       | 307682           | 236.1            | 635       | 326986           | 0.1              | 765       | 19191            | 0.0              | 895       | 15502            | 0.0              |
| 380       | 15679            | 0.0              | 510       | 367102           | 263.6            | 640       | 295583           | 0.0              | 770       | 16229            | 0.0              | 900       | 15935            | 0.0              |
| 385       | 14569            | 0.0              | 515       | 416068           | 271.9            | 645       | 264664           | 0.0              | 775       | 16351            | 0.0              | 905       | 15965            | 0.0              |
| 390       | 13091            | 0.0              | 520       | 457470           | 266.3            | 650       | 238441           | 0.0              | 780       | 14567            | 0.0              | 910       | 16119            | 0.0              |
| 395       | 10927            | 0.1              | 525       | 486980           | 247.0            | 655       | 210047           | 0.0              | 785       | 13349            | 0.0              | 915       | 13972            | 0.0              |
| 400       | 9655             | 0.1              | 530       | 511184           | 220.9            | 660       | 186019           | 0.0              | 790       | 12552            | 0.0              | 920       | 14830            | 0.0              |
| 405       | 10895            | 0.2              | 535       | 527191           | 189.7            | 665       | 164001           | 0.0              | 795       | 11517            | 0.0              | 925       | 13744            | 0.0              |
| 410       | 14929            | 0.6              | 540       | 540658           | 158.2            | 670       | 142007           | 0.0              | 800       | 13250            | 0.0              | 930       | 20340            | 0.0              |
| 415       | 25993            | 1.7              | 545       | 555639           | 129.1            | 675       | 123441           | 0.0              | 805       | 15135            | 0.0              | 935       | 13272            | 0.0              |
| 420       | 49620            | 5.7              | 550       | 572229           | 102.7            | 680       | 106894           | 0.0              | 810       | 9873             | 0.0              | 940       | 16357            | 0.0              |
| 425       | 95836            | 14.9             | 555       | 589788           | 79.5             | 685       | 94026            | 0.0              | 815       | 11566            | 0.0              | 945       | 19257            | 0.0              |
| 430       | 178101           | 37.6             | 560       | 608278           | 60.0             | 690       | 82099            | 0.0              | 820       | 11216            | 0.0              | 950       | 19804            | 0.0              |
| 435       | 300144           | 80.1             | 565       | 619317           | 43.5             | 695       | 70275            | 0.0              | 825       | 15165            | 0.0              | 955       | 14877            | 0.0              |
| 440       | 512674           | 171.3            | 570       | 627176           | 30.6             | 700       | 61784            | 0.0              | 830       | 14983            | 0.0              | 960       | 9882             | 0.0              |
| 445       | 857336           | 338.2            | 575       | 631114           | 21.0             | 705       | 55550            | 0.0              | 835       | 13993            | 0.0              | 965       | 11741            | 0.0              |
| 450       | 1021494          | 470.7            | 580       | 630436           | 14.1             | 710       | 50234            | 0.0              | 840       | 15281            | 0.0              | 970       | 11068            | 0.0              |
| 455       | 730207           | 382.6            | 585       | 625204           | 9.3              | 715       | 44909            | 0.0              | 845       | 15737            | 0.0              | 975       | 18108            | 0.0              |
| 460       | 467897           | 275.7            | 590       | 612752           | 6.0              | 720       | 41441            | 0.0              | 850       | 15148            | 0.0              | 980       | 17506            | 0.0              |
| 465       | 344659           | 225.2            | 595       | 589048           | 3.8              | 725       | 36834            | 0.0              | 855       | 17198            | 0.0              | 985       | 23821            | 0.0              |
| 470       | 230541           | 165.0            | 600       | 567479           | 2.4              | 730       | 32988            | 0.0              | 860       | 19169            | 0.0              | 990       | 25862            | 0.0              |
| 475       | 157156           | 120.0            | 605       | 542722           | 1.5              | 735       | 28984            | 0.0              | 865       | 18632            | 0.0              | 995       | 21133            | 0.0              |
| 480       | 134805           | 108.3            | 610       | 507118           | 0.9              | 740       | 26177            | 0.0              | 870       | 18831            | 0.0              | 1000      | 25640            | 0.0              |
| 485       | 132031           | 108.8            | 615       | 472188           | 0.6              | 745       | 22680            | 0.0              | 875       | 16978            | 0.0              |           |                  |                  |

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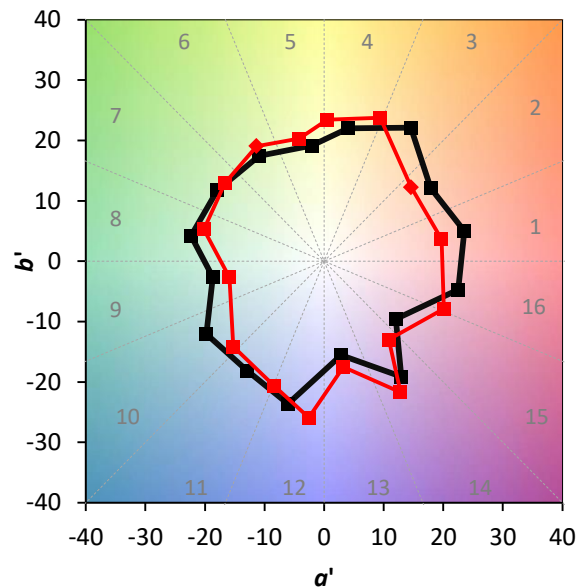
TM-30-18

### Summary

$R_f = 75.2$   
 $R_g = 94.7$   
 CIE  $R_a = 74.1$   
 $R_g = -25.4$



### Color Vector Graphics



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

|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 63 | CES51 = 90 | CES76 = 52 |
| CES02 = 60 | CES27 = 88 | CES52 = 90 | CES77 = 68 |
| CES03 = 30 | CES28 = 81 | CES53 = 81 | CES78 = 54 |
| CES04 = 69 | CES29 = 67 | CES54 = 86 | CES79 = 81 |
| CES05 = 46 | CES30 = 85 | CES55 = 84 | CES80 = 77 |
| CES06 = 50 | CES31 = 71 | CES56 = 76 | CES81 = 79 |
| CES07 = 39 | CES32 = 63 | CES57 = 75 | CES82 = 91 |
| CES08 = 38 | CES33 = 79 | CES58 = 76 | CES83 = 89 |
| CES09 = 29 | CES34 = 70 | CES59 = 87 | CES84 = 86 |
| CES10 = 73 | CES35 = 83 | CES60 = 89 | CES85 = 79 |
| CES11 = 56 | CES36 = 90 | CES61 = 83 | CES86 = 76 |
| CES12 = 62 | CES37 = 79 | CES62 = 85 | CES87 = 78 |
| CES13 = 42 | CES38 = 94 | CES63 = 76 | CES88 = 82 |
| CES14 = 74 | CES39 = 96 | CES64 = 67 | CES89 = 74 |
| CES15 = 70 | CES40 = 91 | CES65 = 64 | CES90 = 81 |
| CES16 = 46 | CES41 = 95 | CES66 = 61 | CES91 = 74 |
| CES17 = 49 | CES42 = 80 | CES67 = 58 | CES92 = 61 |
| CES18 = 55 | CES43 = 78 | CES68 = 66 | CES93 = 77 |
| CES19 = 71 | CES44 = 99 | CES69 = 74 | CES94 = 56 |
| CES20 = 64 | CES45 = 86 | CES70 = 58 | CES95 = 67 |
| CES21 = 85 | CES46 = 85 | CES71 = 51 | CES96 = 78 |
| CES22 = 77 | CES47 = 88 | CES72 = 83 | CES97 = 86 |
| CES23 = 91 | CES48 = 80 | CES73 = 48 | CES98 = 77 |
| CES24 = 90 | CES49 = 83 | CES74 = 92 | CES99 = 65 |
| CES25 = 71 | CES50 = 90 | CES75 = 52 |            |



Color Rendition by Hue-Angle Bin



**Measure Comparisons**



(END OF REPORT)