

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: McGRAW-EDISON

Report Number: P324167

Luminaire Tested: **GLEON-SA3C-740-U-SLL-HSS**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P324167  
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 (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA3C-740-U-SLL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 4000K, 1050mA 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: 16008 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G3

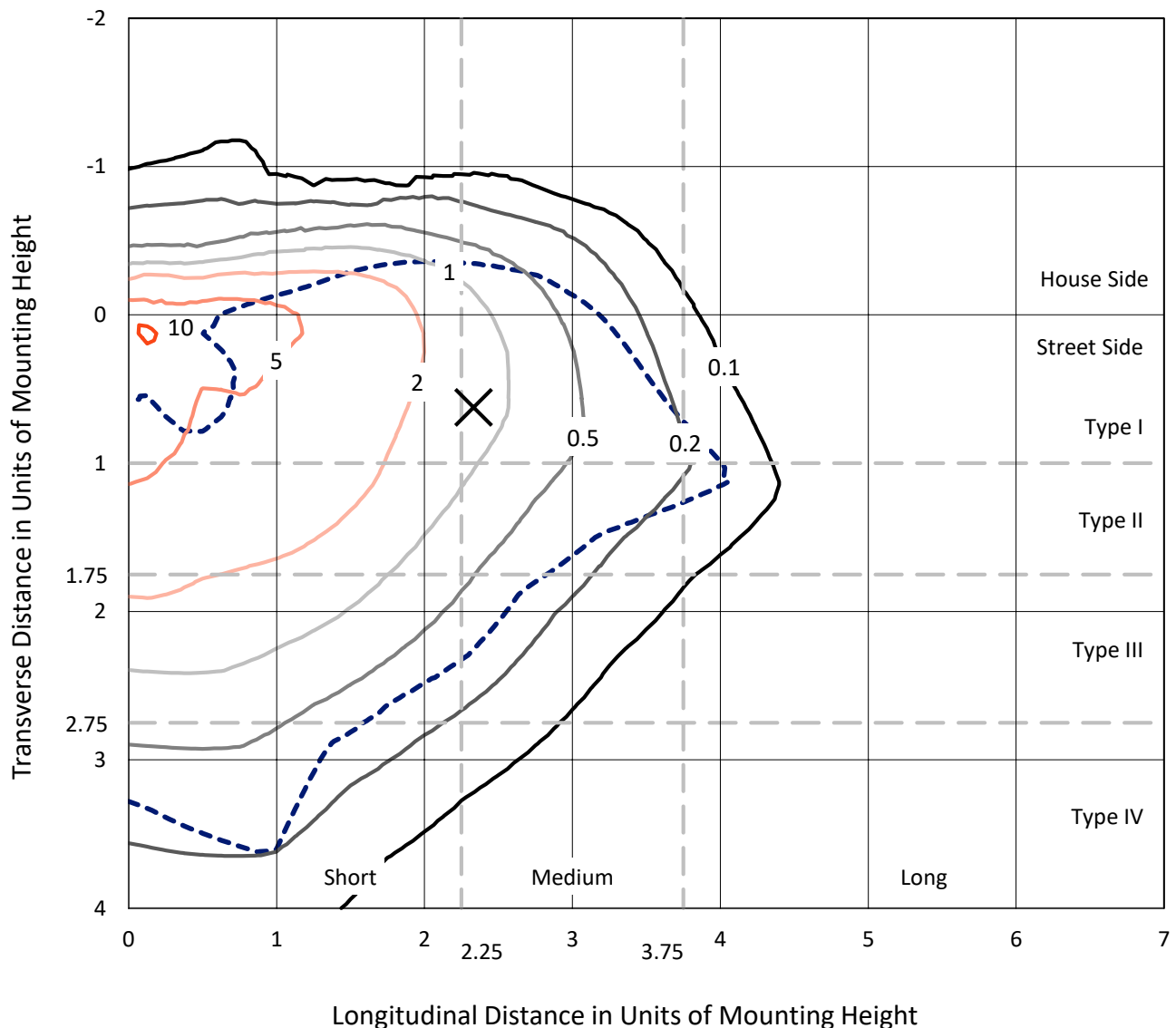
Input Watts (W): 166  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

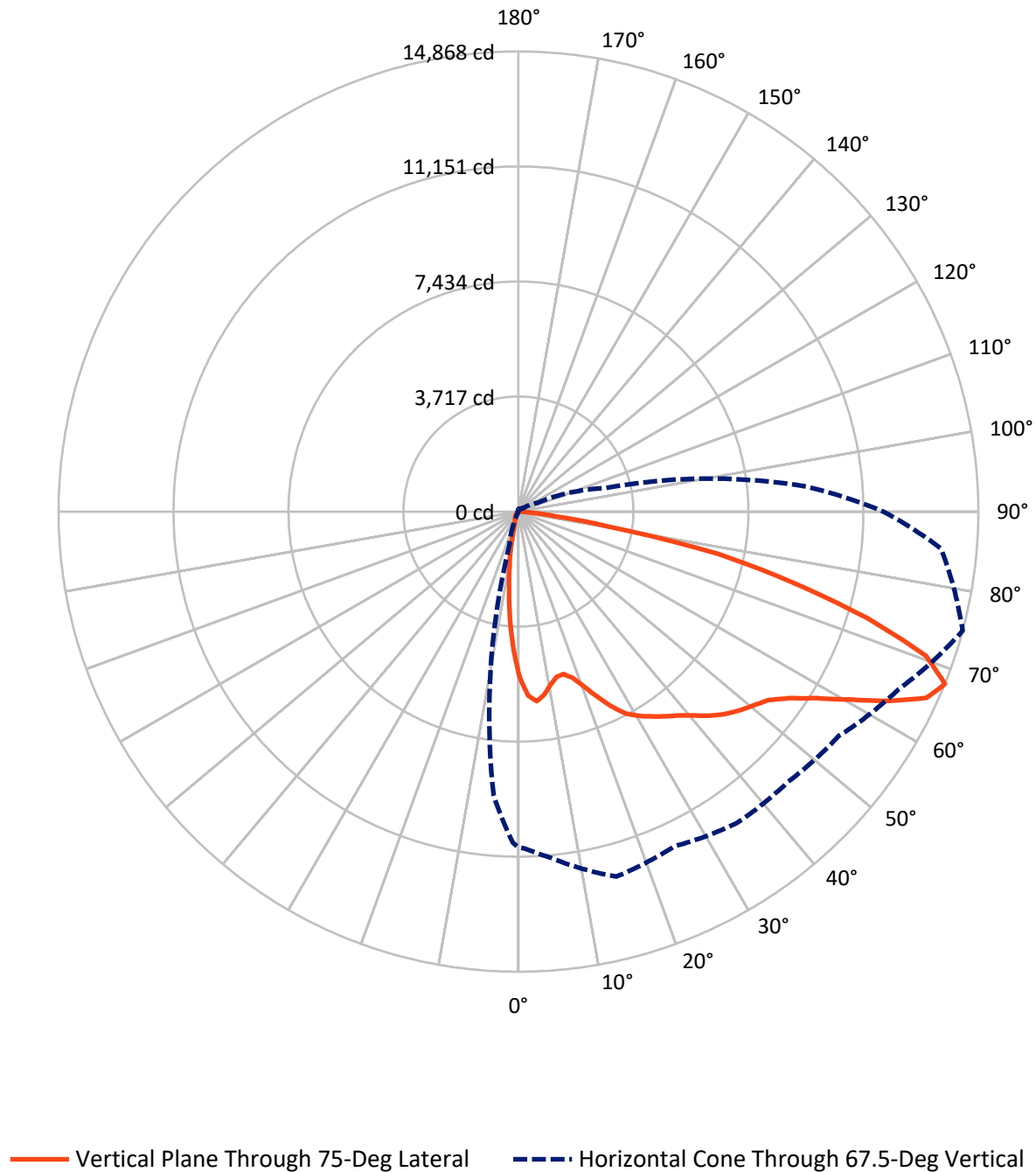
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc  
 Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2402.2   | 0.0    | 2402.2  |
|                    | % Fixture | 15.0     | 0.0    | 15.0    |
| <b>Street Side</b> | Lumens    | 13605.8  | 0.0    | 13605.8 |
|                    | % Fixture | 85.0     | 0.0    | 85.0    |
| <b>Total</b>       | Lumens    | 16008.0  | 0.0    | 16008.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 407.4   | 2.5       |
| 10°-20°   | 802.1   | 5.0       |
| 20°-30°   | 1134.8  | 7.1       |
| 30°-40°   | 1668.4  | 10.4      |
| 40°-50°   | 2398.1  | 15.0      |
| 50°-60°   | 3375.9  | 21.1      |
| 60°-70°   | 3942.7  | 24.6      |
| 70°-80°   | 2011.4  | 12.6      |
| 80°-90°   | 267.2   | 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°    | 16008.0 | 100.0     |
| 0°-180°   | 16008.0 | 100.0     |

**Coefficient of Utilization**



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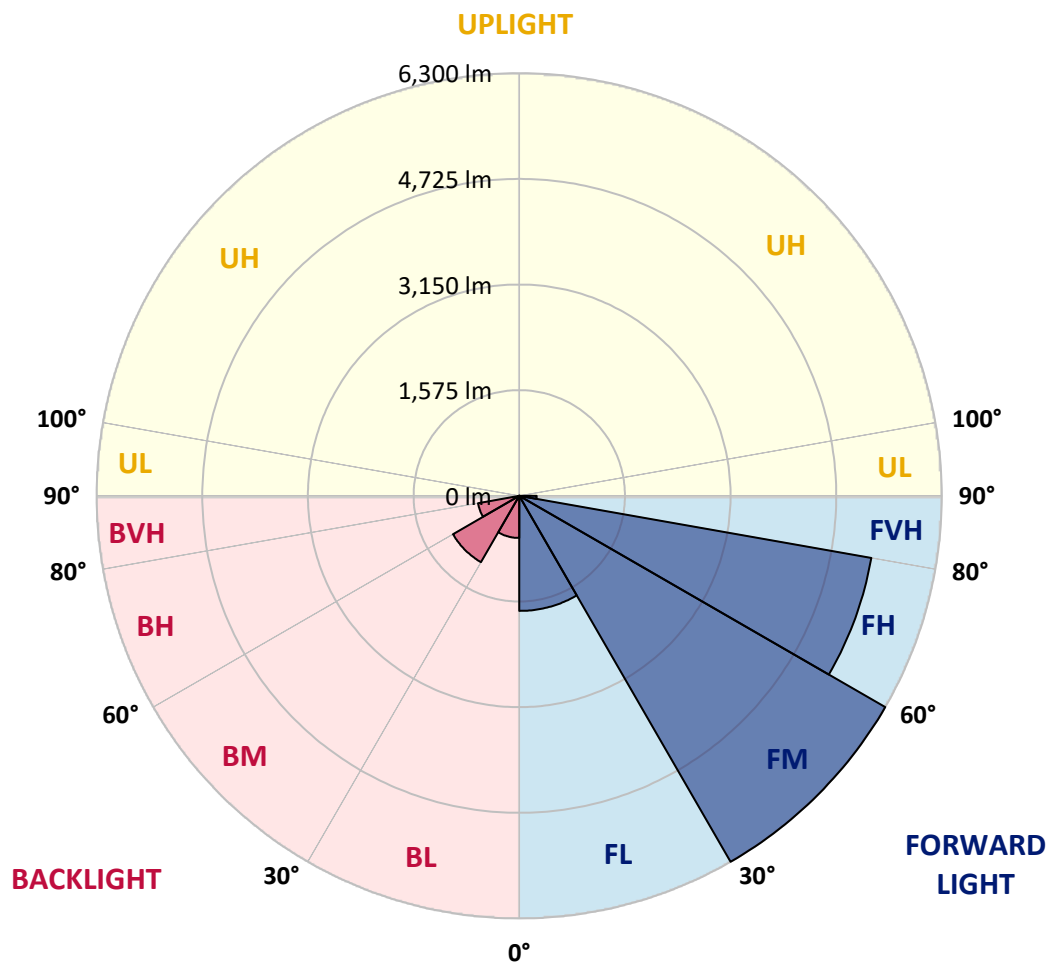
CATALOG NUMBER: GLEON-SA3C-740-U-SLL-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1716.1 | 10.7      |                         |      |         |
| FM   | (30°-60°)   | 6300.5 | 39.4      |                         |      |         |
| FH   | (60°-80°)   | 5330.2 | 33.3      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 259.1  | 1.6       |                         |      | G3/500  |
| BL   | (0°-30°)    | 628.2  | 3.9       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1141.9 | 7.1       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 624.0  | 3.9       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 8.1    | 0.1       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 1°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5370.4  | 5370.4  | 5370.4  | 5370.4  | 5370.4  | 5370.4  | 5370.4  | 5370.4  | 5370.4  | 5370.4  | 5370.4  |
| 2.5°  | 5821.6  | 5830.7  | 5877.7  | 5986.9  | 6106.0  | 6115.1  | 6195.5  | 6112.8  | 6084.7  | 5951.3  | 5813.3  |
| 5°    | 5865.6  | 5900.5  | 6062.0  | 6382.8  | 6661.1  | 6750.5  | 6814.2  | 6652.0  | 6481.3  | 6155.3  | 5807.2  |
| 7.5°  | 5511.5  | 5569.8  | 5823.9  | 6426.0  | 6923.4  | 7143.4  | 7185.1  | 6931.0  | 6513.2  | 5976.3  | 5453.1  |
| 10°   | 5058.0  | 5124.7  | 5431.1  | 6171.2  | 6854.4  | 7231.3  | 7289.0  | 6956.1  | 6355.5  | 5686.6  | 5070.1  |
| 12.5° | 4691.0  | 4769.1  | 5082.2  | 5884.6  | 6617.1  | 7034.2  | 7147.9  | 6871.9  | 6219.0  | 5481.1  | 4808.5  |
| 15°   | 4521.9  | 4611.3  | 4940.4  | 5699.5  | 6353.9  | 6682.3  | 6776.3  | 6657.3  | 6143.1  | 5448.5  | 4747.8  |
| 17.5° | 4618.9  | 4716.0  | 5055.7  | 5715.4  | 6106.7  | 6247.0  | 6322.9  | 6371.4  | 6143.1  | 5644.9  | 4925.3  |
| 20°   | 5017.0  | 5121.7  | 5481.1  | 5877.0  | 5902.0  | 5849.7  | 5930.8  | 6101.4  | 6214.4  | 6018.0  | 5351.5  |
| 22.5° | 5567.6  | 5690.4  | 6096.1  | 6153.8  | 5801.9  | 5604.0  | 5614.6  | 5882.3  | 6344.1  | 6491.2  | 5942.9  |
| 25°   | 6238.7  | 6388.8  | 6801.4  | 6566.3  | 5843.6  | 5457.6  | 5453.8  | 5701.8  | 6470.7  | 6965.2  | 6601.9  |
| 27.5° | 6905.2  | 7070.6  | 7433.0  | 7069.8  | 6015.7  | 5431.1  | 5423.5  | 5647.2  | 6594.3  | 7386.8  | 7321.6  |
| 30°   | 7464.1  | 7624.9  | 7937.3  | 7434.6  | 6201.5  | 5493.3  | 5456.9  | 5705.6  | 6667.9  | 7660.5  | 7846.3  |
| 32.5° | 7919.1  | 8048.0  | 8300.6  | 7685.6  | 6400.2  | 5613.8  | 5535.0  | 5861.8  | 6793.0  | 7891.8  | 8328.6  |
| 35°   | 8419.6  | 8555.3  | 8656.2  | 7924.4  | 6623.2  | 5787.5  | 5674.5  | 6109.8  | 6985.6  | 8126.9  | 8857.2  |
| 37.5° | 8990.6  | 9125.6  | 9113.5  | 8142.8  | 6906.0  | 6074.9  | 6002.8  | 6502.6  | 7285.2  | 8359.7  | 9447.1  |
| 40°   | 9549.5  | 9687.5  | 9588.9  | 8381.7  | 7238.1  | 6548.8  | 6495.8  | 7092.6  | 7686.3  | 8657.7  | 10138.7 |
| 42.5° | 10072.7 | 10222.1 | 10011.3 | 8607.7  | 7634.0  | 7146.4  | 7237.4  | 7852.4  | 8188.3  | 9024.7  | 10734.8 |
| 45°   | 10494.4 | 10646.8 | 10365.5 | 8827.6  | 8051.1  | 7871.3  | 8145.1  | 8694.1  | 8791.9  | 9334.9  | 11137.4 |
| 47.5° | 10800.7 | 10944.8 | 10611.1 | 9047.5  | 8584.9  | 8757.8  | 9234.8  | 9576.8  | 9337.2  | 9604.1  | 11423.3 |
| 50°   | 10996.4 | 11108.6 | 10683.2 | 9322.8  | 9285.6  | 9792.2  | 10370.0 | 10536.8 | 9850.6  | 9846.8  | 11770.6 |
| 52.5° | 11120.7 | 11171.5 | 10736.3 | 9610.2  | 10016.6 | 10918.3 | 11481.7 | 11534.0 | 10379.1 | 10113.7 | 12238.5 |
| 55°   | 11549.2 | 11590.1 | 11112.4 | 9958.2  | 10621.0 | 11904.8 | 12487.2 | 12438.7 | 10977.4 | 10636.2 | 12790.6 |
| 57.5° | 12280.2 | 12323.4 | 11889.7 | 10458.7 | 11110.1 | 12514.5 | 13216.0 | 13303.2 | 11678.9 | 11370.2 | 13382.0 |
| 60°   | 12647.2 | 12727.6 | 12572.9 | 11092.7 | 11584.1 | 12904.3 | 13712.7 | 13991.0 | 12555.5 | 12337.8 | 13955.3 |
| 62.5° | 12314.3 | 12431.1 | 12655.6 | 11795.6 | 12055.0 | 13118.9 | 13867.4 | 14237.4 | 13453.3 | 13465.5 | 14308.7 |
| 65°   | 11650.0 | 11743.3 | 12124.0 | 12180.9 | 12328.0 | 13092.4 | 13485.2 | 13893.1 | 14003.1 | 14501.3 | 14289.8 |
| 67.5° | 10847.7 | 10882.6 | 11205.7 | 12211.2 | 11932.1 | 12294.6 | 12337.1 | 12638.9 | 13568.6 | 14868.3 | 13715.7 |
| 70°   | 9692.8  | 9711.8  | 9993.9  | 11195.8 | 10254.0 | 10333.6 | 10270.7 | 10332.1 | 11665.2 | 13974.3 | 12266.6 |
| 72.5° | 7800.8  | 7848.6  | 8249.7  | 9297.7  | 7470.2  | 7240.4  | 7734.8  | 7707.5  | 8983.8  | 11806.3 | 9110.4  |
| 75°   | 5743.5  | 5826.2  | 6432.1  | 7489.2  | 5243.0  | 4742.5  | 5103.5  | 5199.8  | 6386.6  | 9132.4  | 5697.2  |
| 77.5° | 4021.4  | 4082.8  | 4669.7  | 5505.4  | 3794.6  | 3391.2  | 3260.8  | 3375.3  | 4215.5  | 6606.5  | 2870.2  |
| 80°   | 2316.7  | 2339.4  | 2714.0  | 3178.9  | 2557.0  | 2925.6  | 2650.3  | 2729.2  | 2526.0  | 2939.2  | 1234.5  |
| 82.5° | 1515.9  | 1519.7  | 1666.0  | 1892.0  | 1592.5  | 1850.3  | 1369.5  | 1751.0  | 1553.8  | 1180.7  | 401.9   |
| 85°   | 819.0   | 823.5   | 966.1   | 1343.0  | 901.6   | 509.6   | 299.5   | 615.0   | 960.8   | 270.7   | 110.0   |
| 87.5° | 90.2    | 82.7    | 291.2   | 488.4   | 250.2   | 46.3    | 15.9    | 69.0    | 153.9   | 17.4    | 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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**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5370.4  | 5370.4  | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 |
| 2.5°  | 5742.7  | 5679.8  | 5522.8 | 5356.8 | 5223.3 | 5098.2 | 4972.3 | 4818.4 | 4699.3 | 4675.0 | 4635.6 |
| 5°    | 5619.9  | 5420.5  | 5091.3 | 4760.7 | 4494.6 | 4158.6 | 3945.5 | 3779.5 | 3617.2 | 3607.3 | 3574.7 |
| 7.5°  | 5190.7  | 4928.3  | 4465.0 | 4007.7 | 3633.1 | 3313.1 | 2990.0 | 2773.9 | 2604.1 | 2544.2 | 2508.5 |
| 10°   | 4778.2  | 4483.2  | 3904.6 | 3382.9 | 3048.4 | 2765.6 | 2538.1 | 2312.1 | 2107.4 | 1966.3 | 1902.6 |
| 12.5° | 4490.0  | 4163.9  | 3526.2 | 3076.5 | 2836.9 | 2568.4 | 2290.9 | 2008.8 | 1772.9 | 1603.1 | 1499.2 |
| 15°   | 4378.5  | 4030.5  | 3399.5 | 2955.2 | 2659.4 | 2319.7 | 1964.8 | 1642.5 | 1380.9 | 1227.0 | 1133.7 |
| 17.5° | 4511.2  | 4106.3  | 3389.7 | 2807.3 | 2394.0 | 1971.6 | 1579.6 | 1198.9 | 952.4  | 835.7  | 775.8  |
| 20°   | 4847.9  | 4347.4  | 3385.9 | 2626.1 | 2078.6 | 1559.1 | 1070.0 | 788.7  | 639.3  | 574.0  | 546.0  |
| 22.5° | 5324.2  | 4655.3  | 3416.2 | 2447.1 | 1750.2 | 1114.0 | 738.6  | 579.4  | 502.8  | 467.9  | 452.0  |
| 25°   | 5936.9  | 5087.6  | 3501.9 | 2284.8 | 1441.6 | 831.1  | 575.6  | 485.3  | 431.5  | 404.2  | 392.8  |
| 27.5° | 6589.8  | 5585.0  | 3635.4 | 2143.8 | 1190.6 | 662.8  | 492.9  | 415.6  | 376.9  | 357.9  | 347.3  |
| 30°   | 7128.2  | 6161.3  | 3770.4 | 1986.8 | 1008.6 | 577.8  | 451.2  | 379.2  | 334.4  | 322.3  | 312.4  |
| 32.5° | 7599.1  | 6597.4  | 3865.9 | 1845.0 | 889.5  | 513.4  | 408.0  | 339.0  | 308.6  | 285.1  | 274.5  |
| 35°   | 8086.7  | 6960.6  | 3862.9 | 1745.6 | 807.6  | 464.8  | 371.6  | 303.3  | 266.9  | 239.6  | 231.3  |
| 37.5° | 8614.5  | 7370.9  | 3796.9 | 1660.7 | 772.0  | 426.2  | 351.1  | 284.4  | 248.0  | 220.7  | 210.1  |
| 40°   | 9232.5  | 7801.6  | 3729.4 | 1581.1 | 762.1  | 395.1  | 336.7  | 269.2  | 230.5  | 204.0  | 193.4  |
| 42.5° | 9834.6  | 8189.8  | 3670.3 | 1521.9 | 719.6  | 394.3  | 323.8  | 257.8  | 216.9  | 191.1  | 179.0  |
| 45°   | 10316.2 | 8551.6  | 3658.9 | 1486.3 | 674.9  | 408.0  | 317.0  | 250.2  | 206.3  | 180.5  | 169.1  |
| 47.5° | 10716.6 | 8944.4  | 3731.7 | 1461.3 | 632.4  | 372.3  | 333.7  | 244.9  | 196.4  | 171.4  | 158.5  |
| 50°   | 11192.8 | 9426.7  | 3903.1 | 1420.3 | 587.7  | 335.2  | 382.2  | 246.5  | 188.1  | 162.3  | 148.6  |
| 52.5° | 11857.1 | 10094.0 | 4154.8 | 1351.3 | 526.3  | 301.1  | 376.1  | 248.0  | 179.0  | 152.4  | 138.8  |
| 55°   | 12601.7 | 10927.4 | 4425.5 | 1236.8 | 440.6  | 256.3  | 322.3  | 237.4  | 161.5  | 141.8  | 128.9  |
| 57.5° | 13384.3 | 11683.4 | 4586.3 | 1100.3 | 350.3  | 221.4  | 257.8  | 216.1  | 142.6  | 127.4  | 119.1  |
| 60°   | 13507.2 | 11970.8 | 4512.8 | 932.7  | 278.3  | 192.6  | 191.1  | 219.9  | 127.4  | 112.2  | 106.2  |
| 62.5° | 13201.6 | 11609.9 | 4157.1 | 783.3  | 232.8  | 169.1  | 157.0  | 191.9  | 115.3  | 100.1  | 94.0   |
| 65°   | 12613.9 | 10633.9 | 3580.8 | 706.0  | 216.1  | 144.8  | 130.4  | 135.0  | 100.9  | 87.2   | 81.9   |
| 67.5° | 11796.4 | 9331.1  | 2940.0 | 662.0  | 213.8  | 124.4  | 111.5  | 102.4  | 87.2   | 75.8   | 71.3   |
| 70°   | 10125.1 | 7773.5  | 2345.5 | 637.7  | 207.8  | 104.6  | 94.0   | 83.4   | 72.8   | 64.5   | 60.7   |
| 72.5° | 7452.0  | 5508.4  | 1824.5 | 611.2  | 209.3  | 83.4   | 81.9   | 69.0   | 58.4   | 50.0   | 48.5   |
| 75°   | 4305.7  | 3147.0  | 1196.6 | 495.2  | 199.4  | 64.5   | 68.2   | 48.5   | 40.9   | 34.9   | 34.9   |
| 77.5° | 2294.7  | 1919.3  | 455.7  | 206.3  | 72.8   | 40.9   | 38.7   | 28.8   | 25.8   | 21.2   | 20.5   |
| 80°   | 1000.2  | 844.8   | 137.3  | 57.6   | 40.2   | 22.0   | 14.4   | 12.9   | 11.4   | 9.1    | 8.3    |
| 82.5° | 354.1   | 305.6   | 44.7   | 28.1   | 17.4   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 80.4    | 57.6    | 0.0    | 6.8    | 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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**CANDELA DISTRIBUTION (continued):**

|       | 185°   | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°   | 275°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 |
| 2.5°  | 4555.2 | 4538.5 | 4440.0 | 4443.7 | 4461.2 | 4486.2 | 4427.1 | 4454.4 | 4527.9 | 4598.4 | 4625.0 |
| 5°    | 3522.4 | 3526.2 | 3466.3 | 3503.4 | 3536.8 | 3559.5 | 3464.0 | 3465.5 | 3523.9 | 3603.5 | 3645.2 |
| 7.5°  | 2482.0 | 2475.9 | 2478.9 | 2567.7 | 2630.6 | 2585.1 | 2620.7 | 2497.1 | 2504.7 | 2561.6 | 2519.1 |
| 10°   | 1845.0 | 1761.6 | 1714.6 | 1781.3 | 1850.3 | 1825.3 | 1763.8 | 1723.7 | 1751.7 | 1814.7 | 1810.1 |
| 12.5° | 1449.9 | 1330.1 | 1259.6 | 1211.8 | 1268.7 | 1221.7 | 1220.1 | 1185.3 | 1147.3 | 1154.2 | 1255.0 |
| 15°   | 1090.5 | 1003.3 | 919.8  | 843.2  | 841.7  | 825.8  | 744.7  | 653.7  | 646.1  | 650.6  | 703.0  |
| 17.5° | 750.0  | 720.4  | 686.3  | 620.3  | 602.9  | 536.1  | 457.3  | 420.9  | 402.7  | 411.0  | 428.4  |
| 20°   | 527.0  | 515.7  | 519.4  | 483.8  | 458.8  | 395.1  | 348.8  | 334.4  | 331.4  | 339.7  | 348.1  |
| 22.5° | 436.8  | 416.3  | 414.0  | 398.1  | 373.1  | 326.8  | 301.8  | 293.5  | 289.7  | 297.3  | 303.3  |
| 25°   | 382.2  | 361.7  | 353.4  | 343.5  | 317.0  | 285.1  | 270.0  | 262.4  | 258.6  | 263.1  | 266.9  |
| 27.5° | 336.7  | 317.7  | 310.2  | 303.3  | 277.5  | 254.8  | 242.7  | 235.8  | 232.8  | 234.3  | 238.1  |
| 30°   | 302.6  | 285.9  | 276.0  | 267.7  | 245.7  | 229.8  | 219.2  | 212.3  | 209.3  | 209.3  | 213.1  |
| 32.5° | 266.9  | 257.8  | 248.7  | 238.1  | 217.6  | 207.0  | 196.4  | 188.8  | 185.8  | 186.5  | 189.6  |
| 35°   | 222.2  | 219.2  | 221.4  | 211.6  | 194.1  | 185.0  | 174.4  | 166.1  | 163.8  | 164.6  | 167.6  |
| 37.5° | 197.2  | 183.5  | 191.9  | 186.5  | 176.7  | 164.6  | 150.9  | 143.3  | 139.5  | 141.8  | 143.3  |
| 40°   | 181.2  | 164.6  | 158.5  | 163.8  | 162.3  | 142.6  | 130.4  | 122.8  | 119.8  | 120.6  | 122.1  |
| 42.5° | 167.6  | 147.9  | 134.2  | 133.5  | 142.6  | 124.4  | 111.5  | 104.6  | 100.9  | 100.9  | 102.4  |
| 45°   | 154.7  | 133.5  | 116.8  | 103.9  | 119.8  | 105.4  | 93.3   | 87.2   | 82.7   | 82.7   | 83.4   |
| 47.5° | 144.8  | 121.3  | 101.6  | 84.9   | 90.2   | 86.4   | 76.6   | 70.5   | 66.0   | 66.0   | 66.7   |
| 50°   | 135.7  | 109.2  | 88.0   | 71.3   | 67.5   | 71.3   | 62.2   | 55.4   | 52.3   | 51.6   | 53.1   |
| 52.5° | 125.9  | 97.1   | 75.1   | 60.7   | 53.1   | 53.8   | 48.5   | 44.0   | 40.2   | 40.2   | 41.7   |
| 55°   | 116.0  | 87.2   | 65.2   | 51.6   | 44.0   | 40.2   | 38.7   | 35.6   | 32.6   | 32.6   | 34.1   |
| 57.5° | 106.2  | 76.6   | 55.4   | 42.5   | 34.9   | 31.8   | 31.8   | 29.6   | 27.3   | 27.3   | 28.8   |
| 60°   | 97.1   | 66.0   | 45.5   | 34.9   | 27.3   | 26.5   | 27.3   | 25.0   | 23.5   | 23.5   | 25.0   |
| 62.5° | 86.4   | 56.1   | 37.2   | 28.8   | 22.0   | 21.2   | 23.5   | 22.0   | 20.5   | 20.5   | 22.0   |
| 65°   | 73.6   | 47.8   | 29.6   | 22.0   | 16.7   | 16.7   | 19.7   | 18.2   | 16.7   | 16.7   | 18.2   |
| 67.5° | 62.2   | 40.2   | 22.7   | 15.9   | 12.1   | 12.9   | 16.7   | 15.2   | 14.4   | 14.4   | 15.9   |
| 70°   | 51.6   | 31.1   | 15.9   | 9.9    | 6.8    | 9.9    | 12.9   | 12.9   | 12.9   | 12.9   | 14.4   |
| 72.5° | 38.7   | 21.2   | 9.1    | 3.8    | 3.0    | 6.8    | 10.6   | 12.1   | 11.4   | 11.4   | 13.6   |
| 75°   | 25.0   | 12.1   | 3.0    | 0.0    | 0.0    | 3.8    | 8.3    | 9.9    | 9.9    | 9.1    | 11.4   |
| 77.5° | 14.4   | 3.8    | 0.0    | 0.0    | 0.0    | 0.0    | 5.3    | 4.5    | 3.8    | 3.0    | 5.3    |
| 80°   | 3.8    | 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: P324167

CATALOG NUMBER: GLEON-SA3C-740-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 285°   | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°    | 359°    | 360°    |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0°    | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4 | 5370.4  | 5370.4  | 5370.4  |
| 2.5°  | 4731.9 | 4821.4 | 4947.3 | 5080.7 | 5286.2 | 5449.3 | 5609.3 | 5746.5  | 5799.6  | 5821.6  |
| 5°    | 3745.3 | 3876.5 | 4060.8 | 4297.4 | 4668.2 | 5001.9 | 5340.1 | 5680.6  | 5828.4  | 5865.6  |
| 7.5°  | 2687.5 | 2855.1 | 3089.4 | 3385.9 | 3820.4 | 4252.6 | 4725.1 | 5224.8  | 5453.8  | 5511.5  |
| 10°   | 1989.1 | 2193.8 | 2462.3 | 2774.7 | 3189.5 | 3633.9 | 4148.8 | 4719.8  | 4981.4  | 5058.0  |
| 12.5° | 1411.2 | 1688.0 | 2047.5 | 2427.4 | 2786.8 | 3183.4 | 3704.4 | 4333.8  | 4608.3  | 4691.0  |
| 15°   | 828.8  | 1096.5 | 1521.9 | 2030.8 | 2491.1 | 2893.0 | 3422.3 | 4135.9  | 4438.4  | 4521.9  |
| 17.5° | 475.5  | 608.9  | 930.5  | 1497.7 | 2122.5 | 2679.1 | 3333.6 | 4185.2  | 4541.6  | 4618.9  |
| 20°   | 363.2  | 405.7  | 536.1  | 964.6  | 1691.8 | 2469.1 | 3333.6 | 4464.2  | 4903.3  | 5017.0  |
| 22.5° | 317.7  | 348.8  | 401.9  | 575.6  | 1245.2 | 2243.9 | 3372.2 | 4867.6  | 5441.7  | 5567.6  |
| 25°   | 282.1  | 310.2  | 355.7  | 433.0  | 849.3  | 1976.2 | 3464.0 | 5362.8  | 6075.6  | 6238.7  |
| 27.5° | 252.5  | 279.1  | 320.0  | 379.2  | 580.9  | 1653.1 | 3587.6 | 5943.7  | 6774.8  | 6905.2  |
| 30°   | 226.0  | 251.0  | 288.2  | 329.9  | 448.2  | 1286.9 | 3693.0 | 6491.2  | 7323.8  | 7464.1  |
| 32.5° | 201.0  | 223.7  | 257.1  | 288.2  | 367.0  | 951.7  | 3704.4 | 6925.0  | 7779.6  | 7919.1  |
| 35°   | 177.4  | 197.9  | 228.3  | 252.5  | 304.1  | 751.5  | 3527.7 | 7301.1  | 8235.3  | 8419.6  |
| 37.5° | 154.7  | 174.4  | 201.0  | 219.2  | 267.7  | 612.7  | 3257.7 | 7720.4  | 8820.0  | 8990.6  |
| 40°   | 133.5  | 150.9  | 178.2  | 190.3  | 253.3  | 470.9  | 2964.3 | 8160.3  | 9393.3  | 9549.5  |
| 42.5° | 113.7  | 130.4  | 157.0  | 180.5  | 222.2  | 351.9  | 2647.3 | 8572.8  | 9908.9  | 10072.7 |
| 45°   | 94.8   | 112.2  | 138.8  | 191.1  | 184.3  | 263.1  | 2308.3 | 8846.5  | 10316.2 | 10494.4 |
| 47.5° | 76.6   | 96.3   | 132.7  | 182.0  | 147.1  | 193.4  | 2039.9 | 9105.9  | 10624.8 | 10800.7 |
| 50°   | 61.4   | 81.1   | 149.4  | 162.3  | 120.6  | 147.9  | 1927.6 | 9337.9  | 10827.3 | 10996.4 |
| 52.5° | 50.0   | 68.2   | 141.0  | 124.4  | 100.9  | 122.1  | 1988.3 | 9714.1  | 11014.6 | 11120.7 |
| 55°   | 41.7   | 53.8   | 84.9   | 86.4   | 85.7   | 103.9  | 2063.4 | 10254.0 | 11499.1 | 11549.2 |
| 57.5° | 36.4   | 43.2   | 59.1   | 66.7   | 72.0   | 92.5   | 2064.9 | 11029.0 | 12249.1 | 12280.2 |
| 60°   | 31.1   | 37.9   | 49.3   | 53.8   | 62.2   | 82.7   | 1989.8 | 11299.7 | 12544.1 | 12647.2 |
| 62.5° | 27.3   | 33.4   | 40.9   | 44.7   | 52.3   | 74.3   | 1813.9 | 10907.7 | 12139.2 | 12314.3 |
| 65°   | 24.3   | 30.3   | 34.1   | 37.9   | 46.3   | 66.7   | 1524.2 | 10123.5 | 11467.3 | 11650.0 |
| 67.5° | 21.2   | 26.5   | 30.3   | 34.1   | 41.7   | 59.1   | 1122.3 | 9212.8  | 10696.1 | 10847.7 |
| 70°   | 19.0   | 23.5   | 27.3   | 30.3   | 36.4   | 50.0   | 681.0  | 7817.5  | 9629.9  | 9692.8  |
| 72.5° | 18.2   | 21.2   | 25.0   | 27.3   | 31.8   | 44.0   | 345.0  | 5745.0  | 7698.4  | 7800.8  |
| 75°   | 15.9   | 19.0   | 22.7   | 24.3   | 28.1   | 37.9   | 140.3  | 3773.4  | 5578.9  | 5743.5  |
| 77.5° | 12.9   | 17.4   | 20.5   | 22.0   | 24.3   | 31.1   | 71.3   | 2411.5  | 3915.2  | 4021.4  |
| 80°   | 4.5    | 12.9   | 17.4   | 18.2   | 20.5   | 22.7   | 47.0   | 1320.2  | 2271.2  | 2316.7  |
| 82.5° | 0.0    | 8.3    | 13.6   | 12.9   | 14.4   | 17.4   | 30.3   | 627.9   | 1499.2  | 1515.9  |
| 85°   | 0.0    | 3.8    | 10.6   | 8.3    | 6.1    | 12.1   | 10.6   | 137.3   | 786.4   | 819.0   |
| 87.5° | 0.0    | 0.0    | 0.8    | 3.8    | 3.0    | 4.5    | 1.5    | 0.8     | 71.3    | 90.2    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0     | 0.0     | 0.0     |

LM-79-08: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW, INVUE, LUMARK AND STREETWORKS

DATA VALID FOR LUMINAIRES UTILIZING SA LIGHT ENGINES

Report Number: SP1-2101-121-2

Luminaire Tested: IFLD-S-SA2A-740-U-T3R-HSS

Test Date: 03/05/2021

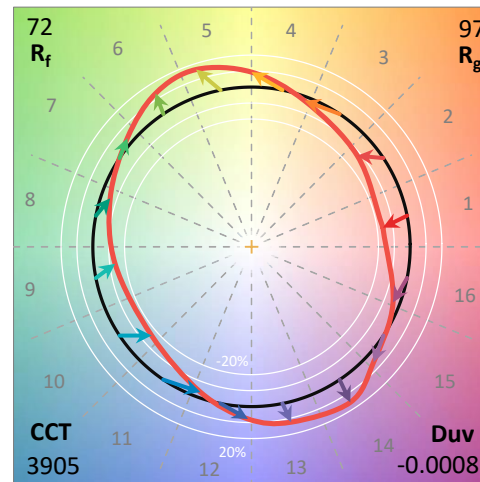
### Test Information

Test Method: LM-79-08  
 Report Number: SP1-2101-121-2  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1  
 Measurement Geometry:  $4\pi$   
 Issue Date: 03/05/2021  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: STREETWORKS  
 Catalog Number: **IFLD-S-SA2A-740-U-T3R-HSS**  
 Description: STREETWORKS INF FLOOD

SHIELD, DRIVER PROGRAMMED @ 615mA.

### Spectral Parameters

|                           |         |           |      |      |       |
|---------------------------|---------|-----------|------|------|-------|
| CCT (K):                  | 3905    | CRI (Ra): | 71.2 |      |       |
| CIE u':                   | 0.2273  | R1:       | 68.9 | R9:  | -29.7 |
| CIE v':                   | 0.5024  | R2:       | 77.0 | R10: | 46.2  |
| Duv:                      | -0.0008 | R3:       | 84.0 | R11: | 68.8  |
| CIE x:                    | 0.3841  | R4:       | 71.6 | R12: | 45.6  |
| CIE y:                    | 0.3774  | R5:       | 68.9 | R13: | 69.5  |
| CIE z:                    | 0.2385  | R6:       | 68.3 | R14: | 90.7  |
| Peak Wavelength (nm):     | 443     | R7:       | 78.7 |      |       |
| Dominant Wavelength (nm): | 579     | R8:       | 52.2 |      |       |
| Purity:                   | 28.7    |           |      |      |       |
| Rf:                       | 71.7    |           |      |      |       |
| Rg:                       | 96.9    |           |      |      |       |



### Test Conditions

Stabilization Time: 211M  
 Operation Time: 12H  
 Room Temperature (°C) / RH%: 24.8/312%  
 Sphere Temperature (°C): 24.1

REPORT NUMBER: SP1-2101-121-2

| 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: SP1-2101-121-2

**CIE 1931 Chromaticity Diagram**



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



Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2101-121-2

### 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       | 2304             | 0.0              | 490       | 19043            | 2.7              | 620       | 97577            | 25.4             | 750       | 4830             | 0.0              | 880       | 3505             | 0.0              |
| 365       | 2150             | 0.0              | 495       | 26606            | 4.8              | 625       | 90158            | 19.9             | 755       | 4664             | 0.0              | 885       | 2991             | 0.0              |
| 370       | 2146             | 0.0              | 500       | 36376            | 8.0              | 630       | 82240            | 14.9             | 760       | 4006             | 0.0              | 890       | 2327             | 0.0              |
| 375       | 2332             | 0.0              | 505       | 47714            | 13.3             | 635       | 74361            | 11.2             | 765       | 3715             | 0.0              | 895       | 2775             | 0.0              |
| 380       | 2527             | 0.0              | 510       | 58741            | 20.2             | 640       | 66994            | 8.0              | 770       | 3696             | 0.0              | 900       | 2141             | 0.0              |
| 385       | 2304             | 0.0              | 515       | 68716            | 28.5             | 645       | 60405            | 5.8              | 775       | 3117             | 0.0              | 905       | 2421             | 0.0              |
| 390       | 2064             | 0.0              | 520       | 77136            | 37.4             | 650       | 53806            | 3.9              | 780       | 3062             | 0.0              | 910       | 2200             | 0.0              |
| 395       | 1856             | 0.0              | 525       | 83567            | 44.9             | 655       | 47610            | 2.7              | 785       | 2907             | 0.0              | 915       | 2716             | 0.0              |
| 400       | 1856             | 0.0              | 530       | 89283            | 52.6             | 660       | 42018            | 1.8              | 790       | 2655             | 0.0              | 920       | 2656             | 0.0              |
| 405       | 2374             | 0.0              | 535       | 94097            | 58.4             | 665       | 36742            | 1.2              | 795       | 2467             | 0.0              | 925       | 2671             | 0.0              |
| 410       | 4084             | 0.0              | 540       | 96845            | 63.1             | 670       | 32105            | 0.7              | 800       | 2609             | 0.0              | 930       | 3292             | 0.0              |
| 415       | 8543             | 0.0              | 545       | 100829           | 67.1             | 675       | 27946            | 0.5              | 805       | 2293             | 0.0              | 935       | 3188             | 0.0              |
| 420       | 18394            | 0.1              | 550       | 105648           | 71.8             | 680       | 24146            | 0.3              | 810       | 2188             | 0.0              | 940       | 1997             | 0.0              |
| 425       | 37987            | 0.2              | 555       | 110017           | 75.1             | 685       | 21191            | 0.2              | 815       | 2386             | 0.0              | 945       | 2623             | 0.0              |
| 430       | 67605            | 0.5              | 560       | 114586           | 77.9             | 690       | 18544            | 0.1              | 820       | 2712             | 0.0              | 950       | 2969             | 0.0              |
| 435       | 102160           | 1.2              | 565       | 118987           | 79.1             | 695       | 16058            | 0.1              | 825       | 2473             | 0.0              | 955       | 2277             | 0.0              |
| 440       | 135103           | 2.1              | 570       | 122326           | 79.5             | 700       | 14133            | 0.0              | 830       | 1969             | 0.0              | 960       | 4267             | 0.0              |
| 445       | 140126           | 2.9              | 575       | 125968           | 78.4             | 705       | 12309            | 0.0              | 835       | 1917             | 0.0              | 965       | 2034             | 0.0              |
| 450       | 102339           | 2.7              | 580       | 127613           | 75.8             | 710       | 11142            | 0.0              | 840       | 2248             | 0.0              | 970       | 3586             | 0.0              |
| 455       | 58751            | 2.0              | 585       | 129466           | 71.9             | 715       | 10143            | 0.0              | 845       | 2266             | 0.0              | 975       | 2505             | 0.0              |
| 460       | 36892            | 1.5              | 590       | 128813           | 66.6             | 720       | 9072             | 0.0              | 850       | 2558             | 0.0              | 980       | 2666             | 0.0              |
| 465       | 24637            | 1.3              | 595       | 126387           | 59.9             | 725       | 8130             | 0.0              | 855       | 2767             | 0.0              | 985       | 2934             | 0.0              |
| 470       | 16738            | 1.0              | 600       | 123477           | 53.2             | 730       | 7149             | 0.0              | 860       | 2826             | 0.0              | 990       | 4120             | 0.0              |
| 475       | 13456            | 1.1              | 605       | 118718           | 46.0             | 735       | 6311             | 0.0              | 865       | 2385             | 0.0              | 995       | 3858             | 0.0              |
| 480       | 13081            | 1.2              | 610       | 112091           | 38.5             | 740       | 5711             | 0.0              | 870       | 3194             | 0.0              | 1000      | 3405             | 0.0              |
| 485       | 14734            | 1.7              | 615       | 105039           | 31.7             | 745       | 5111             | 0.0              | 875       | 3189             | 0.0              |           |                  |                  |

REPORT NUMBER: SP1-2101-121-2

### Scotopic Flux vs. Wavelength



Scotopic Lumens: 10425.8

S/P: 1.47

| $\lambda$<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               | 2304                          | 0.0                            | 490               | 19043                         | 29.3                           | 620               | 97577                         | 1.2                            | 750               | 4830                          | 0.0                            | 880               | 3505                          | 0.0                            |
| 365               | 2150                          | 0.0                            | 495               | 26606                         | 43.0                           | 625               | 90158                         | 0.8                            | 755               | 4664                          | 0.0                            | 885               | 2991                          | 0.0                            |
| 370               | 2146                          | 0.0                            | 500               | 36376                         | 60.8                           | 630               | 82240                         | 0.5                            | 760               | 4006                          | 0.0                            | 890               | 2327                          | 0.0                            |
| 375               | 2332                          | 0.0                            | 505               | 47714                         | 81.1                           | 635               | 74361                         | 0.3                            | 765               | 3715                          | 0.0                            | 895               | 2775                          | 0.0                            |
| 380               | 2527                          | 0.0                            | 510               | 58741                         | 99.6                           | 640               | 66994                         | 0.2                            | 770               | 3696                          | 0.0                            | 900               | 2141                          | 0.0                            |
| 385               | 2304                          | 0.0                            | 515               | 68716                         | 113.9                          | 645               | 60405                         | 0.1                            | 775               | 3117                          | 0.0                            | 905               | 2421                          | 0.0                            |
| 390               | 2064                          | 0.0                            | 520               | 77136                         | 122.6                          | 650               | 53806                         | 0.1                            | 780               | 3062                          | 0.0                            | 910               | 2200                          | 0.0                            |
| 395               | 1856                          | 0.0                            | 525               | 83567                         | 125.0                          | 655               | 47610                         | 0.0                            | 785               | 2907                          | 0.0                            | 915               | 2716                          | 0.0                            |
| 400               | 1856                          | 0.0                            | 530               | 89283                         | 123.1                          | 660               | 42018                         | 0.0                            | 790               | 2655                          | 0.0                            | 920               | 2656                          | 0.0                            |
| 405               | 2374                          | 0.1                            | 535               | 94097                         | 117.3                          | 665               | 36742                         | 0.0                            | 795               | 2467                          | 0.0                            | 925               | 2671                          | 0.0                            |
| 410               | 4084                          | 0.2                            | 540               | 96845                         | 107.0                          | 670               | 32105                         | 0.0                            | 800               | 2609                          | 0.0                            | 930               | 3292                          | 0.0                            |
| 415               | 8543                          | 0.9                            | 545               | 100829                        | 96.7                           | 675               | 27946                         | 0.0                            | 805               | 2293                          | 0.0                            | 935               | 3188                          | 0.0                            |
| 420               | 18394                         | 3.0                            | 550               | 105648                        | 86.4                           | 680               | 24146                         | 0.0                            | 810               | 2188                          | 0.0                            | 940               | 1997                          | 0.0                            |
| 425               | 37987                         | 9.3                            | 555               | 110017                        | 75.2                           | 685               | 21191                         | 0.0                            | 815               | 2386                          | 0.0                            | 945               | 2623                          | 0.0                            |
| 430               | 67605                         | 23.0                           | 560               | 114586                        | 64.0                           | 690               | 18544                         | 0.0                            | 820               | 2712                          | 0.0                            | 950               | 2969                          | 0.0                            |
| 435               | 102160                        | 45.7                           | 565               | 118987                        | 53.4                           | 695               | 16058                         | 0.0                            | 825               | 2473                          | 0.0                            | 955               | 2277                          | 0.0                            |
| 440               | 135103                        | 75.5                           | 570               | 122326                        | 43.2                           | 700               | 14133                         | 0.0                            | 830               | 1969                          | 0.0                            | 960               | 4267                          | 0.0                            |
| 445               | 140126                        | 93.8                           | 575               | 125968                        | 34.3                           | 705               | 12309                         | 0.0                            | 835               | 1917                          | 0.0                            | 965               | 2034                          | 0.0                            |
| 450               | 102339                        | 79.3                           | 580               | 127613                        | 26.3                           | 710               | 11142                         | 0.0                            | 840               | 2248                          | 0.0                            | 970               | 3586                          | 0.0                            |
| 455               | 58751                         | 51.3                           | 585               | 129466                        | 19.8                           | 715               | 10143                         | 0.0                            | 845               | 2266                          | 0.0                            | 975               | 2505                          | 0.0                            |
| 460               | 36892                         | 35.6                           | 590               | 128813                        | 14.3                           | 720               | 9072                          | 0.0                            | 850               | 2558                          | 0.0                            | 980               | 2666                          | 0.0                            |
| 465               | 24637                         | 26.0                           | 595               | 126387                        | 10.1                           | 725               | 8130                          | 0.0                            | 855               | 2767                          | 0.0                            | 985               | 2934                          | 0.0                            |
| 470               | 16738                         | 19.3                           | 600               | 123477                        | 7.0                            | 730               | 7149                          | 0.0                            | 860               | 2826                          | 0.0                            | 990               | 4120                          | 0.0                            |
| 475               | 13456                         | 16.8                           | 605               | 118718                        | 4.7                            | 735               | 6311                          | 0.0                            | 865               | 2385                          | 0.0                            | 995               | 3858                          | 0.0                            |
| 480               | 13081                         | 17.7                           | 610               | 112091                        | 3.0                            | 740               | 5711                          | 0.0                            | 870               | 3194                          | 0.0                            | 1000              | 3405                          | 0.0                            |
| 485               | 14734                         | 21.4                           | 615               | 105039                        | 1.9                            | 745               | 5111                          | 0.0                            | 875               | 3189                          | 0.0                            |                   |                               |                                |

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### Melanopic Flux vs. Wavelength



**Melanopic Lumens: 3927.2**

**M/P: 0.55**

| 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       | 2304             | 0.0              | 490       | 19043            | 15.8             | 620       | 97577            | 0.1              | 750       | 4830             | 0.0              | 880       | 3505             | 0.0              |
| 365       | 2150             | 0.0              | 495       | 26606            | 22.0             | 625       | 90158            | 0.0              | 755       | 4664             | 0.0              | 885       | 2991             | 0.0              |
| 370       | 2146             | 0.0              | 500       | 36376            | 29.2             | 630       | 82240            | 0.0              | 760       | 4006             | 0.0              | 890       | 2327             | 0.0              |
| 375       | 2332             | 0.0              | 505       | 47714            | 36.6             | 635       | 74361            | 0.0              | 765       | 3715             | 0.0              | 895       | 2775             | 0.0              |
| 380       | 2527             | 0.0              | 510       | 58741            | 42.2             | 640       | 66994            | 0.0              | 770       | 3696             | 0.0              | 900       | 2141             | 0.0              |
| 385       | 2304             | 0.0              | 515       | 68716            | 44.9             | 645       | 60405            | 0.0              | 775       | 3117             | 0.0              | 905       | 2421             | 0.0              |
| 390       | 2064             | 0.0              | 520       | 77136            | 44.9             | 650       | 53806            | 0.0              | 780       | 3062             | 0.0              | 910       | 2200             | 0.0              |
| 395       | 1856             | 0.0              | 525       | 83567            | 42.4             | 655       | 47610            | 0.0              | 785       | 2907             | 0.0              | 915       | 2716             | 0.0              |
| 400       | 1856             | 0.0              | 530       | 89283            | 38.6             | 660       | 42018            | 0.0              | 790       | 2655             | 0.0              | 920       | 2656             | 0.0              |
| 405       | 2374             | 0.0              | 535       | 94097            | 33.9             | 665       | 36742            | 0.0              | 795       | 2467             | 0.0              | 925       | 2671             | 0.0              |
| 410       | 4084             | 0.2              | 540       | 96845            | 28.3             | 670       | 32105            | 0.0              | 800       | 2609             | 0.0              | 930       | 3292             | 0.0              |
| 415       | 8543             | 0.6              | 545       | 100829           | 23.4             | 675       | 27946            | 0.0              | 805       | 2293             | 0.0              | 935       | 3188             | 0.0              |
| 420       | 18394            | 2.1              | 550       | 105648           | 19.0             | 680       | 24146            | 0.0              | 810       | 2188             | 0.0              | 940       | 1997             | 0.0              |
| 425       | 37987            | 5.9              | 555       | 110017           | 14.8             | 685       | 21191            | 0.0              | 815       | 2386             | 0.0              | 945       | 2623             | 0.0              |
| 430       | 67605            | 14.3             | 560       | 114586           | 11.3             | 690       | 18544            | 0.0              | 820       | 2712             | 0.0              | 950       | 2969             | 0.0              |
| 435       | 102160           | 27.3             | 565       | 118987           | 8.4              | 695       | 16058            | 0.0              | 825       | 2473             | 0.0              | 955       | 2277             | 0.0              |
| 440       | 135103           | 45.1             | 570       | 122326           | 6.0              | 700       | 14133            | 0.0              | 830       | 1969             | 0.0              | 960       | 4267             | 0.0              |
| 445       | 140126           | 55.3             | 575       | 125968           | 4.2              | 705       | 12309            | 0.0              | 835       | 1917             | 0.0              | 965       | 2034             | 0.0              |
| 450       | 102339           | 47.2             | 580       | 127613           | 2.9              | 710       | 11142            | 0.0              | 840       | 2248             | 0.0              | 970       | 3586             | 0.0              |
| 455       | 58751            | 30.8             | 585       | 129466           | 1.9              | 715       | 10143            | 0.0              | 845       | 2266             | 0.0              | 975       | 2505             | 0.0              |
| 460       | 36892            | 21.7             | 590       | 128813           | 1.3              | 720       | 9072             | 0.0              | 850       | 2558             | 0.0              | 980       | 2666             | 0.0              |
| 465       | 24637            | 16.1             | 595       | 126387           | 0.8              | 725       | 8130             | 0.0              | 855       | 2767             | 0.0              | 985       | 2934             | 0.0              |
| 470       | 16738            | 12.0             | 600       | 123477           | 0.5              | 730       | 7149             | 0.0              | 860       | 2826             | 0.0              | 990       | 4120             | 0.0              |
| 475       | 13456            | 10.3             | 605       | 118718           | 0.3              | 735       | 6311             | 0.0              | 865       | 2385             | 0.0              | 995       | 3858             | 0.0              |
| 480       | 13081            | 10.5             | 610       | 112091           | 0.2              | 740       | 5711             | 0.0              | 870       | 3194             | 0.0              | 1000      | 3405             | 0.0              |
| 485       | 14734            | 12.1             | 615       | 105039           | 0.1              | 745       | 5111             | 0.0              | 875       | 3189             | 0.0              |           |                  |                  |

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### Summary

$R_f = 71.7$   
 $R_g = 96.9$   
 CIE  $R_a = 71.2$   
 $R_g = -29.7$

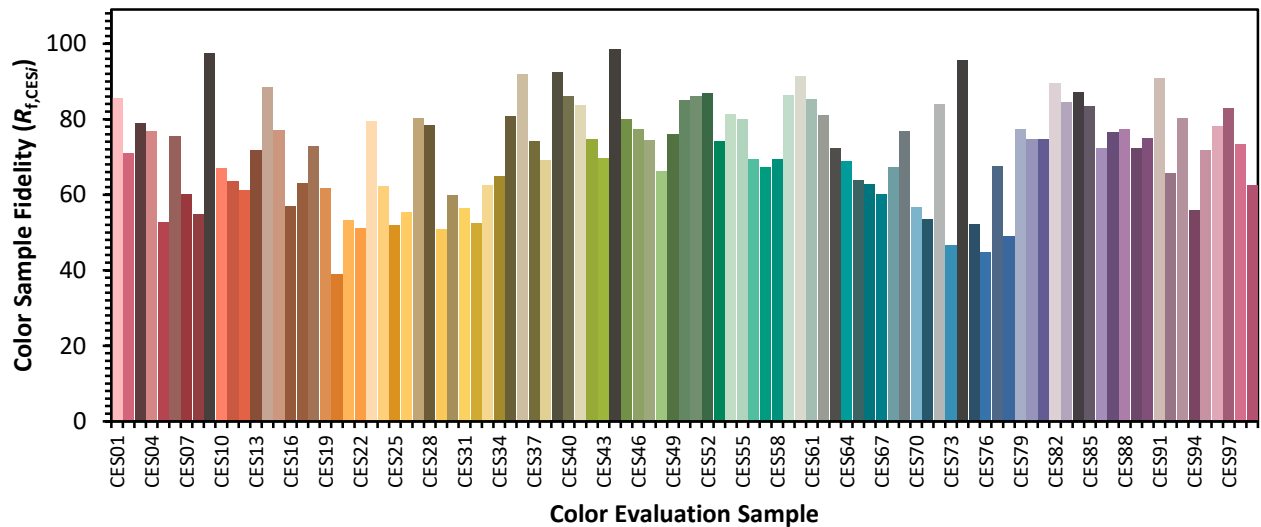


### Color Vector Graphics



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

|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 55 | CES51 = 86 | CES76 = 45 |
| CES02 = 61 | CES27 = 80 | CES52 = 87 | CES77 = 68 |
| CES03 = 30 | CES28 = 79 | CES53 = 74 | CES78 = 49 |
| CES04 = 70 | CES29 = 51 | CES54 = 81 | CES79 = 77 |
| CES05 = 47 | CES30 = 60 | CES55 = 80 | CES80 = 75 |
| CES06 = 50 | CES31 = 56 | CES56 = 69 | CES81 = 75 |
| CES07 = 40 | CES32 = 52 | CES57 = 67 | CES82 = 90 |
| CES08 = 39 | CES33 = 62 | CES58 = 69 | CES83 = 85 |
| CES09 = 29 | CES34 = 65 | CES59 = 86 | CES84 = 87 |
| CES10 = 74 | CES35 = 81 | CES60 = 91 | CES85 = 83 |
| CES11 = 57 | CES36 = 92 | CES61 = 85 | CES86 = 72 |
| CES12 = 63 | CES37 = 74 | CES62 = 81 | CES87 = 77 |
| CES13 = 42 | CES38 = 69 | CES63 = 72 | CES88 = 77 |
| CES14 = 74 | CES39 = 92 | CES64 = 69 | CES89 = 72 |
| CES15 = 71 | CES40 = 86 | CES65 = 64 | CES90 = 75 |
| CES16 = 46 | CES41 = 84 | CES66 = 63 | CES91 = 91 |
| CES17 = 49 | CES42 = 75 | CES67 = 60 | CES92 = 66 |
| CES18 = 56 | CES43 = 70 | CES68 = 67 | CES93 = 80 |
| CES19 = 72 | CES44 = 98 | CES69 = 77 | CES94 = 56 |
| CES20 = 65 | CES45 = 80 | CES70 = 57 | CES95 = 72 |
| CES21 = 86 | CES46 = 77 | CES71 = 53 | CES96 = 78 |
| CES22 = 78 | CES47 = 74 | CES72 = 84 | CES97 = 83 |
| CES23 = 92 | CES48 = 66 | CES73 = 47 | CES98 = 73 |
| CES24 = 91 | CES49 = 76 | CES74 = 96 | CES99 = 63 |
| CES25 = 72 | CES50 = 85 | CES75 = 52 |            |



Color Rendition by Hue-Angle Bin



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**Measure Comparisons**



(END OF REPORT)