

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



Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: LUMARK

Report Number: P980934

Luminaire Tested: **NFFLD-C40-7022-66**

Issue Date: 04/10/2025



**Test Information**

Test Method: LM-79-08  
Report Number: P980934  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 04/10/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NFFLD-C40-7022-66  
Description: LUMARK NIGHT FALCON MEDIUM SIZE 130W 70CRI 2200K LED FIXTURE NEMA 6  
Light Source: (2) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

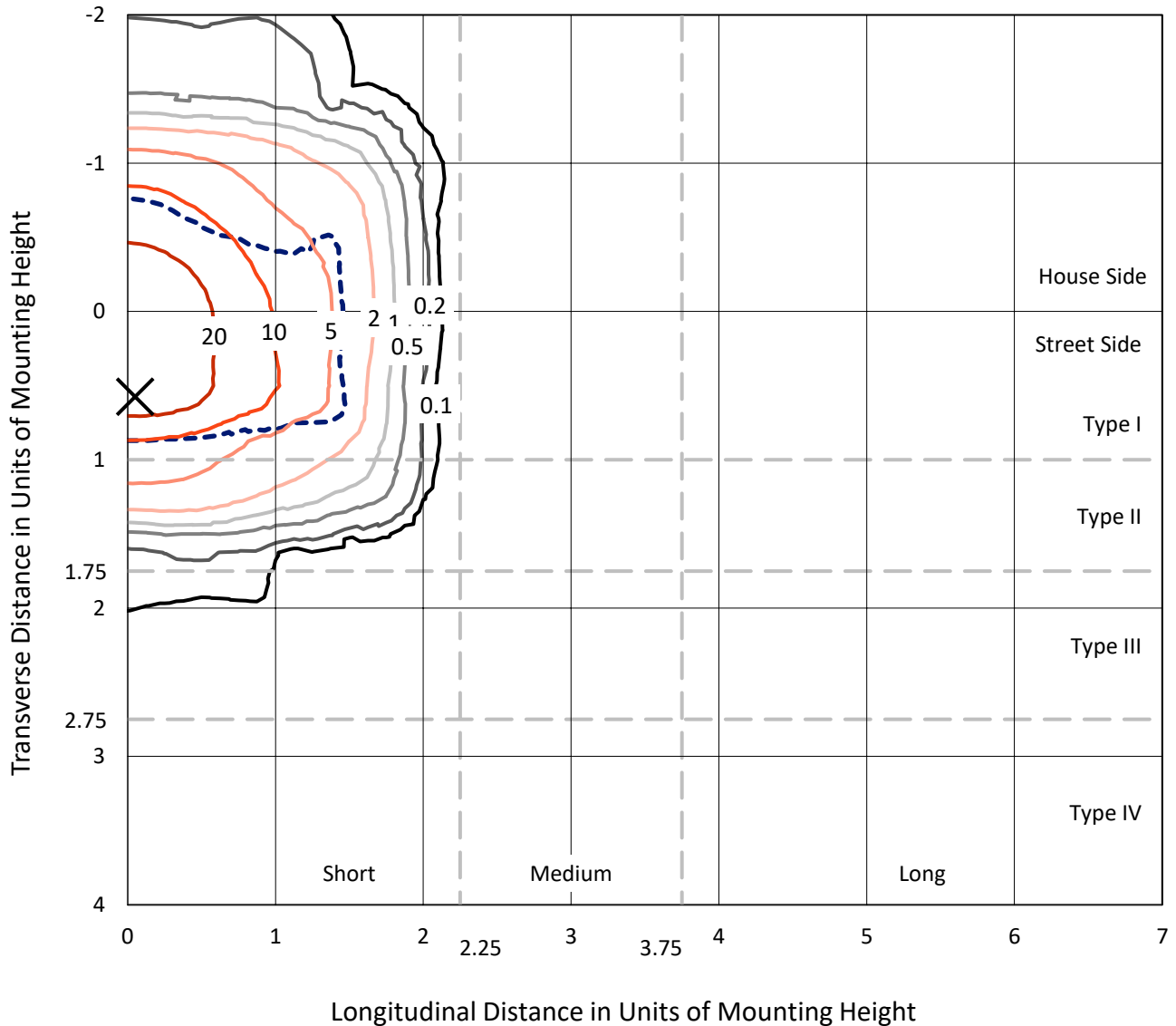
Lumens per Lamp: N/A  
Luminaire Lumens: 18845 lumens  
Efficiency: N/A  
Efficacy: 141.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.31' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B4 - U0 - G1

Input Watts (W): 132.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 2.87%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT

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### Iso-Footcandle Lines of Horizontal Illumination

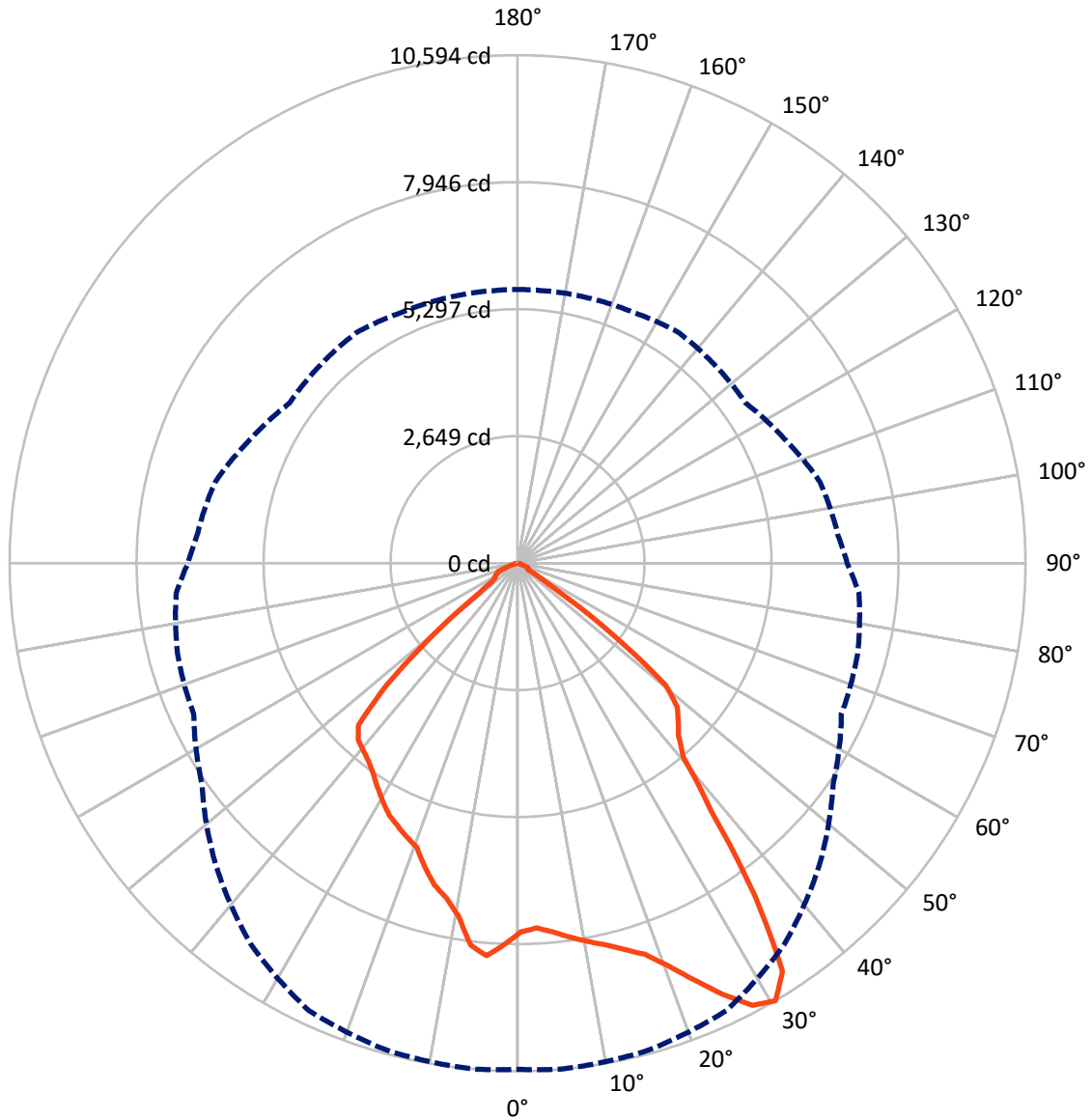
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 35 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 5-Deg Lateral      - - - Horizontal Cone Through 30-Deg Vertical

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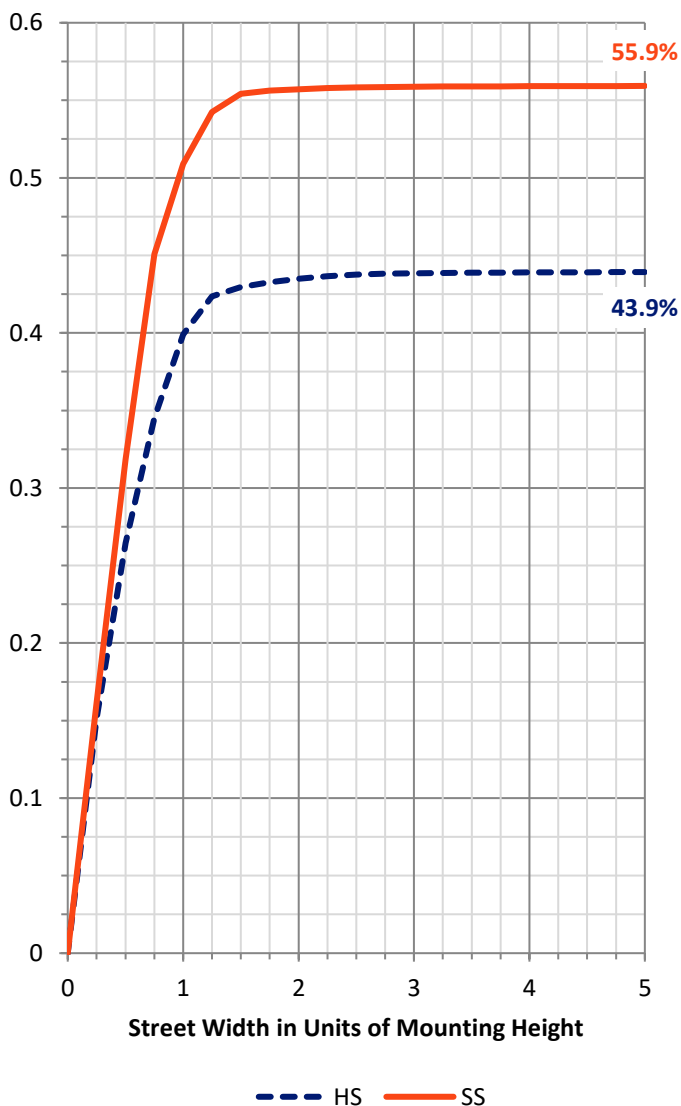
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8334.9	0.0	8334.9
	% Fixture	44.2	0.0	44.2
<b>Street Side</b>	Lumens	10510.0	0.0	10510.0
	% Fixture	55.8	0.0	55.8
<b>Total</b>	Lumens	18845.0	0.0	18845.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	752.4	4.0
10°-20°	2179.7	11.6
20°-30°	3473.6	18.4
30°-40°	4342.5	23.0
40°-50°	4261.5	22.6
50°-60°	3046.7	16.2
60°-70°	674.1	3.6
70°-80°	103.5	0.5
80°-90°	10.9	0.1
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°	18845.0	100.0
0°-180°	18845.0	100.0



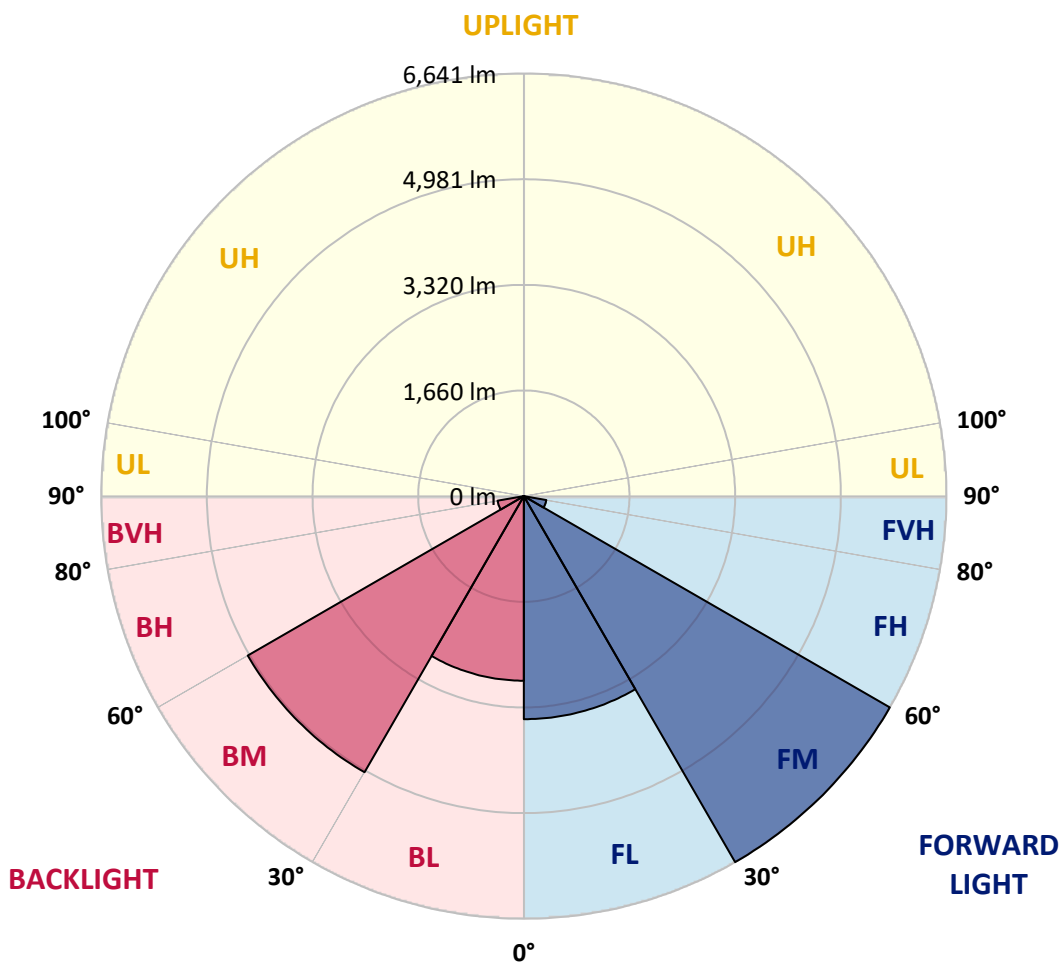
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3505.0	18.6			
FM (30°-60°)	6641.0	35.2			
FH (60°-80°)	358.5	1.9			G0/660
FVH (80°-90°)	5.5	0.0			G0/10
BL (0°-30°)	2900.7	15.4	B4/5000		
BM (30°-60°)	5009.7	26.6	B4/8500		
BH (60°-80°)	419.1	2.2	B1/500		G1/500
BVH (80°-90°)	5.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G1**

Type I Short





REPORT NUMBER: P980934

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7691.9	7691.9	7691.9	7691.9	7691.9	7691.9	7691.9	7691.9	7691.9	7691.9	7691.9
2.5°	7605.8	7618.1	7630.4	7648.8	7673.4	7685.7	7673.4	7661.1	7655.0	7667.3	7673.4
5°	7710.3	7728.8	7734.9	7747.2	7759.5	7747.2	7741.1	7728.8	7722.6	7728.8	7747.2
7.5°	7864.0	7876.3	7870.2	7864.0	7857.9	7814.8	7771.8	7753.4	7753.4	7771.8	7821.0
10°	7999.3	8023.9	7993.2	7968.6	7925.5	7857.9	7784.1	7741.1	7753.4	7790.3	7851.7
12.5°	8171.5	8171.5	8140.7	8116.1	8017.7	7937.8	7839.4	7771.8	7771.8	7839.4	7907.1
15°	8380.5	8362.1	8349.8	8282.1	8165.3	8036.2	7913.2	7814.8	7796.4	7900.9	7944.0
17.5°	8644.9	8577.3	8546.5	8429.7	8269.8	8103.8	7937.8	7857.9	7802.5	7913.2	7864.0
20°	9007.7	8958.5	8860.1	8675.6	8349.8	8134.6	7937.8	7833.3	7790.3	7851.7	7802.5
22.5°	9475.0	9444.2	9222.9	8989.2	8558.8	8159.2	7907.1	7765.7	7753.4	7722.6	7618.1
25°	10046.8	9966.8	9739.4	9407.3	8872.4	8399.0	7900.9	7642.7	7599.6	7519.7	7335.3
27.5°	10532.5	10446.4	10169.8	9874.6	9302.8	8755.6	7950.1	7495.1	7445.9	7390.6	7163.1
30°	10557.1	10594.0	10520.2	10298.9	9702.5	8903.1	8036.2	7452.1	7341.4	7144.7	6874.1
32.5°	10059.1	10145.2	10323.5	10403.4	10003.7	9081.5	8110.0	7470.5	7267.6	6794.2	6572.8
35°	8355.9	8528.1	9259.8	9948.4	10089.8	9339.7	8171.5	7470.5	7243.0	6542.1	6369.9
37.5°	6419.1	6560.5	7181.5	8429.7	9708.6	9499.6	8306.7	7427.5	7212.3	6560.5	6326.9
40°	5244.7	5324.7	5595.2	6443.7	8368.2	9235.2	8442.0	7476.7	7120.1	6572.8	6351.5
42.5°	4925.0	4918.9	4863.5	5177.1	6382.2	8460.4	8534.2	7599.6	6966.3	6492.9	6308.4
45°	4709.8	4697.5	4648.3	4709.8	5048.0	6923.3	8466.6	7821.0	6775.7	6210.1	6087.1
47.5°	4476.2	4482.3	4463.9	4488.5	4427.0	5257.0	8085.4	7913.2	6449.9	5736.6	5693.6
50°	3916.6	4008.9	4254.8	4279.4	4119.5	4242.5	6923.3	7870.2	6216.2	5601.4	5564.5
52.5°	2434.8	2582.4	3307.9	3922.8	3830.6	3830.6	5281.6	7931.7	5798.1	5552.2	5576.8
55°	860.8	971.5	1770.8	2699.2	3430.9	3498.5	4174.9	7058.6	5748.9	5638.2	5662.8
57.5°	215.2	264.4	541.1	1168.2	2311.9	3172.7	3732.2	5828.9	4365.5	4211.8	4273.3
60°	252.1	245.9	338.2	375.1	897.7	2508.6	3363.3	3935.1	2816.0	2637.7	2668.5
62.5°	270.5	252.1	264.4	332.0	147.6	1229.7	2680.8	2342.6	1162.1	860.8	910.0
65°	239.8	227.5	209.1	307.4	104.5	227.5	1580.2	688.6	166.0	264.4	239.8
67.5°	159.9	166.0	172.2	245.9	98.4	98.4	209.1	172.2	116.8	239.8	209.1
70°	92.2	98.4	116.8	147.6	98.4	79.9	92.2	141.4	98.4	239.8	209.1
72.5°	55.3	55.3	55.3	61.5	98.4	67.6	61.5	116.8	86.1	221.3	209.1
75°	43.0	43.0	43.0	36.9	86.1	43.0	43.0	92.2	73.8	159.9	159.9
77.5°	36.9	36.9	36.9	30.7	49.2	36.9	36.9	67.6	67.6	79.9	92.2
80°	24.6	24.6	24.6	24.6	30.7	30.7	24.6	36.9	30.7	36.9	43.0
82.5°	12.3	18.4	18.4	12.3	18.4	18.4	18.4	24.6	18.4	24.6	24.6
85°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	12.3	6.1	6.1	12.3
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7691.9	7691.9	7691.9	7691.9	7691.9	7691.9	7691.9	7691.9	7691.9	7691.9
2.5°	7685.7	7716.5	7759.5	7827.1	7851.7	7894.8	7931.7	7962.4	7962.4	7950.1
5°	7784.1	7870.2	7987.0	8091.5	8128.4	8171.5	8189.9	8220.7	8214.5	8208.4
7.5°	7870.2	8005.5	8128.4	8202.2	8189.9	8134.6	8097.7	8048.5	8030.0	8042.3
10°	7937.8	8060.8	8116.1	8066.9	7919.4	7790.3	7624.2	7513.6	7458.2	7476.7
12.5°	7962.4	8005.5	7956.3	7685.7	7501.3	7378.3	7243.0	7169.2	7138.5	7144.7
15°	7968.6	7870.2	7599.6	7396.7	7261.5	7107.8	6997.1	6929.5	6929.5	6935.6
17.5°	7839.4	7599.6	7366.0	7212.3	7021.7	6861.8	6800.3	6775.7	6622.0	6646.6
20°	7722.6	7378.3	7249.2	7009.4	6781.9	6677.4	6320.7	6283.8	6290.0	6296.1
22.5°	7476.7	7218.4	7101.6	6788.0	6529.8	6240.8	6191.6	6154.7	6160.9	6160.9
25°	7138.5	6990.9	6831.1	6505.2	6191.6	6136.3	6099.4	6050.2	6025.6	6031.8
27.5°	6947.9	6763.4	6468.3	6191.6	5988.7	6013.3	5970.3	5896.5	5896.5	5902.6
30°	6708.1	6529.8	6136.3	5810.4	5828.9	5865.7	5761.2	5724.3	5705.9	5705.9
32.5°	6413.0	6167.0	5822.7	5515.3	5626.0	5613.7	5484.5	5496.8	5509.1	5496.8
35°	6191.6	5871.9	5582.9	5416.9	5373.9	5324.7	5257.0	5300.1	5318.5	5306.2
37.5°	6136.3	5755.1	5453.8	5337.0	5171.0	5078.7	5097.2	5140.2	5164.8	5158.7
40°	6117.8	5638.2	5343.1	5220.1	4998.8	4918.9	4943.5	5029.5	5060.3	5054.1
42.5°	6093.2	5558.3	5275.5	5127.9	4820.5	4765.2	4882.0	4961.9	4968.1	4961.9
45°	5964.1	5472.2	5232.4	4937.3	4549.9	4617.6	4765.2	4808.2	4734.4	4703.7
47.5°	5662.8	5312.4	5103.3	4703.7	4328.6	4457.7	4476.2	4008.9	3738.3	3676.9
50°	5576.8	5318.5	4955.8	4427.0	4193.3	4322.5	3517.0	2686.9	2348.8	2281.1
52.5°	5552.2	5257.0	5011.1	4138.0	4144.1	3646.1	2219.6	1315.8	1057.6	1008.4
55°	5613.7	5527.6	5103.3	3965.8	3855.2	2373.4	1033.0	621.0	639.5	621.0
57.5°	4236.4	4623.7	5214.0	3695.3	2816.0	1143.6	651.7	602.6	559.5	547.2
60°	2643.9	3012.8	3818.3	3178.8	1444.9	682.5	664.0	559.5	541.1	534.9
62.5°	873.1	1340.4	2188.9	2090.5	399.7	676.3	670.2	498.0	498.0	498.0
65°	221.3	227.5	602.6	719.4	295.1	602.6	639.5	467.3	455.0	473.4
67.5°	190.6	172.2	319.7	282.8	245.9	418.1	559.5	448.8	424.3	424.3
70°	190.6	202.9	313.6	264.4	153.7	227.5	405.8	276.7	245.9	227.5
72.5°	178.3	196.8	276.7	239.8	104.5	110.7	178.3	92.2	86.1	73.8
75°	153.7	159.9	215.2	215.2	110.7	55.3	73.8	61.5	61.5	55.3
77.5°	104.5	79.9	123.0	153.7	79.9	36.9	30.7	30.7	30.7	24.6
80°	55.3	30.7	30.7	24.6	30.7	30.7	18.4	24.6	24.6	18.4
82.5°	30.7	18.4	18.4	12.3	12.3	18.4	12.3	12.3	12.3	12.3
85°	12.3	12.3	6.1	6.1	6.1	12.3	6.1	6.1	6.1	6.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Lumark

Report Number: SP1-2501-319-8

Test Date: 02/05/2025

Luminaire Tested: NFFLD-C55-7022-66

Data in this report applies to families of products including NFFLD-C55-7022-66

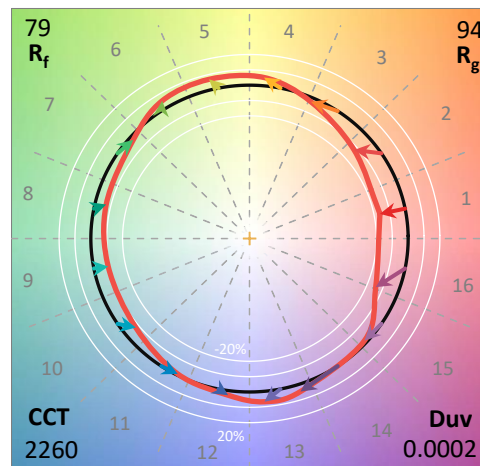
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2501-319-8  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 02/06/2025  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Lumark  
 Catalog Number: **NFFLD-C55-7022-66**  
 Description: LUMARK NIGHT FALCON 16900LM NEMA 6

**Spectral Parameters**

CCT (K): 2260  
 CIE u': 0.2861  
 CIE v': 0.5354  
 Duv: 0.0002  
 CIE x: 0.5000  
 CIE y: 0.4158  
 CIE z: 0.0842  
 Peak Wavelength (nm): 604  
 Dominant Wavelength (nm): 586  
 Purity: 74.90898  
 Rf: 78.7  
 Rg: 93.7

CRI (Ra):	72.8		
R1:	70.2	R9:	-28.5
R2:	88.0	R10:	76.1
R3:	89.4	R11:	65.3
R4:	67.3	R12:	73.8
R5:	70.5	R13:	73.9
R6:	87.8	R14:	94.5
R7:	71.9	R15:	60.0
R8:	36.8		



**Test Conditions**

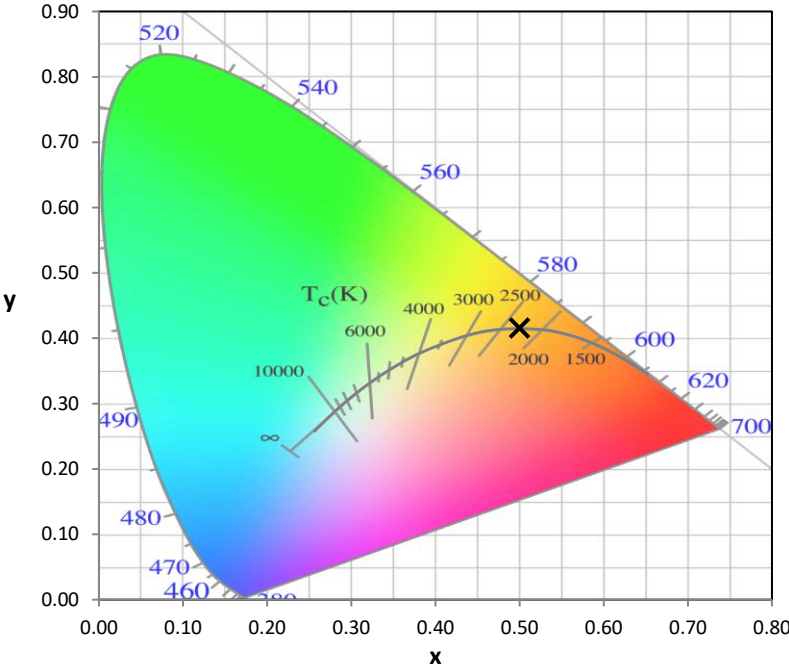
Stabilization Time: 59M  
 Operation Time: 1H 59M  
 Sphere Temperature (°C): 25.0

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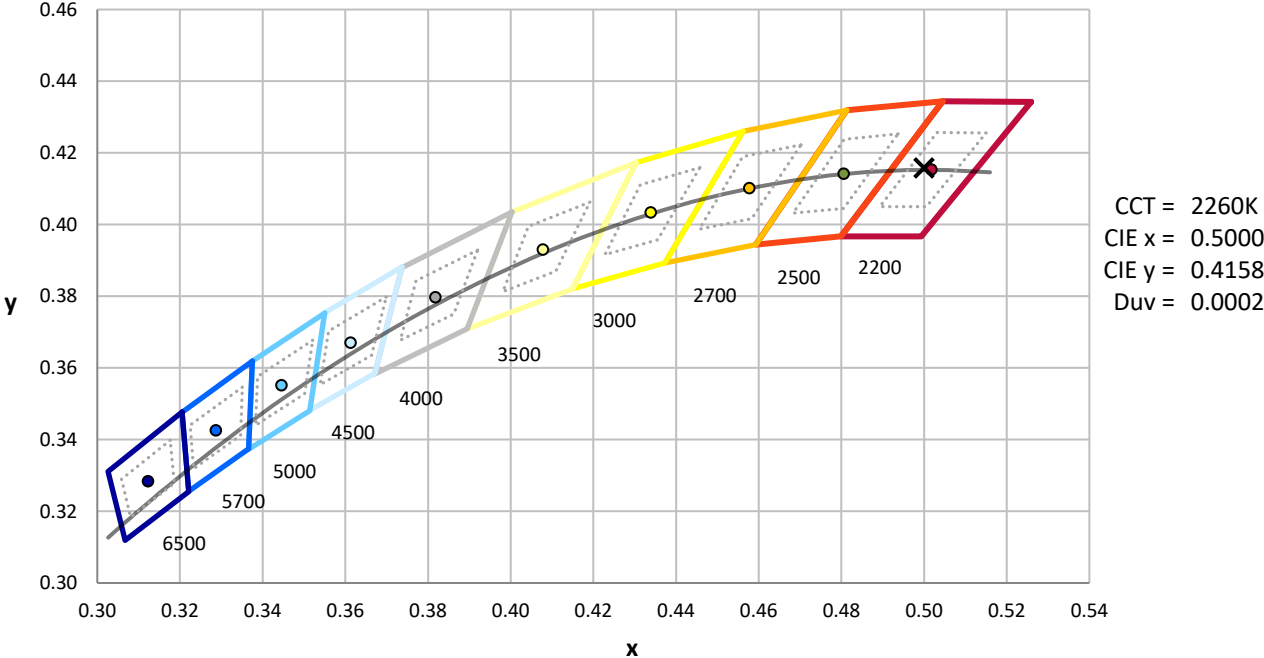
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	12/16/2024	6/16/2025
Power Meter	INXT2011004	1/21/2025	1/21/2026
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085	10/22/2024	10/22/2025
Room Thermometer	IN0046	10/22/2024	10/22/2025

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CIE 1931 Chromaticity Diagram



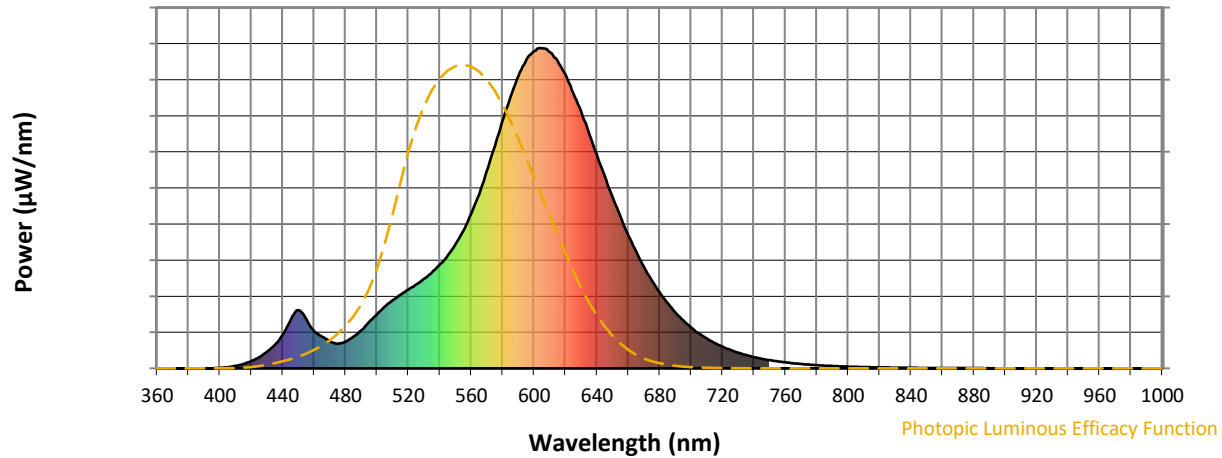
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 2200K 4-step quadrangle

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**Photopic Flux vs. Wavelength**

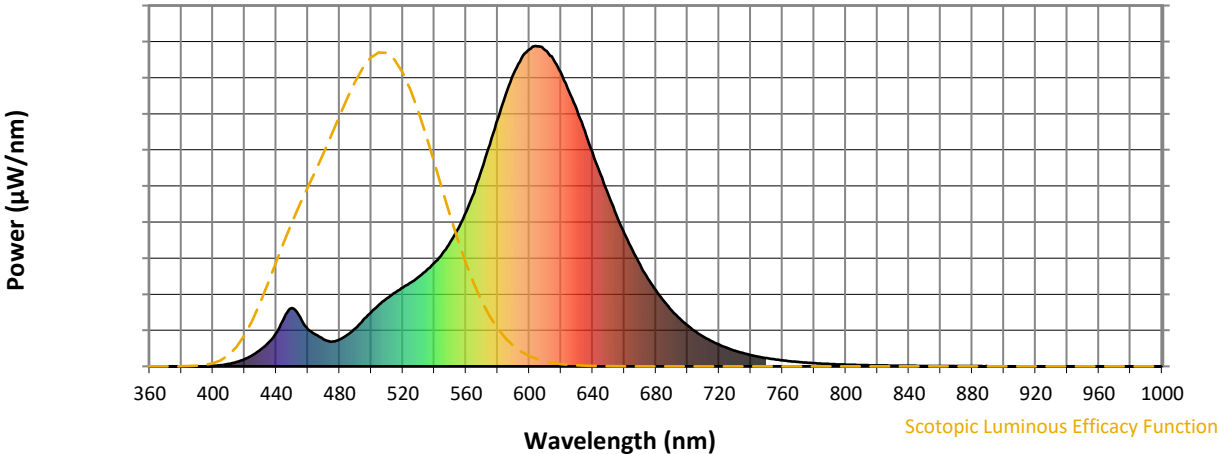


**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)
360	0	NR	490	118	NR	620	917	NR	750	26	NR	880	1	NR
365	0	NR	495	145	NR	625	859	NR	755	22	NR	885	1	NR
370	0	NR	500	169	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	193	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	213	NR	640	667	NR	770	14	NR	900	0	NR
385	0	NR	515	230	NR	645	600	NR	775	12	NR	905	0	NR
390	0	NR	520	246	NR	650	534	NR	780	10	NR	910	0	NR
395	0	NR	525	262	NR	655	473	NR	785	8	NR	915	0	NR
400	2	NR	530	280	NR	660	416	NR	790	7	NR	920	0	NR
405	4	NR	535	299	NR	665	364	NR	795	6	NR	925	0	NR
410	8	NR	540	324	NR	670	316	NR	800	5	NR	930	0	NR
415	14	NR	545	352	NR	675	274	NR	805	5	NR	935	0	NR
420	23	NR	550	388	NR	680	237	NR	810	4	NR	940	0	NR
425	35	NR	555	429	NR	685	204	NR	815	4	NR	945	0	NR
430	52	NR	560	482	NR	690	174	NR	820	3	NR	950	0	NR
435	74	NR	565	543	NR	695	150	NR	825	3	NR	955	0	NR
440	105	NR	570	616	NR	700	128	NR	830	2	NR	960	0	NR
445	151	NR	575	692	NR	705	109	NR	835	2	NR	965	0	NR
450	182	NR	580	773	NR	710	93	NR	840	2	NR	970	0	NR
455	154	NR	585	847	NR	715	79	NR	845	2	NR	975	0	NR
460	116	NR	590	913	NR	720	68	NR	850	1	NR	980	0	NR
465	99	NR	595	962	NR	725	58	NR	855	1	NR	985	0	NR
470	84	NR	600	990	NR	730	49	NR	860	1	NR	990	0	NR
475	77	NR	605	999	NR	735	42	NR	865	1	NR	995	0	NR
480	84	NR	610	986	NR	740	35	NR	870	1	NR	1000	0	NR
485	99	NR	615	960	NR	745	30	NR	875	1	NR			

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**Scotopic Flux vs. Wavelength**



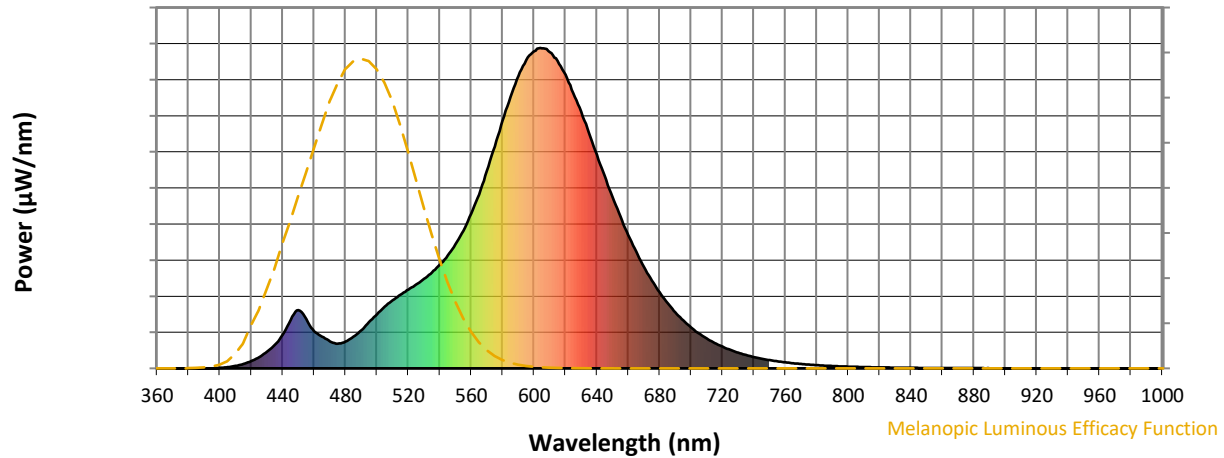
**Scotopic Lumens: NR**

**S/P: 0.95**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)
360	0	NR	490	118	NR	620	917	NR	750	26	NR	880	1	NR
365	0	NR	495	145	NR	625	859	NR	755	22	NR	885	1	NR
370	0	NR	500	169	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	193	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	213	NR	640	667	NR	770	14	NR	900	0	NR
385	0	NR	515	230	NR	645	600	NR	775	12	NR	905	0	NR
390	0	NR	520	246	NR	650	534	NR	780	10	NR	910	0	NR
395	0	NR	525	262	NR	655	473	NR	785	8	NR	915	0	NR
400	2	NR	530	280	NR	660	416	NR	790	7	NR	920	0	NR
405	4	NR	535	299	NR	665	364	NR	795	6	NR	925	0	NR
410	8	NR	540	324	NR	670	316	NR	800	5	NR	930	0	NR
415	14	NR	545	352	NR	675	274	NR	805	5	NR	935	0	NR
420	23	NR	550	388	NR	680	237	NR	810	4	NR	940	0	NR
425	35	NR	555	429	NR	685	204	NR	815	4	NR	945	0	NR
430	52	NR	560	482	NR	690	174	NR	820	3	NR	950	0	NR
435	74	NR	565	543	NR	695	150	NR	825	3	NR	955	0	NR
440	105	NR	570	616	NR	700	128	NR	830	2	NR	960	0	NR
445	151	NR	575	692	NR	705	109	NR	835	2	NR	965	0	NR
450	182	NR	580	773	NR	710	93	NR	840	2	NR	970	0	NR
455	154	NR	585	847	NR	715	79	NR	845	2	NR	975	0	NR
460	116	NR	590	913	NR	720	68	NR	850	1	NR	980	0	NR
465	99	NR	595	962	NR	725	58	NR	855	1	NR	985	0	NR
470	84	NR	600	990	NR	730	49	NR	860	1	NR	990	0	NR
475	77	NR	605	999	NR	735	42	NR	865	1	NR	995	0	NR
480	84	NR	610	986	NR	740	35	NR	870	1	NR	1000	0	NR
485	99	NR	615	960	NR	745	30	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



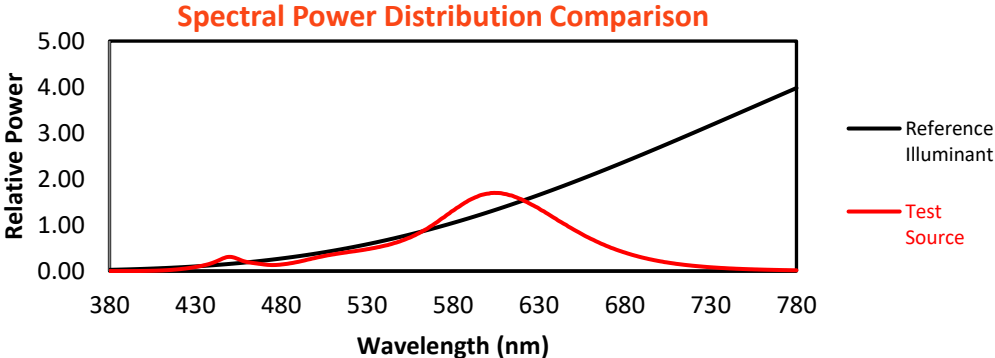
Melanopic Lumens: NR

M/P: 1.64

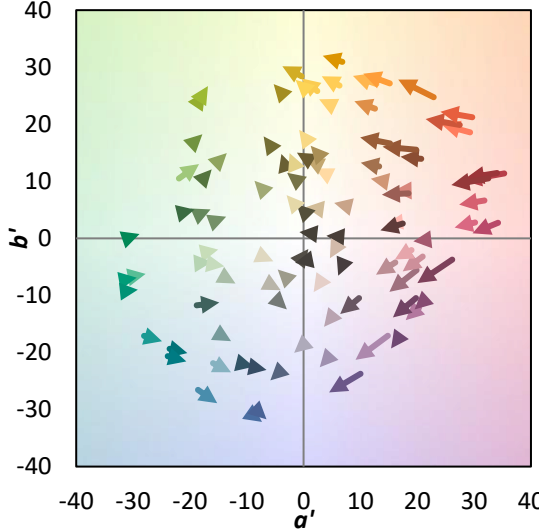
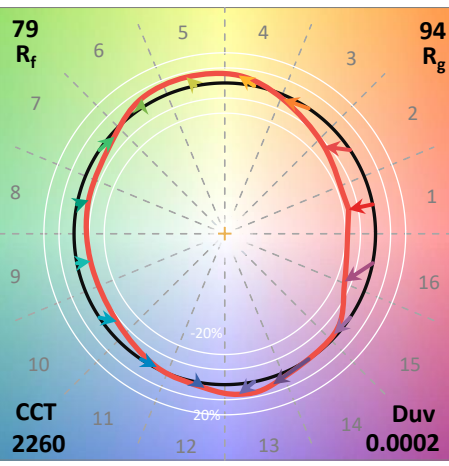
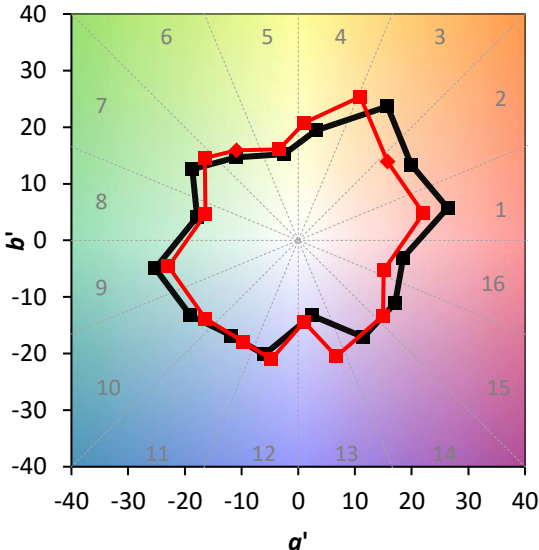
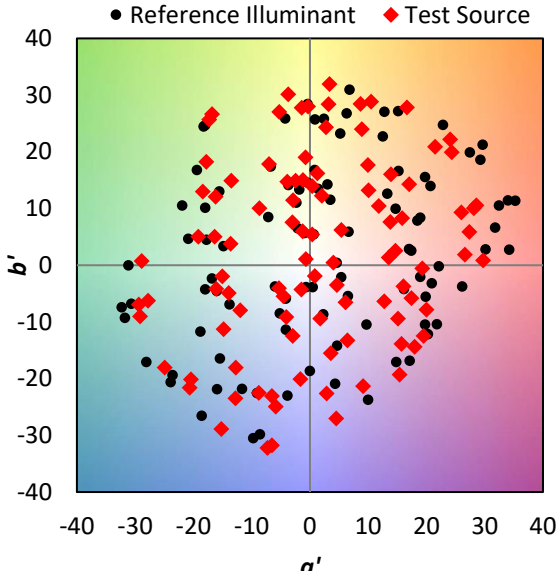
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	118	NR	620	917	NR	750	26	NR	880	1	NR
365	0	NR	495	145	NR	625	859	NR	755	22	NR	885	1	NR
370	0	NR	500	169	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	193	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	213	NR	640	667	NR	770	14	NR	900	0	NR
385	0	NR	515	230	NR	645	600	NR	775	12	NR	905	0	NR
390	0	NR	520	246	NR	650	534	NR	780	10	NR	910	0	NR
395	0	NR	525	262	NR	655	473	NR	785	8	NR	915	0	NR
400	2	NR	530	280	NR	660	416	NR	790	7	NR	920	0	NR
405	4	NR	535	299	NR	665	364	NR	795	6	NR	925	0	NR
410	8	NR	540	324	NR	670	316	NR	800	5	NR	930	0	NR
415	14	NR	545	352	NR	675	274	NR	805	5	NR	935	0	NR
420	23	NR	550	388	NR	680	237	NR	810	4	NR	940	0	NR
425	35	NR	555	429	NR	685	204	NR	815	4	NR	945	0	NR
430	52	NR	560	482	NR	690	174	NR	820	3	NR	950	0	NR
435	74	NR	565	543	NR	695	150	NR	825	3	NR	955	0	NR
440	105	NR	570	616	NR	700	128	NR	830	2	NR	960	0	NR
445	151	NR	575	692	NR	705	109	NR	835	2	NR	965	0	NR
450	182	NR	580	773	NR	710	93	NR	840	2	NR	970	0	NR
455	154	NR	585	847	NR	715	79	NR	845	2	NR	975	0	NR
460	116	NR	590	913	NR	720	68	NR	850	1	NR	980	0	NR
465	99	NR	595	962	NR	725	58	NR	855	1	NR	985	0	NR
470	84	NR	600	990	NR	730	49	NR	860	1	NR	990	0	NR
475	77	NR	605	999	NR	735	42	NR	865	1	NR	995	0	NR
480	84	NR	610	986	NR	740	35	NR	870	1	NR	1000	0	NR
485	99	NR	615	960	NR	745	30	NR	875	1	NR			

**Summary**

$R_f = 78.7$   
 $R_g = 93.7$   
 CIE  $R_a = 72.8$   
 $R_9 = -28.5$

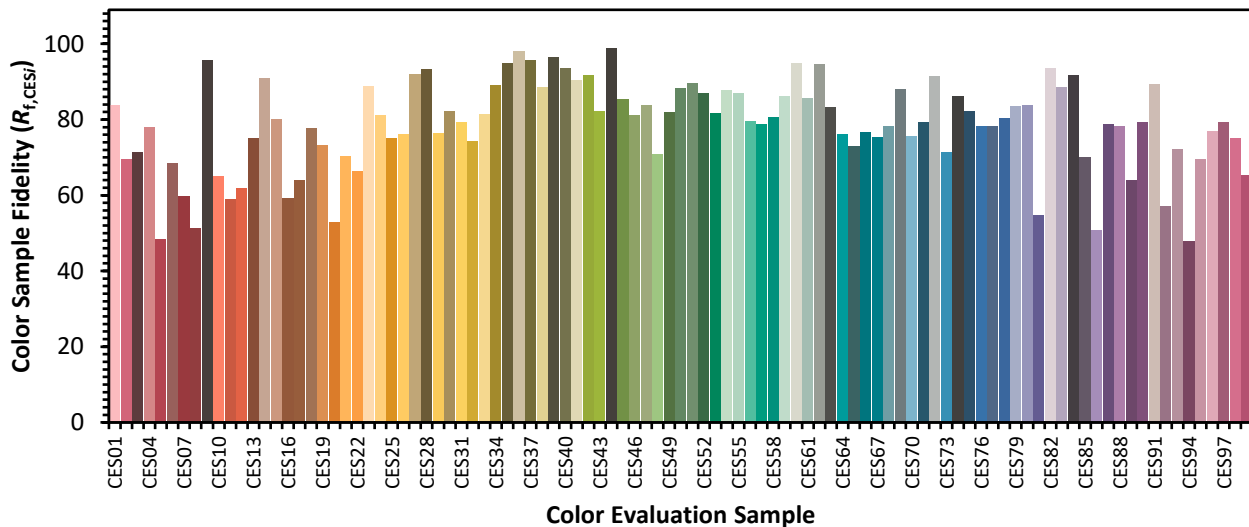


**Color Vector Graphics**

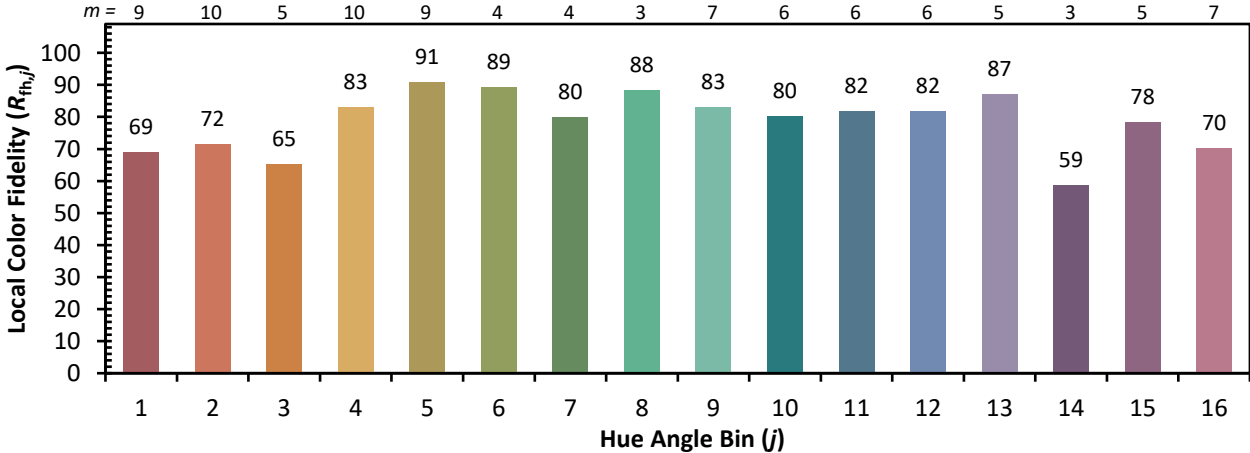
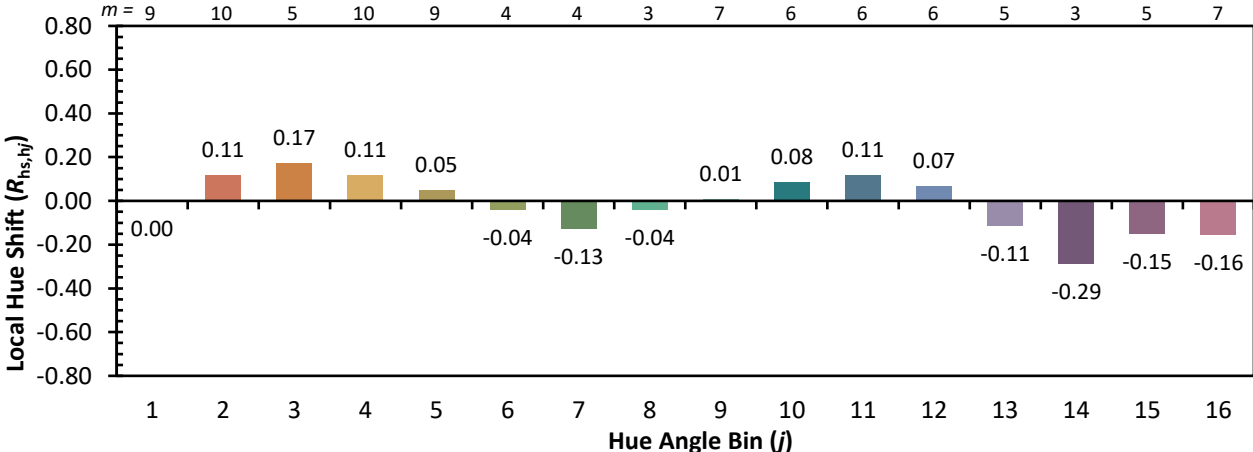
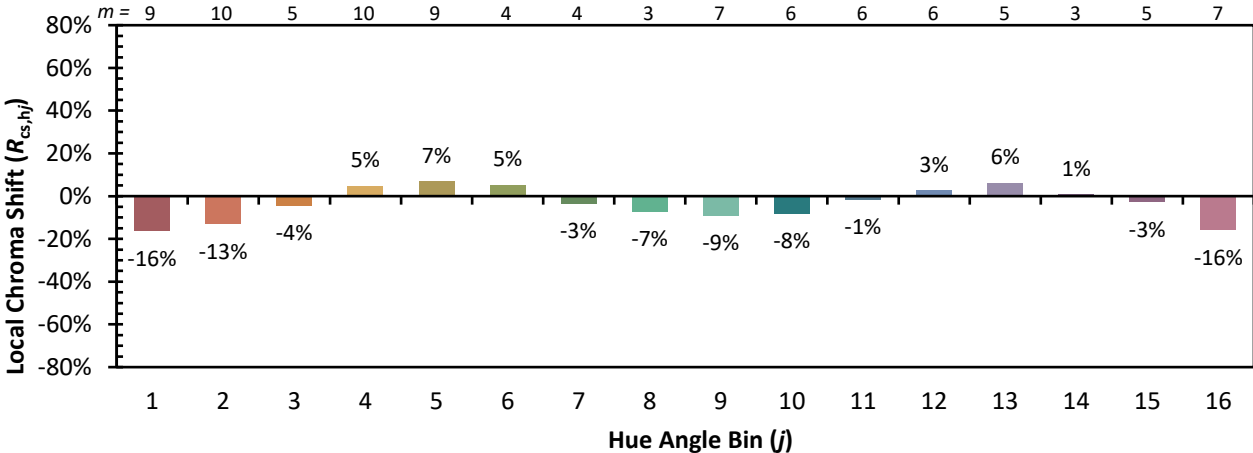


Individual Sample Fidelity Index ( $R_{f,i}$ )

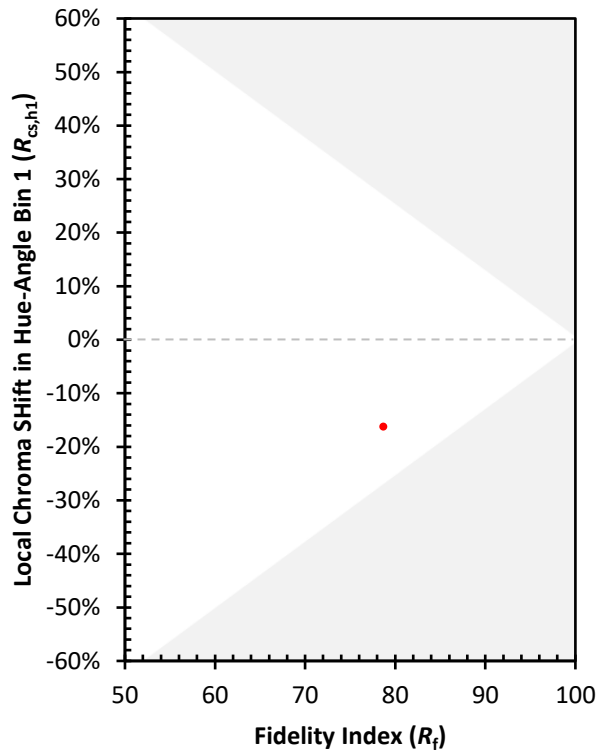
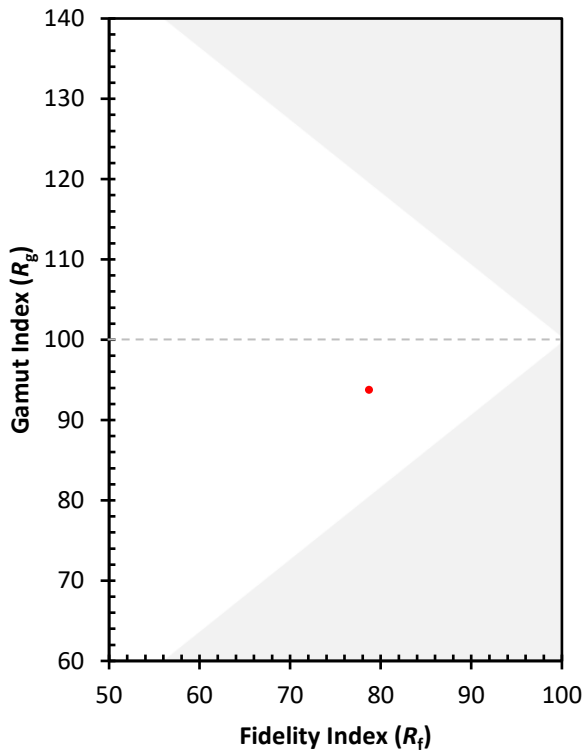
CES01 = 87	CES26 = 76	CES51 = 90	CES76 = 78
CES02 = 65	CES27 = 92	CES52 = 87	CES77 = 78
CES03 = 32	CES28 = 93	CES53 = 82	CES78 = 80
CES04 = 72	CES29 = 77	CES54 = 88	CES79 = 84
CES05 = 51	CES30 = 82	CES55 = 87	CES80 = 84
CES06 = 52	CES31 = 79	CES56 = 80	CES81 = 55
CES07 = 44	CES32 = 74	CES57 = 79	CES82 = 94
CES08 = 42	CES33 = 81	CES58 = 81	CES83 = 88
CES09 = 29	CES34 = 89	CES59 = 86	CES84 = 92
CES10 = 79	CES35 = 95	CES60 = 95	CES85 = 70
CES11 = 61	CES36 = 98	CES61 = 86	CES86 = 51
CES12 = 68	CES37 = 96	CES62 = 95	CES87 = 79
CES13 = 45	CES38 = 89	CES63 = 83	CES88 = 78
CES14 = 75	CES39 = 96	CES64 = 76	CES89 = 64
CES15 = 72	CES40 = 94	CES65 = 73	CES90 = 79
CES16 = 48	CES41 = 91	CES66 = 77	CES91 = 89
CES17 = 51	CES42 = 92	CES67 = 75	CES92 = 57
CES18 = 57	CES43 = 82	CES68 = 78	CES93 = 72
CES19 = 74	CES44 = 99	CES69 = 88	CES94 = 48
CES20 = 68	CES45 = 85	CES70 = 76	CES95 = 70
CES21 = 88	CES46 = 81	CES71 = 79	CES96 = 77
CES22 = 81	CES47 = 84	CES72 = 91	CES97 = 79
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 75
CES24 = 92	CES49 = 82	CES74 = 86	CES99 = 65
CES25 = 73	CES50 = 88	CES75 = 82	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)