

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: P980965

Luminaire Tested: **NFFLD-S-C15-7040-66**

Issue Date: 04/10/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P980965  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 04/10/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NFFLD-S-C15-7040-66  
Description: LUMARK NIGHT FALCON SMALL SIZE 50W 70CRI 4000K LED FIXTURE NEMA 6  
Light Source: (1) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

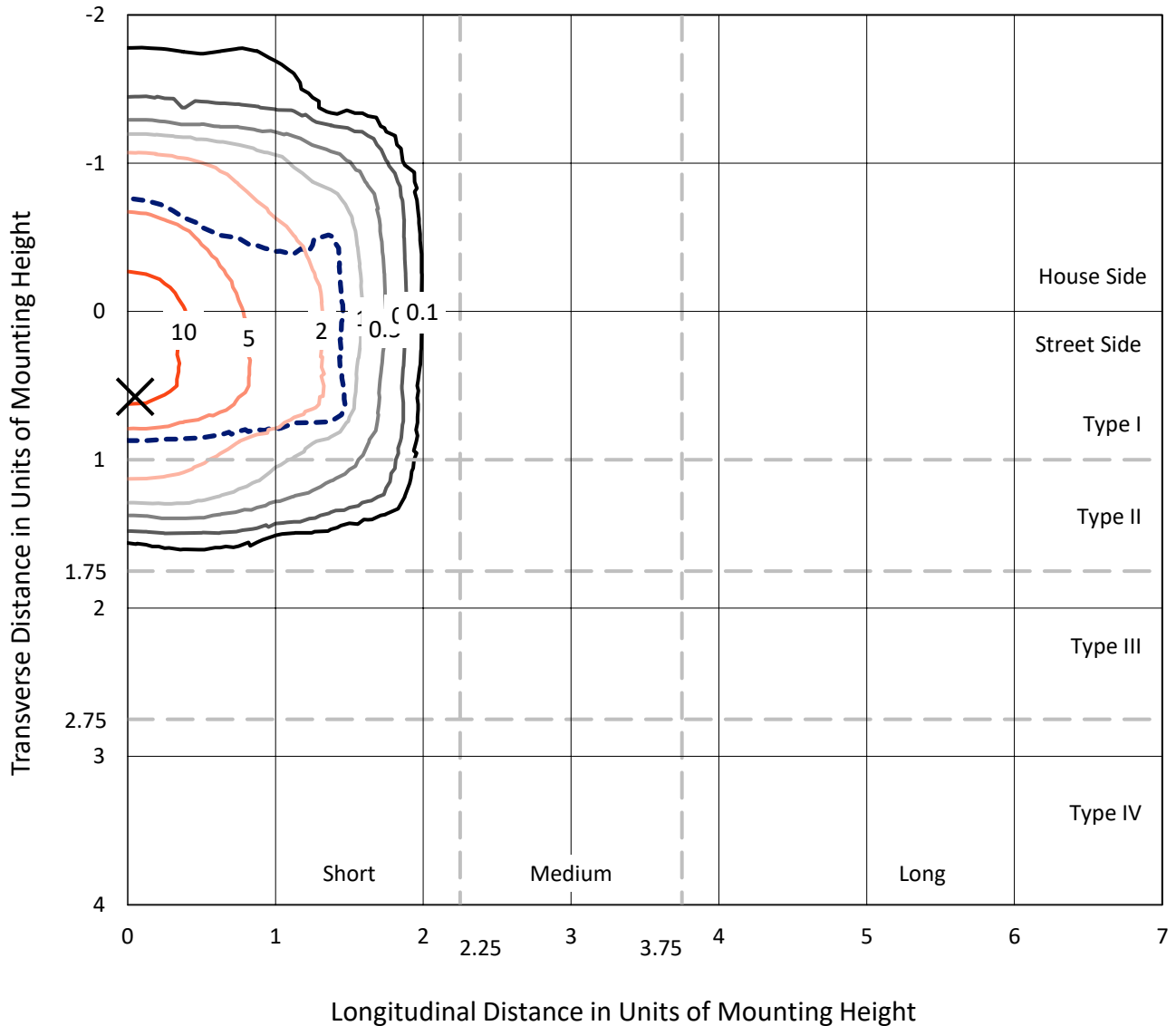
Lumens per Lamp: N/A  
Luminaire Lumens: 6828.8 lumens  
Efficiency: N/A  
Efficacy: 133.4 lumens/watt  
Luminous Opening: Rectangular (W 0.42' x L: 0.31' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B3 - U0 - G1  
  
Input Watts (W): 51.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 8.18%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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 CATALOG NUMBER: NFFLD-S-C15-7040-66

### Iso-Footcandle Lines of Horizontal Illumination

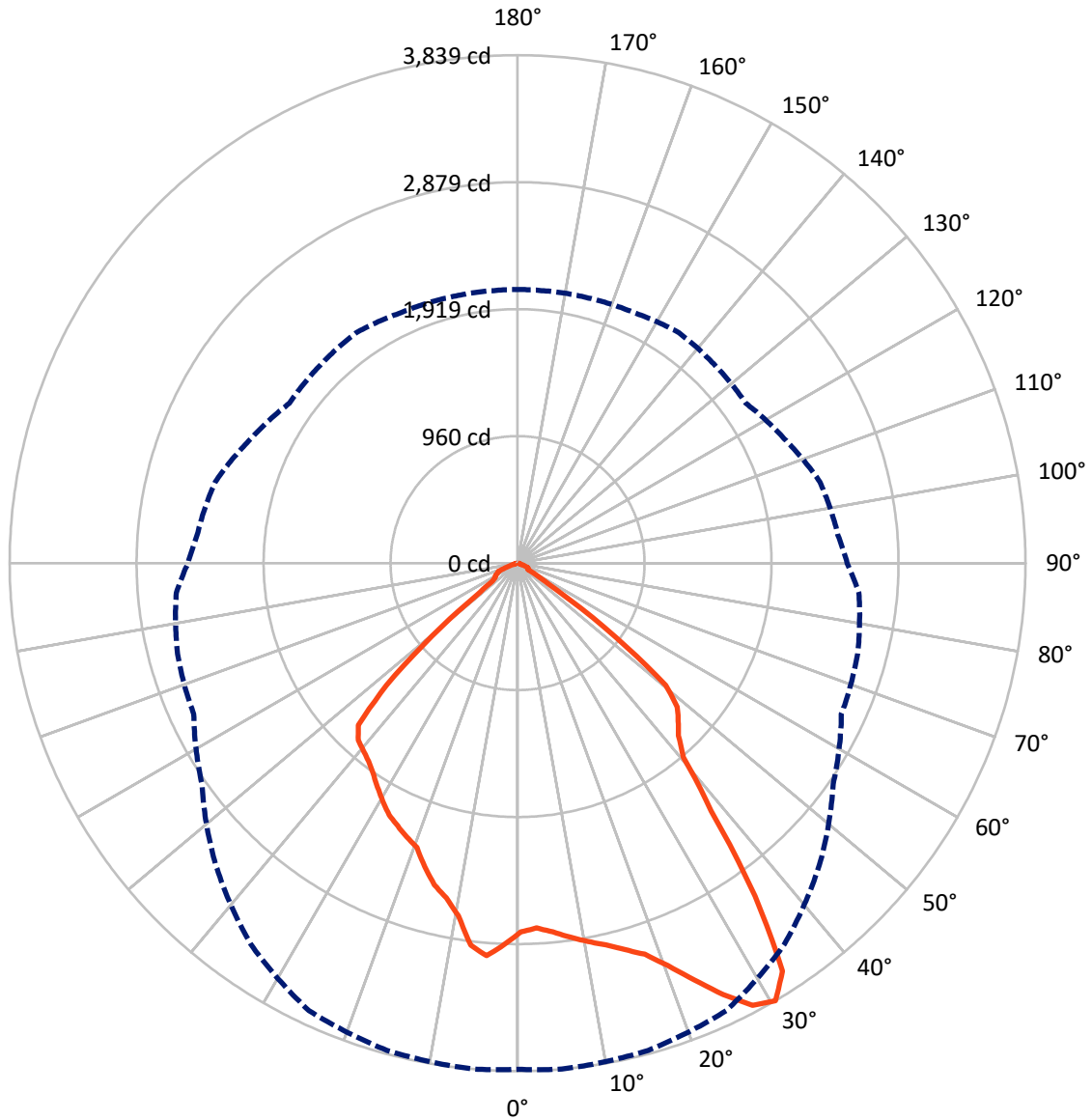
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 12.7 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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 CATALOG NUMBER: NFFLD-S-C15-7040-66

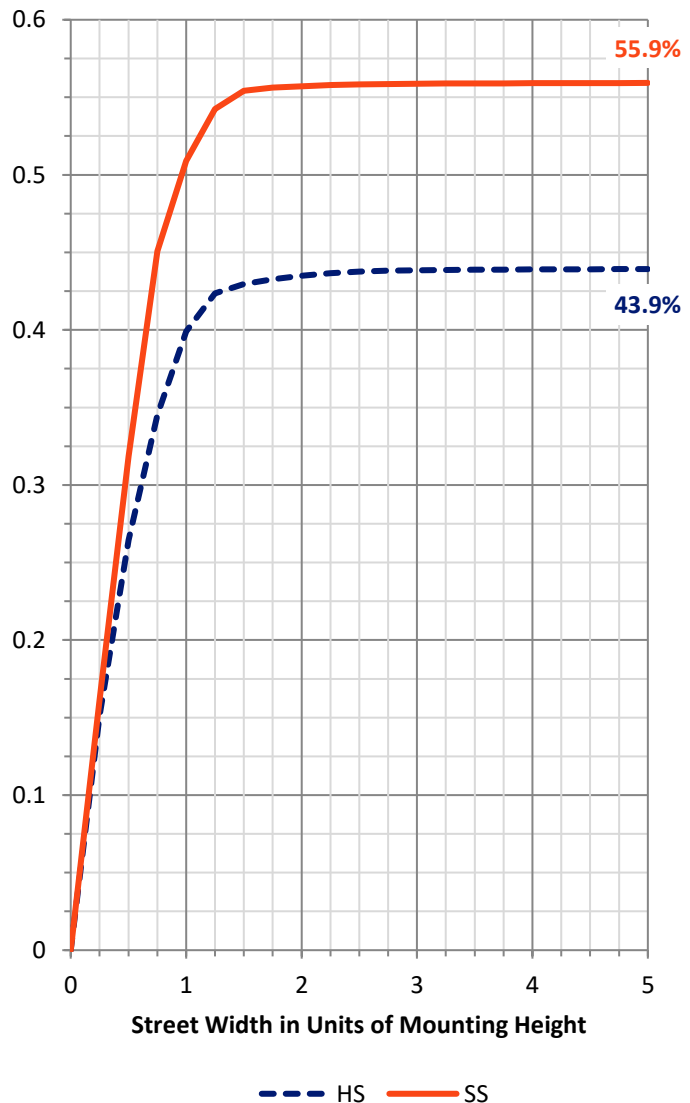
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3020.3	0.0	3020.3
	% Fixture	44.2	0.0	44.2
<b>Street Side</b>	Lumens	3808.5	0.0	3808.5
	% Fixture	55.8	0.0	55.8
<b>Total</b>	Lumens	6828.8	0.0	6828.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	272.7	4.0
10°-20°	789.9	11.6
20°-30°	1258.7	18.4
30°-40°	1573.6	23.0
40°-50°	1544.2	22.6
50°-60°	1104.0	16.2
60°-70°	244.3	3.6
70°-80°	37.5	0.5
80°-90°	4.0	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°	6828.8	100.0
0°-180°	6828.8	100.0



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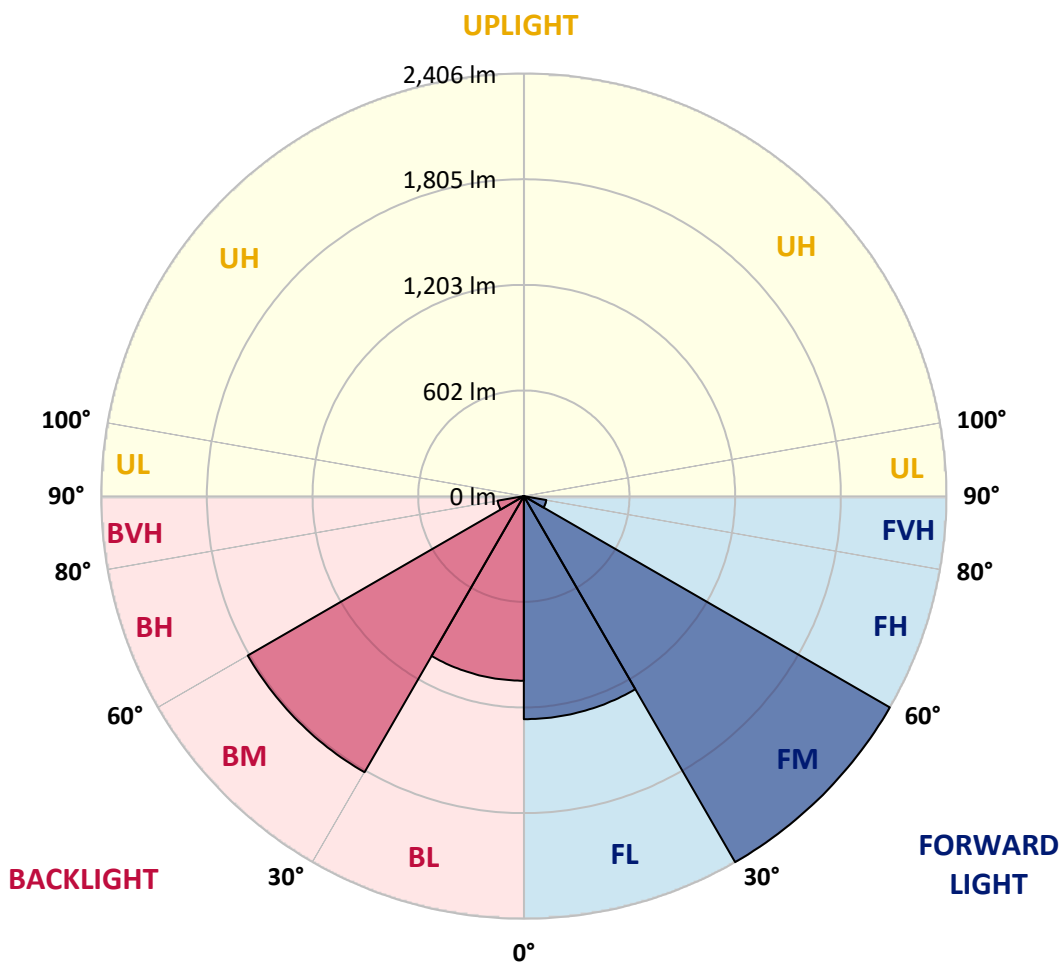
CATALOG NUMBER: NFFLD-S-C15-7040-66

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1270.1	18.6			
FM (30°-60°)	2406.5	35.2			
FH (60°-80°)	129.9	1.9			G0/660
FVH (80°-90°)	2.0	0.0			G0/10
BL (0°-30°)	1051.1	15.4	B3/2500		
BM (30°-60°)	1815.4	26.6	B2/2500		
BH (60°-80°)	151.9	2.2	B1/500		G1/500
BVH (80°-90°)	2.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type I Short





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 CATALOG NUMBER: NFFLD-S-C15-7040-66

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2787.3	2787.3	2787.3	2787.3	2787.3	2787.3	2787.3	2787.3	2787.3	2787.3	2787.3
2.5°	2756.1	2760.6	2765.0	2771.7	2780.6	2785.1	2780.6	2776.2	2773.9	2778.4	2780.6
5°	2794.0	2800.7	2802.9	2807.4	2811.8	2807.4	2805.1	2800.7	2798.4	2800.7	2807.4
7.5°	2849.7	2854.1	2851.9	2849.7	2847.5	2831.9	2816.3	2809.6	2809.6	2816.3	2834.1
10°	2898.7	2907.6	2896.5	2887.6	2872.0	2847.5	2820.7	2805.1	2809.6	2823.0	2845.2
12.5°	2961.1	2961.1	2949.9	2941.0	2905.4	2876.4	2840.8	2816.3	2816.3	2840.8	2865.3
15°	3036.8	3030.2	3025.7	3001.2	2958.9	2912.1	2867.5	2831.9	2825.2	2863.1	2878.7
17.5°	3132.7	3108.1	3097.0	3054.7	2996.7	2936.6	2876.4	2847.5	2827.4	2867.5	2849.7
20°	3264.1	3246.3	3210.6	3143.8	3025.7	2947.7	2876.4	2838.5	2823.0	2845.2	2827.4
22.5°	3433.4	3422.3	3342.1	3257.4	3101.5	2956.6	2865.3	2814.0	2809.6	2798.4	2760.6
25°	3640.6	3611.7	3529.2	3408.9	3215.1	3043.5	2863.1	2769.5	2753.9	2724.9	2658.1
27.5°	3816.7	3785.5	3685.2	3578.3	3371.1	3172.8	2880.9	2716.0	2698.2	2678.1	2595.7
30°	3825.6	3838.9	3812.2	3732.0	3515.9	3226.2	2912.1	2700.4	2660.3	2589.0	2491.0
32.5°	3645.1	3676.3	3740.9	3769.9	3625.1	3290.8	2938.8	2707.1	2633.6	2462.0	2381.8
35°	3027.9	3090.3	3355.5	3605.0	3656.2	3384.4	2961.1	2707.1	2624.7	2370.7	2308.3
37.5°	2326.1	2377.3	2602.4	3054.7	3518.1	3442.4	3010.1	2691.5	2613.5	2377.3	2292.7
40°	1900.5	1929.5	2027.5	2335.0	3032.4	3346.5	3059.1	2709.3	2580.1	2381.8	2301.6
42.5°	1784.7	1782.4	1762.4	1876.0	2312.7	3065.8	3092.5	2753.9	2524.4	2352.8	2286.0
45°	1706.7	1702.2	1684.4	1706.7	1829.2	2508.8	3068.0	2834.1	2455.3	2250.3	2205.8
47.5°	1622.0	1624.3	1617.6	1626.5	1604.2	1905.0	2929.9	2867.5	2337.2	2078.8	2063.2
50°	1419.3	1452.7	1541.8	1550.7	1492.8	1537.4	2508.8	2851.9	2252.6	2029.8	2016.4
52.5°	882.3	935.8	1198.7	1421.5	1388.1	1388.1	1913.9	2874.2	2101.1	2011.9	2020.8
55°	311.9	352.0	641.7	978.1	1243.3	1267.8	1512.9	2557.8	2083.2	2043.1	2052.0
57.5°	78.0	95.8	196.1	423.3	837.8	1149.7	1352.4	2112.2	1581.9	1526.2	1548.5
60°	91.4	89.1	122.5	135.9	325.3	909.0	1218.7	1426.0	1020.5	955.8	967.0
62.5°	98.0	91.4	95.8	120.3	53.5	445.6	971.4	848.9	421.1	311.9	329.8
65°	86.9	82.4	75.8	111.4	37.9	82.4	572.6	249.5	60.2	95.8	86.9
67.5°	57.9	60.2	62.4	89.1	35.6	35.6	75.8	62.4	42.3	86.9	75.8
70°	33.4	35.6	42.3	53.5	35.6	29.0	33.4	51.2	35.6	86.9	75.8
72.5°	20.1	20.1	20.1	22.3	35.6	24.5	22.3	42.3	31.2	80.2	75.8
75°	15.6	15.6	15.6	13.4	31.2	15.6	15.6	33.4	26.7	57.9	57.9
77.5°	13.4	13.4	13.4	11.1	17.8	13.4	13.4	24.5	24.5	29.0	33.4
80°	8.9	8.9	8.9	8.9	11.1	11.1	8.9	13.4	11.1	13.4	15.6
82.5°	4.5	6.7	6.7	4.5	6.7	6.7	6.7	8.9	6.7	8.9	8.9
85°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	4.5	2.2	2.2	4.5
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: P980965  
 CATALOG NUMBER: NFFLD-S-C15-7040-66

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2787.3	2787.3	2787.3	2787.3	2787.3	2787.3	2787.3	2787.3	2787.3	2787.3
2.5°	2785.1	2796.2	2811.8	2836.3	2845.2	2860.8	2874.2	2885.3	2885.3	2880.9
5°	2820.7	2851.9	2894.2	2932.1	2945.5	2961.1	2967.8	2978.9	2976.7	2974.5
7.5°	2851.9	2900.9	2945.5	2972.2	2967.8	2947.7	2934.4	2916.5	2909.8	2914.3
10°	2876.4	2921.0	2941.0	2923.2	2869.7	2823.0	2762.8	2722.7	2702.6	2709.3
12.5°	2885.3	2900.9	2883.1	2785.1	2718.2	2673.7	2624.7	2597.9	2586.8	2589.0
15°	2887.6	2851.9	2753.9	2680.4	2631.3	2575.6	2535.5	2511.0	2511.0	2513.3
17.5°	2840.8	2753.9	2669.2	2613.5	2544.4	2486.5	2464.2	2455.3	2399.6	2408.5
20°	2798.4	2673.7	2626.9	2540.0	2457.5	2419.7	2290.4	2277.1	2279.3	2281.5
22.5°	2709.3	2615.7	2573.4	2459.8	2366.2	2261.5	2243.7	2230.3	2232.5	2232.5
25°	2586.8	2533.3	2475.4	2357.3	2243.7	2223.6	2210.2	2192.4	2183.5	2185.7
27.5°	2517.7	2450.9	2343.9	2243.7	2170.1	2179.0	2163.4	2136.7	2136.7	2138.9
30°	2430.8	2366.2	2223.6	2105.5	2112.2	2125.6	2087.7	2074.3	2067.6	2067.6
32.5°	2323.9	2234.7	2110.0	1998.6	2038.7	2034.2	1987.4	1991.9	1996.3	1991.9
35°	2243.7	2127.8	2023.1	1962.9	1947.3	1929.5	1905.0	1920.6	1927.3	1922.8
37.5°	2223.6	2085.5	1976.3	1934.0	1873.8	1840.4	1847.1	1862.7	1871.6	1869.3
40°	2216.9	2043.1	1936.2	1891.6	1811.4	1782.4	1791.4	1822.6	1833.7	1831.5
42.5°	2208.0	2014.2	1911.7	1858.2	1746.8	1726.7	1769.1	1798.0	1800.3	1798.0
45°	2161.2	1983.0	1896.1	1789.1	1648.8	1673.3	1726.7	1742.3	1715.6	1704.5
47.5°	2052.0	1925.0	1849.3	1704.5	1568.6	1615.3	1622.0	1452.7	1354.7	1332.4
50°	2020.8	1927.3	1795.8	1604.2	1519.5	1566.3	1274.4	973.7	851.1	826.6
52.5°	2011.9	1905.0	1815.9	1499.5	1501.7	1321.2	804.3	476.8	383.2	365.4
55°	2034.2	2003.0	1849.3	1437.1	1397.0	860.0	374.3	225.0	231.7	225.0
57.5°	1535.1	1675.5	1889.4	1339.1	1020.5	414.4	236.2	218.3	202.8	198.3
60°	958.1	1091.7	1383.6	1151.9	523.6	247.3	240.6	202.8	196.1	193.8
62.5°	316.4	485.7	793.2	757.5	144.8	245.1	242.9	180.5	180.5	180.5
65°	80.2	82.4	218.3	260.7	106.9	218.3	231.7	169.3	164.9	171.6
67.5°	69.1	62.4	115.9	102.5	89.1	151.5	202.8	162.6	153.7	153.7
70°	69.1	73.5	113.6	95.8	55.7	82.4	147.1	100.3	89.1	82.4
72.5°	64.6	71.3	100.3	86.9	37.9	40.1	64.6	33.4	31.2	26.7
75°	55.7	57.9	78.0	78.0	40.1	20.1	26.7	22.3	22.3	20.1
77.5°	37.9	29.0	44.6	55.7	29.0	13.4	11.1	11.1	11.1	8.9
80°	20.1	11.1	11.1	8.9	11.1	11.1	6.7	8.9	8.9	6.7
82.5°	11.1	6.7	6.7	4.5	4.5	6.7	4.5	4.5	4.5	4.5
85°	4.5	4.5	2.2	2.2	2.2	4.5	2.2	2.2	2.2	2.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2
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: SP1-2501-319-13

Test Date: 02/05/2025

Luminaire Tested: NFFLD-C55-7040-66

Data in this report applies to families of products including NFFLD-C55-7040-66

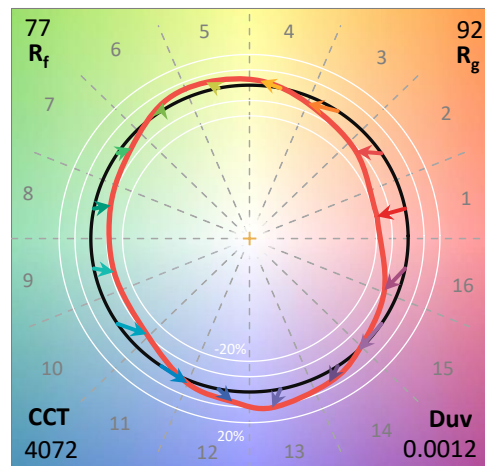
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2501-319-13  
 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-C55-7040-66**  
 Description: LUMARK NIGHT FALCON 16900LM NEMA 6

**Spectral Parameters**

CCT (K): 4072  
 CIE u': 0.2232  
 CIE v': 0.5017  
 Duv: 0.0012  
 CIE x: 0.3781  
 CIE y: 0.3777  
 CIE z: 0.2442  
 Peak Wavelength (nm): 582  
 Dominant Wavelength (nm): 578  
 Purity: 26.82001  
 Rf: 76.8  
 Rg: 91.7

CRI (Ra):	73.2		
R1:	68.7	R9:	-38.7
R2:	82.1	R10:	58.6
R3:	92.3	R11:	65.6
R4:	69.9	R12:	52.4
R5:	69.8	R13:	71.5
R6:	75.1	R14:	95.9
R7:	79.8	R15:	60.5
R8:	47.9		



**Test Conditions**

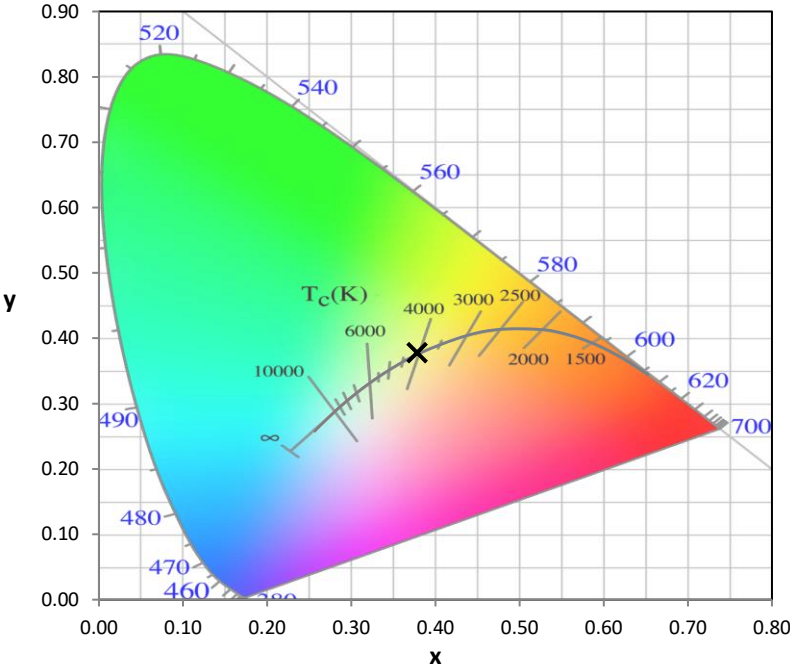
Stabilization Time: 38M  
 Operation Time: 1H 38M  
 Sphere Temperature (°C): 25.0

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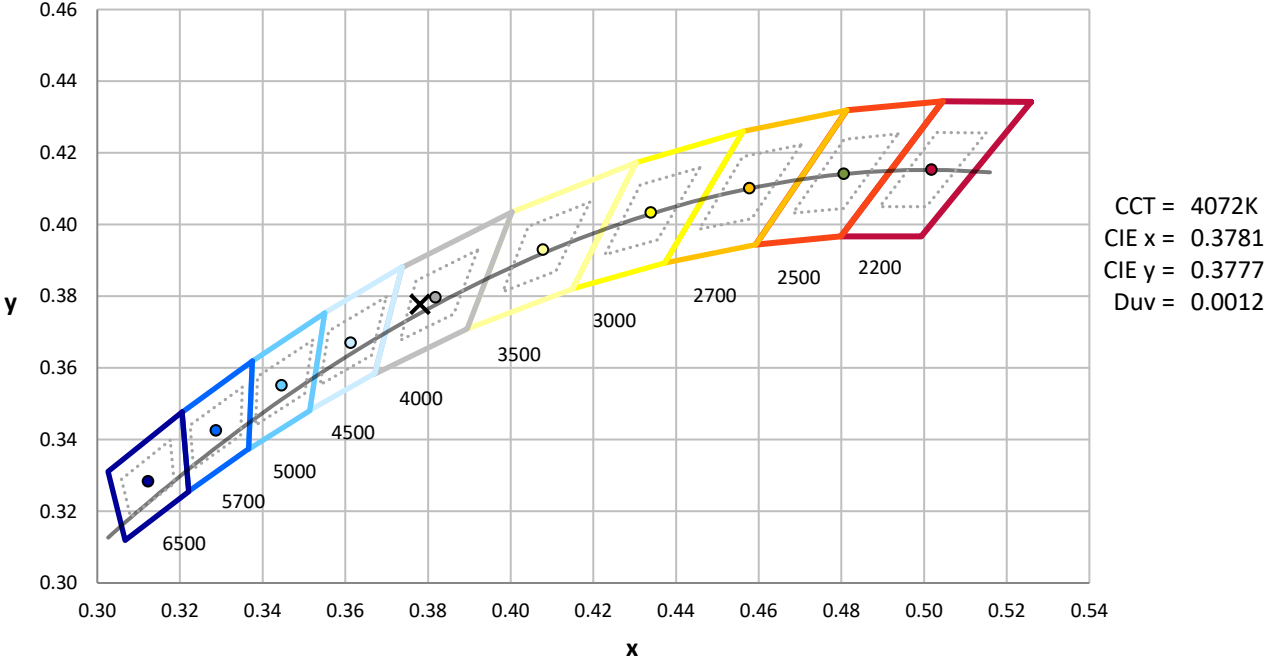
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	12/16/2024	6/16/2025
Power Meter	INXT2011004	1/21/2025	1/21/2026
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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

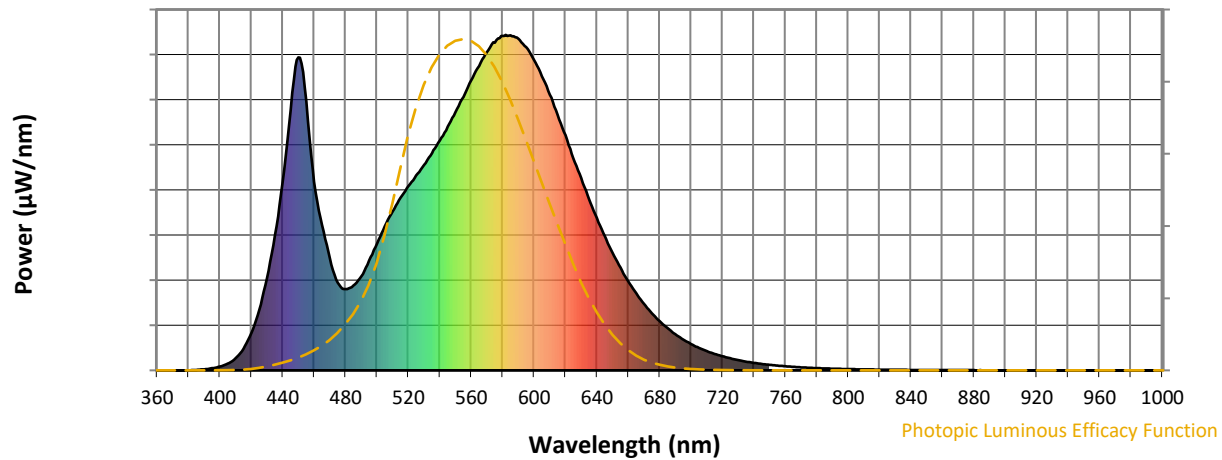


CCT = 4072K  
 CIE x = 0.3781  
 CIE y = 0.3777  
 Duv = 0.0012

Point lies inside the ANSI 4000K 4-step quadrangle

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**Photopic Flux vs. Wavelength**

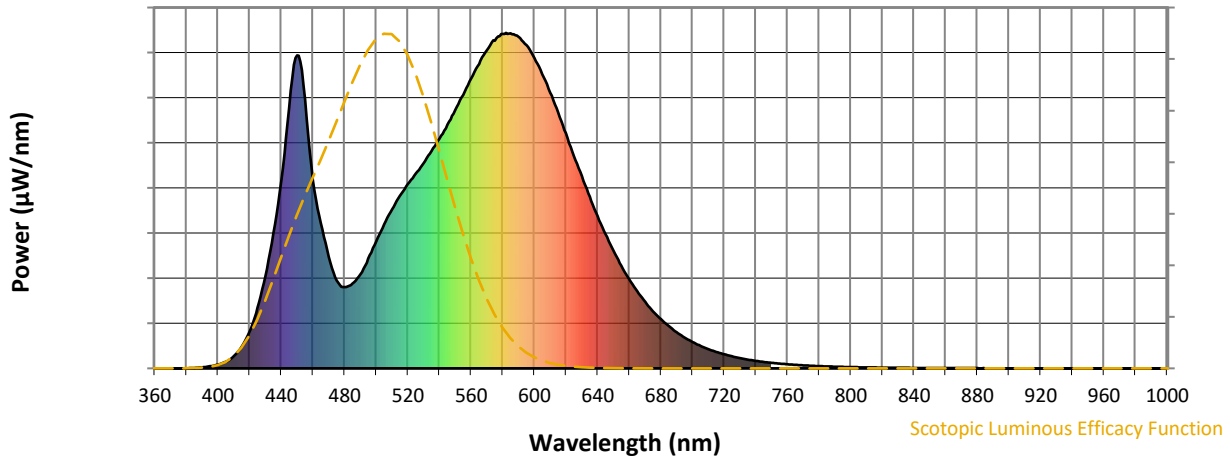


**Photopic Lumens: NR**

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	280	NR	620	701	NR	750	16	NR	880	1	NR
365	0	NR	495	327	NR	625	633	NR	755	14	NR	885	0	NR
370	0	NR	500	378	NR	630	573	NR	760	12	NR	890	0	NR
375	0	NR	505	429	NR	635	511	NR	765	10	NR	895	0	NR
380	0	NR	510	474	NR	640	454	NR	770	9	NR	900	0	NR
385	1	NR	515	514	NR	645	400	NR	775	8	NR	905	0	NR
390	3	NR	520	549	NR	650	350	NR	780	7	NR	910	0	NR
395	6	NR	525	581	NR	655	306	NR	785	6	NR	915	0	NR
400	11	NR	530	613	NR	660	265	NR	790	5	NR	920	0	NR
405	20	NR	535	647	NR	665	230	NR	795	4	NR	925	0	NR
410	37	NR	540	685	NR	670	198	NR	800	4	NR	930	0	NR
415	65	NR	545	727	NR	675	170	NR	805	3	NR	935	0	NR
420	111	NR	550	770	NR	680	147	NR	810	3	NR	940	0	NR
425	180	NR	555	815	NR	685	126	NR	815	3	NR	945	0	NR
430	275	NR	560	864	NR	690	107	NR	820	2	NR	950	0	NR
435	403	NR	565	907	NR	695	92	NR	825	2	NR	955	0	NR
440	562	NR	570	948	NR	700	78	NR	830	2	NR	960	0	NR
445	775	NR	575	977	NR	705	67	NR	835	2	NR	965	0	NR
450	933	NR	580	997	NR	710	57	NR	840	1	NR	970	0	NR
455	801	NR	585	999	NR	715	49	NR	845	1	NR	975	0	NR
460	562	NR	590	988	NR	720	42	NR	850	1	NR	980	0	NR
465	433	NR	595	963	NR	725	36	NR	855	1	NR	985	0	NR
470	332	NR	600	925	NR	730	31	NR	860	1	NR	990	0	NR
475	261	NR	605	877	NR	735	26	NR	865	1	NR	995	0	NR
480	243	NR	610	822	NR	740	22	NR	870	1	NR	1000	0	NR
485	253	NR	615	762	NR	745	19	NR	875	1	NR			

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**Scotopic Flux vs. Wavelength**



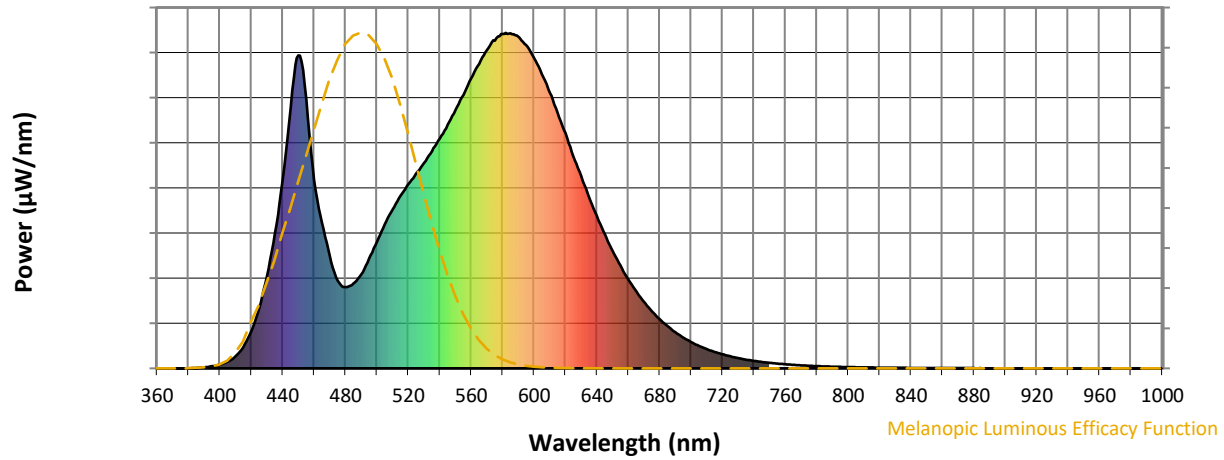
**Scotopic Lumens: NR**

**S/P: 1.6**

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	280	NR	620	701	NR	750	16	NR	880	1	NR
365	0	NR	495	327	NR	625	633	NR	755	14	NR	885	0	NR
370	0	NR	500	378	NR	630	573	NR	760	12	NR	890	0	NR
375	0	NR	505	429	NR	635	511	NR	765	10	NR	895	0	NR
380	0	NR	510	474	NR	640	454	NR	770	9	NR	900	0	NR
385	1	NR	515	514	NR	645	400	NR	775	8	NR	905	0	NR
390	3	NR	520	549	NR	650	350	NR	780	7	NR	910	0	NR
395	6	NR	525	581	NR	655	306	NR	785	6	NR	915	0	NR
400	11	NR	530	613	NR	660	265	NR	790	5	NR	920	0	NR
405	20	NR	535	647	NR	665	230	NR	795	4	NR	925	0	NR
410	37	NR	540	685	NR	670	198	NR	800	4	NR	930	0	NR
415	65	NR	545	727	NR	675	170	NR	805	3	NR	935	0	NR
420	111	NR	550	770	NR	680	147	NR	810	3	NR	940	0	NR
425	180	NR	555	815	NR	685	126	NR	815	3	NR	945	0	NR
430	275	NR	560	864	NR	690	107	NR	820	2	NR	950	0	NR
435	403	NR	565	907	NR	695	92	NR	825	2	NR	955	0	NR
440	562	NR	570	948	NR	700	78	NR	830	2	NR	960	0	NR
445	775	NR	575	977	NR	705	67	NR	835	2	NR	965	0	NR
450	933	NR	580	997	NR	710	57	NR	840	1	NR	970	0	NR
455	801	NR	585	999	NR	715	49	NR	845	1	NR	975	0	NR
460	562	NR	590	988	NR	720	42	NR	850	1	NR	980	0	NR
465	433	NR	595	963	NR	725	36	NR	855	1	NR	985	0	NR
470	332	NR	600	925	NR	730	31	NR	860	1	NR	990	0	NR
475	261	NR	605	877	NR	735	26	NR	865	1	NR	995	0	NR
480	243	NR	610	822	NR	740	22	NR	870	1	NR	1000	0	NR
485	253	NR	615	762	NR	745	19	NR	875	1	NR			

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**Melanopic Flux vs. Wavelength**



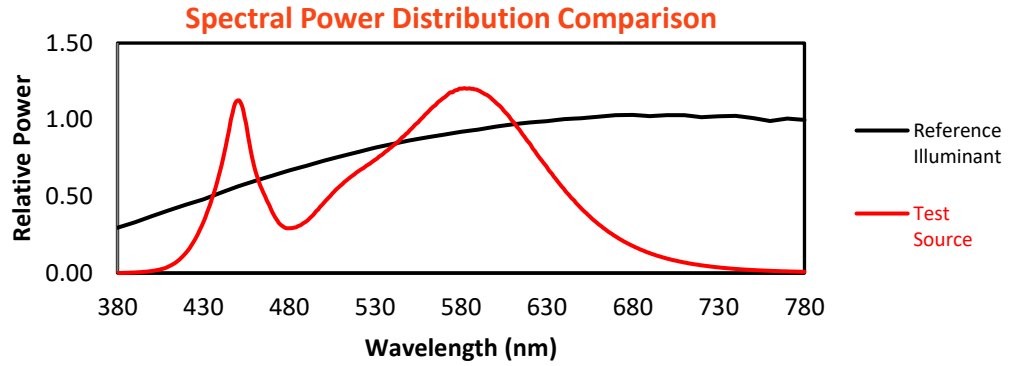
**Melanopic Lumens: NR**

**M/P: 3.24**

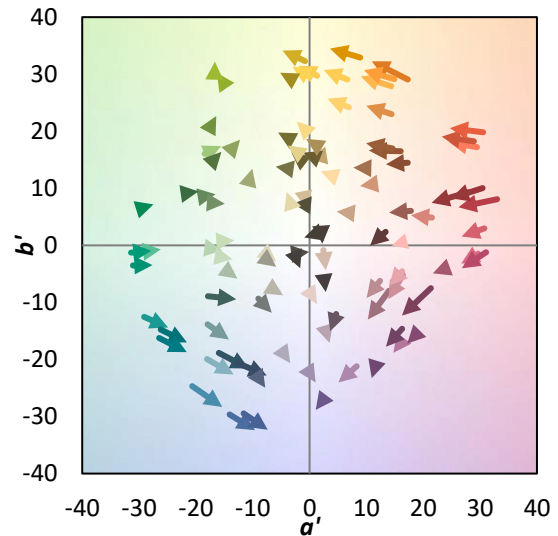
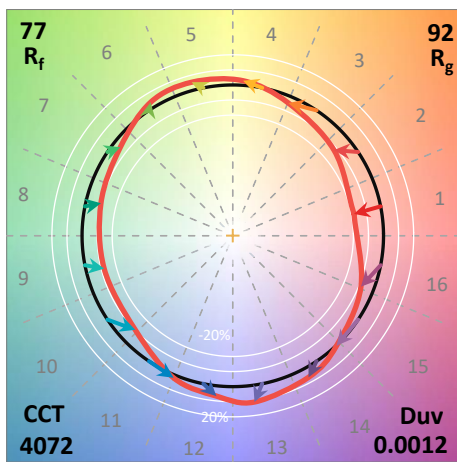
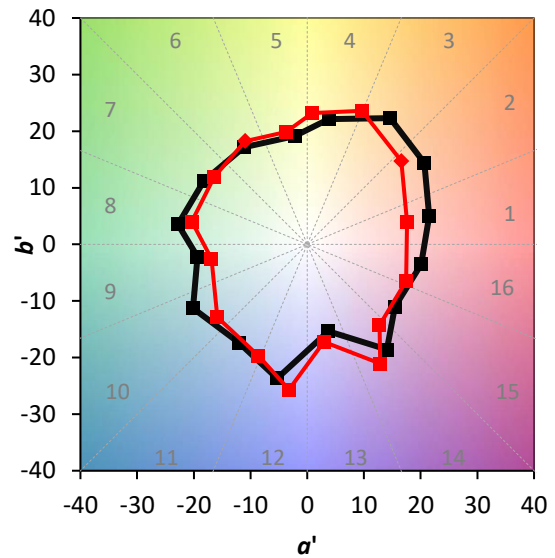
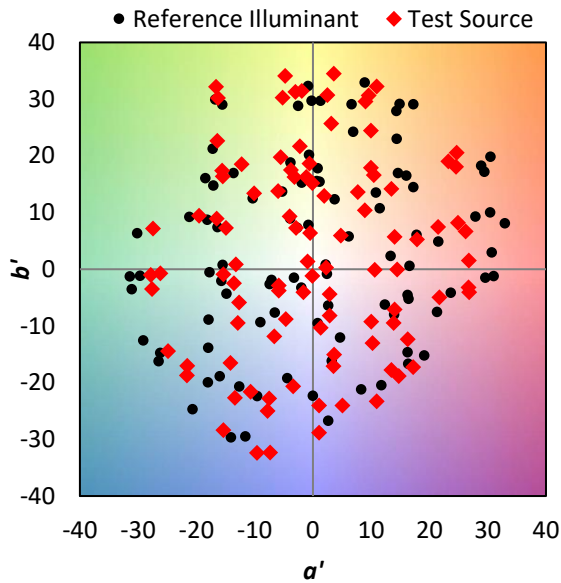
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	280	NR	620	701	NR	750	16	NR	880	1	NR
365	0	NR	495	327	NR	625	633	NR	755	14	NR	885	0	NR
370	0	NR	500	378	NR	630	573	NR	760	12	NR	890	0	NR
375	0	NR	505	429	NR	635	511	NR	765	10	NR	895	0	NR
380	0	NR	510	474	NR	640	454	NR	770	9	NR	900	0	NR
385	1	NR	515	514	NR	645	400	NR	775	8	NR	905	0	NR
390	3	NR	520	549	NR	650	350	NR	780	7	NR	910	0	NR
395	6	NR	525	581	NR	655	306	NR	785	6	NR	915	0	NR
400	11	NR	530	613	NR	660	265	NR	790	5	NR	920	0	NR
405	20	NR	535	647	NR	665	230	NR	795	4	NR	925	0	NR
410	37	NR	540	685	NR	670	198	NR	800	4	NR	930	0	NR
415	65	NR	545	727	NR	675	170	NR	805	3	NR	935	0	NR
420	111	NR	550	770	NR	680	147	NR	810	3	NR	940	0	NR
425	180	NR	555	815	NR	685	126	NR	815	3	NR	945	0	NR
430	275	NR	560	864	NR	690	107	NR	820	2	NR	950	0	NR
435	403	NR	565	907	NR	695	92	NR	825	2	NR	955	0	NR
440	562	NR	570	948	NR	700	78	NR	830	2	NR	960	0	NR
445	775	NR	575	977	NR	705	67	NR	835	2	NR	965	0	NR
450	933	NR	580	997	NR	710	57	NR	840	1	NR	970	0	NR
455	801	NR	585	999	NR	715	49	NR	845	1	NR	975	0	NR
460	562	NR	590	988	NR	720	42	NR	850	1	NR	980	0	NR
465	433	NR	595	963	NR	725	36	NR	855	1	NR	985	0	NR
470	332	NR	600	925	NR	730	31	NR	860	1	NR	990	0	NR
475	261	NR	605	877	NR	735	26	NR	865	1	NR	995	0	NR
480	243	NR	610	822	NR	740	22	NR	870	1	NR	1000	0	NR
485	253	NR	615	762	NR	745	19	NR	875	1	NR			

**Summary**

$R_f = 76.8$   
 $R_g = 91.7$   
 $CIE R_a = 73.2$   
 $R_g = -38.7$

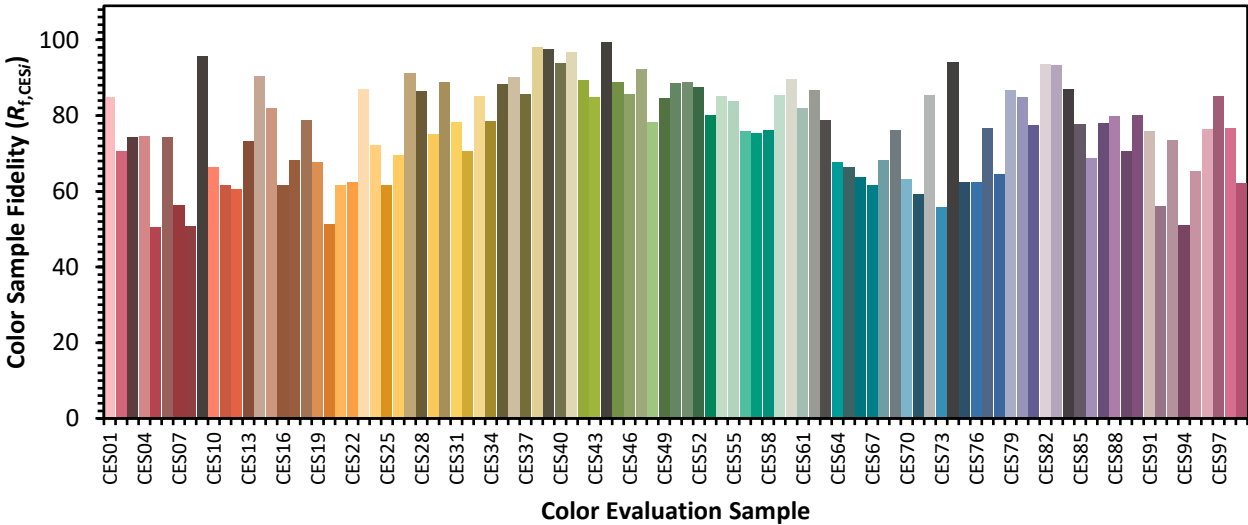


**Color Vector Graphics**

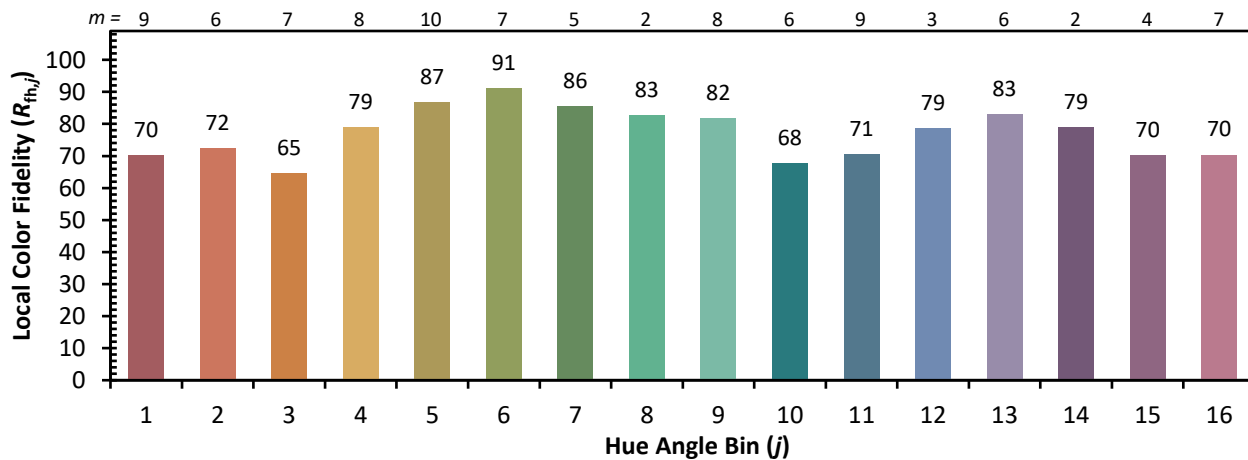
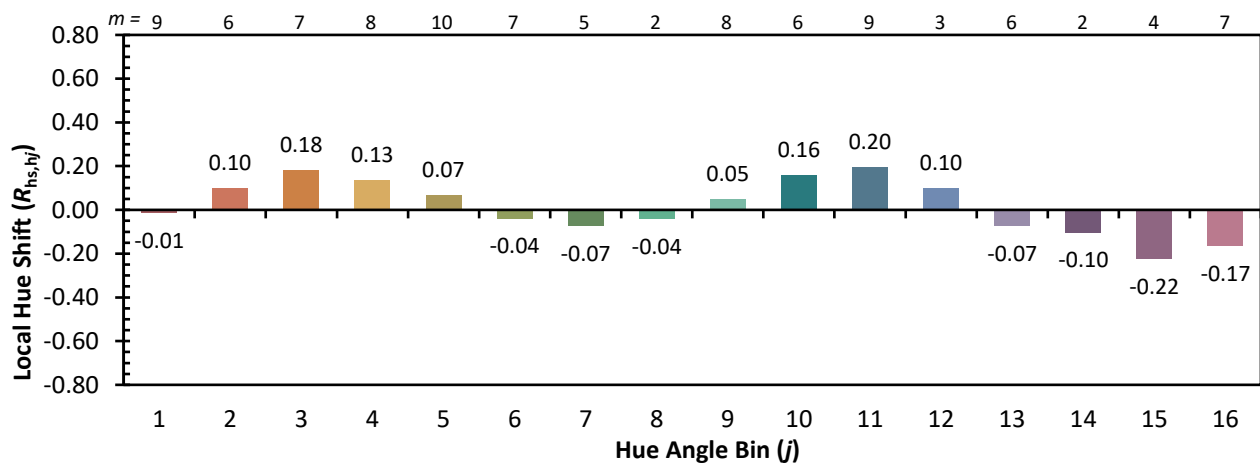
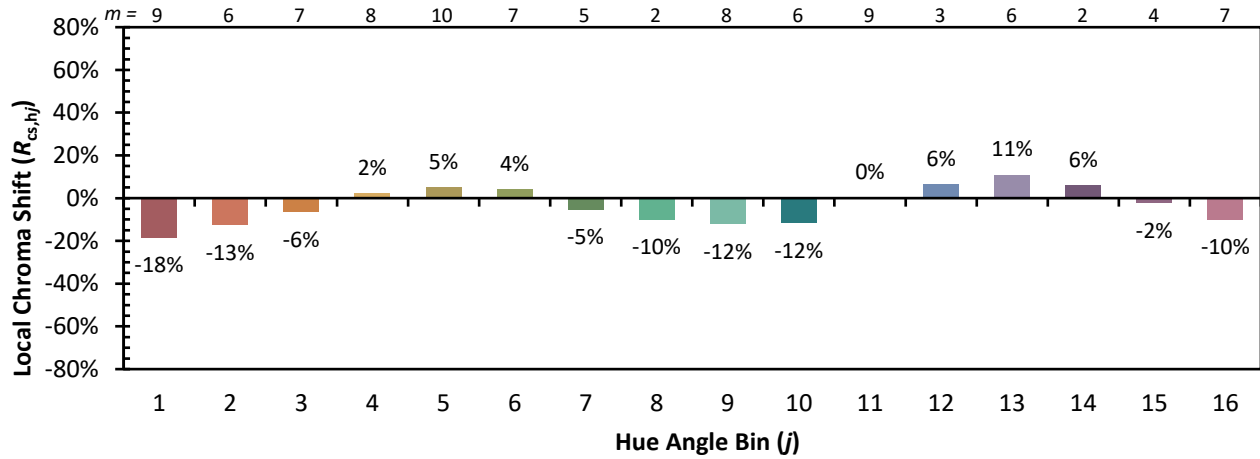


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

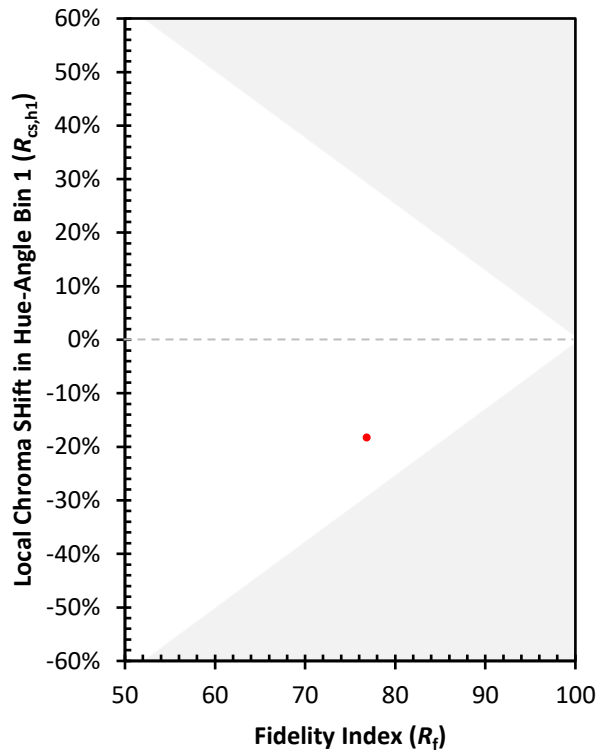
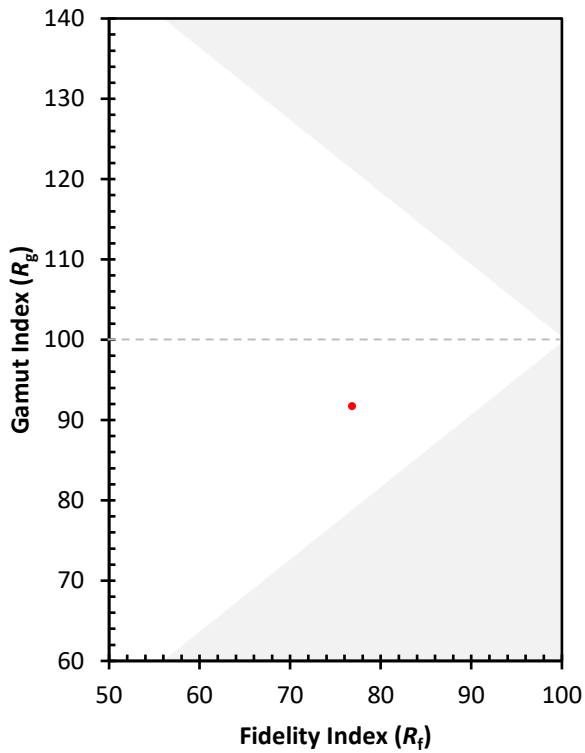
CES01 = 85	CES26 = 70	CES51 = 89	CES76 = 62
CES02 = 61	CES27 = 91	CES52 = 87	CES77 = 77
CES03 = 30	CES28 = 87	CES53 = 80	CES78 = 65
CES04 = 70	CES29 = 75	CES54 = 85	CES79 = 87
CES05 = 47	CES30 = 89	CES55 = 84	CES80 = 85
CES06 = 50	CES31 = 78	CES56 = 76	CES81 = 77
CES07 = 39	CES32 = 70	CES57 = 75	CES82 = 94
CES08 = 38	CES33 = 85	CES58 = 76	CES83 = 93
CES09 = 29	CES34 = 79	CES59 = 85	CES84 = 87
CES10 = 74	CES35 = 88	CES60 = 90	CES85 = 78
CES11 = 57	CES36 = 90	CES61 = 82	CES86 = 69
CES12 = 63	CES37 = 86	CES62 = 87	CES87 = 78
CES13 = 42	CES38 = 98	CES63 = 79	CES88 = 80
CES14 = 74	CES39 = 98	CES64 = 68	CES89 = 71
CES15 = 71	CES40 = 94	CES65 = 66	CES90 = 80
CES16 = 46	CES41 = 97	CES66 = 64	CES91 = 76
CES17 = 49	CES42 = 89	CES67 = 62	CES92 = 56
CES18 = 56	CES43 = 85	CES68 = 68	CES93 = 73
CES19 = 72	CES44 = 99	CES69 = 76	CES94 = 51
CES20 = 64	CES45 = 89	CES70 = 63	CES95 = 65
CES21 = 86	CES46 = 86	CES71 = 59	CES96 = 76
CES22 = 78	CES47 = 92	CES72 = 85	CES97 = 85
CES23 = 92	CES48 = 78	CES73 = 56	CES98 = 77
CES24 = 91	CES49 = 85	CES74 = 94	CES99 = 62
CES25 = 72	CES50 = 89	CES75 = 62	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)