

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: STREETWORKS

Report Number: P879922

Luminaire Tested: **MEM2-HSN-VA-50-830-U-WT4**

Issue Date: 10/01/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P879922  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/01/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: MEM2-HSN-VA-50-830-U-WT4  
Description: EPIC MODERN SHORT HOUSING 50W 80CRI 3000K VISUAL COMFORT FIXTURE w/  
DRIVE LANE TYPE IV DISTRIBUTION OPTIC  
Light Source: (1) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

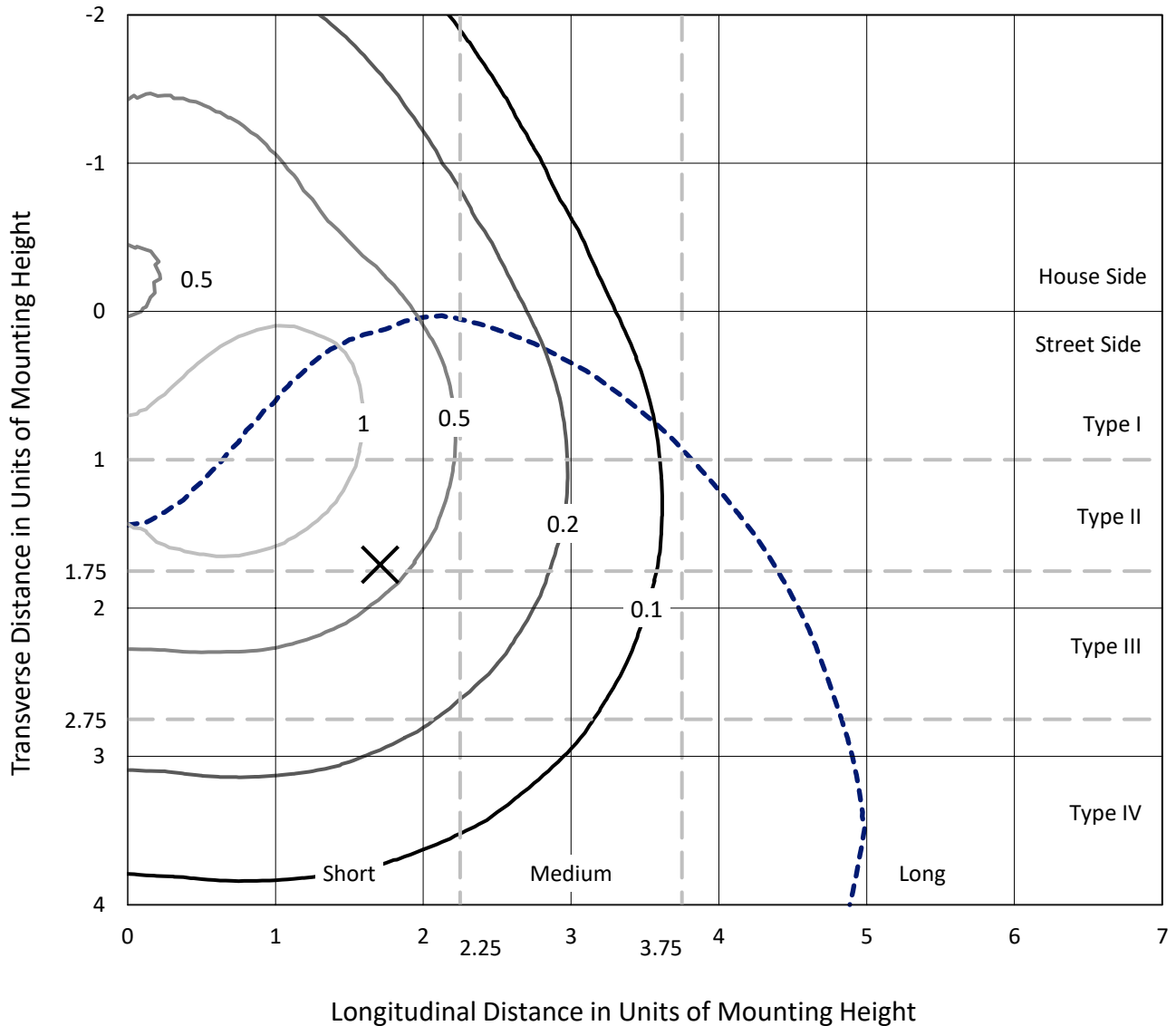
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4688.2 lumens  
Efficiency: N/A  
Efficacy: 95.7 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G3  
  
Input Watts (W): 49  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 6%  
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

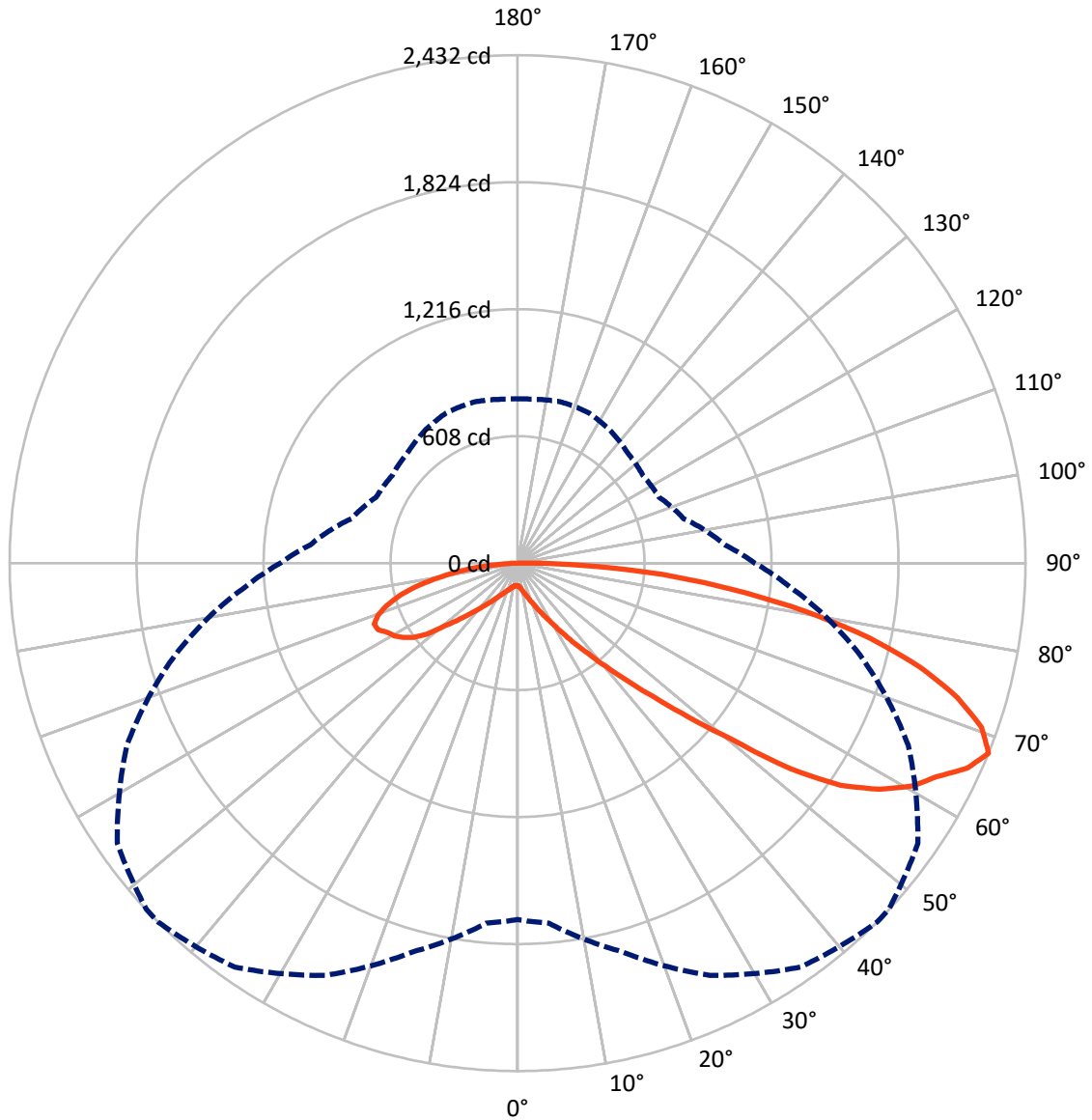
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.6 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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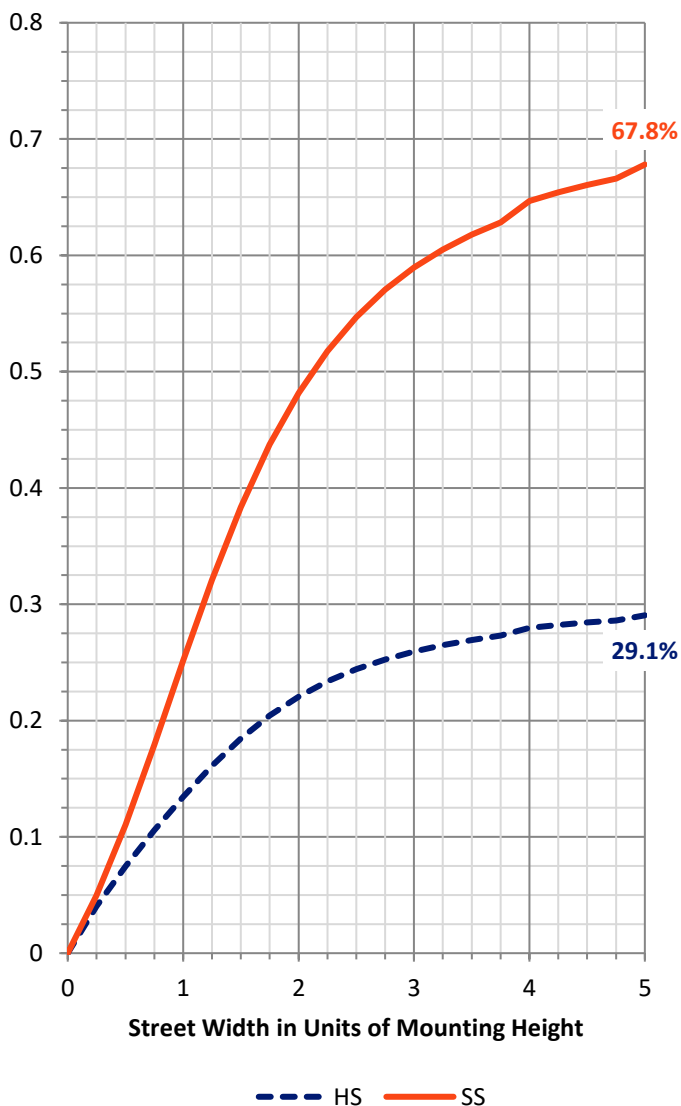
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1389.4	0.0	1389.4
	% Fixture	29.6	0.0	29.6
<b>Street Side</b>	Lumens	3298.8	0.0	3298.8
	% Fixture	70.4	0.0	70.4
<b>Total</b>	Lumens	4688.2	0.0	4688.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	11.1	0.2
10°-20°	41.7	0.9
20°-30°	98.3	2.1
30°-40°	215.5	4.6
40°-50°	469.1	10.0
50°-60°	963.9	20.6
60°-70°	1357.9	29.0
70°-80°	1152.9	24.6
80°-90°	377.8	8.1
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°	4688.2	100.0
0°-180°	4688.2	100.0



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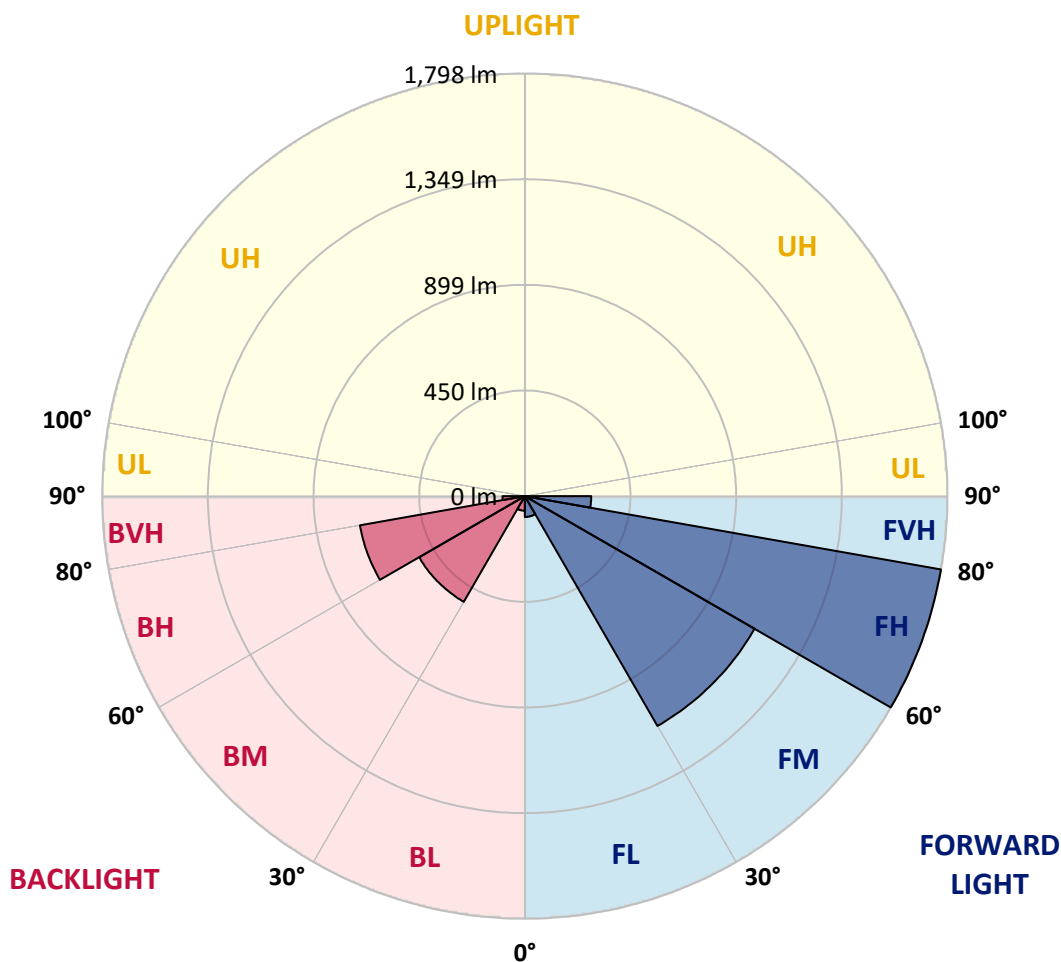
CATALOG NUMBER: MEM2-HSN-VA-50-830-U-WT4

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	88.7	1.9			
FM (30°-60°)	1129.1	24.1			
FH (60°-80°)	1798.4	38.4			G1/1800
FVH (80°-90°)	282.5	6.0			G3/500
BL (0°-30°)	62.4	1.3	B0/110		
BM (30°-60°)	519.3	11.1	B1/1000		
BH (60°-80°)	712.4	15.2	B2/1000		G2/1000
BVH (80°-90°)	95.3	2.0			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

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

Type IV Short





REPORT NUMBER: P879922

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	108.3	108.3	108.3	108.3	108.3	108.3	108.3	108.3	108.3	108.3	108.3
2.5°	111.6	111.1	111.6	111.6	111.6	111.1	111.1	111.1	110.6	110.2	109.7
5°	118.3	118.3	118.3	117.8	117.8	116.9	116.9	116.4	115.4	114.5	113.5
7.5°	127.4	126.9	126.9	126.5	126.0	125.0	124.5	124.1	122.1	120.7	118.8
10°	138.4	138.4	138.0	137.0	137.0	134.6	135.1	134.1	131.7	128.8	125.5
12.5°	151.8	151.8	150.9	150.9	149.9	148.0	147.5	146.1	143.7	138.9	135.1
15°	166.7	166.7	167.6	166.7	165.7	163.3	163.3	161.4	156.2	152.3	146.6
17.5°	185.4	183.0	184.4	183.9	183.9	182.5	181.1	178.7	174.4	167.6	160.5
20°	204.5	205.0	203.6	205.0	205.5	203.6	203.6	200.7	194.5	186.3	174.8
22.5°	228.5	228.5	225.6	229.4	231.8	230.4	229.9	224.2	216.5	205.5	194.0
25°	253.4	252.4	257.2	258.2	263.4	263.0	262.5	257.2	245.7	232.3	214.6
27.5°	281.6	283.1	292.2	294.6	299.9	299.4	298.9	293.1	280.7	262.5	239.5
30°	316.6	318.5	327.2	335.3	344.4	345.4	344.4	339.6	321.4	297.5	271.6
32.5°	357.3	362.6	371.2	385.1	396.6	401.9	402.8	394.2	373.6	342.0	308.0
35°	412.9	408.6	420.6	443.5	462.7	473.2	472.8	461.3	438.8	398.5	350.1
37.5°	467.5	466.1	484.7	514.9	540.8	549.4	551.8	544.1	515.4	462.2	405.2
40°	524.5	536.5	558.0	593.0	631.3	649.5	651.0	639.9	600.7	540.8	465.6
42.5°	598.7	610.7	638.0	681.1	736.7	766.9	768.8	756.3	708.9	631.3	538.4
45°	692.6	699.3	728.1	793.7	865.1	913.4	927.3	912.0	853.6	745.8	628.9
47.5°	793.7	793.7	840.6	927.3	1035.1	1098.8	1109.4	1095.5	1008.3	878.5	730.0
50°	906.3	906.7	981.5	1105.5	1241.6	1321.1	1329.2	1295.7	1190.3	1013.6	833.0
52.5°	1023.1	1035.6	1144.8	1332.6	1515.1	1636.7	1644.9	1606.1	1465.7	1207.1	942.7
55°	1184.1	1203.7	1362.3	1592.7	1782.3	1878.1	1878.6	1832.2	1663.5	1394.8	1073.9
57.5°	1407.3	1414.9	1563.0	1798.1	1977.3	2042.9	2038.1	1970.1	1775.6	1499.7	1181.7
60°	1591.7	1609.4	1730.1	1948.5	2123.4	2168.4	2163.1	2073.1	1852.3	1561.0	1233.4
62.5°	1712.9	1721.5	1846.5	2056.3	2213.4	2251.3	2245.5	2161.7	1946.2	1667.9	1319.6
65°	1742.1	1756.5	1915.0	2128.2	2280.5	2365.8	2361.9	2316.9	2095.6	1746.9	1360.3
67.5°	1706.7	1730.6	1925.1	2177.5	2361.0	2431.9	2429.9	2339.4	2063.5	1696.1	1309.1
70°	1634.3	1654.9	1896.3	2172.2	2337.5	2356.7	2341.8	2238.3	1969.1	1611.8	1232.5
72.5°	1520.3	1555.3	1791.0	2052.0	2190.0	2202.4	2197.1	2070.7	1827.4	1466.7	1116.5
75°	1370.9	1413.5	1627.1	1838.4	1969.6	1991.2	1981.1	1870.5	1624.3	1285.1	972.8
77.5°	1181.7	1205.6	1368.5	1569.2	1720.1	1723.9	1718.2	1594.6	1368.0	1076.3	818.6
80°	931.2	945.5	1086.8	1254.0	1379.0	1394.4	1389.1	1305.7	1086.4	851.7	638.5
82.5°	689.8	680.2	775.0	912.0	1036.1	1037.0	1045.6	953.2	813.3	617.9	457.0
85°	397.1	400.9	483.3	576.7	651.9	695.5	695.0	650.5	523.1	393.3	278.8
87.5°	110.6	119.3	171.5	249.6	283.6	308.5	299.4	270.2	218.4	123.6	70.9
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: P879922

CATALOG NUMBER: MEM2-HSN-VA-50-830-U-WT4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	108.3	108.3	108.3	108.3	108.3	108.3	108.3	108.3	108.3	108.3	108.3
2.5°	109.7	109.2	108.7	108.3	107.3	107.3	106.8	107.3	107.3	107.3	107.3
5°	112.6	112.1	110.6	109.7	108.3	107.3	106.8	106.8	106.8	106.8	106.8
7.5°	117.4	116.9	114.5	112.6	110.6	109.7	108.7	108.3	107.8	107.3	107.8
10°	124.5	122.6	120.2	117.4	114.5	113.0	111.6	111.1	110.6	110.2	110.2
12.5°	132.7	131.2	126.9	123.1	120.2	117.8	115.9	115.0	114.5	114.0	114.0
15°	143.7	140.8	135.1	130.3	126.0	123.1	121.2	120.2	119.7	119.3	119.3
17.5°	156.2	152.3	144.7	138.4	133.6	129.8	127.4	126.0	125.0	125.5	126.0
20°	170.5	164.3	155.7	148.0	141.8	137.5	135.1	133.2	132.2	132.7	133.2
22.5°	187.3	180.6	168.1	159.0	151.4	146.1	143.7	142.3	141.3	140.8	139.9
25°	206.4	197.8	183.5	171.0	161.9	156.6	153.8	152.8	151.8	150.9	150.9
27.5°	229.4	219.4	199.7	186.3	175.3	170.0	166.7	165.3	165.3	163.8	163.8
30°	256.3	242.9	218.9	201.2	190.2	183.5	179.6	179.1	178.2	179.6	179.6
32.5°	288.4	270.2	240.9	220.3	207.9	201.7	197.8	196.9	195.4	196.4	199.3
35°	328.6	305.1	270.2	245.7	230.4	224.2	219.4	218.9	216.5	218.9	215.1
37.5°	373.6	347.7	301.3	272.5	255.8	248.6	245.2	243.8	243.3	243.3	240.5
40°	428.7	397.6	341.0	305.6	286.4	277.8	274.5	274.0	273.0	276.4	273.0
42.5°	496.7	449.3	382.2	342.0	322.4	313.3	309.4	308.0	310.4	311.8	311.3
45°	572.4	521.1	434.9	388.5	366.0	356.9	351.6	350.1	351.1	351.1	355.9
47.5°	659.6	599.2	495.3	439.2	418.6	407.6	404.3	399.5	397.1	396.1	404.3
50°	750.6	675.4	557.1	494.3	475.6	467.0	468.0	458.4	455.0	451.2	450.3
52.5°	842.1	756.8	627.5	571.0	549.4	553.7	551.8	541.7	522.1	517.3	505.8
55°	951.8	848.8	695.0	627.5	608.8	612.2	619.8	619.8	615.5	605.0	595.9
57.5°	1044.7	924.9	745.8	661.5	645.2	653.8	669.2	680.7	690.7	698.4	697.9
60°	1096.4	971.9	778.8	687.4	668.2	685.0	708.0	727.6	749.1	771.7	770.7
62.5°	1167.8	1037.5	837.8	733.3	700.3	705.6	731.9	765.9	785.6	804.2	809.5
65°	1186.5	1049.5	859.8	765.9	739.1	740.0	757.8	785.6	802.3	807.1	810.0
67.5°	1136.2	996.8	823.4	746.8	732.4	745.8	774.5	796.6	799.0	787.5	786.5
70°	1060.5	932.1	765.9	701.7	692.6	713.2	751.1	777.4	771.7	748.2	746.8
72.5°	953.7	834.4	688.8	642.3	633.2	659.1	692.6	720.4	711.8	694.1	692.6
75°	825.3	713.7	595.4	560.9	560.4	588.7	617.9	634.7	634.2	621.7	617.9
77.5°	685.9	595.4	490.5	459.4	470.9	497.7	519.2	531.7	527.4	523.1	521.6
80°	537.0	456.5	378.4	359.7	377.4	386.5	409.5	408.6	411.0	401.9	408.6
82.5°	382.2	329.1	271.1	263.0	265.4	283.6	296.0	294.6	288.4	281.6	278.8
85°	231.8	202.6	173.9	162.4	170.5	169.1	176.7	170.5	166.7	163.3	166.2
87.5°	64.2	55.6	53.2	38.3	47.4	37.4	39.3	27.3	23.9	28.7	24.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2407-176-7

Test Date: 09/27/2024

Luminaire Tested: MEM2-HTN-VA-30-830-U-WQ

Data in this report applies to families of products including MEM2-HTN-VA-30-830-U-WQ

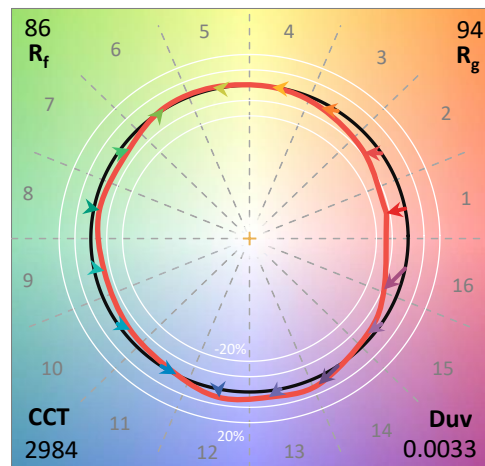
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-176-7  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 09/27/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Streetworks  
 Catalog Number: **MEM2-HTN-VA-30-830-U-WQ**  
 Description: EPIC MODERN VISUAL COMFORT 30W WAVESTREAM WIDE

**Spectral Parameters**

CCT (K): 2984  
 CIE u': 0.2500  
 CIE v': 0.5264  
 Duv: 0.0033  
 CIE x: 0.4431  
 CIE y: 0.4147  
 CIE z: 0.1422  
 Peak Wavelength (nm): 601  
 Dominant Wavelength (nm): 581  
 Purity: 57.4798  
 Rf: 85.8  
 Rg: 94.1

CRI (Ra):	81.8		
R1:	79.4	R9:	-1.1
R2:	89.9	R10:	78.4
R3:	96.6	R11:	80.8
R4:	80.6	R12:	72.8
R5:	80.1	R13:	81.7
R6:	88.9	R14:	98.5
R7:	82.6	R15:	70.2
R8:	56.0		



**Test Conditions**

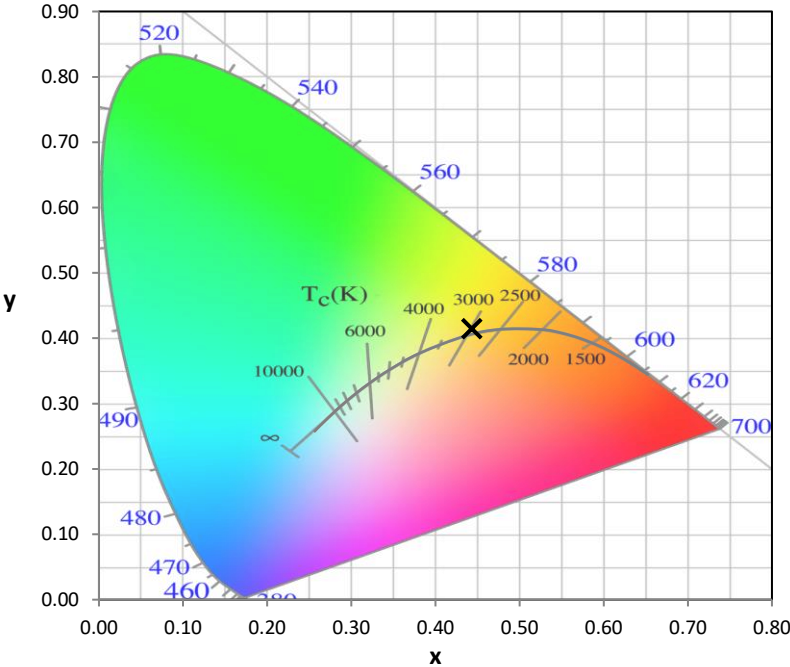
Stabilization Time: 29M  
 Operation Time: 1H 29M  
 Sphere Temperature (°C): 25.2

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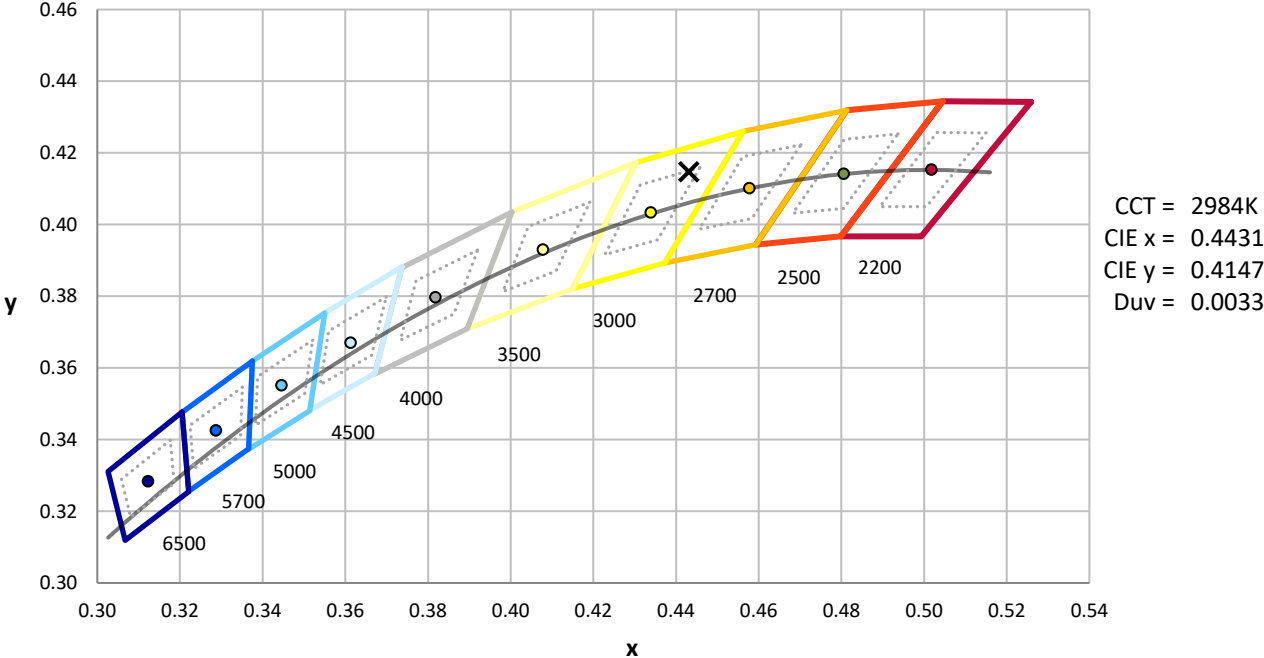
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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**CIE 1931 Chromaticity Diagram**



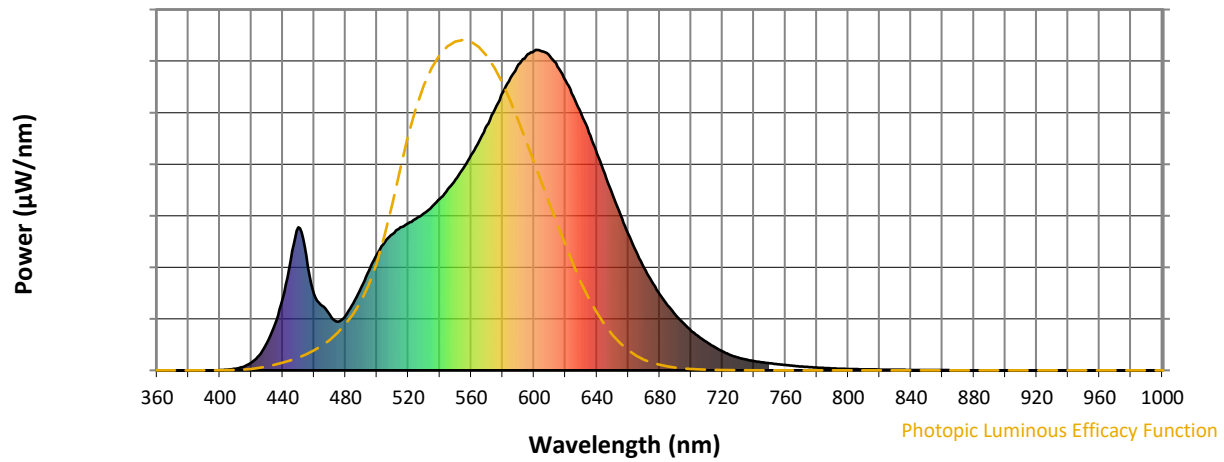
**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 3000K 4-step quadrangle

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**Photopic Flux vs. Wavelength**

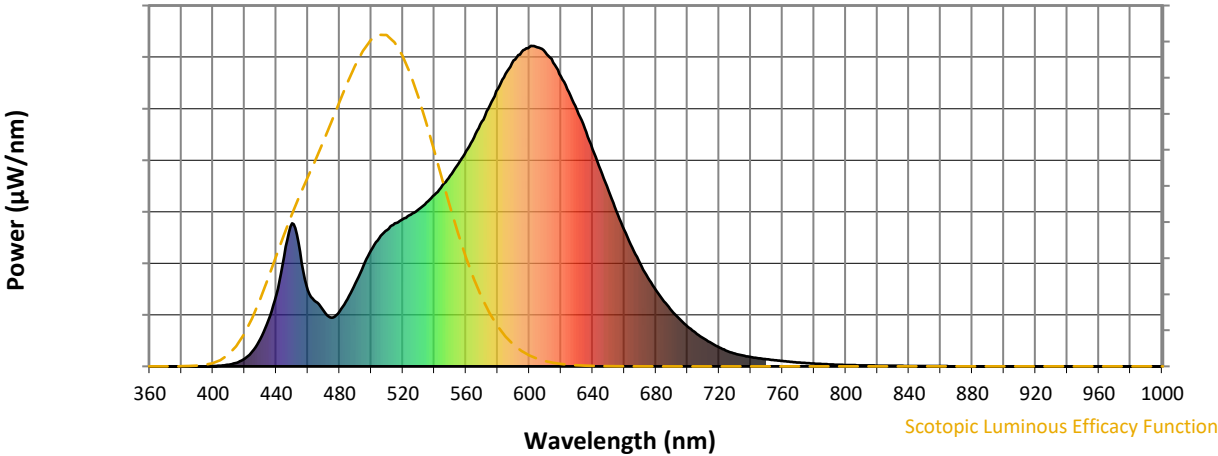


**Photopic Lumens: NR**

$\lambda$ (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	260	NR	620	905	NR	750	22	NR	880	0	NR
365	0	NR	495	312	NR	625	856	NR	755	19	NR	885	0	NR
370	0	NR	500	362	NR	630	801	NR	760	17	NR	890	0	NR
375	0	NR	505	399	NR	635	742	NR	765	14	NR	895	0	NR
380	0	NR	510	425	NR	640	677	NR	770	12	NR	900	0	NR
385	0	NR	515	446	NR	645	613	NR	775	10	NR	905	0	NR
390	0	NR	520	459	NR	650	549	NR	780	9	NR	910	0	NR
395	0	NR	525	473	NR	655	485	NR	785	7	NR	915	0	NR
400	1	NR	530	490	NR	660	425	NR	790	6	NR	920	0	NR
405	2	NR	535	511	NR	665	371	NR	795	5	NR	925	0	NR
410	5	NR	540	535	NR	670	321	NR	800	4	NR	930	0	NR
415	11	NR	545	565	NR	675	276	NR	805	4	NR	935	0	NR
420	24	NR	550	595	NR	680	238	NR	810	3	NR	940	0	NR
425	47	NR	555	631	NR	685	203	NR	815	3	NR	945	0	NR
430	86	NR	560	672	NR	690	174	NR	820	2	NR	950	0	NR
435	144	NR	565	715	NR	695	148	NR	825	2	NR	955	0	NR
440	224	NR	570	763	NR	700	124	NR	830	2	NR	960	0	NR
445	342	NR	575	814	NR	705	105	NR	835	2	NR	965	0	NR
450	446	NR	580	866	NR	710	88	NR	840	1	NR	970	0	NR
455	357	NR	585	912	NR	715	73	NR	845	1	NR	975	0	NR
460	237	NR	590	954	NR	720	59	NR	850	1	NR	980	0	NR
465	202	NR	595	981	NR	725	48	NR	855	1	NR	985	0	NR
470	172	NR	600	996	NR	730	40	NR	860	1	NR	990	0	NR
475	152	NR	605	996	NR	735	34	NR	865	1	NR	995	0	NR
480	171	NR	610	980	NR	740	29	NR	870	0	NR	1000	0	NR
485	210	NR	615	947	NR	745	25	NR	875	0	NR			

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Scotopic Flux vs. Wavelength

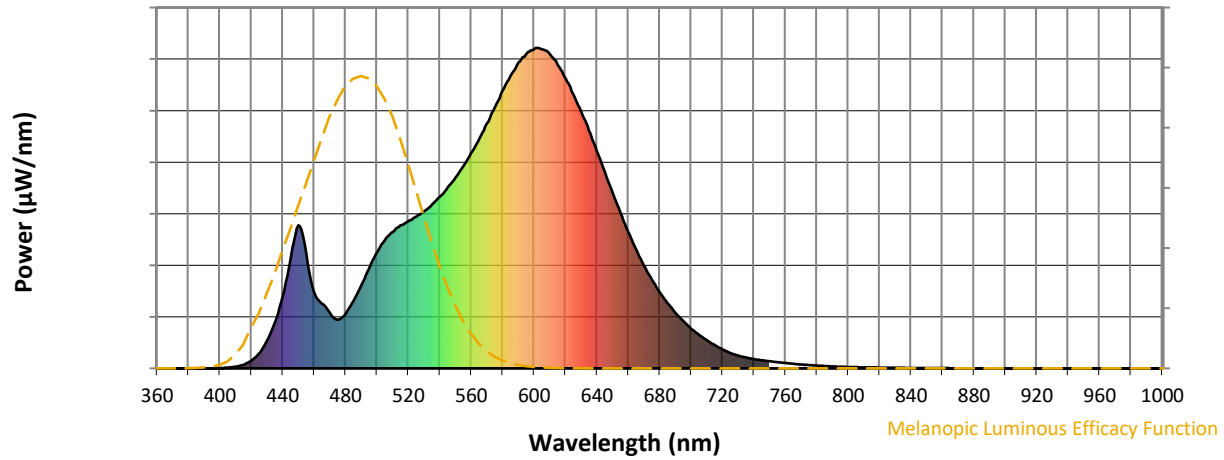


Scotopic Lumens: NR S/P: 1.32

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	260	NR	620	905	NR	750	22	NR	880	0	NR
365	0	NR	495	312	NR	625	856	NR	755	19	NR	885	0	NR
370	0	NR	500	362	NR	630	801	NR	760	17	NR	890	0	NR
375	0	NR	505	399	NR	635	742	NR	765	14	NR	895	0	NR
380	0	NR	510	425	NR	640	677	NR	770	12	NR	900	0	NR
385	0	NR	515	446	NR	645	613	NR	775	10	NR	905	0	NR
390	0	NR	520	459	NR	650	549	NR	780	9	NR	910	0	NR
395	0	NR	525	473	NR	655	485	NR	785	7	NR	915	0	NR
400	1	NR	530	490	NR	660	425	NR	790	6	NR	920	0	NR
405	2	NR	535	511	NR	665	371	NR	795	5	NR	925	0	NR
410	5	NR	540	535	NR	670	321	NR	800	4	NR	930	0	NR
415	11	NR	545	565	NR	675	276	NR	805	4	NR	935	0	NR
420	24	NR	550	595	NR	680	238	NR	810	3	NR	940	0	NR
425	47	NR	555	631	NR	685	203	NR	815	3	NR	945	0	NR
430	86	NR	560	672	NR	690	174	NR	820	2	NR	950	0	NR
435	144	NR	565	715	NR	695	148	NR	825	2	NR	955	0	NR
440	224	NR	570	763	NR	700	124	NR	830	2	NR	960	0	NR
445	342	NR	575	814	NR	705	105	NR	835	2	NR	965	0	NR
450	446	NR	580	866	NR	710	88	NR	840	1	NR	970	0	NR
455	357	NR	585	912	NR	715	73	NR	845	1	NR	975	0	NR
460	237	NR	590	954	NR	720	59	NR	850	1	NR	980	0	NR
465	202	NR	595	981	NR	725	48	NR	855	1	NR	985	0	NR
470	172	NR	600	996	NR	730	40	NR	860	1	NR	990	0	NR
475	152	NR	605	996	NR	735	34	NR	865	1	NR	995	0	NR
480	171	NR	610	980	NR	740	29	NR	870	0	NR	1000	0	NR
485	210	NR	615	947	NR	745	25	NR	875	0	NR			

REPORT NUMBER: SP1-2407-176-7

Melanopic Flux vs. Wavelength



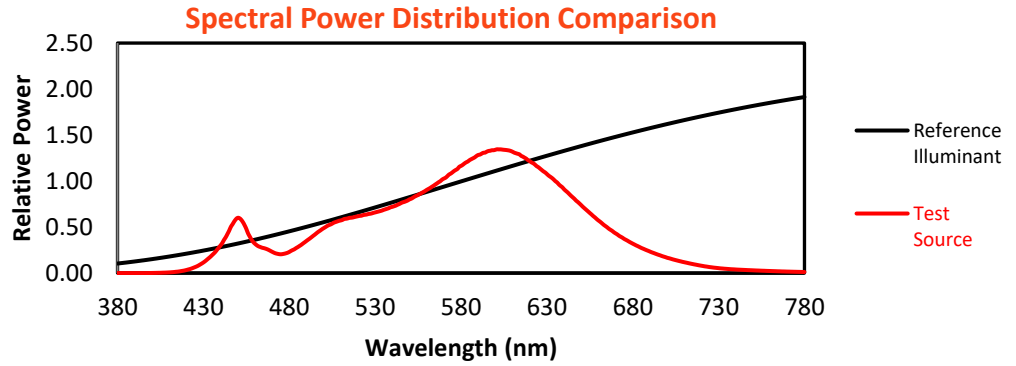
Melanopic Lumens: NR

M/P: 2.51

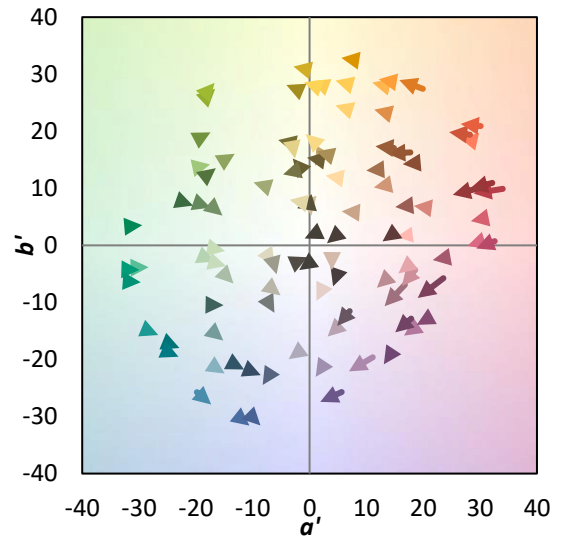
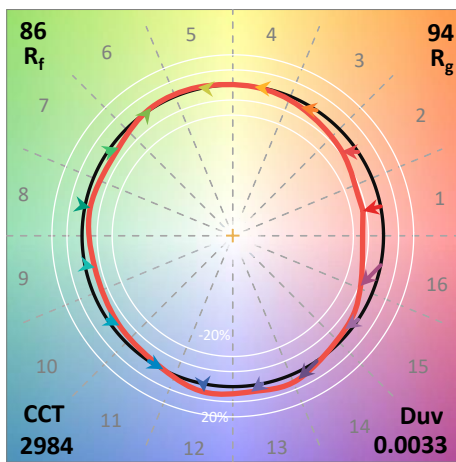
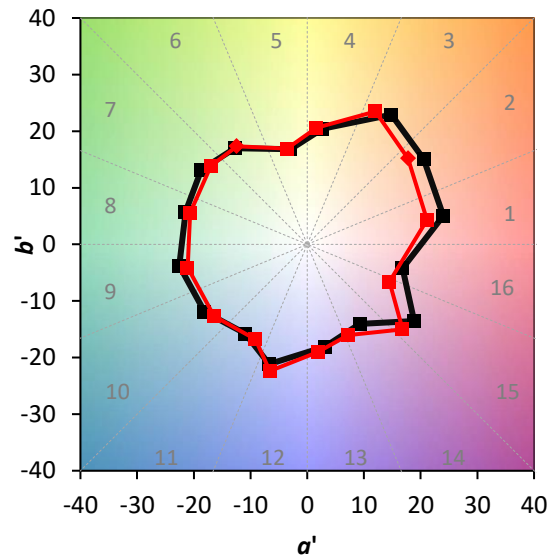
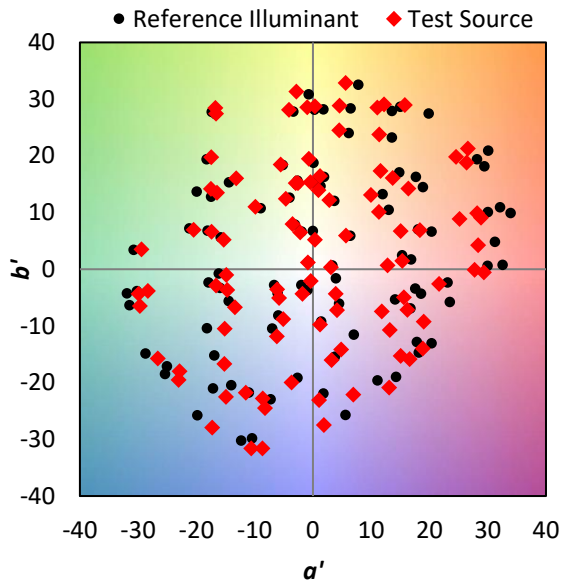
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	260	NR	620	905	NR	750	22	NR	880	0	NR
365	0	NR	495	312	NR	625	856	NR	755	19	NR	885	0	NR
370	0	NR	500	362	NR	630	801	NR	760	17	NR	890	0	NR
375	0	NR	505	399	NR	635	742	NR	765	14	NR	895	0	NR
380	0	NR	510	425	NR	640	677	NR	770	12	NR	900	0	NR
385	0	NR	515	446	NR	645	613	NR	775	10	NR	905	0	NR
390	0	NR	520	459	NR	650	549	NR	780	9	NR	910	0	NR
395	0	NR	525	473	NR	655	485	NR	785	7	NR	915	0	NR
400	1	NR	530	490	NR	660	425	NR	790	6	NR	920	0	NR
405	2	NR	535	511	NR	665	371	NR	795	5	NR	925	0	NR
410	5	NR	540	535	NR	670	321	NR	800	4	NR	930	0	NR
415	11	NR	545	565	NR	675	276	NR	805	4	NR	935	0	NR
420	24	NR	550	595	NR	680	238	NR	810	3	NR	940	0	NR
425	47	NR	555	631	NR	685	203	NR	815	3	NR	945	0	NR
430	86	NR	560	672	NR	690	174	NR	820	2	NR	950	0	NR
435	144	NR	565	715	NR	695	148	NR	825	2	NR	955	0	NR
440	224	NR	570	763	NR	700	124	NR	830	2	NR	960	0	NR
445	342	NR	575	814	NR	705	105	NR	835	2	NR	965	0	NR
450	446	NR	580	866	NR	710	88	NR	840	1	NR	970	0	NR
455	357	NR	585	912	NR	715	73	NR	845	1	NR	975	0	NR
460	237	NR	590	954	NR	720	59	NR	850	1	NR	980	0	NR
465	202	NR	595	981	NR	725	48	NR	855	1	NR	985	0	NR
470	172	NR	600	996	NR	730	40	NR	860	1	NR	990	0	NR
475	152	NR	605	996	NR	735	34	NR	865	1	NR	995	0	NR
480	171	NR	610	980	NR	740	29	NR	870	0	NR	1000	0	NR
485	210	NR	615	947	NR	745	25	NR	875	0	NR			

**Summary**

$R_f = 85.8$   
 $R_g = 94.1$   
 $CIE R_a = 81.8$   
 $R_g = -1.1$



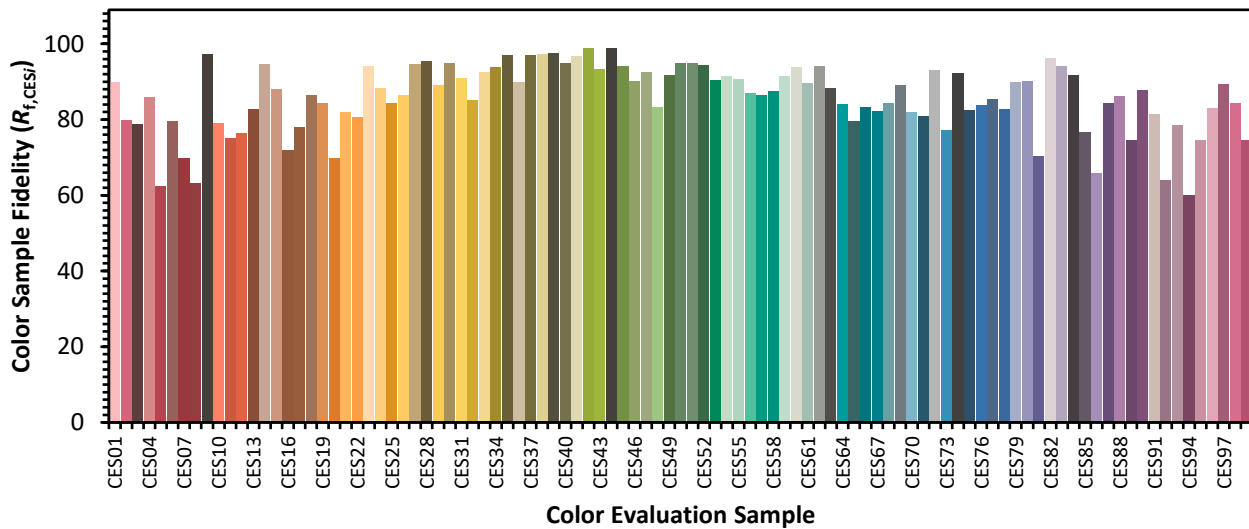
**Color Vector Graphics**



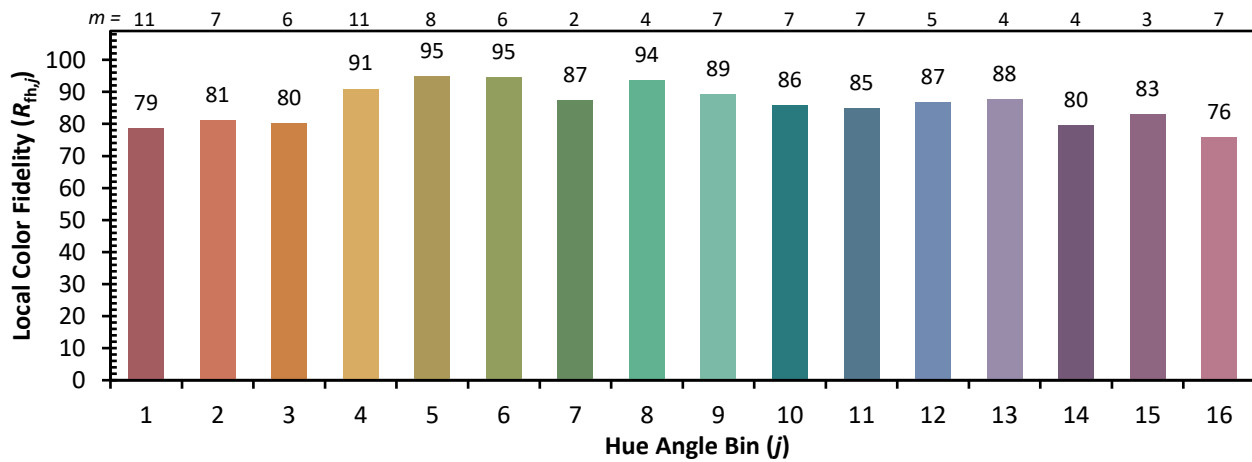
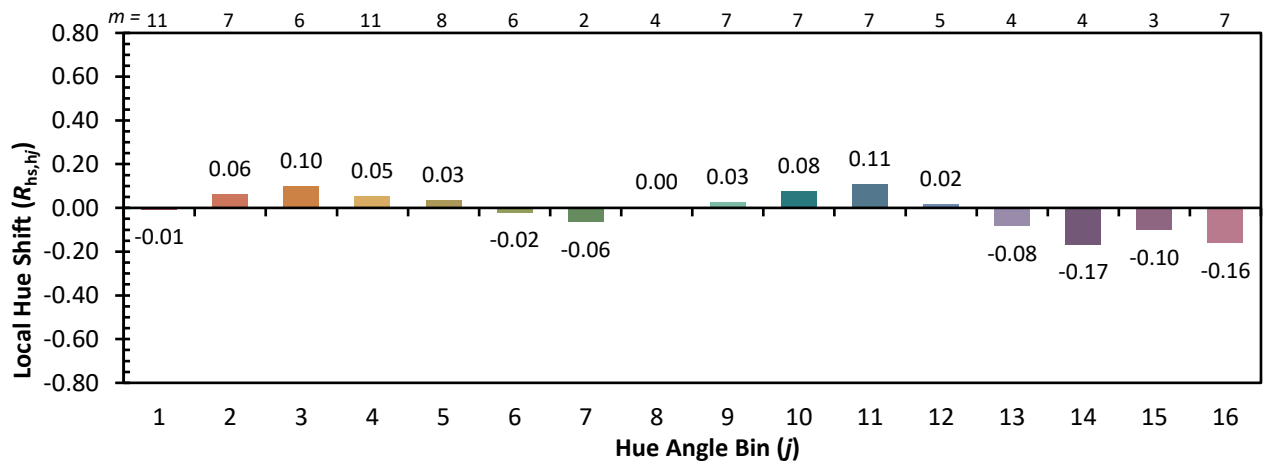
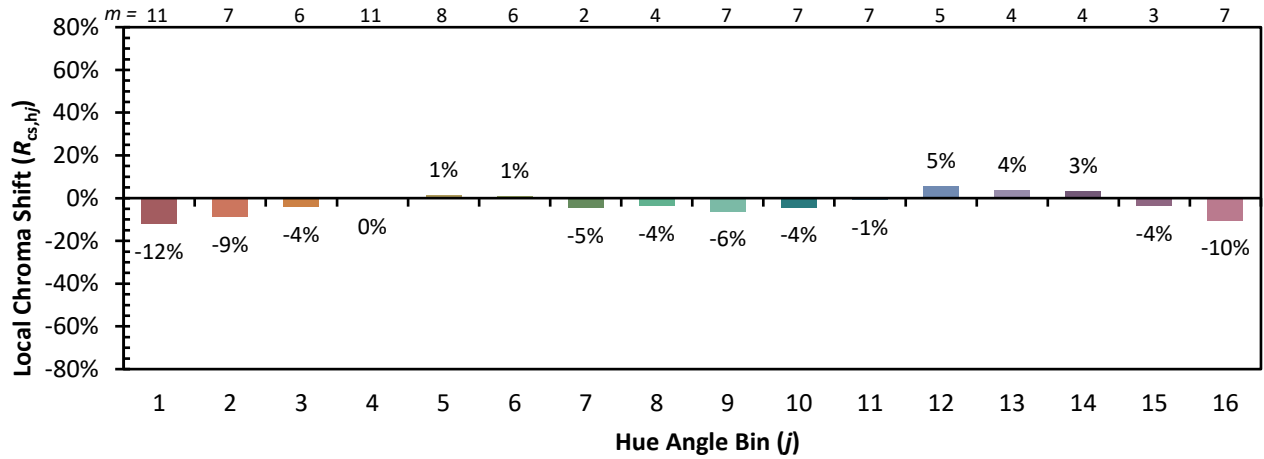


Individual Sample Fidelity Index ( $R_{f,i}$ )

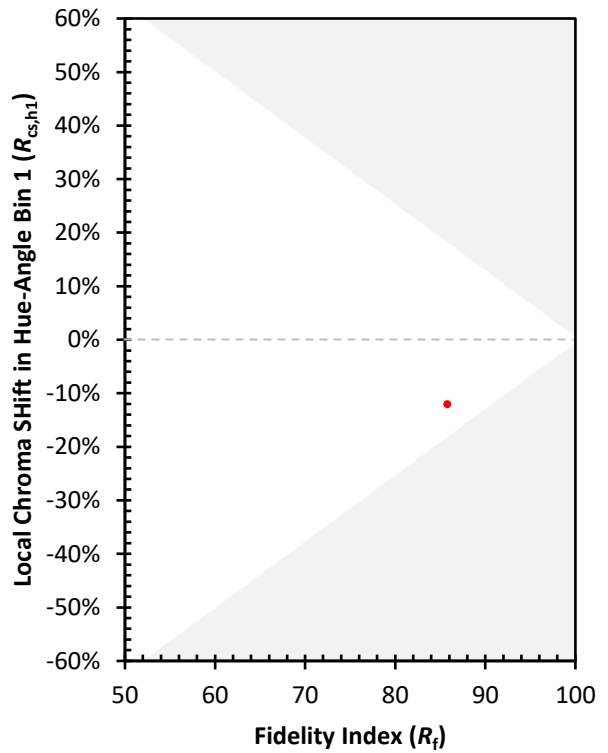
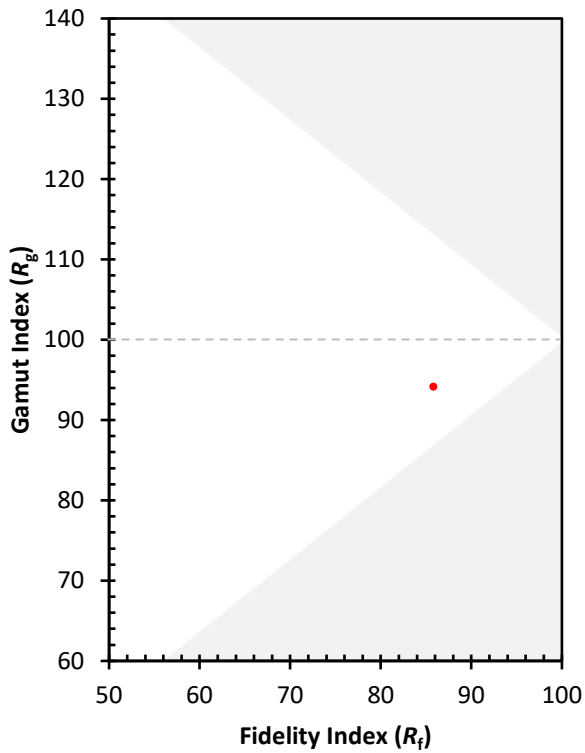
CES01 = 86	CES26 = 86	CES51 = 95	CES76 = 84
CES02 = 63	CES27 = 95	CES52 = 94	CES77 = 86
CES03 = 31	CES28 = 95	CES53 = 90	CES78 = 83
CES04 = 70	CES29 = 89	CES54 = 91	CES79 = 90
CES05 = 50	CES30 = 95	CES55 = 91	CES80 = 90
CES06 = 51	CES31 = 91	CES56 = 87	CES81 = 70
CES07 = 42	CES32 = 85	CES57 = 86	CES82 = 96
CES08 = 41	CES33 = 93	CES58 = 87	CES83 = 94
CES09 = 29	CES34 = 94	CES59 = 92	CES84 = 92
CES10 = 76	CES35 = 97	CES60 = 94	CES85 = 77
CES11 = 59	CES36 = 90	CES61 = 90	CES86 = 66
CES12 = 65	CES37 = 97	CES62 = 94	CES87 = 84
CES13 = 43	CES38 = 97	CES63 = 88	CES88 = 86
CES14 = 74	CES39 = 98	CES64 = 84	CES89 = 75
CES15 = 72	CES40 = 95	CES65 = 80	CES90 = 88
CES16 = 47	CES41 = 97	CES66 = 83	CES91 = 81
CES17 = 50	CES42 = 99	CES67 = 82	CES92 = 64
CES18 = 56	CES43 = 93	CES68 = 84	CES93 = 79
CES19 = 72	CES44 = 99	CES69 = 89	CES94 = 60
CES20 = 67	CES45 = 94	CES70 = 82	CES95 = 74
CES21 = 87	CES46 = 90	CES71 = 81	CES96 = 83
CES22 = 79	CES47 = 93	CES72 = 93	CES97 = 89
CES23 = 92	CES48 = 83	CES73 = 77	CES98 = 84
CES24 = 91	CES49 = 92	CES74 = 92	CES99 = 75
CES25 = 72	CES50 = 95	CES75 = 83	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)