

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: INVUE

Report Number: P880265

Luminaire Tested: **EMM2-HSN-VA4-735-U-WT4**

Issue Date: 10/01/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P880265  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/01/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-VA4-735-U-WT4  
Description: EPIC MODERN SHORT HOUSING 4W 70CRI 3500K VISUAL COMFORT FIXTURE w/  
DRIVE LANE TYPE IV DISTRIBUTION OPTIC  
Light Source: (1) 3500K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

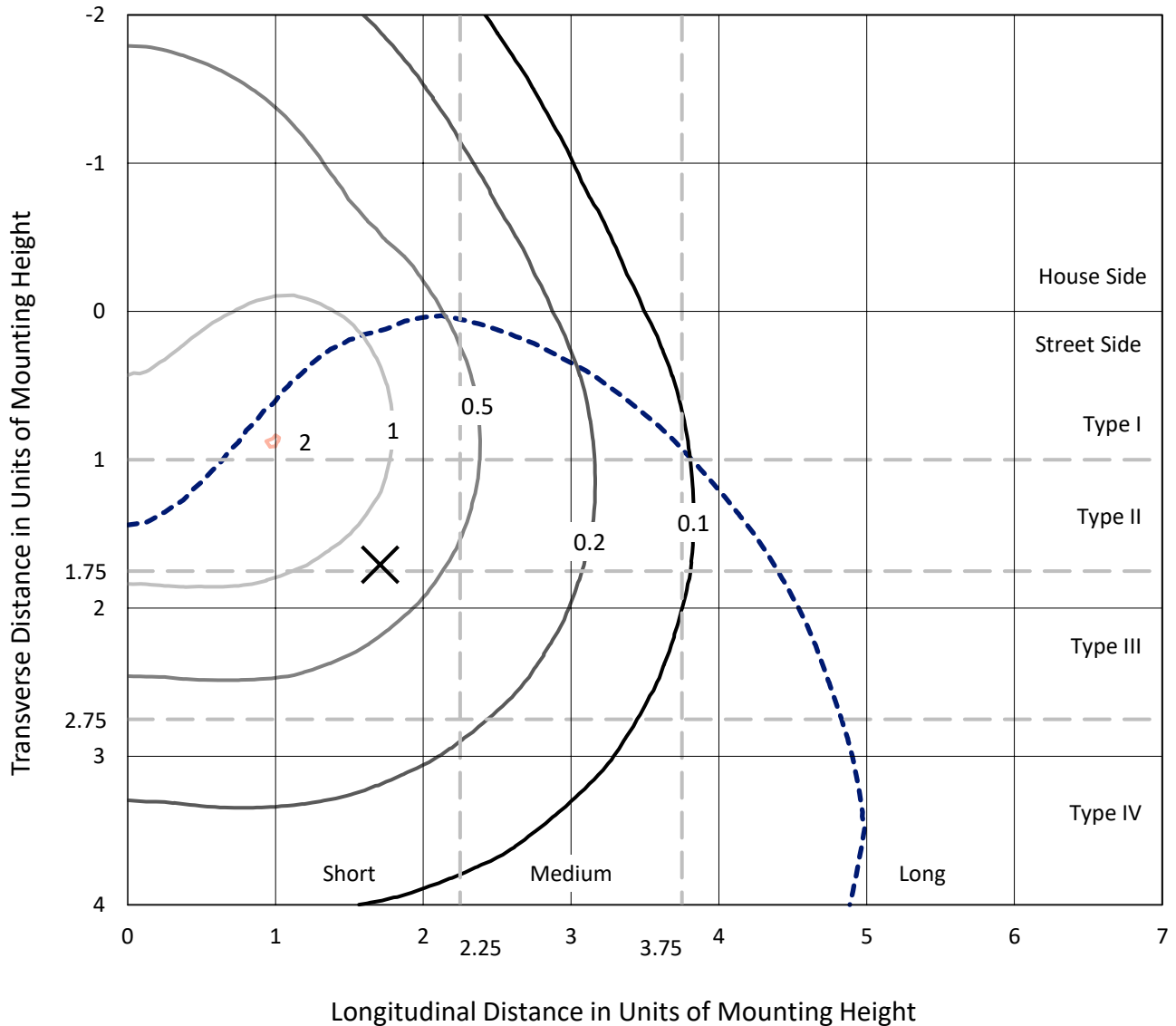
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5798.3 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G3  
  
Input Watts (W): 59  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 8%  
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

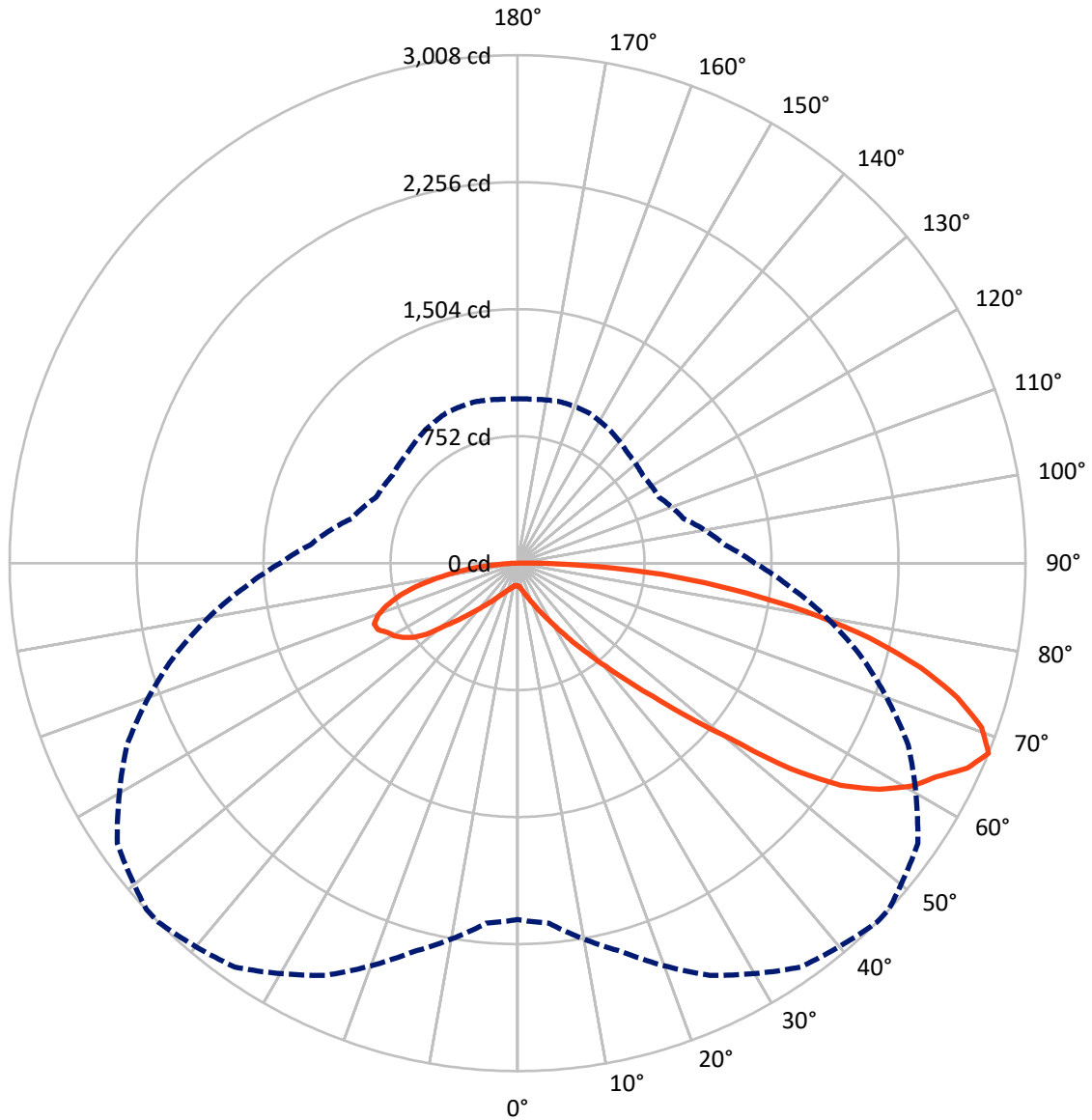
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2 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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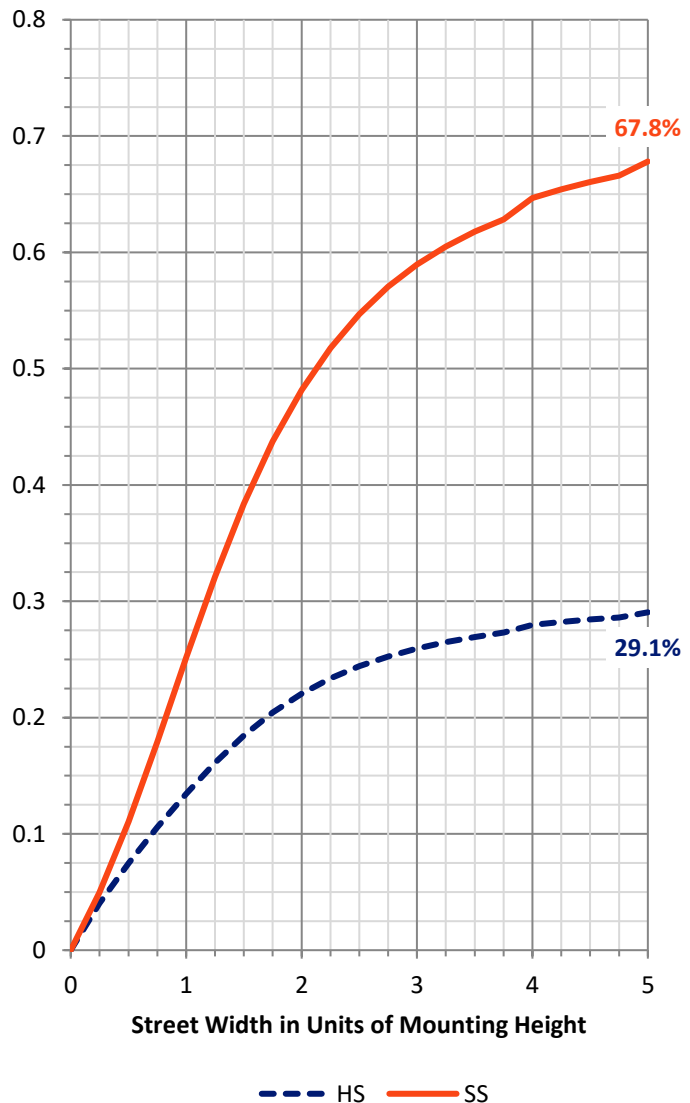
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1718.4	0.0	1718.4
	% Fixture	29.6	0.0	29.6
<b>Street Side</b>	Lumens	4079.9	0.0	4079.9
	% Fixture	70.4	0.0	70.4
<b>Total</b>	Lumens	5798.3	0.0	5798.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	13.7	0.2
10°-20°	51.6	0.9
20°-30°	121.5	2.1
30°-40°	266.5	4.6
40°-50°	580.2	10.0
50°-60°	1192.1	20.6
60°-70°	1679.5	29.0
70°-80°	1425.9	24.6
80°-90°	467.3	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°	5798.3	100.0
0°-180°	5798.3	100.0



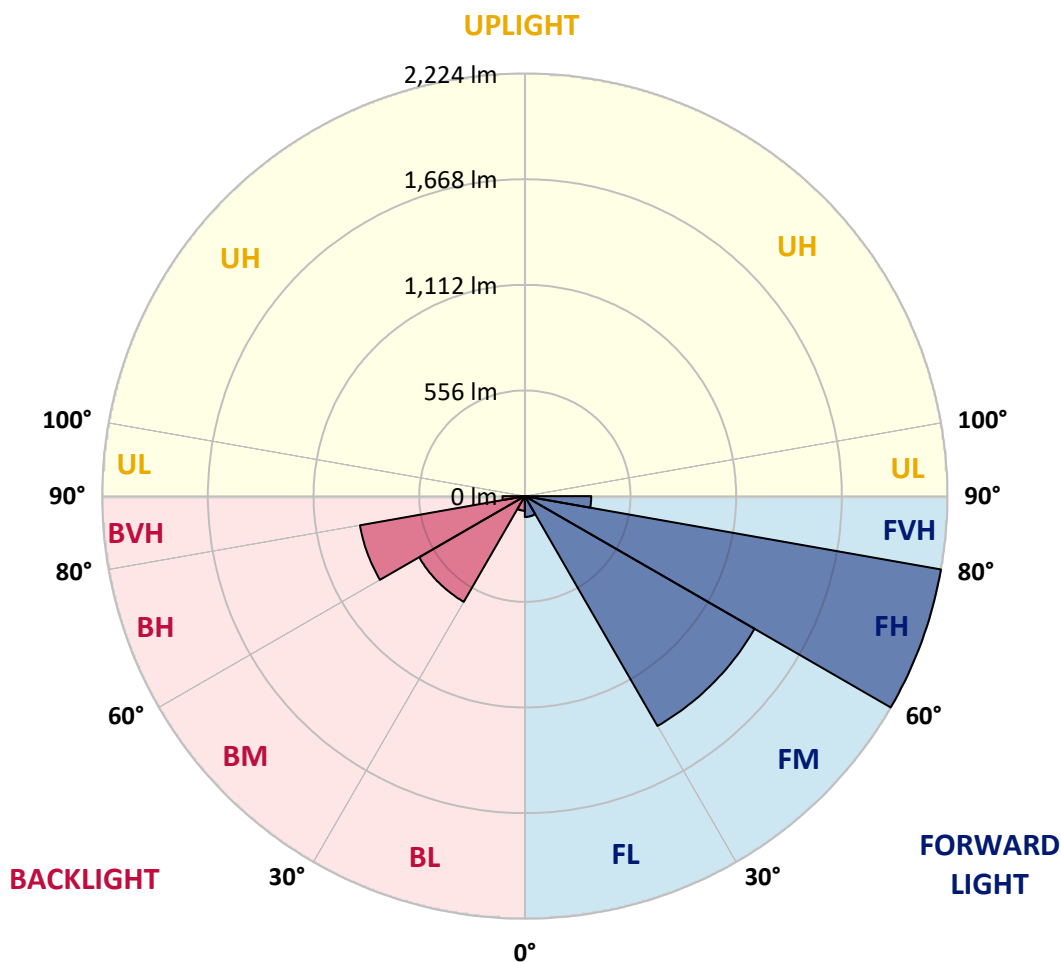
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	109.7	1.9			
FM (30°-60°)	1396.5	24.1			
FH (60°-80°)	2224.2	38.4			G2/5000
FVH (80°-90°)	349.4	6.0			G3/500
BL (0°-30°)	77.1	1.3	B0/110		
BM (30°-60°)	642.3	11.1	B1/1000		
BH (60°-80°)	881.2	15.2	B2/1000		G2/1000
BVH (80°-90°)	117.8	2.0			G2/225
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: P880265

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	133.9	133.9	133.9	133.9	133.9	133.9	133.9	133.9	133.9	133.9	133.9
2.5°	138.0	137.4	138.0	138.0	138.0	137.4	137.4	137.4	136.8	136.3	135.7
5°	146.3	146.3	146.3	145.7	145.7	144.6	144.6	144.0	142.8	141.6	140.4
7.5°	157.6	157.0	157.0	156.4	155.8	154.6	154.0	153.4	151.1	149.3	146.9
10°	171.2	171.2	170.6	169.4	169.4	166.5	167.1	165.9	162.9	159.4	155.2
12.5°	187.8	187.8	186.6	186.6	185.4	183.1	182.5	180.7	177.7	171.8	167.1
15°	206.2	206.2	207.3	206.2	205.0	202.0	202.0	199.6	193.1	188.4	181.3
17.5°	229.3	226.3	228.1	227.5	227.5	225.7	223.9	221.0	215.6	207.3	198.5
20°	253.0	253.6	251.8	253.6	254.1	251.8	251.8	248.2	240.5	230.5	216.2
22.5°	282.6	282.6	279.0	283.8	286.7	285.0	284.4	277.3	267.8	254.1	239.9
25°	313.4	312.2	318.1	319.3	325.8	325.2	324.6	318.1	303.9	287.3	265.4
27.5°	348.3	350.1	361.4	364.3	370.9	370.3	369.7	362.6	347.2	324.6	296.2
30°	391.6	394.0	404.6	414.7	426.0	427.1	426.0	420.0	397.5	367.9	335.9
32.5°	441.9	448.5	459.1	476.3	490.5	497.0	498.2	487.6	462.1	423.0	380.9
35°	510.7	505.3	520.1	548.6	572.3	585.3	584.7	570.5	542.7	492.9	433.1
37.5°	578.2	576.4	599.5	636.9	668.8	679.5	682.5	673.0	637.4	571.7	501.2
40°	648.7	663.5	690.2	733.4	780.8	803.3	805.1	791.5	742.9	668.8	575.8
42.5°	740.5	755.3	789.1	842.4	911.1	948.5	950.8	935.4	876.8	780.8	665.9
45°	856.6	864.9	900.5	981.6	1069.9	1129.7	1146.9	1128.0	1055.7	922.4	777.8
47.5°	981.6	981.6	1039.7	1146.9	1280.2	1359.0	1372.0	1354.9	1247.0	1086.5	902.9
50°	1120.9	1121.5	1213.9	1367.3	1535.6	1633.9	1644.0	1602.5	1472.2	1253.6	1030.2
52.5°	1265.4	1280.8	1415.9	1648.1	1873.8	2024.3	2034.4	1986.4	1812.8	1492.9	1165.9
55°	1464.5	1488.8	1684.8	1969.8	2204.4	2322.9	2323.5	2266.0	2057.5	1725.1	1328.2
57.5°	1740.5	1750.0	1933.1	2224.0	2445.5	2526.7	2520.8	2436.6	2196.1	1854.9	1461.5
60°	1968.6	1990.5	2139.8	2410.0	2626.2	2681.9	2675.4	2564.0	2290.9	1930.7	1525.5
62.5°	2118.5	2129.2	2283.8	2543.3	2737.6	2784.4	2777.3	2673.6	2407.0	2062.8	1632.1
65°	2154.6	2172.4	2368.5	2632.1	2820.5	2926.0	2921.2	2865.5	2591.8	2160.6	1682.5
67.5°	2110.8	2140.4	2380.9	2693.1	2920.0	3007.7	3005.4	2893.4	2552.2	2097.8	1619.1
70°	2021.3	2046.8	2345.4	2686.6	2891.0	2914.7	2896.3	2768.4	2435.4	1993.5	1524.3
72.5°	1880.3	1923.6	2215.1	2537.9	2708.6	2724.0	2717.4	2561.0	2260.1	1814.0	1380.9
75°	1695.5	1748.2	2012.5	2273.7	2436.0	2462.7	2450.3	2313.4	2008.9	1589.5	1203.2
77.5°	1461.5	1491.1	1692.5	1940.8	2127.4	2132.1	2125.0	1972.2	1692.0	1331.2	1012.4
80°	1151.7	1169.4	1344.2	1551.0	1705.6	1724.5	1718.0	1614.9	1343.6	1053.3	789.7
82.5°	853.1	841.2	958.5	1128.0	1281.4	1282.6	1293.3	1178.9	1005.9	764.2	565.2
85°	491.1	495.9	597.8	713.3	806.3	860.2	859.6	804.5	646.9	486.4	344.8
87.5°	136.8	147.5	212.1	308.7	350.7	381.5	370.3	334.1	270.1	152.8	87.7
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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CATALOG NUMBER: EMM2-HSN-VA4-735-U-WT4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	133.9	133.9	133.9	133.9	133.9	133.9	133.9	133.9	133.9	133.9	133.9
2.5°	135.7	135.1	134.5	133.9	132.7	132.7	132.1	132.7	132.7	132.7	132.7
5°	139.2	138.6	136.8	135.7	133.9	132.7	132.1	132.1	132.1	132.1	132.1
7.5°	145.1	144.6	141.6	139.2	136.8	135.7	134.5	133.9	133.3	132.7	133.3
10°	154.0	151.7	148.7	145.1	141.6	139.8	138.0	137.4	136.8	136.3	136.3
12.5°	164.1	162.3	157.0	152.3	148.7	145.7	143.4	142.2	141.6	141.0	141.0
15°	177.7	174.2	167.1	161.1	155.8	152.3	149.9	148.7	148.1	147.5	147.5
17.5°	193.1	188.4	178.9	171.2	165.3	160.5	157.6	155.8	154.6	155.2	155.8
20°	210.9	203.2	192.5	183.1	175.4	170.0	167.1	164.7	163.5	164.1	164.7
22.5°	231.6	223.3	207.9	196.7	187.2	180.7	177.7	175.9	174.8	174.2	173.0
25°	255.3	244.7	226.9	211.5	200.2	193.7	190.2	189.0	187.8	186.6	186.6
27.5°	283.8	271.3	247.0	230.5	216.8	210.3	206.2	204.4	204.4	202.6	202.6
30°	316.9	300.4	270.7	248.8	235.2	226.9	222.2	221.6	220.4	222.2	222.2
32.5°	356.6	334.1	298.0	272.5	257.1	249.4	244.7	243.5	241.7	242.9	246.4
35°	406.4	377.4	334.1	303.9	285.0	277.3	271.3	270.7	267.8	270.7	266.0
37.5°	462.1	430.1	372.6	337.1	316.4	307.5	303.3	301.5	301.0	301.0	297.4
40°	530.2	491.7	421.8	378.0	354.3	343.6	339.5	338.9	337.7	341.8	337.7
42.5°	614.3	555.7	472.8	423.0	398.7	387.4	382.7	380.9	383.9	385.7	385.1
45°	707.9	644.6	537.9	480.5	452.6	441.4	434.8	433.1	434.2	434.2	440.2
47.5°	815.8	741.1	612.6	543.3	517.8	504.2	500.0	494.1	491.1	489.9	500.0
50°	928.3	835.3	689.0	611.4	588.3	577.6	578.8	566.9	562.8	558.1	556.9
52.5°	1041.5	936.0	776.1	706.2	679.5	684.8	682.5	670.0	645.7	639.8	625.6
55°	1177.1	1049.8	859.6	776.1	753.0	757.1	766.6	766.6	761.3	748.2	737.0
57.5°	1292.1	1144.0	922.4	818.1	798.0	808.7	827.6	841.8	854.3	863.8	863.2
60°	1356.1	1202.0	963.3	850.1	826.4	847.2	875.6	899.9	926.5	954.4	953.2
62.5°	1444.3	1283.2	1036.1	907.0	866.1	872.6	905.2	947.3	971.6	994.7	1001.2
65°	1467.4	1298.0	1063.4	947.3	914.1	915.3	937.2	971.6	992.3	998.2	1001.8
67.5°	1405.2	1232.8	1018.4	923.6	905.8	922.4	957.9	985.2	988.2	973.9	972.8
70°	1311.6	1152.9	947.3	867.9	856.6	882.1	928.9	961.5	954.4	925.4	923.6
72.5°	1179.5	1032.0	851.9	794.4	783.2	815.2	856.6	891.0	880.3	858.4	856.6
75°	1020.7	882.7	736.4	693.7	693.1	728.1	764.2	785.0	784.4	769.0	764.2
77.5°	848.3	736.4	606.6	568.1	582.4	615.5	642.2	657.6	652.3	646.9	645.1
80°	664.1	564.6	468.0	444.9	466.8	478.1	506.5	505.3	508.3	497.0	505.3
82.5°	472.8	407.0	335.3	325.2	328.2	350.7	366.1	364.3	356.6	348.3	344.8
85°	286.7	250.6	215.0	200.8	210.9	209.1	218.6	210.9	206.2	202.0	205.6
87.5°	79.4	68.7	65.8	47.4	58.6	46.2	48.6	33.8	29.6	35.5	30.8
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: SP1-2407-176-4

Test Date: 09/24/2024

Luminaire Tested: MEM2-HTN-VA-30-735-U-WQ

Data in this report applies to families of products including MEM2-HTN-VA-30-735-U-WQ

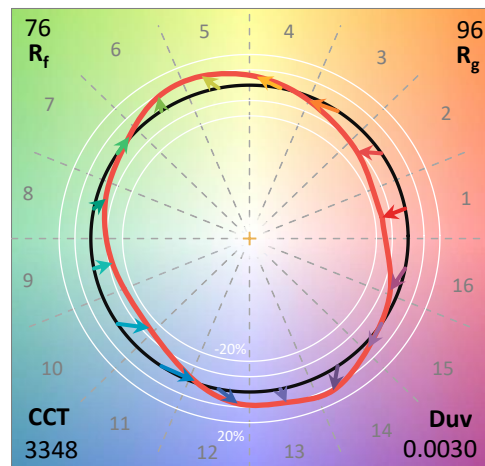
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-176-4  
 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-30-735-U-WQ**  
 Description: EPIC MODERN VISUAL COMFORT 30W WAVESTREAM WIDE

**Spectral Parameters**

CCT (K): 3348  
 CIE u': 0.2384  
 CIE v': 0.5184  
 Duv: 0.0030  
 CIE x: 0.4177  
 CIE y: 0.4036  
 CIE z: 0.1787  
 Peak Wavelength (nm): 593  
 Dominant Wavelength (nm): 580  
 Purity: 46.5223  
 Rf: 75.8  
 Rg: 95.8

CRI (Ra):	73.4		
R1:	70.8	R9:	-19.2
R2:	79.9	R10:	52.5
R3:	87.6	R11:	68.0
R4:	72.6	R12:	42.6
R5:	69.3	R13:	72.0
R6:	71.3	R14:	92.6
R7:	82.1	R15:	63.8
R8:	53.3		



**Test Conditions**

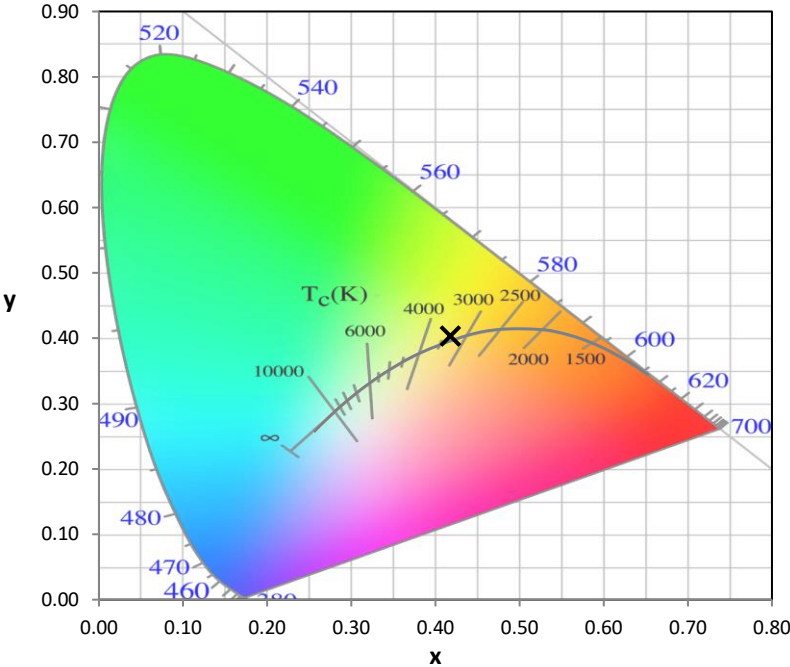
Stabilization Time: 30M  
 Operation Time: 1H 30M  
 Sphere Temperature (°C): 25.2

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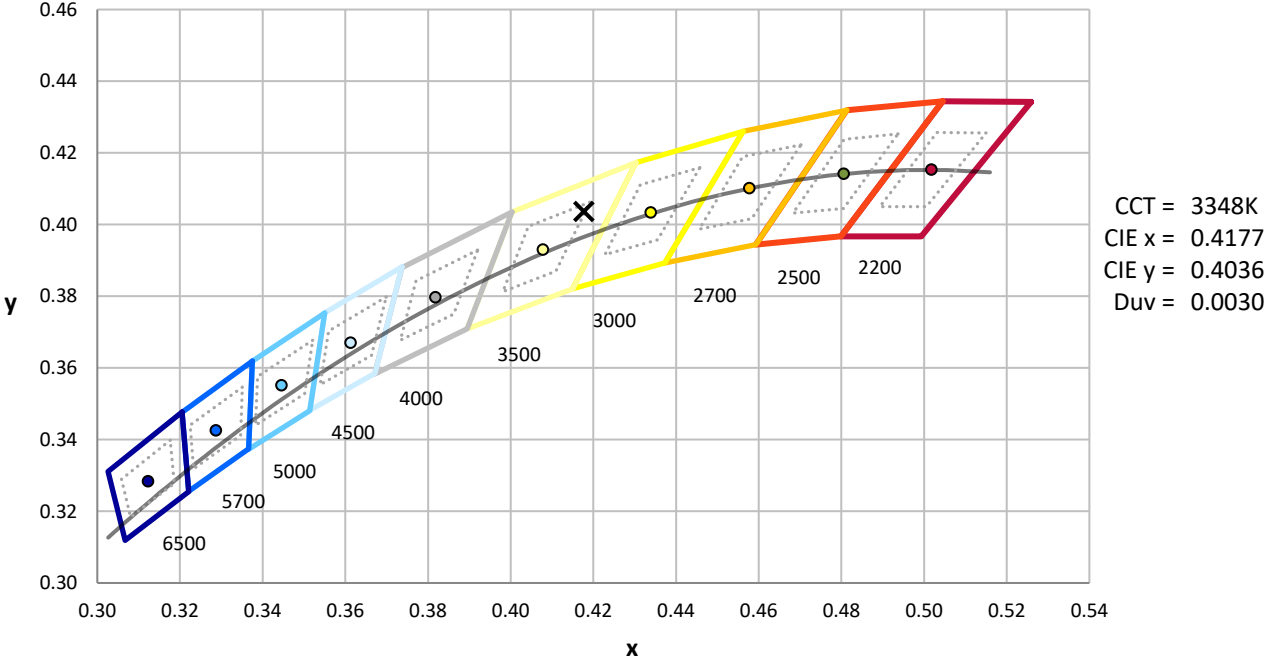
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



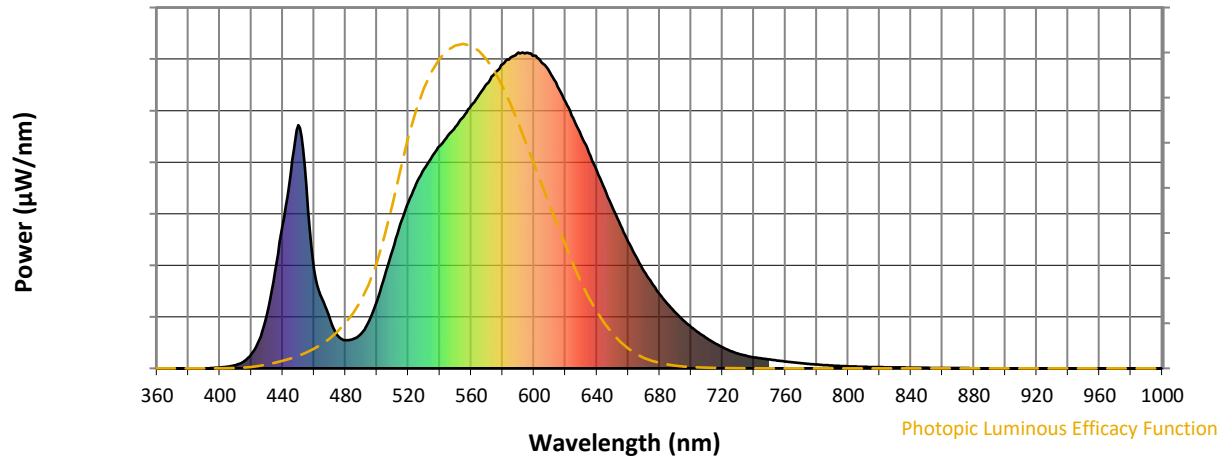
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 4-step quadrangle

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**Photopic Flux vs. Wavelength**

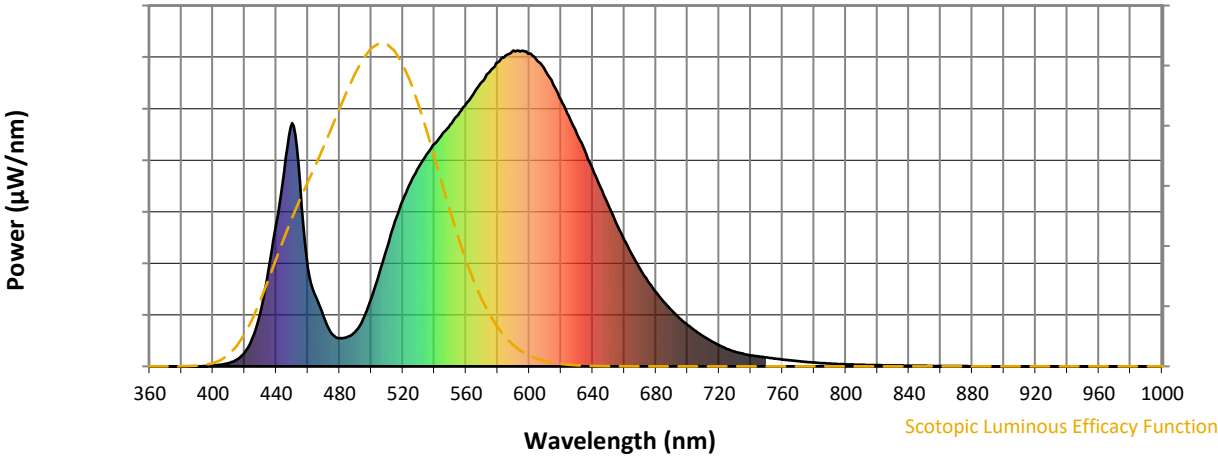


**Photopic Lumens: NR**

$\lambda$ (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	110	NR	620	844	NR	750	28	NR	880	0	NR
365	0	NR	495	150	NR	625	792	NR	755	25	NR	885	0	NR
370	0	NR	500	214	NR	630	737	NR	760	22	NR	890	0	NR
375	0	NR	505	293	NR	635	683	NR	765	19	NR	895	0	NR
380	0	NR	510	376	NR	640	625	NR	770	16	NR	900	0	NR
385	0	NR	515	458	NR	645	566	NR	775	14	NR	905	0	NR
390	0	NR	520	526	NR	650	509	NR	780	12	NR	910	0	NR
395	1	NR	525	584	NR	655	453	NR	785	10	NR	915	0	NR
400	3	NR	530	631	NR	660	401	NR	790	9	NR	920	0	NR
405	5	NR	535	671	NR	665	353	NR	795	8	NR	925	0	NR
410	10	NR	540	704	NR	670	308	NR	800	7	NR	930	0	NR
415	21	NR	545	737	NR	675	269	NR	805	6	NR	935	0	NR
420	44	NR	550	766	NR	680	235	NR	810	5	NR	940	0	NR
425	90	NR	555	797	NR	685	204	NR	815	4	NR	945	0	NR
430	171	NR	560	832	NR	690	177	NR	820	4	NR	950	0	NR
435	305	NR	565	866	NR	695	152	NR	825	3	NR	955	0	NR
440	455	NR	570	901	NR	700	131	NR	830	3	NR	960	0	NR
445	615	NR	575	933	NR	705	112	NR	835	3	NR	965	0	NR
450	771	NR	580	963	NR	710	96	NR	840	2	NR	970	0	NR
455	579	NR	585	984	NR	715	80	NR	845	2	NR	975	0	NR
460	313	NR	590	1000	NR	720	67	NR	850	2	NR	980	0	NR
465	221	NR	595	999	NR	725	55	NR	855	1	NR	985	0	NR
470	156	NR	600	990	NR	730	46	NR	860	1	NR	990	0	NR
475	103	NR	605	968	NR	735	40	NR	865	1	NR	995	0	NR
480	89	NR	610	937	NR	740	35	NR	870	1	NR	1000	0	NR
485	93	NR	615	893	NR	745	31	NR	875	1	NR			

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Scotopic Flux vs. Wavelength



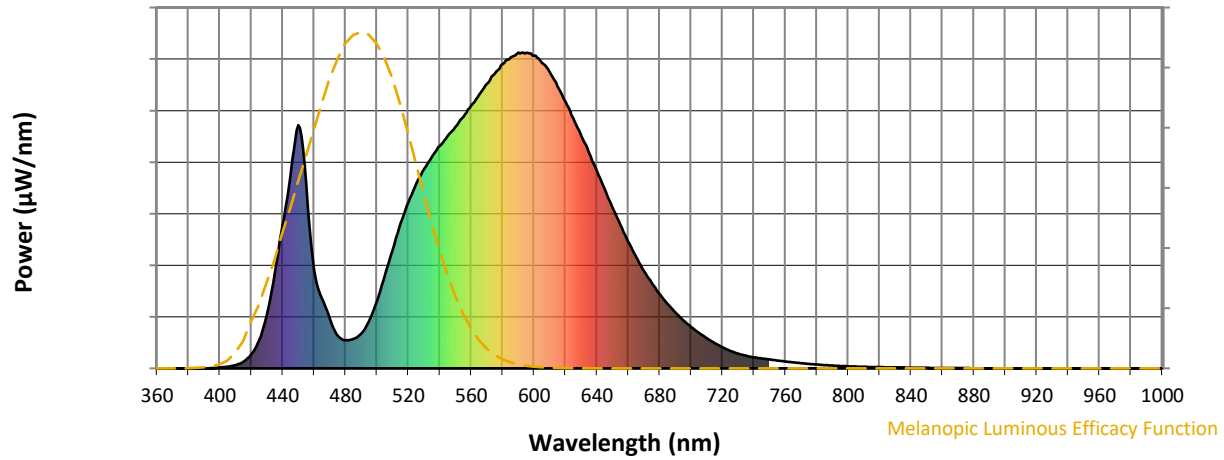
Scotopic Lumens: NR

S/P: 1.31

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	110	NR	620	844	NR	750	28	NR	880	0	NR
365	0	NR	495	150	NR	625	792	NR	755	25	NR	885	0	NR
370	0	NR	500	214	NR	630	737	NR	760	22	NR	890	0	NR
375	0	NR	505	293	NR	635	683	NR	765	19	NR	895	0	NR
380	0	NR	510	376	NR	640	625	NR	770	16	NR	900	0	NR
385	0	NR	515	458	NR	645	566	NR	775	14	NR	905	0	NR
390	0	NR	520	526	NR	650	509	NR	780	12	NR	910	0	NR
395	1	NR	525	584	NR	655	453	NR	785	10	NR	915	0	NR
400	3	NR	530	631	NR	660	401	NR	790	9	NR	920	0	NR
405	5	NR	535	671	NR	665	353	NR	795	8	NR	925	0	NR
410	10	NR	540	704	NR	670	308	NR	800	7	NR	930	0	NR
415	21	NR	545	737	NR	675	269	NR	805	6	NR	935	0	NR
420	44	NR	550	766	NR	680	235	NR	810	5	NR	940	0	NR
425	90	NR	555	797	NR	685	204	NR	815	4	NR	945	0	NR
430	171	NR	560	832	NR	690	177	NR	820	4	NR	950	0	NR
435	305	NR	565	866	NR	695	152	NR	825	3	NR	955	0	NR
440	455	NR	570	901	NR	700	131	NR	830	3	NR	960	0	NR
445	615	NR	575	933	NR	705	112	NR	835	3	NR	965	0	NR
450	771	NR	580	963	NR	710	96	NR	840	2	NR	970	0	NR
455	579	NR	585	984	NR	715	80	NR	845	2	NR	975	0	NR
460	313	NR	590	1000	NR	720	67	NR	850	2	NR	980	0	NR
465	221	NR	595	999	NR	725	55	NR	855	1	NR	985	0	NR
470	156	NR	600	990	NR	730	46	NR	860	1	NR	990	0	NR
475	103	NR	605	968	NR	735	40	NR	865	1	NR	995	0	NR
480	89	NR	610	937	NR	740	35	NR	870	1	NR	1000	0	NR
485	93	NR	615	893	NR	745	31	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



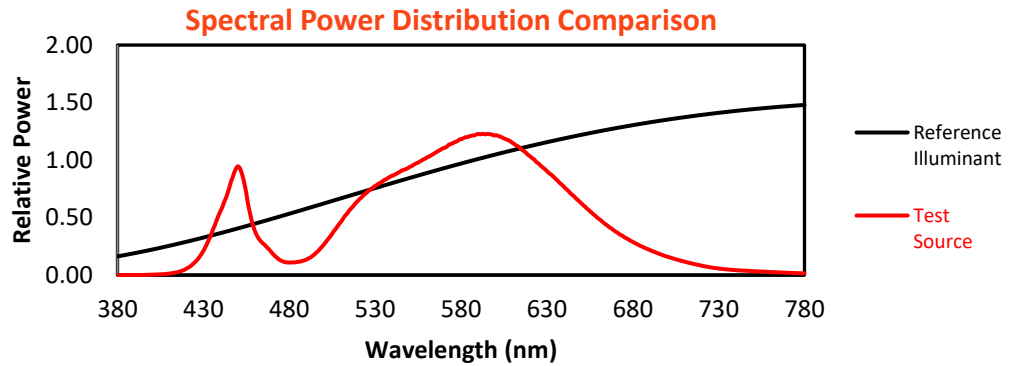
Melanopic Lumens: NR

M/P: 2.4

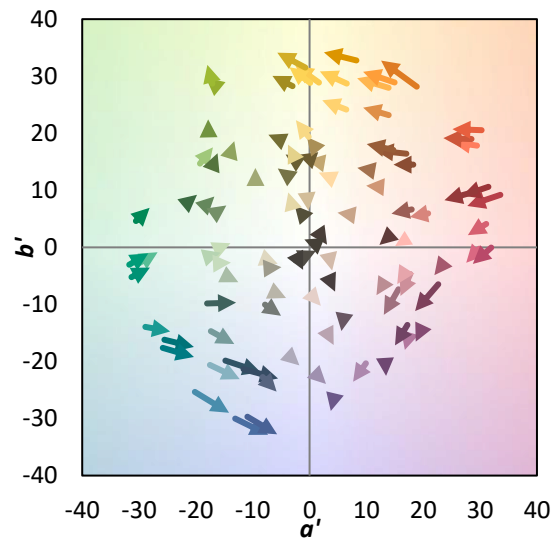
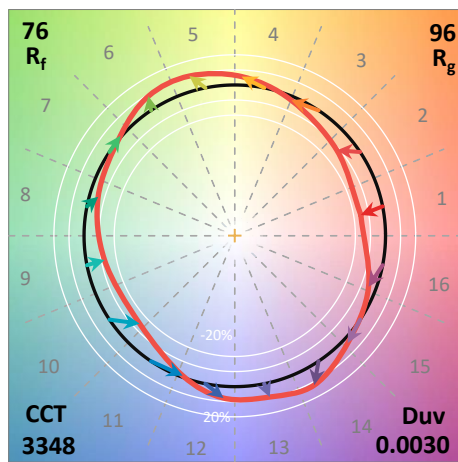
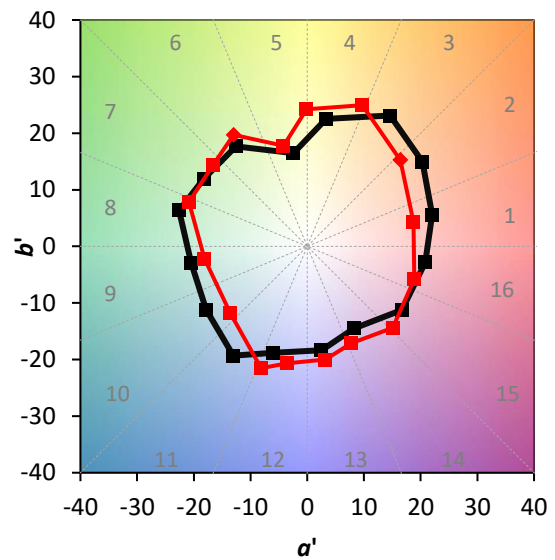
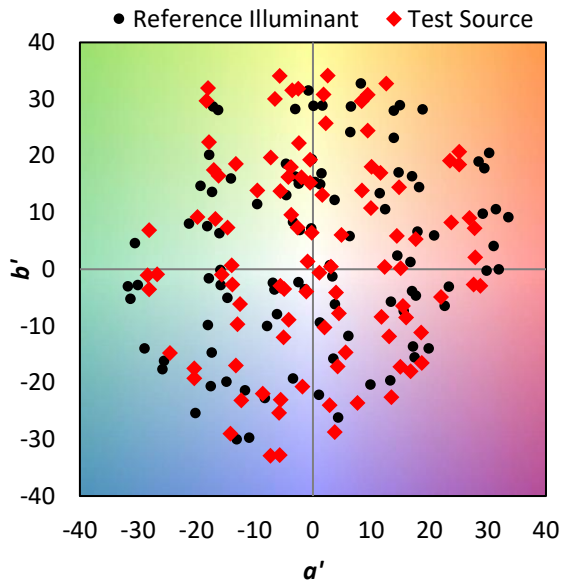
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	110	NR	620	844	NR	750	28	NR	880	0	NR
365	0	NR	495	150	NR	625	792	NR	755	25	NR	885	0	NR
370	0	NR	500	214	NR	630	737	NR	760	22	NR	890	0	NR
375	0	NR	505	293	NR	635	683	NR	765	19	NR	895	0	NR
380	0	NR	510	376	NR	640	625	NR	770	16	NR	900	0	NR
385	0	NR	515	458	NR	645	566	NR	775	14	NR	905	0	NR
390	0	NR	520	526	NR	650	509	NR	780	12	NR	910	0	NR
395	1	NR	525	584	NR	655	453	NR	785	10	NR	915	0	NR
400	3	NR	530	631	NR	660	401	NR	790	9	NR	920	0	NR
405	5	NR	535	671	NR	665	353	NR	795	8	NR	925	0	NR
410	10	NR	540	704	NR	670	308	NR	800	7	NR	930	0	NR
415	21	NR	545	737	NR	675	269	NR	805	6	NR	935	0	NR
420	44	NR	550	766	NR	680	235	NR	810	5	NR	940	0	NR
425	90	NR	555	797	NR	685	204	NR	815	4	NR	945	0	NR
430	171	NR	560	832	NR	690	177	NR	820	4	NR	950	0	NR
435	305	NR	565	866	NR	695	152	NR	825	3	NR	955	0	NR
440	455	NR	570	901	NR	700	131	NR	830	3	NR	960	0	NR
445	615	NR	575	933	NR	705	112	NR	835	3	NR	965	0	NR
450	771	NR	580	963	NR	710	96	NR	840	2	NR	970	0	NR
455	579	NR	585	984	NR	715	80	NR	845	2	NR	975	0	NR
460	313	NR	590	1000	NR	720	67	NR	850	2	NR	980	0	NR
465	221	NR	595	999	NR	725	55	NR	855	1	NR	985	0	NR
470	156	NR	600	990	NR	730	46	NR	860	1	NR	990	0	NR
475	103	NR	605	968	NR	735	40	NR	865	1	NR	995	0	NR
480	89	NR	610	937	NR	740	35	NR	870	1	NR	1000	0	NR
485	93	NR	615	893	NR	745	31	NR	875	1	NR			

**Summary**

$R_f = 75.8$   
 $R_g = 95.8$   
 $CIE R_a = 73.4$   
 $R_9 = -19.2$



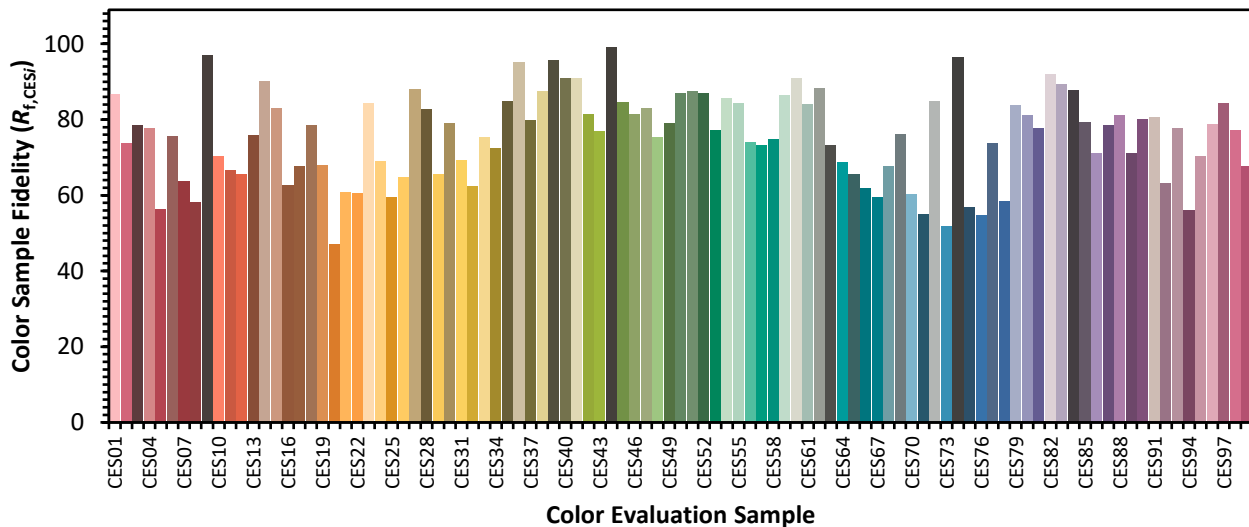
**Color Vector Graphics**



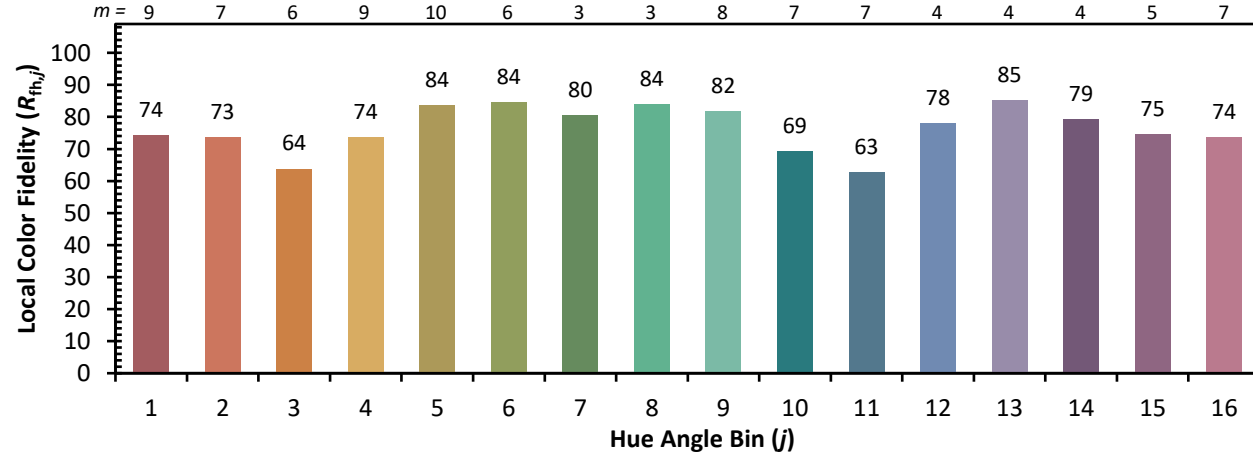
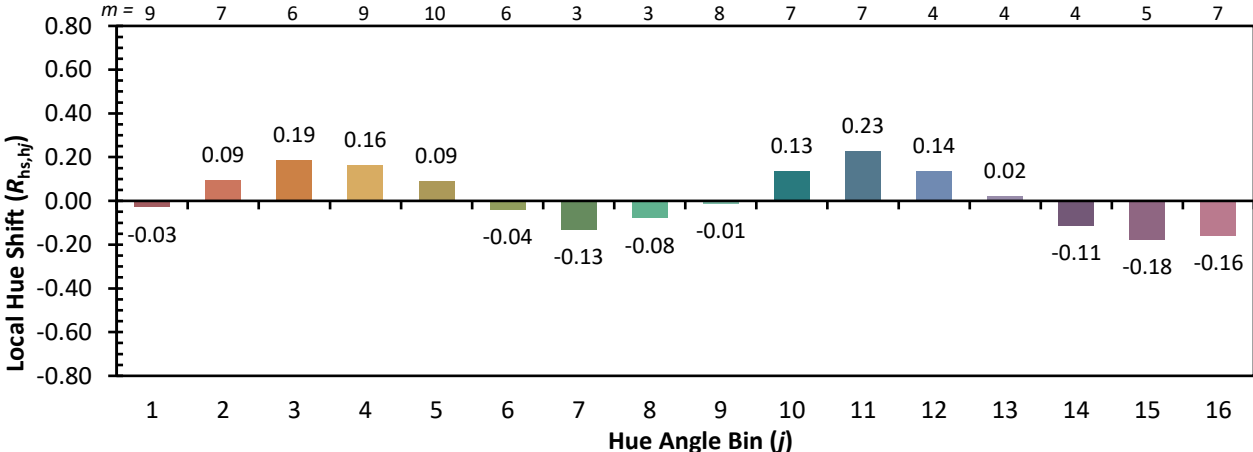
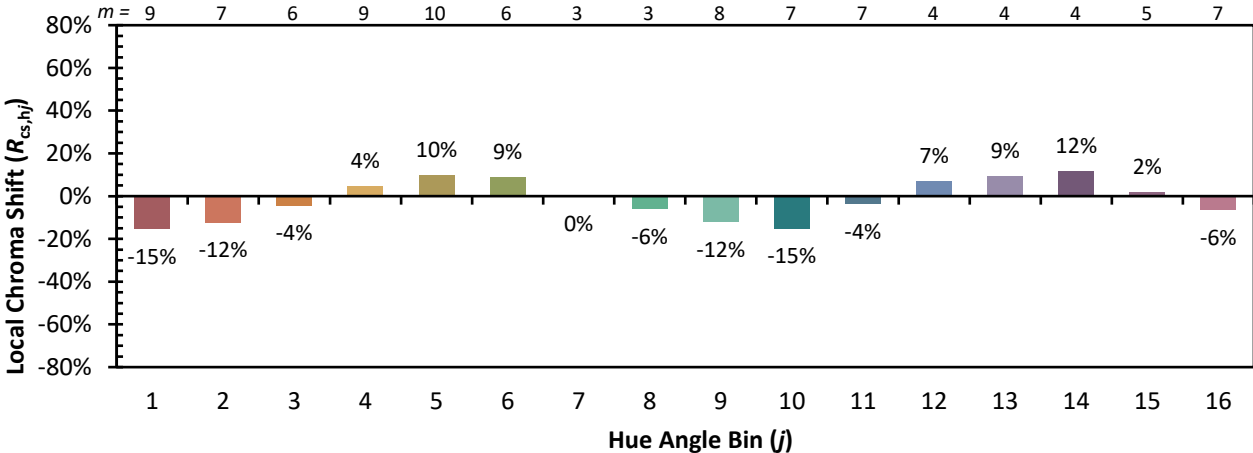


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

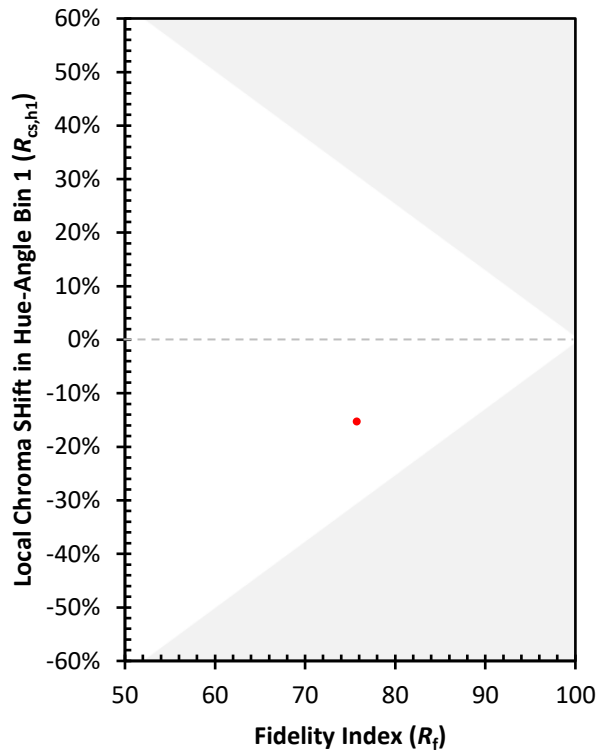
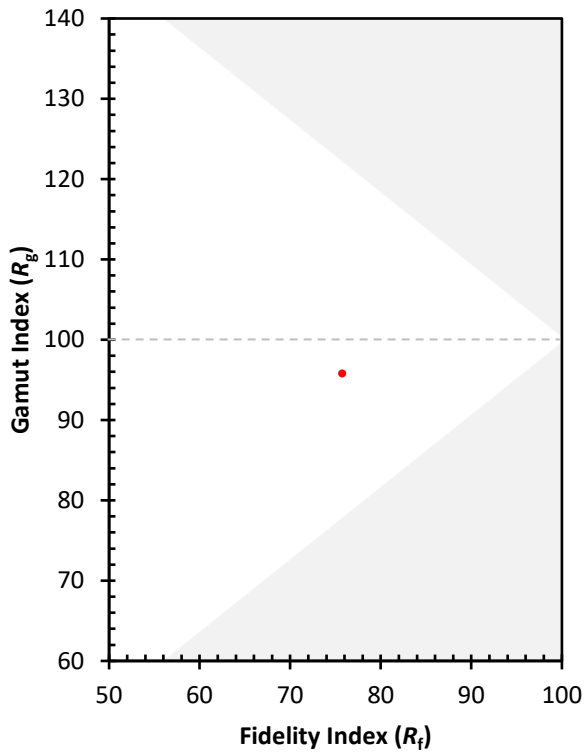
CES01 = 86	CES26 = 65	CES51 = 88	CES76 = 55
CES02 = 62	CES27 = 88	CES52 = 87	CES77 = 74
CES03 = 31	CES28 = 83	CES53 = 77	CES78 = 58
CES04 = 70	CES29 = 66	CES54 = 86	CES79 = 84
CES05 = 48	CES30 = 79	CES55 = 84	CES80 = 81
CES06 = 51	CES31 = 69	CES56 = 74	CES81 = 78
CES07 = 41	CES32 = 62	CES57 = 73	CES82 = 92
CES08 = 40	CES33 = 75	CES58 = 75	CES83 = 89
CES09 = 29	CES34 = 73	CES59 = 87	CES84 = 88
CES10 = 75	CES35 = 85	CES60 = 91	CES85 = 79
CES11 = 58	CES36 = 95	CES61 = 84	CES86 = 71
CES12 = 64	CES37 = 80	CES62 = 88	CES87 = 79
CES13 = 43	CES38 = 88	CES63 = 73	CES88 = 81
CES14 = 74	CES39 = 96	CES64 = 69	CES89 = 71
CES15 = 71	CES40 = 91	CES65 = 66	CES90 = 80
CES16 = 47	CES41 = 91	CES66 = 62	CES91 = 81
CES17 = 50	CES42 = 81	CES67 = 60	CES92 = 63
CES18 = 56	CES43 = 77	CES68 = 68	CES93 = 78
CES19 = 72	CES44 = 99	CES69 = 76	CES94 = 56
CES20 = 65	CES45 = 85	CES70 = 60	CES95 = 70
CES21 = 87	CES46 = 82	CES71 = 55	CES96 = 79
CES22 = 79	CES47 = 83	CES72 = 85	CES97 = 84
CES23 = 92	CES48 = 75	CES73 = 52	CES98 = 77
CES24 = 91	CES49 = 79	CES74 = 96	CES99 = 68
CES25 = 72	CES50 = 87	CES75 = 57	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)