

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: P879769

Luminaire Tested: **EMM2-HSN-VA7-830-U-WT4**

Issue Date: 10/01/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P879769  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/01/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-VA7-830-U-WT4  
Description: EPIC MODERN SHORT HOUSING 7W 80CRI 3000K WAVESTREAM FIXTURE w/  
DRIVE LANE TYPE IV DISTRIBUTION OPTIC  
Light Source: (1) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

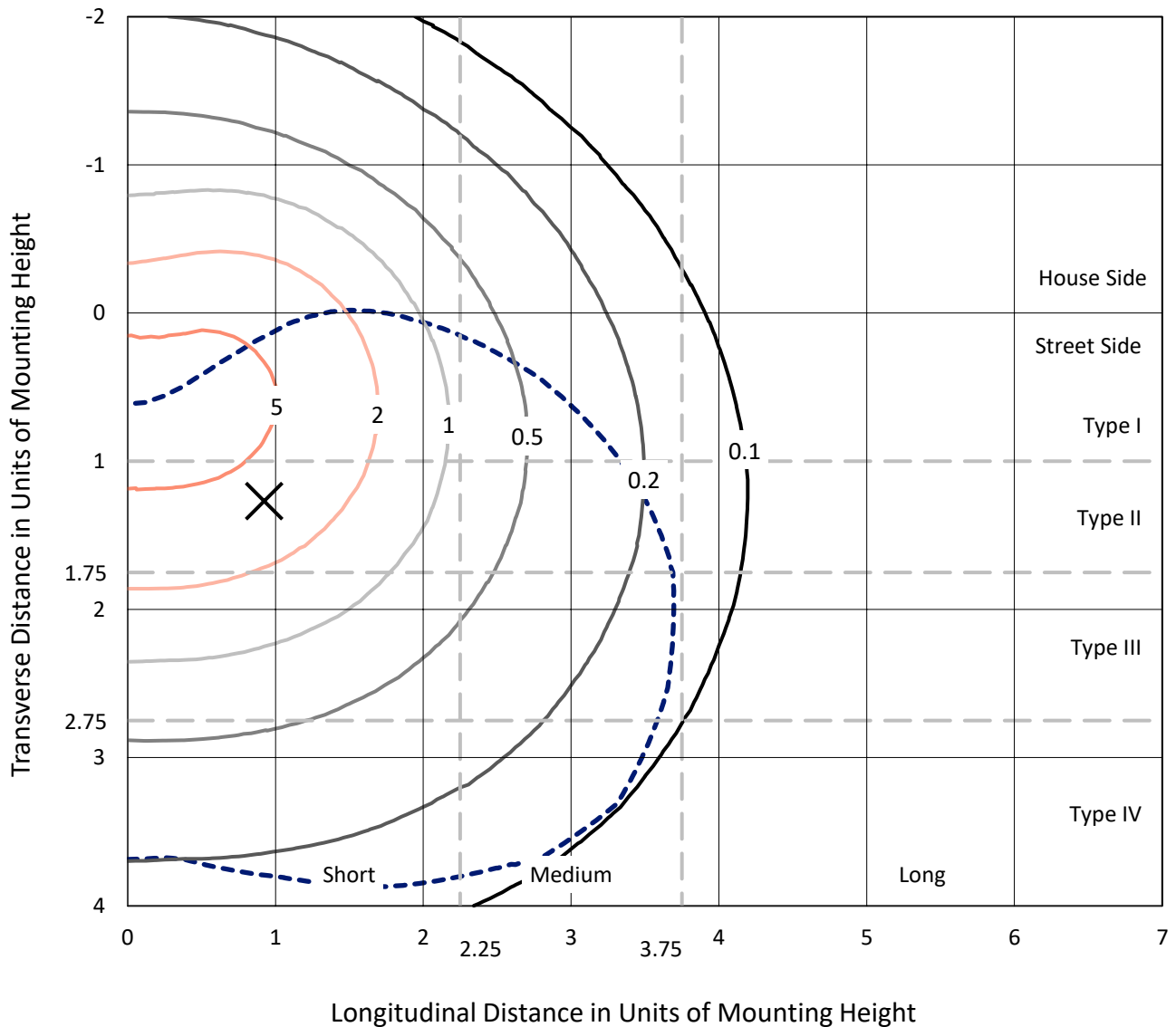
Lumens per Lamp: N/A  
Luminaire Lumens: 10857.7 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G3

Input Watts (W): 130  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.1%  
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

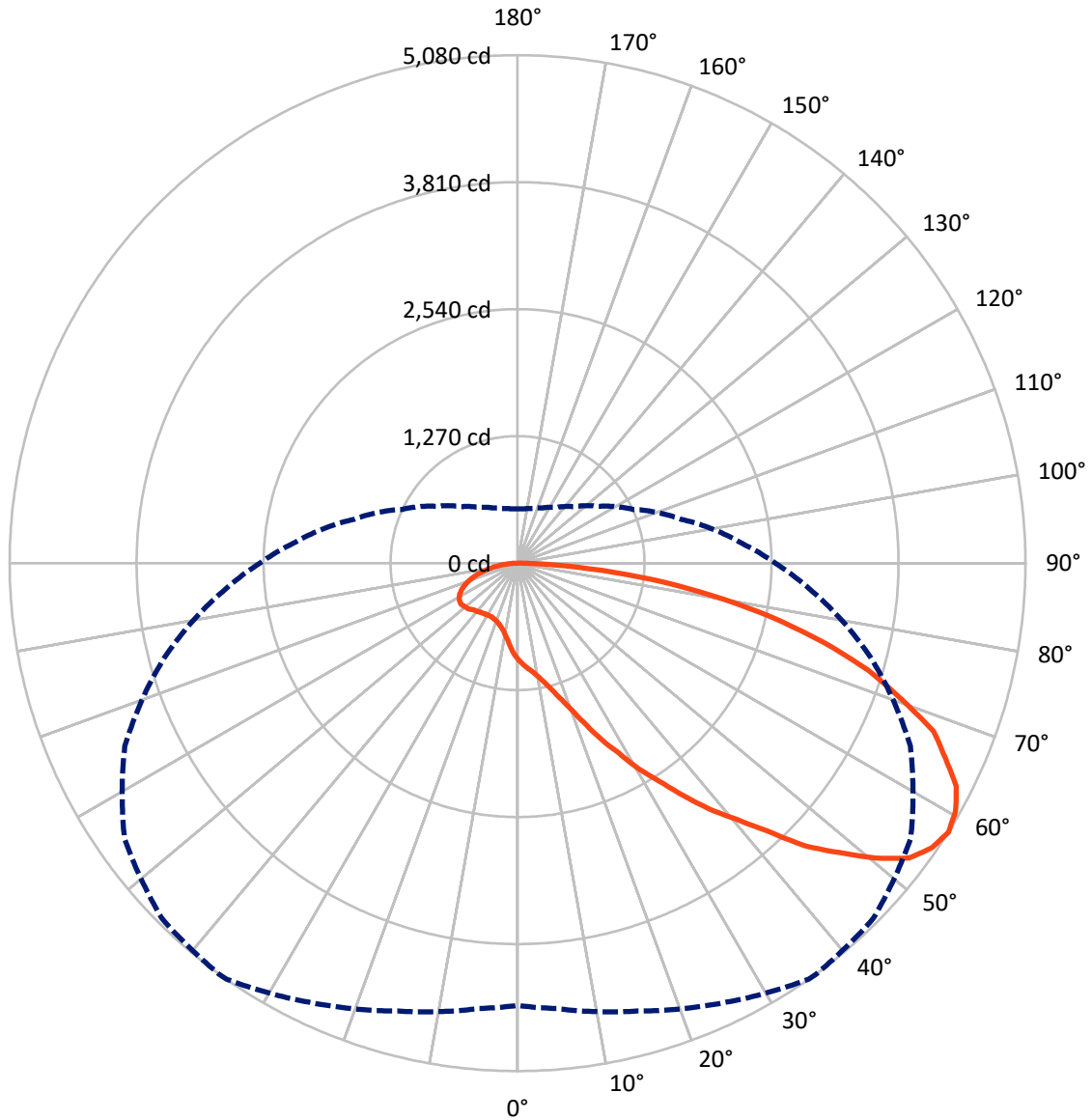
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 7 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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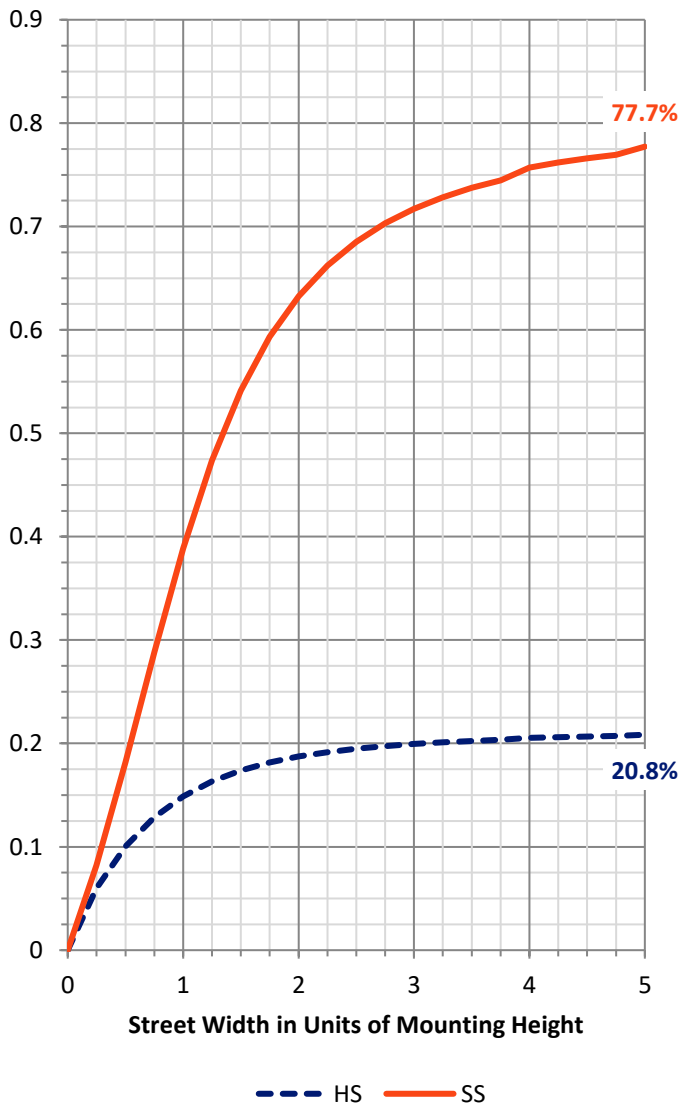
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2295.3	0.0	2295.3
	% Fixture	21.1	0.0	21.1
<b>Street Side</b>	Lumens	8562.4	0.0	8562.4
	% Fixture	78.9	0.0	78.9
<b>Total</b>	Lumens	10857.7	0.0	10857.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.4	0.8
10°-20°	285.4	2.6
20°-30°	592.1	5.5
30°-40°	1077.0	9.9
40°-50°	1755.8	16.2
50°-60°	2410.0	22.2
60°-70°	2453.8	22.6
70°-80°	1726.4	15.9
80°-90°	466.8	4.3
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°	10857.7	100.0
0°-180°	10857.7	100.0



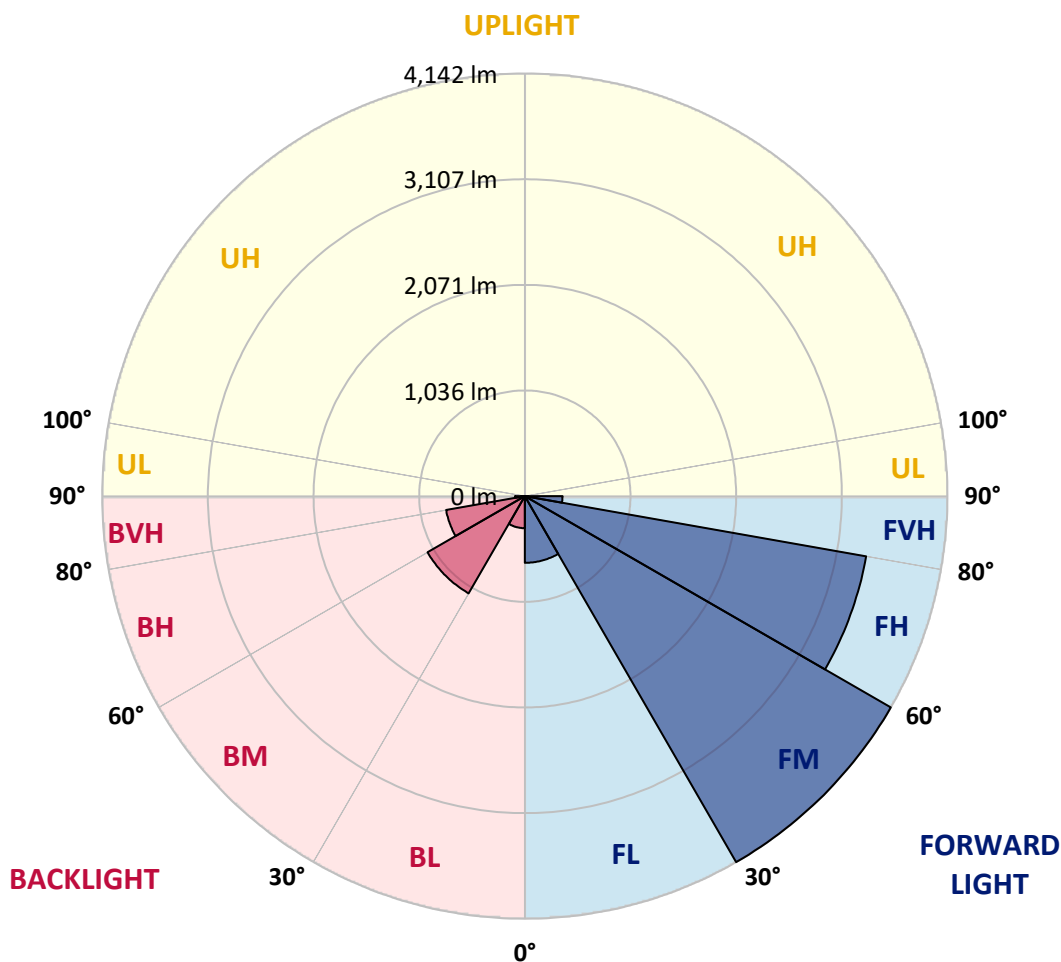
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	653.7	6.0			
FM (30°-60°)	4142.3	38.2			
FH (60°-80°)	3396.9	31.3			G2/5000
FVH (80°-90°)	369.6	3.4			G3/500
BL (0°-30°)	314.2	2.9	B1/500		
BM (30°-60°)	1100.6	10.1	B2/2500		
BH (60°-80°)	783.3	7.2	B2/1000		G2/1000
BVH (80°-90°)	97.2	0.9			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: P879769

CATALOG NUMBER: EMM2-HSN-VA7-830-U-WT4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	964.5	964.5	964.5	964.5	964.5	964.5	964.5	964.5	964.5	964.5	964.5
2.5°	1018.5	1025.5	1019.3	1019.3	1009.9	1013.0	1002.8	995.0	985.6	975.4	965.3
5°	1071.7	1076.4	1074.1	1063.1	1051.4	1055.3	1038.8	1020.8	1002.0	982.5	962.9
7.5°	1130.4	1136.7	1129.6	1114.0	1098.3	1098.3	1078.0	1049.8	1021.6	990.3	958.2
10°	1196.2	1204.0	1195.4	1177.4	1151.6	1157.8	1125.7	1094.4	1052.1	1009.9	966.0
12.5°	1286.2	1293.3	1278.4	1266.6	1235.3	1230.6	1197.0	1156.3	1105.4	1044.3	986.4
15°	1381.7	1384.9	1388.8	1365.3	1327.7	1326.9	1287.8	1233.8	1170.4	1098.3	1024.7
17.5°	1506.2	1507.8	1493.7	1480.4	1440.4	1438.1	1400.5	1338.7	1252.6	1164.9	1074.8
20°	1630.7	1643.2	1639.3	1621.3	1592.3	1579.8	1538.3	1461.6	1370.8	1258.0	1140.6
22.5°	1798.2	1808.4	1810.7	1790.4	1767.7	1757.5	1712.1	1618.1	1498.4	1365.3	1232.2
25°	1986.9	1987.6	1997.0	1990.0	1950.1	1957.1	1896.1	1813.1	1672.9	1505.4	1337.1
27.5°	2192.0	2196.7	2205.3	2194.3	2157.5	2148.1	2083.2	1990.0	1841.3	1655.7	1445.9
30°	2377.5	2401.0	2396.3	2408.0	2397.9	2385.3	2321.1	2200.6	2001.0	1794.3	1580.6
32.5°	2617.1	2603.7	2612.4	2636.6	2596.7	2597.5	2531.7	2407.3	2212.3	1968.1	1694.1
35°	2801.0	2834.7	2852.7	2864.4	2846.4	2854.3	2801.8	2652.3	2418.2	2139.5	1827.9
37.5°	3016.3	3051.5	3068.0	3114.2	3134.5	3122.0	3068.8	2923.9	2640.5	2318.8	1981.4
40°	3266.0	3289.5	3327.9	3368.6	3378.0	3364.7	3310.7	3143.9	2876.2	2519.2	2119.9
42.5°	3533.0	3501.7	3609.7	3631.6	3686.4	3659.8	3644.2	3417.9	3096.9	2723.5	2266.3
45°	3767.8	3784.3	3895.4	4005.8	4064.5	4035.6	3969.8	3787.4	3414.0	2925.5	2426.0
47.5°	3980.8	4055.1	4124.0	4287.7	4344.8	4325.2	4274.3	4049.7	3690.3	3165.1	2609.2
50°	4218.0	4236.0	4369.9	4524.9	4659.5	4637.6	4586.7	4364.4	3923.6	3383.5	2741.5
52.5°	4414.5	4363.6	4536.6	4758.1	4915.5	4899.8	4826.3	4589.8	4176.5	3528.3	2847.2
55°	4420.0	4481.0	4611.0	4862.3	5032.9	5027.4	4991.4	4736.2	4309.6	3636.3	2916.1
57.5°	4423.1	4472.4	4637.6	4852.9	5078.3	5079.9	5029.0	4799.6	4333.8	3657.5	2927.1
60°	4338.5	4357.3	4584.4	4817.6	5024.3	5033.7	4982.8	4782.4	4290.0	3622.2	2884.0
62.5°	4185.1	4218.0	4444.2	4669.7	4905.3	4924.9	4874.0	4686.1	4196.1	3544.7	2801.0
65°	3976.9	3984.7	4182.0	4488.1	4666.6	4700.2	4691.6	4488.1	4044.2	3400.7	2675.8
67.5°	3687.2	3682.5	3926.0	4179.6	4433.3	4487.3	4443.4	4297.0	3794.5	3192.5	2520.8
70°	3320.1	3385.0	3603.4	3867.3	4038.7	4068.5	4087.2	3926.8	3543.2	2987.3	2318.0
72.5°	2953.7	2970.9	3144.7	3453.1	3642.6	3665.3	3696.6	3530.6	3201.8	2649.9	2067.5
75°	2500.4	2494.9	2683.6	2927.8	3093.0	3155.7	3168.2	3037.4	2764.2	2307.1	1793.5
77.5°	2007.2	2029.1	2176.3	2383.8	2548.2	2594.4	2646.0	2499.6	2275.7	1916.4	1462.4
80°	1474.1	1472.5	1606.4	1802.1	1991.6	1986.1	2004.1	1972.0	1740.3	1488.2	1132.0
82.5°	970.7	950.4	1068.6	1197.8	1347.3	1361.4	1416.2	1383.3	1244.7	1037.3	787.5
85°	399.3	395.3	502.6	580.9	702.2	718.7	766.4	742.9	689.7	576.2	435.3
87.5°	9.4	9.4	9.4	39.1	114.3	162.0	163.6	208.2	213.7	183.2	134.6
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-VA7-830-U-WT4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	964.5	964.5	964.5	964.5	964.5	964.5	964.5	964.5	964.5	964.5	964.5
2.5°	960.6	955.1	943.3	934.7	926.9	918.3	913.6	908.1	905.8	905.0	898.7
5°	951.9	940.2	919.1	897.9	879.1	863.5	847.8	836.1	825.1	819.6	817.3
7.5°	941.0	923.8	891.7	861.9	829.8	804.8	779.7	761.7	754.7	748.4	742.9
10°	942.5	919.8	873.7	830.6	792.2	758.6	727.3	703.0	688.1	674.0	676.4
12.5°	955.9	926.9	870.5	814.9	767.2	723.4	683.4	654.5	632.5	617.7	616.1
15°	983.3	947.2	877.6	811.8	752.3	698.3	652.9	613.8	587.1	571.5	568.3
17.5°	1027.1	984.0	895.6	819.6	746.8	684.2	631.0	587.1	553.5	536.3	532.3
20°	1085.8	1029.4	927.7	830.6	744.5	672.5	613.0	564.4	530.0	507.3	504.2
22.5°	1159.4	1091.3	963.7	847.0	749.2	667.8	601.2	548.0	508.1	489.3	486.1
25°	1252.6	1168.0	1012.2	871.3	757.0	665.4	591.8	536.3	495.5	474.4	472.8
27.5°	1343.4	1246.3	1060.0	899.5	770.3	668.6	588.7	528.4	486.9	465.8	462.7
30°	1448.3	1333.2	1122.6	935.5	786.0	674.0	588.7	525.3	482.2	461.1	458.7
32.5°	1572.0	1420.9	1182.1	973.9	807.1	685.0	591.8	523.7	481.5	459.5	457.2
35°	1676.9	1523.4	1243.9	1012.2	829.8	696.0	599.7	528.4	482.2	461.9	458.0
37.5°	1793.5	1618.9	1309.7	1046.7	850.2	706.9	604.4	533.1	487.7	465.8	465.0
40°	1922.7	1723.0	1375.5	1091.3	877.6	724.9	616.1	539.4	495.5	472.8	471.3
42.5°	2049.5	1835.0	1446.7	1141.4	901.1	737.4	624.7	551.1	502.6	484.6	479.9
45°	2195.1	1948.5	1523.4	1177.4	930.0	757.0	638.0	561.3	518.2	496.3	495.5
47.5°	2311.7	2048.7	1587.6	1222.8	967.6	780.5	659.2	576.2	534.7	510.4	512.0
50°	2439.4	2141.1	1629.9	1261.9	980.1	788.3	667.0	596.5	545.6	527.6	522.9
52.5°	2518.4	2213.1	1680.0	1271.3	998.9	805.5	679.5	603.6	559.7	540.2	533.9
55°	2581.0	2256.9	1698.0	1283.1	1005.2	807.1	686.6	611.4	567.6	544.9	545.6
57.5°	2577.9	2255.4	1694.9	1271.3	989.5	797.7	680.3	609.8	563.6	543.3	543.3
60°	2540.3	2208.4	1653.4	1233.8	962.9	775.8	664.6	593.4	552.7	536.3	533.9
62.5°	2452.7	2129.3	1597.8	1186.8	924.5	747.6	644.3	571.5	537.8	520.6	516.7
65°	2337.6	2028.4	1498.4	1124.2	868.2	706.1	609.8	549.6	515.9	497.9	495.5
67.5°	2190.4	1885.9	1385.6	1038.1	805.5	659.9	571.5	516.7	483.0	470.5	470.5
70°	2006.4	1717.6	1274.5	942.5	732.7	598.9	522.9	473.6	447.0	432.1	432.1
72.5°	1785.7	1533.6	1128.9	839.2	652.1	533.9	465.0	428.2	403.2	394.6	389.1
75°	1542.2	1313.6	962.1	711.6	556.6	460.3	405.5	371.9	353.1	346.0	344.5
77.5°	1275.3	1078.0	775.0	584.0	461.9	383.6	338.2	313.1	300.6	290.4	289.7
80°	977.0	822.0	594.2	455.6	356.2	294.4	267.0	249.7	241.1	238.0	234.9
82.5°	670.9	581.7	415.7	306.9	248.9	210.6	196.5	188.7	178.5	179.3	177.7
85°	376.5	319.4	223.1	178.5	148.0	131.5	126.0	121.3	122.9	119.8	121.3
87.5°	113.5	105.7	75.9	65.0	56.4	57.1	61.8	64.2	65.0	65.8	67.3
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: SP1-2407-176-11

Test Date: 09/26/2024

Luminaire Tested: MEM2-HTN-VA-130-830-U-RW

Data in this report applies to families of products including MEM2-HTN-VA-130-830-U-RW

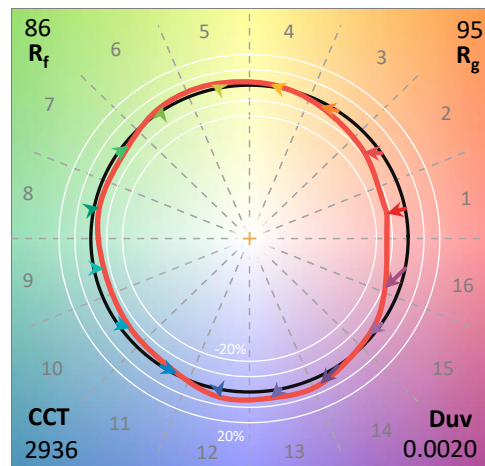
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-176-11  
 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-130-830-U-RW**  
 Description: EPIC MODERN VISUAL COMFORT 130W WAVESTREAM RECTANGULAR WIDE

**Spectral Parameters**

CCT (K): 2936  
 CIE u': 0.2522  
 CIE v': 0.5255  
 Duv: 0.0020  
 CIE x: 0.4446  
 CIE y: 0.4117  
 CIE z: 0.1436  
 Peak Wavelength (nm): 601  
 Dominant Wavelength (nm): 582  
 Purity: 57.05514  
 Rf: 85.6  
 Rg: 95.3

CRI (Ra):	82.0		
R1:	79.9	R9:	1.5
R2:	90.0	R10:	78.0
R3:	96.9	R11:	80.9
R4:	80.9	R12:	73.9
R5:	80.4	R13:	82.1
R6:	88.8	R14:	98.8
R7:	82.7	R15:	71.1
R8:	56.8		



**Test Conditions**

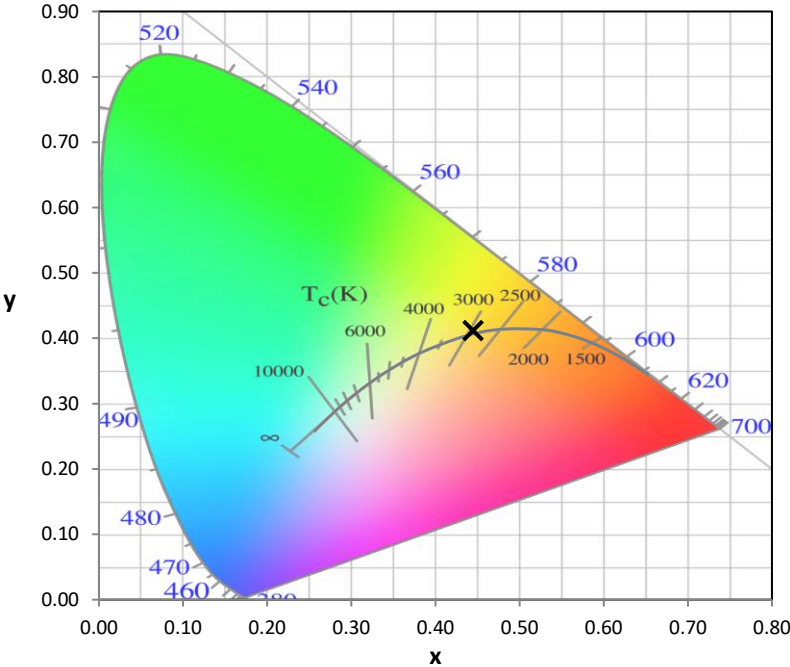
Stabilization Time: 54M  
 Operation Time: 1H 54M  
 Sphere Temperature (°C): 25.2

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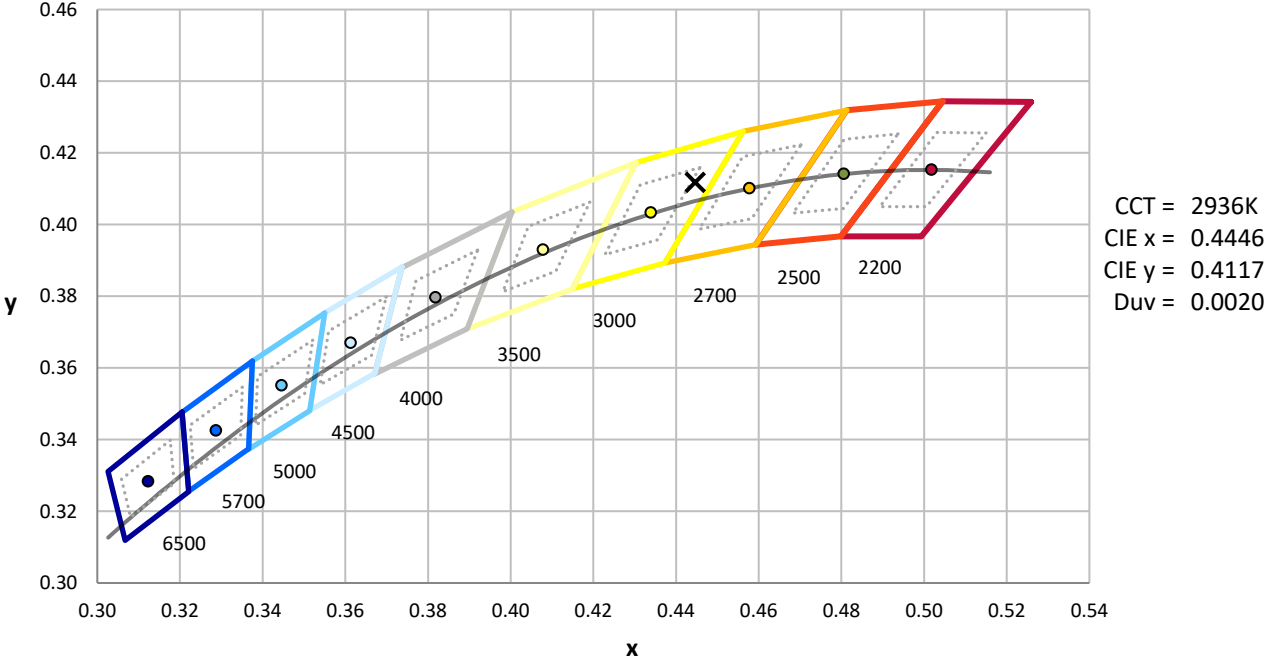
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



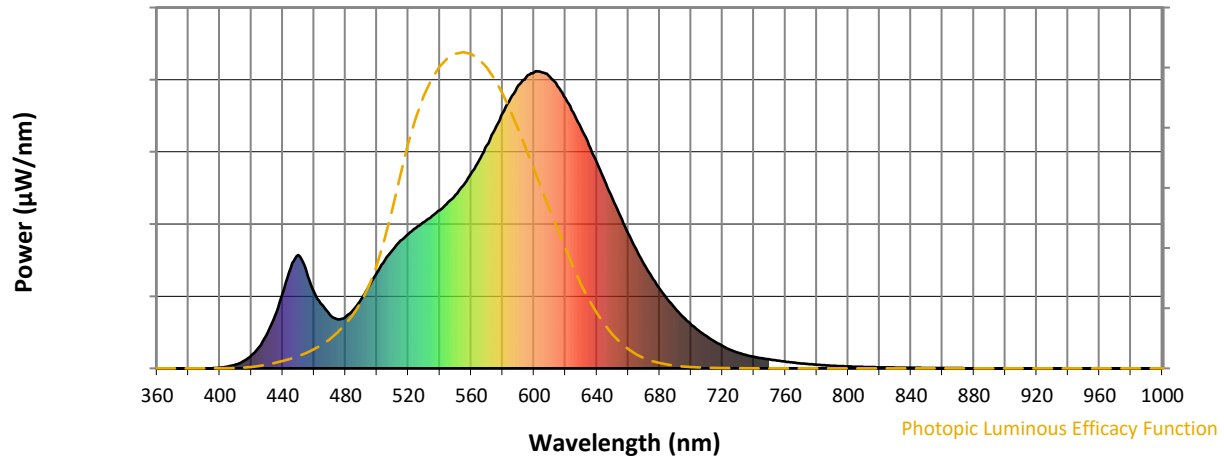
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 7-step quadrangle

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**Photopic Flux vs. Wavelength**

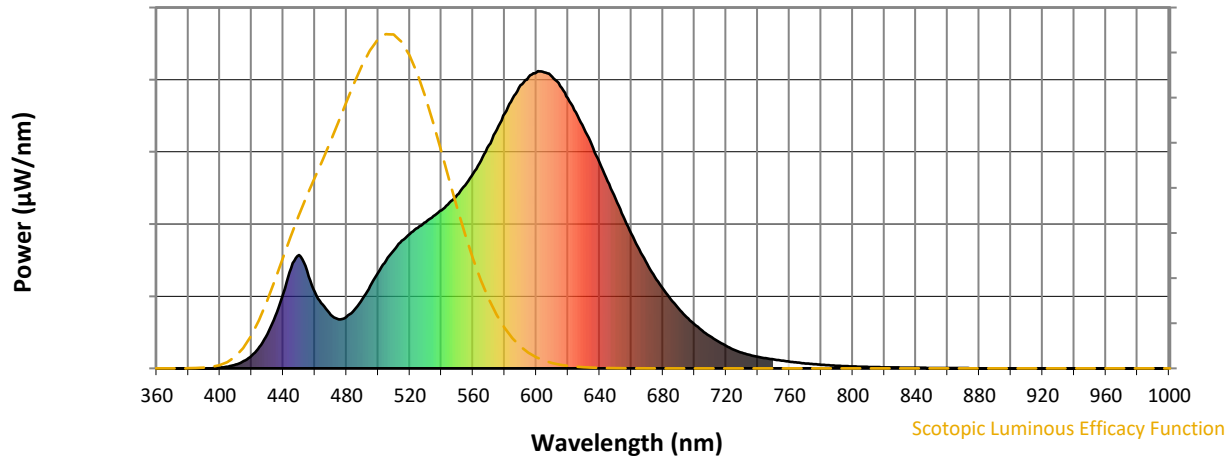


**Photopic Lumens: NR**

$\lambda$ (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	234	NR	620	908	NR	750	30	NR	880	0	NR
365	0	NR	495	276	NR	625	861	NR	755	26	NR	885	0	NR
370	0	NR	500	322	NR	630	808	NR	760	23	NR	890	0	NR
375	0	NR	505	363	NR	635	751	NR	765	20	NR	895	0	NR
380	0	NR	510	398	NR	640	692	NR	770	17	NR	900	0	NR
385	0	NR	515	429	NR	645	630	NR	775	14	NR	905	0	NR
390	0	NR	520	453	NR	650	570	NR	780	12	NR	910	0	NR
395	0	NR	525	473	NR	655	511	NR	785	10	NR	915	0	NR
400	2	NR	530	492	NR	660	453	NR	790	9	NR	920	0	NR
405	6	NR	535	512	NR	665	401	NR	795	8	NR	925	0	NR
410	13	NR	540	532	NR	670	351	NR	800	6	NR	930	0	NR
415	24	NR	545	557	NR	675	306	NR	805	5	NR	935	0	NR
420	43	NR	550	583	NR	680	268	NR	810	5	NR	940	0	NR
425	73	NR	555	616	NR	685	232	NR	815	4	NR	945	0	NR
430	115	NR	560	656	NR	690	201	NR	820	4	NR	950	0	NR
435	176	NR	565	700	NR	695	173	NR	825	3	NR	955	0	NR
440	254	NR	570	750	NR	700	148	NR	830	3	NR	960	0	NR
445	337	NR	575	803	NR	705	126	NR	835	2	NR	965	0	NR
450	381	NR	580	859	NR	710	107	NR	840	2	NR	970	0	NR
455	328	NR	585	907	NR	715	90	NR	845	2	NR	975	0	NR
460	257	NR	590	953	NR	720	76	NR	850	1	NR	980	0	NR
465	214	NR	595	980	NR	725	62	NR	855	1	NR	985	0	NR
470	180	NR	600	996	NR	730	53	NR	860	1	NR	990	0	NR
475	165	NR	605	995	NR	735	45	NR	865	1	NR	995	0	NR
480	173	NR	610	981	NR	740	39	NR	870	1	NR	1000	0	NR
485	197	NR	615	950	NR	745	34	NR	875	1	NR			

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**Scotopic Flux vs. Wavelength**



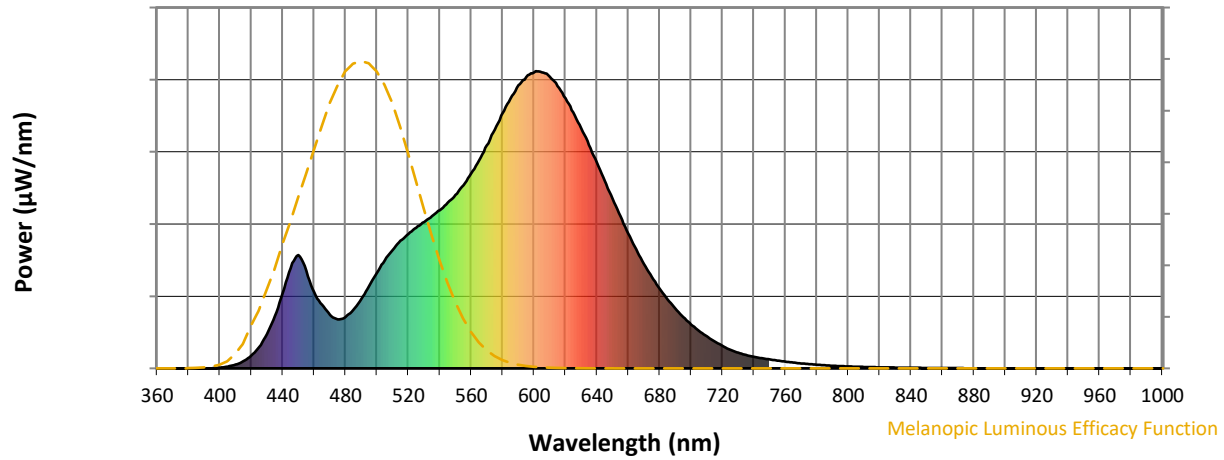
**Scotopic Lumens: NR**

**S/P: 1.3**

$\lambda$ (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	234	NR	620	908	NR	750	30	NR	880	0	NR
365	0	NR	495	276	NR	625	861	NR	755	26	NR	885	0	NR
370	0	NR	500	322	NR	630	808	NR	760	23	NR	890	0	NR
375	0	NR	505	363	NR	635	751	NR	765	20	NR	895	0	NR
380	0	NR	510	398	NR	640	692	NR	770	17	NR	900	0	NR
385	0	NR	515	429	NR	645	630	NR	775	14	NR	905	0	NR
390	0	NR	520	453	NR	650	570	NR	780	12	NR	910	0	NR
395	0	NR	525	473	NR	655	511	NR	785	10	NR	915	0	NR
400	2	NR	530	492	NR	660	453	NR	790	9	NR	920	0	NR
405	6	NR	535	512	NR	665	401	NR	795	8	NR	925	0	NR
410	13	NR	540	532	NR	670	351	NR	800	6	NR	930	0	NR
415	24	NR	545	557	NR	675	306	NR	805	5	NR	935	0	NR
420	43	NR	550	583	NR	680	268	NR	810	5	NR	940	0	NR
425	73	NR	555	616	NR	685	232	NR	815	4	NR	945	0	NR
430	115	NR	560	656	NR	690	201	NR	820	4	NR	950	0	NR
435	176	NR	565	700	NR	695	173	NR	825	3	NR	955	0	NR
440	254	NR	570	750	NR	700	148	NR	830	3	NR	960	0	NR
445	337	NR	575	803	NR	705	126	NR	835	2	NR	965	0	NR
450	381	NR	580	859	NR	710	107	NR	840	2	NR	970	0	NR
455	328	NR	585	907	NR	715	90	NR	845	2	NR	975	0	NR
460	257	NR	590	953	NR	720	76	NR	850	1	NR	980	0	NR
465	214	NR	595	980	NR	725	62	NR	855	1	NR	985	0	NR
470	180	NR	600	996	NR	730	53	NR	860	1	NR	990	0	NR
475	165	NR	605	995	NR	735	45	NR	865	1	NR	995	0	NR
480	173	NR	610	981	NR	740	39	NR	870	1	NR	1000	0	NR
485	197	NR	615	950	NR	745	34	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



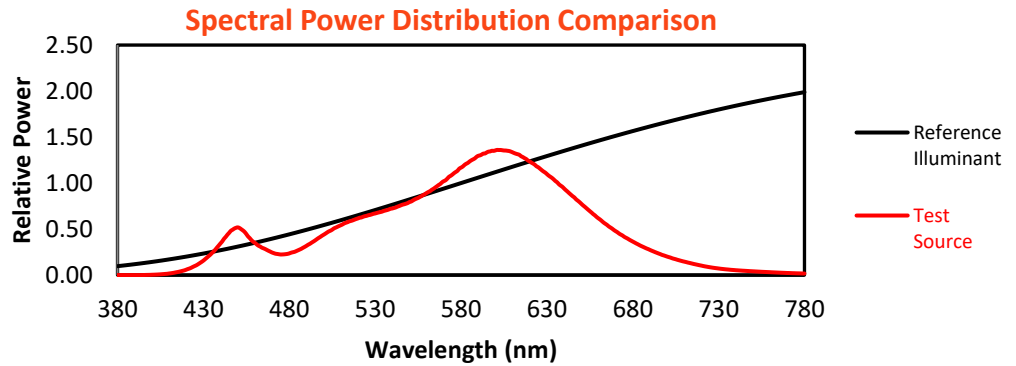
Melanopic Lumens: NR

M/P: 2.46

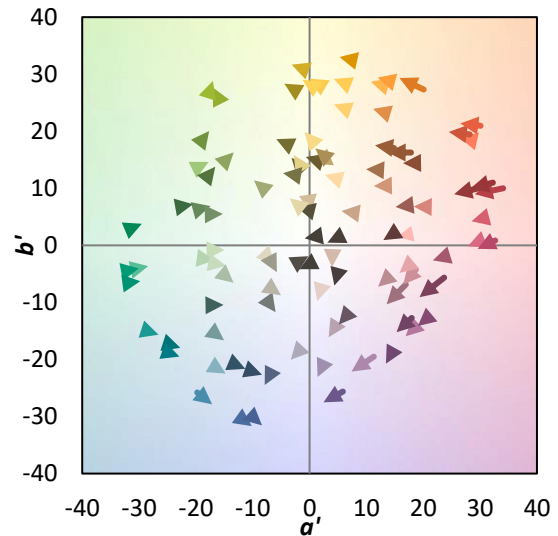
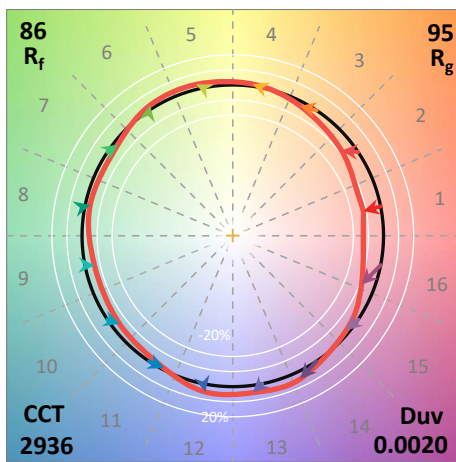
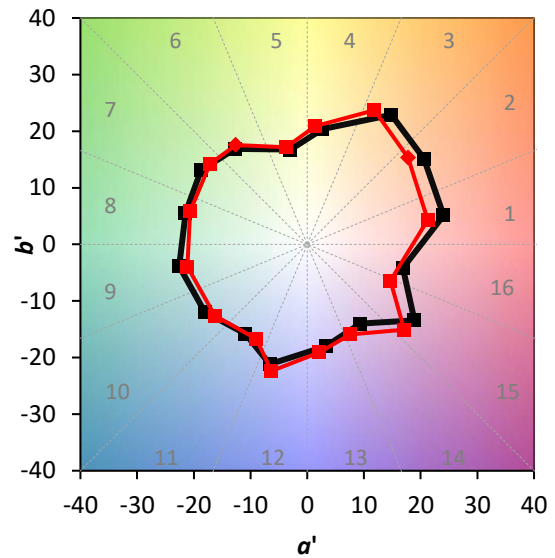
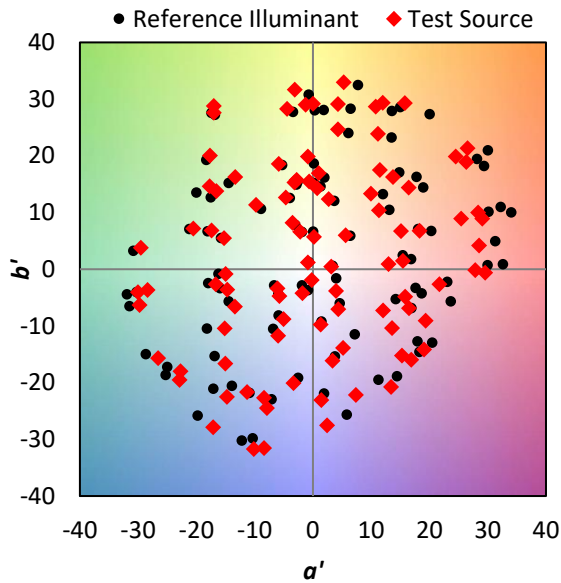
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	234	NR	620	908	NR	750	30	NR	880	0	NR
365	0	NR	495	276	NR	625	861	NR	755	26	NR	885	0	NR
370	0	NR	500	322	NR	630	808	NR	760	23	NR	890	0	NR
375	0	NR	505	363	NR	635	751	NR	765	20	NR	895	0	NR
380	0	NR	510	398	NR	640	692	NR	770	17	NR	900	0	NR
385	0	NR	515	429	NR	645	630	NR	775	14	NR	905	0	NR
390	0	NR	520	453	NR	650	570	NR	780	12	NR	910	0	NR
395	0	NR	525	473	NR	655	511	NR	785	10	NR	915	0	NR
400	2	NR	530	492	NR	660	453	NR	790	9	NR	920	0	NR
405	6	NR	535	512	NR	665	401	NR	795	8	NR	925	0	NR
410	13	NR	540	532	NR	670	351	NR	800	6	NR	930	0	NR
415	24	NR	545	557	NR	675	306	NR	805	5	NR	935	0	NR
420	43	NR	550	583	NR	680	268	NR	810	5	NR	940	0	NR
425	73	NR	555	616	NR	685	232	NR	815	4	NR	945	0	NR
430	115	NR	560	656	NR	690	201	NR	820	4	NR	950	0	NR
435	176	NR	565	700	NR	695	173	NR	825	3	NR	955	0	NR
440	254	NR	570	750	NR	700	148	NR	830	3	NR	960	0	NR
445	337	NR	575	803	NR	705	126	NR	835	2	NR	965	0	NR
450	381	NR	580	859	NR	710	107	NR	840	2	NR	970	0	NR
455	328	NR	585	907	NR	715	90	NR	845	2	NR	975	0	NR
460	257	NR	590	953	NR	720	76	NR	850	1	NR	980	0	NR
465	214	NR	595	980	NR	725	62	NR	855	1	NR	985	0	NR
470	180	NR	600	996	NR	730	53	NR	860	1	NR	990	0	NR
475	165	NR	605	995	NR	735	45	NR	865	1	NR	995	0	NR
480	173	NR	610	981	NR	740	39	NR	870	1	NR	1000	0	NR
485	197	NR	615	950	NR	745	34	NR	875	1	NR			

**Summary**

$R_f = 85.6$   
 $R_g = 95.3$   
 CIE  $R_a = 82.0$   
 $R_9 = 1.5$



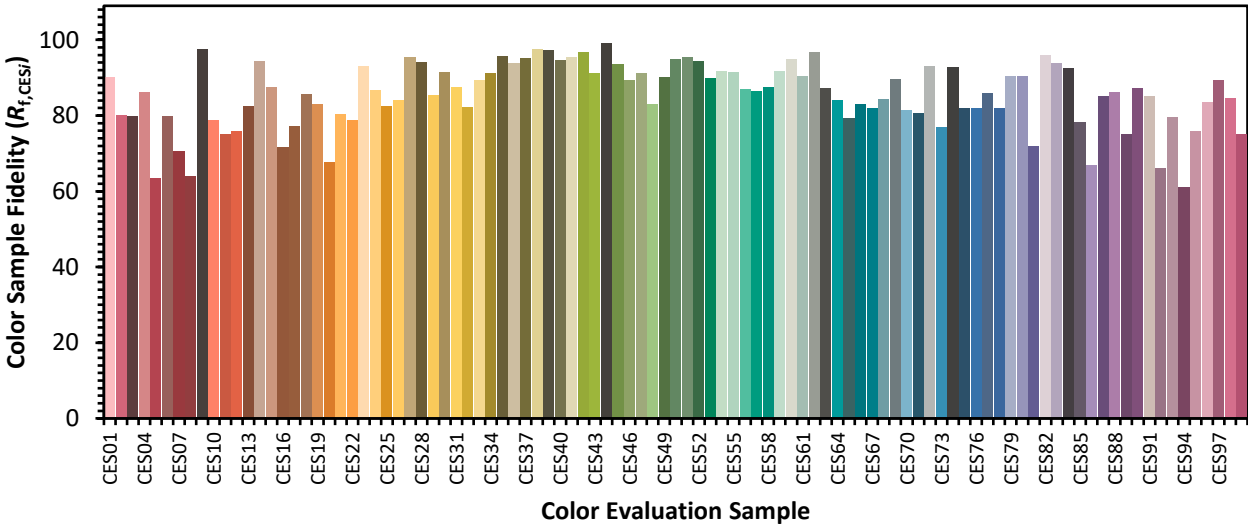
**Color Vector Graphics**



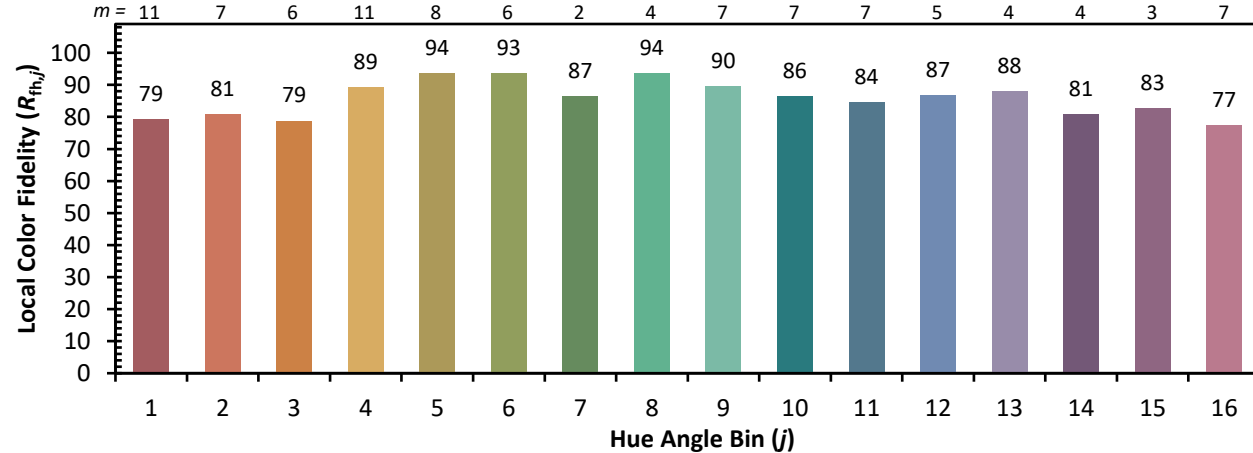
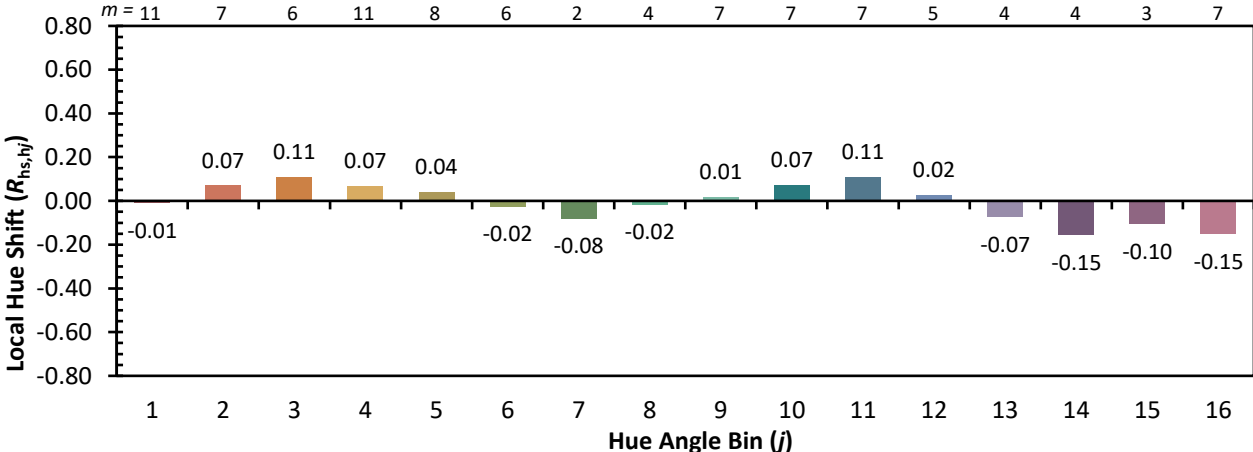
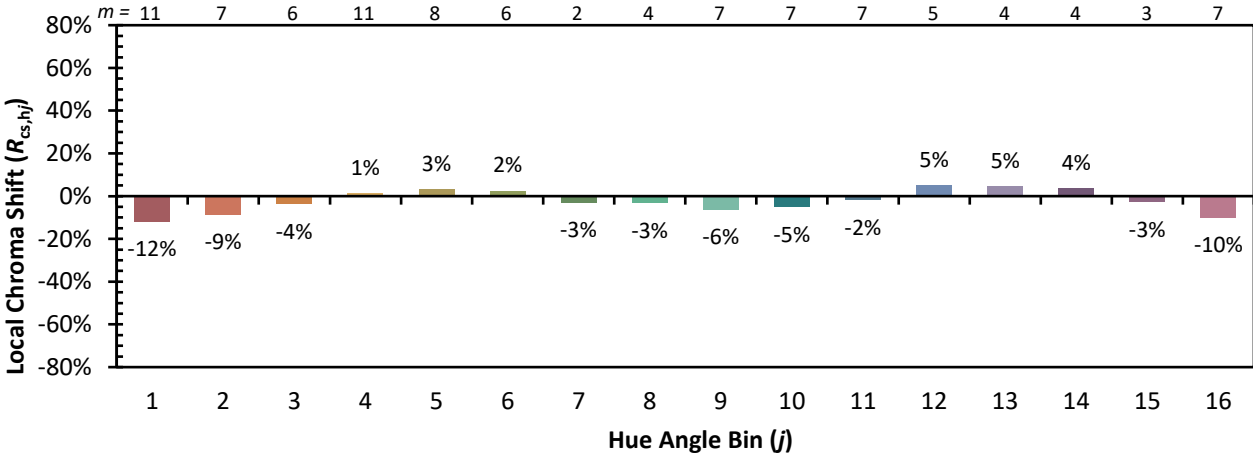


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

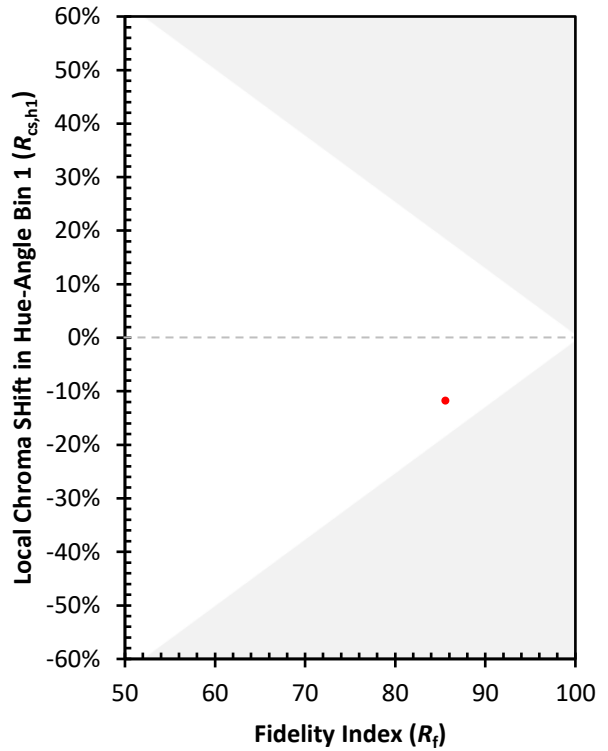
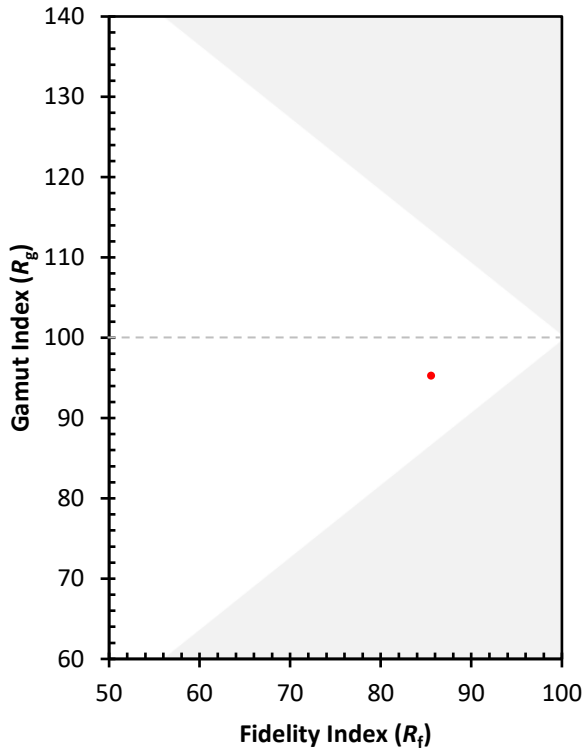
CES01 = 86	CES26 = 84	CES51 = 95	CES76 = 82
CES02 = 63	CES27 = 95	CES52 = 94	CES77 = 86
CES03 = 31	CES28 = 94	CES53 = 90	CES78 = 82
CES04 = 71	CES29 = 85	CES54 = 92	CES79 = 90
CES05 = 50	CES30 = 91	CES55 = 92	CES80 = 90
CES06 = 51	CES31 = 87	CES56 = 87	CES81 = 72
CES07 = 42	CES32 = 82	CES57 = 87	CES82 = 96
CES08 = 41	CES33 = 89	CES58 = 88	CES83 = 94
CES09 = 29	CES34 = 91	CES59 = 92	CES84 = 93
CES10 = 76	CES35 = 96	CES60 = 95	CES85 = 78
CES11 = 59	CES36 = 94	CES61 = 90	CES86 = 67
CES12 = 65	CES37 = 95	CES62 = 97	CES87 = 85
CES13 = 44	CES38 = 98	CES63 = 87	CES88 = 86
CES14 = 74	CES39 = 97	CES64 = 84	CES89 = 75
CES15 = 72	CES40 = 95	CES65 = 79	CES90 = 87
CES16 = 48	CES41 = 95	CES66 = 83	CES91 = 85
CES17 = 50	CES42 = 97	CES67 = 82	CES92 = 66
CES18 = 57	CES43 = 91	CES68 = 84	CES93 = 80
CES19 = 72	CES44 = 99	CES69 = 90	CES94 = 61
CES20 = 67	CES45 = 93	CES70 = 81	CES95 = 76
CES21 = 87	CES46 = 89	CES71 = 81	CES96 = 84
CES22 = 79	CES47 = 91	CES72 = 93	CES97 = 89
CES23 = 92	CES48 = 83	CES73 = 77	CES98 = 85
CES24 = 91	CES49 = 90	CES74 = 93	CES99 = 75
CES25 = 72	CES50 = 95	CES75 = 82	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)