

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: P879761

Luminaire Tested: **EMM2-HTN-VA7-740-U-WT4**

Issue Date: 10/01/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P879761  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/01/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HTN-VA7-740-U-WT4  
Description: EPIC MODERN TALL HOUSING 7W 70CRI 4000K WAVESTREAM FIXTURE w/  
DRIVE LANE TYPE IV DISTRIBUTION OPTIC  
Light Source: (1) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

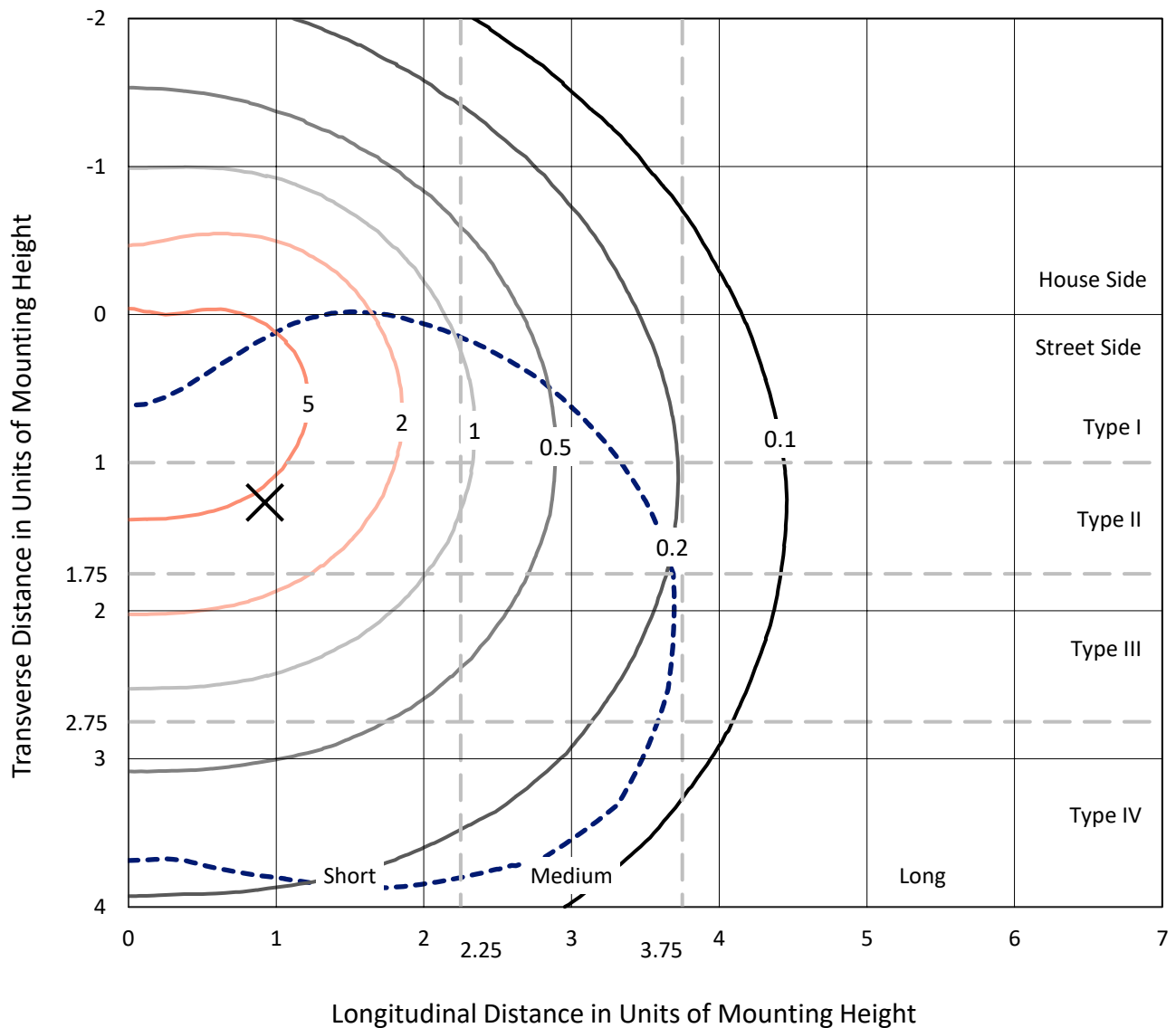
Lumens per Lamp: N/A  
Luminaire Lumens: 13743.9 lumens  
Efficiency: N/A  
Efficacy: 105.7 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G3

Input Watts (W): 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

REPORT NUMBER: P879761  
 CATALOG NUMBER: EMM2-HTN-VA7-740-U-WT4

### Iso-Footcandle Lines of Horizontal Illumination

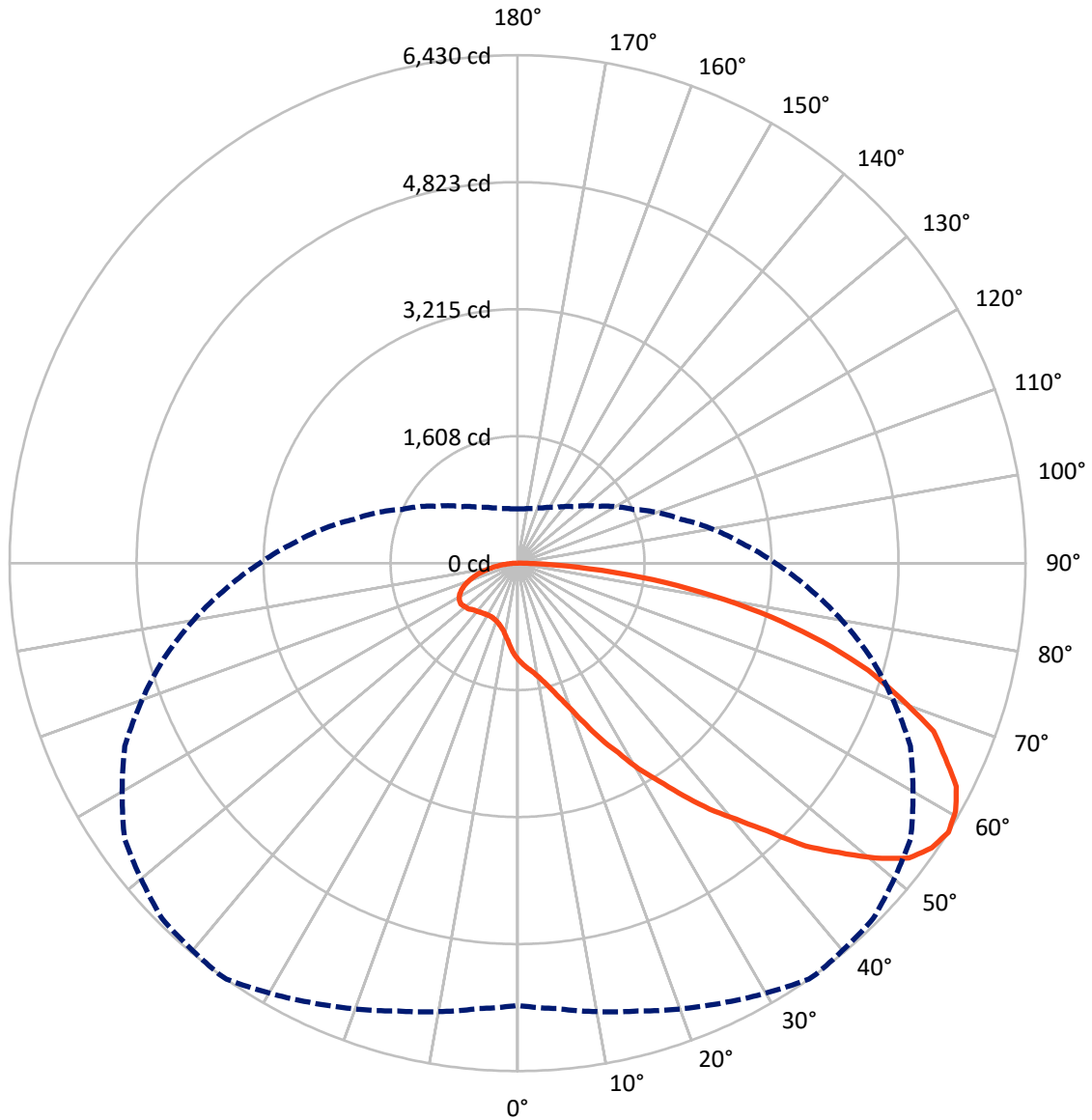
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 8.9 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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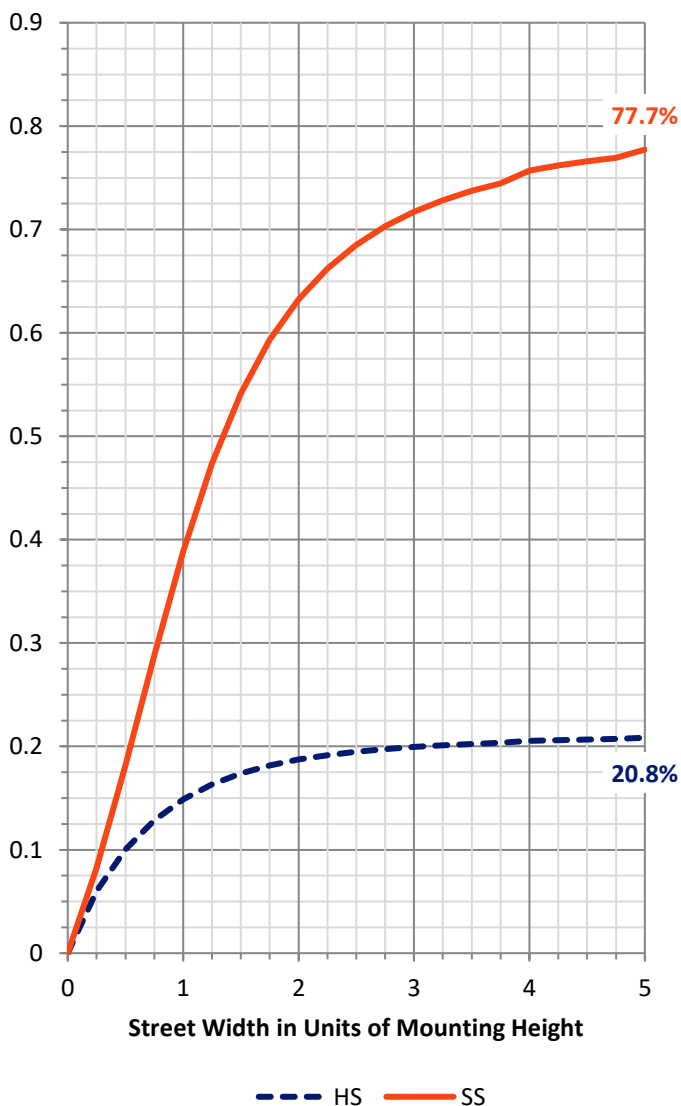
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2905.4	0.0	2905.4
	% Fixture	21.1	0.0	21.1
<b>Street Side</b>	Lumens	10838.5	0.0	10838.5
	% Fixture	78.9	0.0	78.9
<b>Total</b>	Lumens	13743.9	0.0	13743.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.4	0.8
10°-20°	361.3	2.6
20°-30°	749.4	5.5
30°-40°	1363.3	9.9
40°-50°	2222.6	16.2
50°-60°	3050.7	22.2
60°-70°	3106.1	22.6
70°-80°	2185.3	15.9
80°-90°	590.9	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°	13743.9	100.0
0°-180°	13743.9	100.0



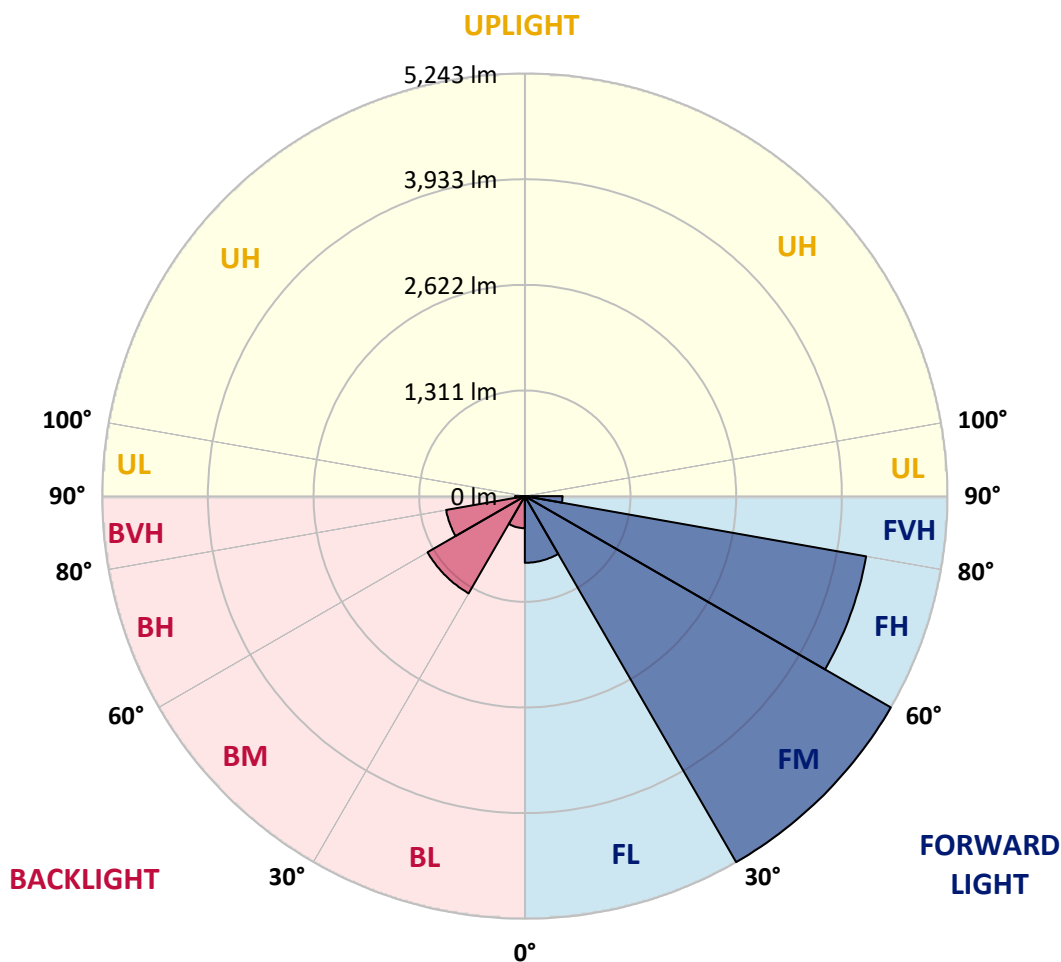
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	827.4	6.0			
FM (30°-60°)	5243.4	38.2			
FH (60°-80°)	4299.9	31.3			G2/5000
FVH (80°-90°)	467.8	3.4			G3/500
BL (0°-30°)	397.7	2.9	B1/500		
BM (30°-60°)	1393.2	10.1	B2/2500		
BH (60°-80°)	991.5	7.2	B2/1000		G2/1000
BVH (80°-90°)	123.0	0.9			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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1220.8	1220.8	1220.8	1220.8	1220.8	1220.8	1220.8	1220.8	1220.8	1220.8	1220.8
2.5°	1289.2	1298.1	1290.2	1290.2	1278.3	1282.3	1269.4	1259.5	1247.6	1234.7	1221.8
5°	1356.6	1362.6	1359.6	1345.7	1330.8	1335.8	1315.0	1292.2	1268.4	1243.6	1218.9
7.5°	1430.9	1438.9	1429.9	1410.1	1390.3	1390.3	1364.5	1328.9	1293.2	1253.5	1212.9
10°	1514.2	1524.1	1513.2	1490.4	1457.7	1465.6	1425.0	1385.3	1331.8	1278.3	1222.8
12.5°	1628.1	1637.0	1618.2	1603.4	1563.7	1557.8	1515.2	1463.6	1399.2	1321.9	1248.6
15°	1749.0	1753.0	1757.9	1728.2	1680.6	1679.7	1630.1	1561.7	1481.5	1390.3	1297.1
17.5°	1906.6	1908.6	1890.7	1873.9	1823.3	1820.4	1772.8	1694.5	1585.5	1474.5	1360.6
20°	2064.1	2080.0	2075.0	2052.2	2015.6	1999.7	1947.2	1850.1	1735.1	1592.4	1443.8
22.5°	2276.2	2289.1	2292.1	2266.3	2237.6	2224.7	2167.2	2048.3	1896.7	1728.2	1559.7
25°	2515.0	2516.0	2527.9	2519.0	2468.4	2477.4	2400.1	2295.0	2117.7	1905.6	1692.5
27.5°	2774.6	2780.6	2791.5	2777.6	2731.0	2719.2	2636.9	2519.0	2330.7	2095.9	1830.3
30°	3009.5	3039.2	3033.3	3048.1	3035.3	3019.4	2938.2	2785.5	2532.9	2271.2	2000.7
32.5°	3312.7	3295.9	3306.8	3337.5	3287.0	3288.0	3204.7	3047.2	2800.4	2491.2	2144.4
35°	3545.6	3588.2	3611.0	3625.9	3603.1	3613.0	3546.6	3357.3	3061.0	2708.3	2313.9
37.5°	3818.1	3862.7	3883.5	3942.0	3967.7	3951.9	3884.5	3701.2	3342.5	2935.2	2508.1
40°	4134.2	4164.0	4212.5	4264.0	4275.9	4259.1	4190.7	3979.6	3640.7	3188.9	2683.5
42.5°	4472.1	4432.5	4569.3	4597.0	4666.4	4632.7	4612.9	4326.5	3920.2	3447.5	2868.8
45°	4769.4	4790.2	4930.9	5070.7	5145.0	5108.3	5025.1	4794.2	4321.5	3703.2	3070.9
47.5°	5039.0	5133.1	5220.3	5427.4	5499.7	5475.0	5410.6	5126.2	4671.3	4006.4	3302.8
50°	5339.2	5362.0	5531.5	5727.7	5898.1	5870.4	5806.0	5524.5	4966.6	4282.9	3470.3
52.5°	5587.9	5523.5	5742.5	6023.0	6222.1	6202.3	6109.2	5809.9	5286.7	4466.2	3604.1
55°	5594.9	5672.2	5836.7	6154.8	6370.8	6363.9	6318.3	5995.2	5455.2	4602.9	3691.3
57.5°	5598.8	5661.3	5870.4	6142.9	6428.3	6430.2	6365.8	6075.5	5485.9	4629.7	3705.1
60°	5491.8	5515.6	5803.0	6098.3	6359.9	6371.8	6307.4	6053.7	5430.4	4585.1	3650.6
62.5°	5297.6	5339.2	5625.6	5911.0	6209.3	6234.0	6169.6	5931.8	5311.5	4487.0	3545.6
65°	5034.0	5043.9	5293.6	5681.1	5907.0	5949.6	5938.7	5681.1	5119.2	4304.7	3387.1
67.5°	4667.4	4661.4	4969.6	5290.7	5611.7	5680.1	5624.6	5439.3	4803.1	4041.1	3190.8
70°	4202.6	4284.8	4561.3	4895.3	5112.3	5149.9	5173.7	4970.6	4485.0	3781.4	2934.2
72.5°	3738.8	3760.6	3980.6	4371.1	4610.9	4639.6	4679.2	4469.2	4053.0	3354.4	2617.1
75°	3165.1	3158.1	3397.0	3706.1	3915.2	3994.5	4010.4	3844.9	3499.0	2920.3	2270.3
77.5°	2540.8	2568.5	2754.8	3017.4	3225.5	3284.0	3349.4	3164.1	2880.7	2425.8	1851.1
80°	1866.0	1864.0	2033.4	2281.2	2521.0	2514.0	2536.8	2496.2	2202.9	1883.8	1432.9
82.5°	1228.8	1203.0	1352.6	1516.1	1705.4	1723.3	1792.6	1751.0	1575.6	1313.0	996.9
85°	505.4	500.4	636.2	735.3	888.9	909.7	970.1	940.4	873.0	729.3	551.0
87.5°	11.9	11.9	11.9	49.5	144.7	205.1	207.1	263.6	270.5	231.9	170.4
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: P879761

CATALOG NUMBER: EMM2-HTN-VA7-740-U-WT4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1220.8	1220.8	1220.8	1220.8	1220.8	1220.8	1220.8	1220.8	1220.8	1220.8	1220.8
2.5°	1215.9	1209.0	1194.1	1183.2	1173.3	1162.4	1156.4	1149.5	1146.5	1145.5	1137.6
5°	1205.0	1190.1	1163.4	1136.6	1112.8	1093.0	1073.2	1058.3	1044.5	1037.5	1034.5
7.5°	1191.1	1169.3	1128.7	1091.0	1050.4	1018.7	987.0	964.2	955.3	947.3	940.4
10°	1193.1	1164.4	1105.9	1051.4	1002.8	960.2	920.6	889.9	871.0	853.2	856.2
12.5°	1209.9	1173.3	1101.9	1031.6	971.1	915.6	865.1	828.4	800.7	781.9	779.9
15°	1244.6	1199.0	1110.9	1027.6	952.3	883.9	826.4	776.9	743.2	723.4	719.4
17.5°	1300.1	1245.6	1133.6	1037.5	945.4	866.1	798.7	743.2	700.6	678.8	673.8
20°	1374.4	1303.1	1174.3	1051.4	942.4	851.2	775.9	714.5	670.9	642.1	638.2
22.5°	1467.6	1381.4	1219.9	1072.2	948.3	845.3	761.0	693.7	643.1	619.3	615.4
25°	1585.5	1478.5	1281.3	1102.9	958.2	842.3	749.2	678.8	627.3	600.5	598.5
27.5°	1700.5	1577.6	1341.7	1138.6	975.1	846.3	745.2	668.9	616.4	589.6	585.6
30°	1833.2	1687.6	1421.0	1184.2	994.9	853.2	745.2	664.9	610.4	583.7	580.7
32.5°	1989.8	1798.6	1496.3	1232.7	1021.7	867.1	749.2	662.9	609.4	581.7	578.7
35°	2122.6	1928.4	1574.6	1281.3	1050.4	881.0	759.1	668.9	610.4	584.7	579.7
37.5°	2270.3	2049.3	1657.9	1324.9	1076.2	894.8	765.0	674.8	617.4	589.6	588.6
40°	2433.8	2181.1	1741.1	1381.4	1110.9	917.6	779.9	682.8	627.3	598.5	596.5
42.5°	2594.3	2322.8	1831.3	1444.8	1140.6	933.5	790.8	697.6	636.2	613.4	607.4
45°	2778.6	2466.5	1928.4	1490.4	1177.2	958.2	807.6	710.5	656.0	628.3	627.3
47.5°	2926.3	2593.3	2009.6	1547.9	1224.8	988.0	834.4	729.3	676.8	646.1	648.1
50°	3087.8	2710.2	2063.1	1597.4	1240.7	997.9	844.3	755.1	690.7	667.9	662.0
52.5°	3187.9	2801.4	2126.6	1609.3	1264.4	1019.7	860.1	764.0	708.5	683.8	675.8
55°	3267.1	2856.9	2149.4	1624.2	1272.4	1021.7	869.1	773.9	718.4	689.7	690.7
57.5°	3263.2	2854.9	2145.4	1609.3	1252.6	1009.8	861.1	771.9	713.5	687.7	687.7
60°	3215.6	2795.5	2092.9	1561.7	1218.9	982.0	841.3	751.1	699.6	678.8	675.8
62.5°	3104.6	2695.4	2022.5	1502.3	1170.3	946.4	815.5	723.4	680.8	659.0	654.0
65°	2959.0	2567.5	1896.7	1423.0	1099.0	893.8	771.9	695.6	653.0	630.2	627.3
67.5°	2772.7	2387.2	1754.0	1314.0	1019.7	835.4	723.4	654.0	611.4	595.6	595.6
70°	2539.8	2174.1	1613.3	1193.1	927.5	758.1	662.0	599.5	565.8	547.0	547.0
72.5°	2260.3	1941.3	1428.9	1062.3	825.5	675.8	588.6	542.0	510.3	499.4	492.5
75°	1952.2	1662.8	1217.9	900.8	704.6	582.7	513.3	470.7	446.9	438.0	436.0
77.5°	1614.3	1364.5	981.0	739.2	584.7	485.6	428.1	396.4	380.5	367.6	366.6
80°	1236.7	1040.5	752.1	576.7	450.9	372.6	337.9	316.1	305.2	301.2	297.3
82.5°	849.2	736.3	526.2	388.5	315.1	266.6	248.7	238.8	225.9	226.9	224.9
85°	476.6	404.3	282.4	225.9	187.3	166.5	159.5	153.6	155.6	151.6	153.6
87.5°	143.7	133.8	96.1	82.2	71.3	72.3	78.3	81.3	82.2	83.2	85.2
90°	0.0	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

Streetworks

Report Number: SP1-2407-176-9

Test Date: 09/25/2024

Luminaire Tested: MEM2-HTN-VA-130-740-U-RW

Data in this report applies to families of products including MEM2-HTN-VA-130-740-U-RW

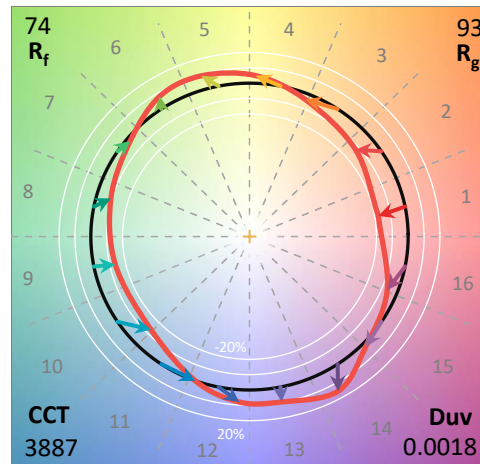
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-176-9  
 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-130-740-U-RW**  
 Description: EPIC MODERN VISUAL COMFORT 130W WAVESTREAM RECTANGULAR WIDE

**Spectral Parameters**

CCT (K): 3887  
 CIE u': 0.2262  
 CIE v': 0.5060  
 Duv: 0.0018  
 CIE x: 0.3870  
 CIE y: 0.3847  
 CIE z: 0.2283  
 Peak Wavelength (nm): 583  
 Dominant Wavelength (nm): 578  
 Purity: 31.59626  
 Rf: 74.5  
 Rg: 93.5

CRI (Ra):	71.4		
R1:	67.6	R9:	-36.8
R2:	78.8	R10:	50.4
R3:	88.2	R11:	65.0
R4:	69.8	R12:	44.4
R5:	67.7	R13:	69.4
R6:	70.3	R14:	93.3
R7:	80.1	R15:	59.9
R8:	49.0		



**Test Conditions**

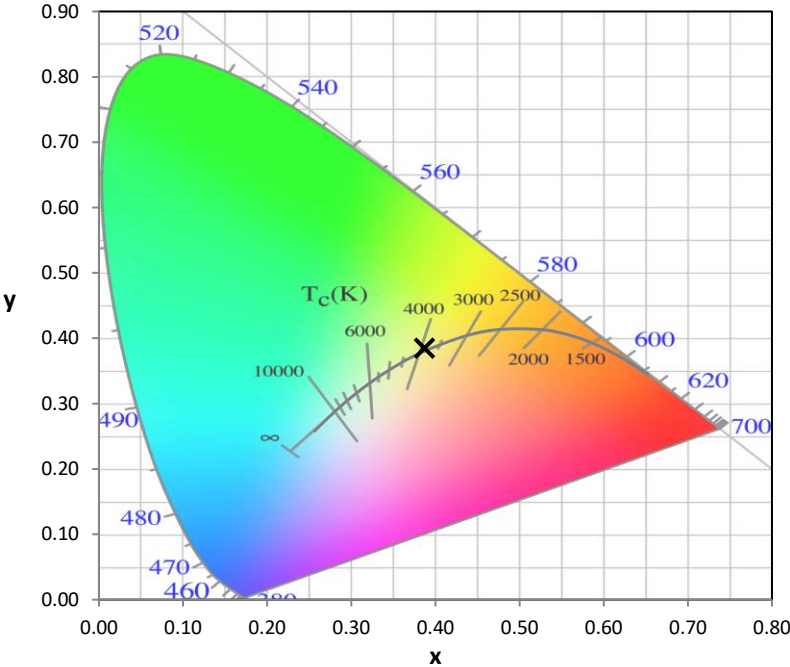
Stabilization Time: 50M  
 Operation Time: 1H 50M  
 Sphere Temperature (°C): 25.2

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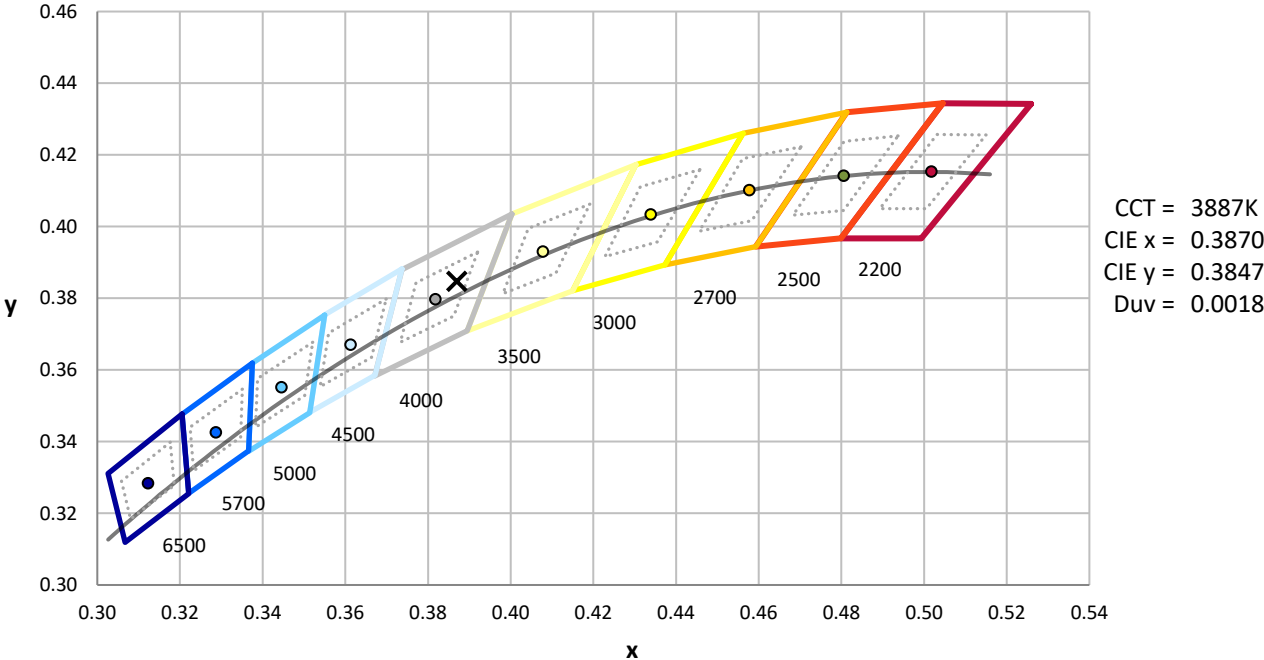
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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**CIE 1931 Chromaticity Diagram**



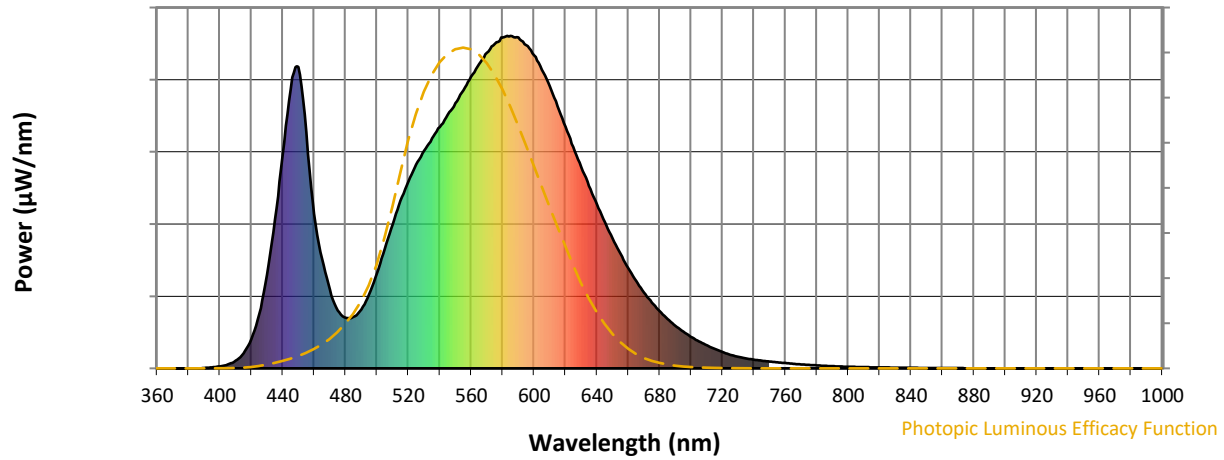
**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 4000K 4-step quadrangle

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**Photopic Flux vs. Wavelength**

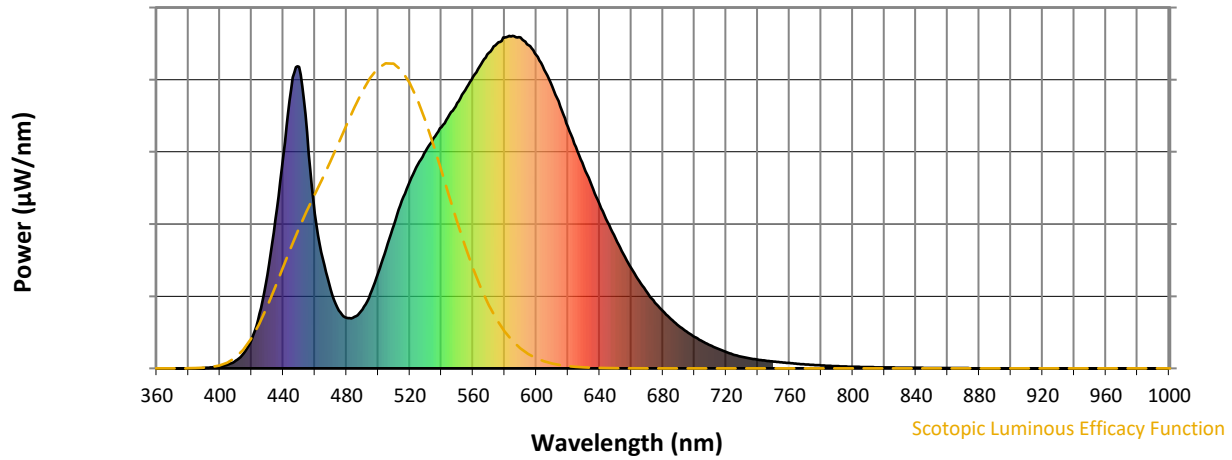


**Photopic Lumens: NR**

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	177	NR	620	727	NR	750	21	NR	880	0	NR
365	0	NR	495	222	NR	625	666	NR	755	18	NR	885	0	NR
370	0	NR	500	286	NR	630	606	NR	760	16	NR	890	0	NR
375	0	NR	505	359	NR	635	549	NR	765	14	NR	895	0	NR
380	0	NR	510	433	NR	640	493	NR	770	12	NR	900	0	NR
385	0	NR	515	505	NR	645	440	NR	775	10	NR	905	0	NR
390	1	NR	520	562	NR	650	390	NR	780	9	NR	910	0	NR
395	3	NR	525	613	NR	655	344	NR	785	8	NR	915	0	NR
400	6	NR	530	654	NR	660	301	NR	790	7	NR	920	0	NR
405	11	NR	535	692	NR	665	263	NR	795	6	NR	925	0	NR
410	23	NR	540	726	NR	670	228	NR	800	5	NR	930	0	NR
415	45	NR	545	763	NR	675	198	NR	805	4	NR	935	0	NR
420	88	NR	550	798	NR	680	172	NR	810	4	NR	940	0	NR
425	164	NR	555	837	NR	685	148	NR	815	3	NR	945	0	NR
430	281	NR	560	878	NR	690	128	NR	820	3	NR	950	0	NR
435	447	NR	565	915	NR	695	110	NR	825	2	NR	955	0	NR
440	642	NR	570	948	NR	700	95	NR	830	2	NR	960	0	NR
445	838	NR	575	976	NR	705	81	NR	835	2	NR	965	0	NR
450	907	NR	580	995	NR	710	69	NR	840	2	NR	970	0	NR
455	710	NR	585	1000	NR	715	58	NR	845	1	NR	975	0	NR
460	465	NR	590	995	NR	720	49	NR	850	1	NR	980	0	NR
465	330	NR	595	972	NR	725	41	NR	855	1	NR	985	0	NR
470	236	NR	600	941	NR	730	35	NR	860	1	NR	990	0	NR
475	174	NR	605	898	NR	735	30	NR	865	1	NR	995	0	NR
480	152	NR	610	848	NR	740	26	NR	870	1	NR	1000	0	NR
485	155	NR	615	788	NR	745	23	NR	875	0	NR			

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**Scotopic Flux vs. Wavelength**



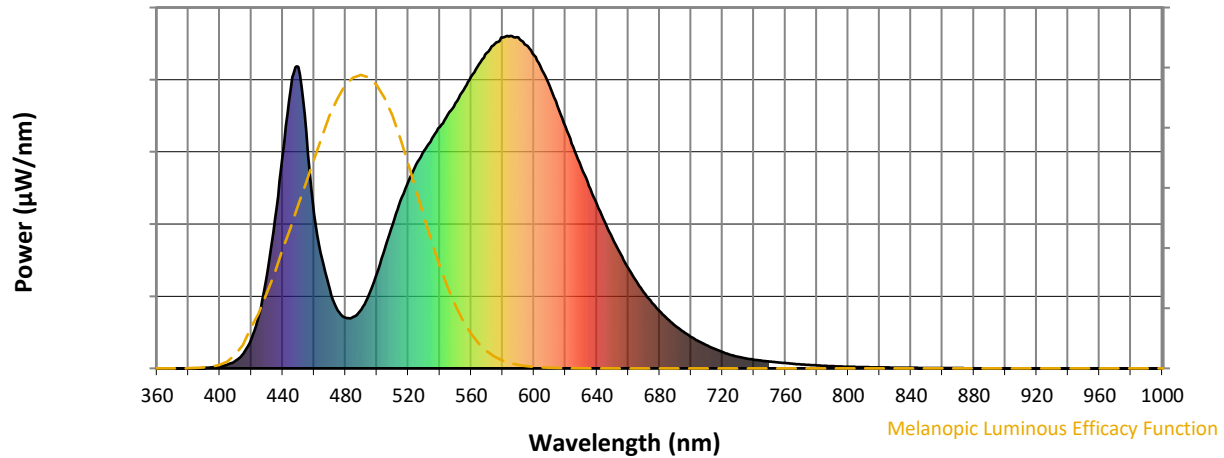
**Scotopic Lumens: NR**

**S/P: 1.49**

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	177	NR	620	727	NR	750	21	NR	880	0	NR
365	0	NR	495	222	NR	625	666	NR	755	18	NR	885	0	NR
370	0	NR	500	286	NR	630	606	NR	760	16	NR	890	0	NR
375	0	NR	505	359	NR	635	549	NR	765	14	NR	895	0	NR
380	0	NR	510	433	NR	640	493	NR	770	12	NR	900	0	NR
385	0	NR	515	505	NR	645	440	NR	775	10	NR	905	0	NR
390	1	NR	520	562	NR	650	390	NR	780	9	NR	910	0	NR
395	3	NR	525	613	NR	655	344	NR	785	8	NR	915	0	NR
400	6	NR	530	654	NR	660	301	NR	790	7	NR	920	0	NR
405	11	NR	535	692	NR	665	263	NR	795	6	NR	925	0	NR
410	23	NR	540	726	NR	670	228	NR	800	5	NR	930	0	NR
415	45	NR	545	763	NR	675	198	NR	805	4	NR	935	0	NR
420	88	NR	550	798	NR	680	172	NR	810	4	NR	940	0	NR
425	164	NR	555	837	NR	685	148	NR	815	3	NR	945	0	NR
430	281	NR	560	878	NR	690	128	NR	820	3	NR	950	0	NR
435	447	NR	565	915	NR	695	110	NR	825	2	NR	955	0	NR
440	642	NR	570	948	NR	700	95	NR	830	2	NR	960	0	NR
445	838	NR	575	976	NR	705	81	NR	835	2	NR	965	0	NR
450	907	NR	580	995	NR	710	69	NR	840	2	NR	970	0	NR
455	710	NR	585	1000	NR	715	58	NR	845	1	NR	975	0	NR
460	465	NR	590	995	NR	720	49	NR	850	1	NR	980	0	NR
465	330	NR	595	972	NR	725	41	NR	855	1	NR	985	0	NR
470	236	NR	600	941	NR	730	35	NR	860	1	NR	990	0	NR
475	174	NR	605	898	NR	735	30	NR	865	1	NR	995	0	NR
480	152	NR	610	848	NR	740	26	NR	870	1	NR	1000	0	NR
485	155	NR	615	788	NR	745	23	NR	875	0	NR			

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**Melanopic Flux vs. Wavelength**



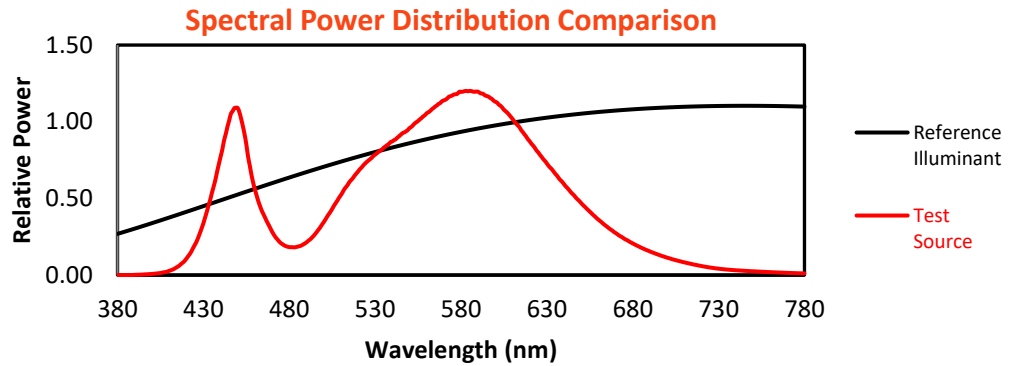
**Melanopic Lumens: NR**

**M/P: 2.89**

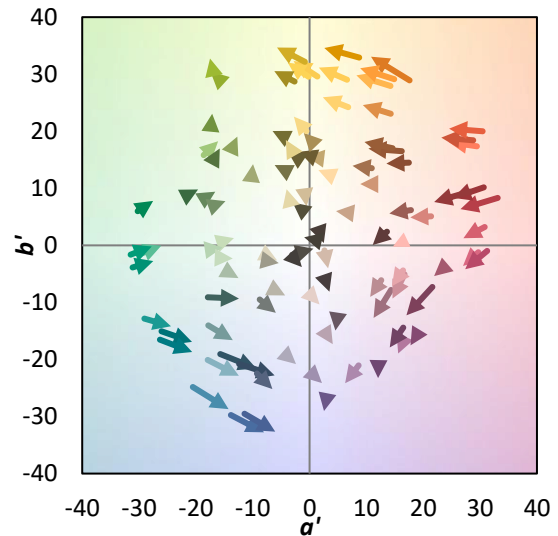
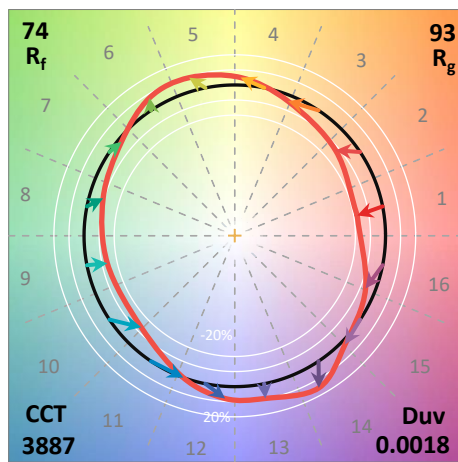
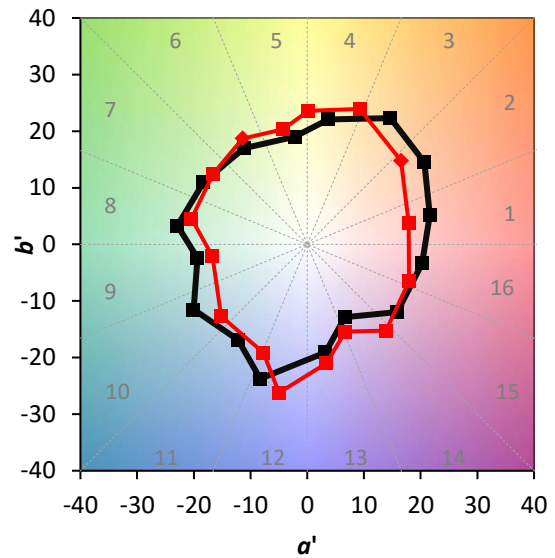
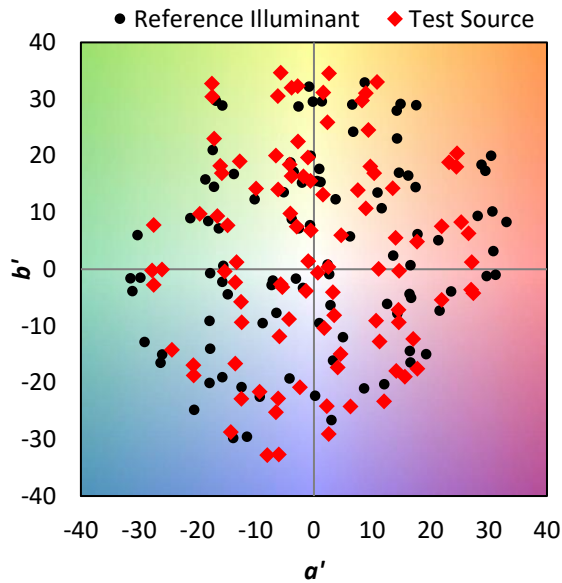
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	177	NR	620	727	NR	750	21	NR	880	0	NR
365	0	NR	495	222	NR	625	666	NR	755	18	NR	885	0	NR
370	0	NR	500	286	NR	630	606	NR	760	16	NR	890	0	NR
375	0	NR	505	359	NR	635	549	NR	765	14	NR	895	0	NR
380	0	NR	510	433	NR	640	493	NR	770	12	NR	900	0	NR
385	0	NR	515	505	NR	645	440	NR	775	10	NR	905	0	NR
390	1	NR	520	562	NR	650	390	NR	780	9	NR	910	0	NR
395	3	NR	525	613	NR	655	344	NR	785	8	NR	915	0	NR
400	6	NR	530	654	NR	660	301	NR	790	7	NR	920	0	NR
405	11	NR	535	692	NR	665	263	NR	795	6	NR	925	0	NR
410	23	NR	540	726	NR	670	228	NR	800	5	NR	930	0	NR
415	45	NR	545	763	NR	675	198	NR	805	4	NR	935	0	NR
420	88	NR	550	798	NR	680	172	NR	810	4	NR	940	0	NR
425	164	NR	555	837	NR	685	148	NR	815	3	NR	945	0	NR
430	281	NR	560	878	NR	690	128	NR	820	3	NR	950	0	NR
435	447	NR	565	915	NR	695	110	NR	825	2	NR	955	0	NR
440	642	NR	570	948	NR	700	95	NR	830	2	NR	960	0	NR
445	838	NR	575	976	NR	705	81	NR	835	2	NR	965	0	NR
450	907	NR	580	995	NR	710	69	NR	840	2	NR	970	0	NR
455	710	NR	585	1000	NR	715	58	NR	845	1	NR	975	0	NR
460	465	NR	590	995	NR	720	49	NR	850	1	NR	980	0	NR
465	330	NR	595	972	NR	725	41	NR	855	1	NR	985	0	NR
470	236	NR	600	941	NR	730	35	NR	860	1	NR	990	0	NR
475	174	NR	605	898	NR	735	30	NR	865	1	NR	995	0	NR
480	152	NR	610	848	NR	740	26	NR	870	1	NR	1000	0	NR
485	155	NR	615	788	NR	745	23	NR	875	0	NR			

**Summary**

$R_f = 74.5$   
 $R_g = 93.5$   
 CIE  $R_a = 71.4$   
 $R_g = -36.8$



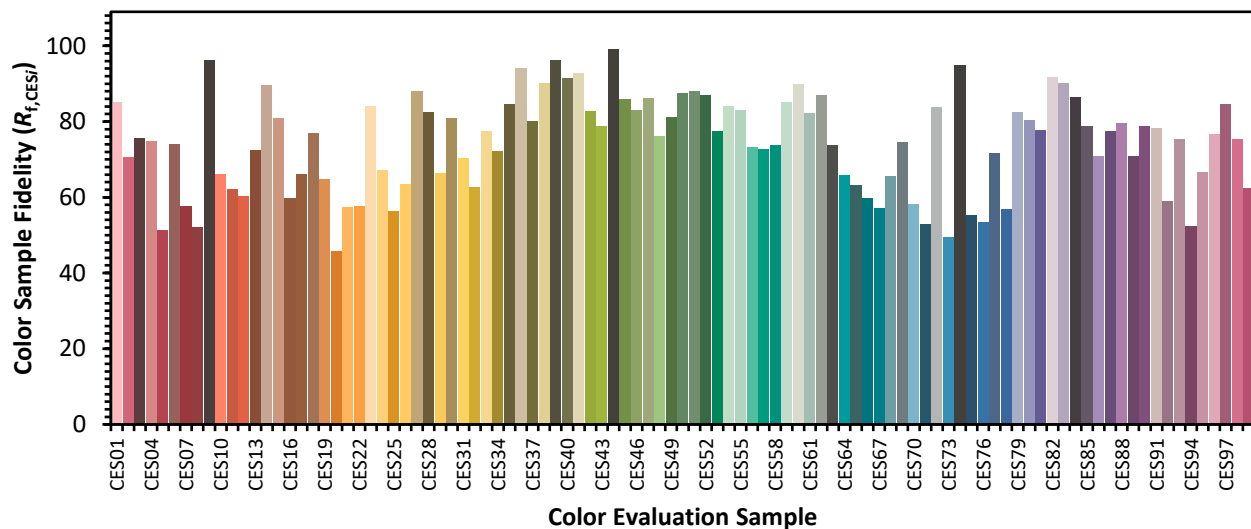
**Color Vector Graphics**



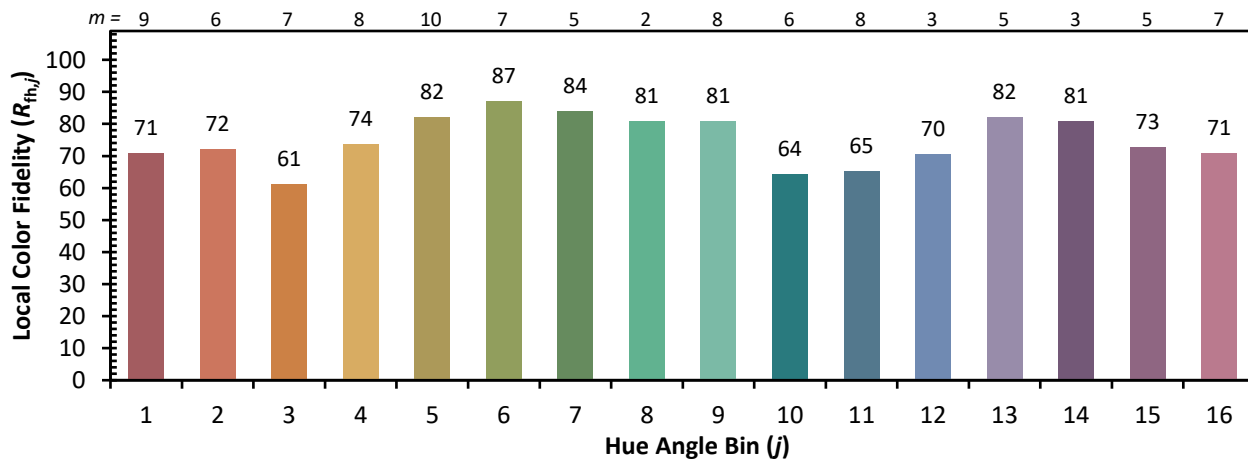
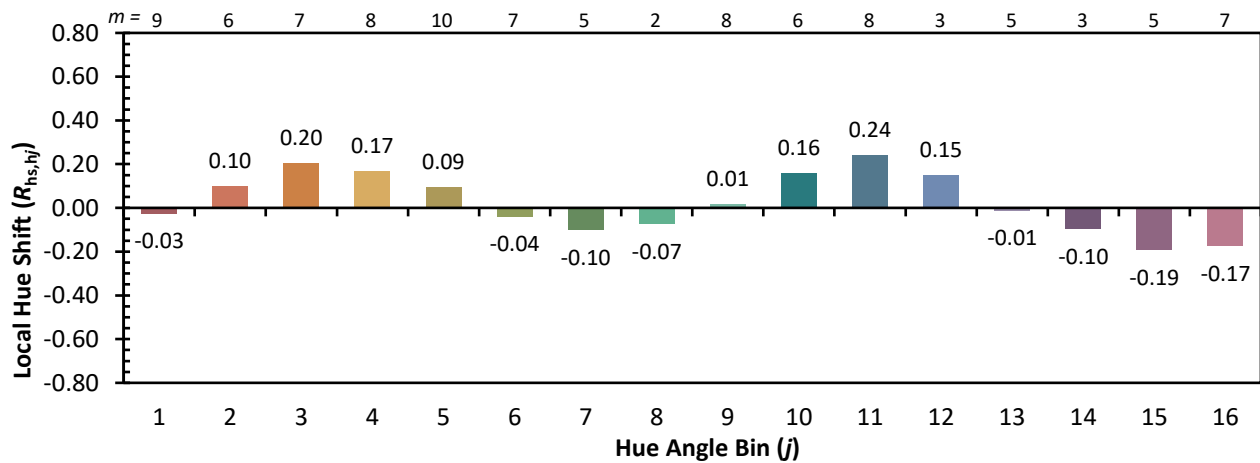
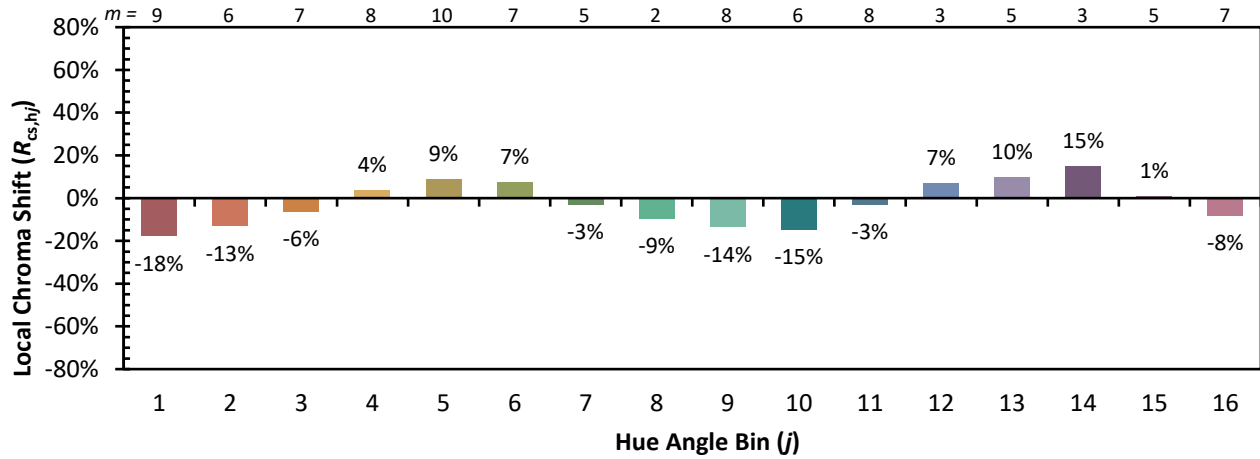


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

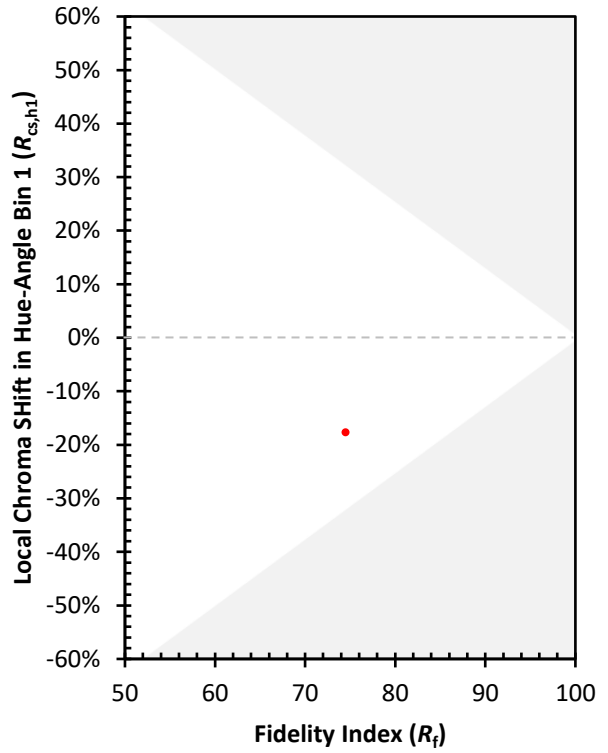
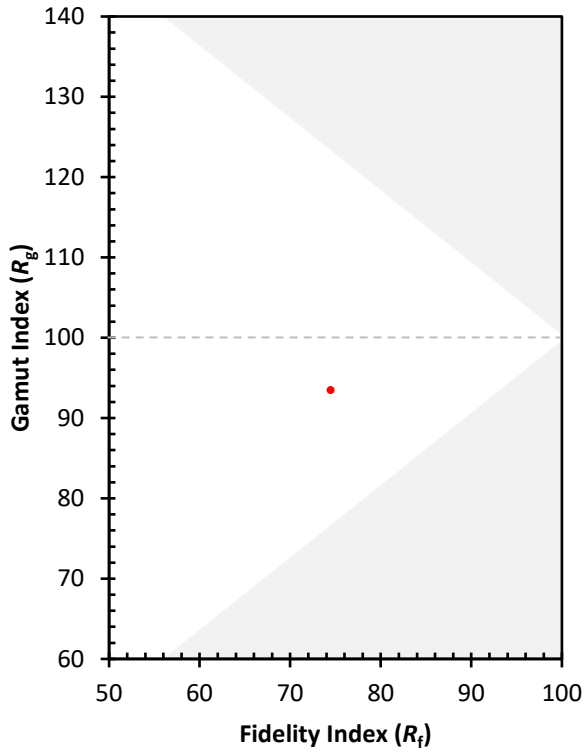
CES01 = 85	CES26 = 63	CES51 = 88	CES76 = 54
CES02 = 61	CES27 = 88	CES52 = 87	CES77 = 72
CES03 = 30	CES28 = 82	CES53 = 77	CES78 = 57
CES04 = 70	CES29 = 66	CES54 = 84	CES79 = 83
CES05 = 47	CES30 = 81	CES55 = 83	CES80 = 80
CES06 = 50	CES31 = 70	CES56 = 73	CES81 = 78
CES07 = 40	CES32 = 63	CES57 = 73	CES82 = 92
CES08 = 39	CES33 = 77	CES58 = 74	CES83 = 90
CES09 = 29	CES34 = 72	CES59 = 85	CES84 = 87
CES10 = 74	CES35 = 85	CES60 = 90	CES85 = 79
CES11 = 57	CES36 = 94	CES61 = 82	CES86 = 71
CES12 = 63	CES37 = 80	CES62 = 87	CES87 = 77
CES13 = 42	CES38 = 90	CES63 = 74	CES88 = 80
CES14 = 74	CES39 = 96	CES64 = 66	CES89 = 71
CES15 = 71	CES40 = 92	CES65 = 63	CES90 = 79
CES16 = 46	CES41 = 93	CES66 = 60	CES91 = 78
CES17 = 49	CES42 = 83	CES67 = 57	CES92 = 59
CES18 = 56	CES43 = 79	CES68 = 65	CES93 = 75
CES19 = 72	CES44 = 99	CES69 = 74	CES94 = 52
CES20 = 65	CES45 = 86	CES70 = 58	CES95 = 67
CES21 = 86	CES46 = 83	CES71 = 53	CES96 = 77
CES22 = 78	CES47 = 86	CES72 = 84	CES97 = 85
CES23 = 92	CES48 = 76	CES73 = 49	CES98 = 75
CES24 = 91	CES49 = 81	CES74 = 95	CES99 = 62
CES25 = 72	CES50 = 88	CES75 = 55	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)