

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: P879779

Luminaire Tested: **EMM2-HSN-VA7-740-U-RW**

Issue Date: 10/01/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P879779  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/01/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-VA7-740-U-RW  
Description: EPIC MODERN SHORT HOUSING 7W 70CRI 4000K WAVESTREAM FIXTURE w/  
RECTANGULAR WIDE DISTRIBUTION OPTIC  
Light Source: (1) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

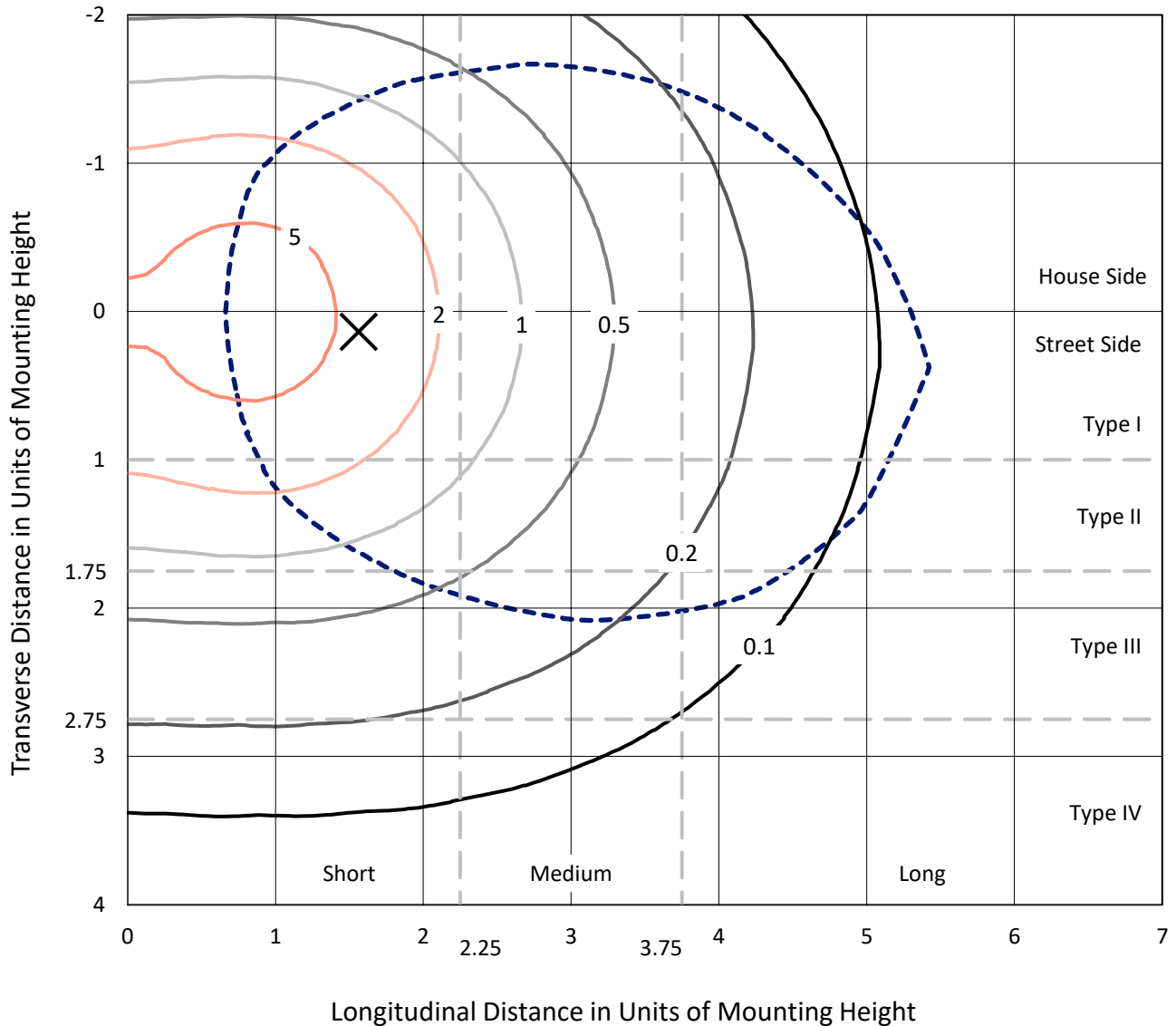
Lumens per Lamp: N/A  
Luminaire Lumens: 14072.8 lumens  
Efficiency: N/A  
Efficacy: 108.3 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G4

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: P879779  
 CATALOG NUMBER: EMM2-HSN-VA7-740-U-RW

### Iso-Footcandle Lines of Horizontal Illumination

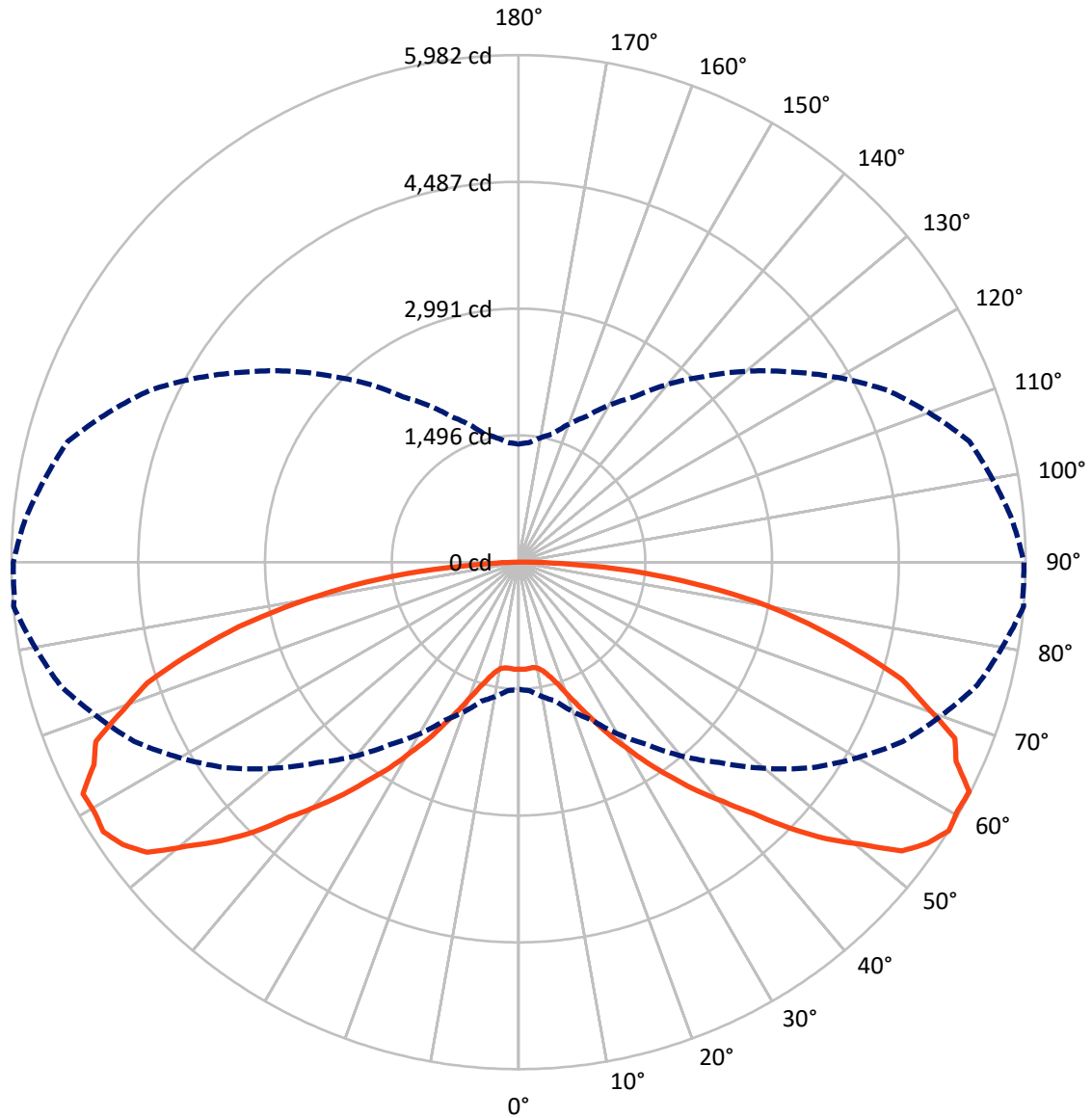
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 7.7 fc  
 Type III - Short - N/A

REPORT NUMBER: P879779  
CATALOG NUMBER: EMM2-HSN-VA7-740-U-RW

### Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral      - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P879779  
 CATALOG NUMBER: EMM2-HSN-VA7-740-U-RW

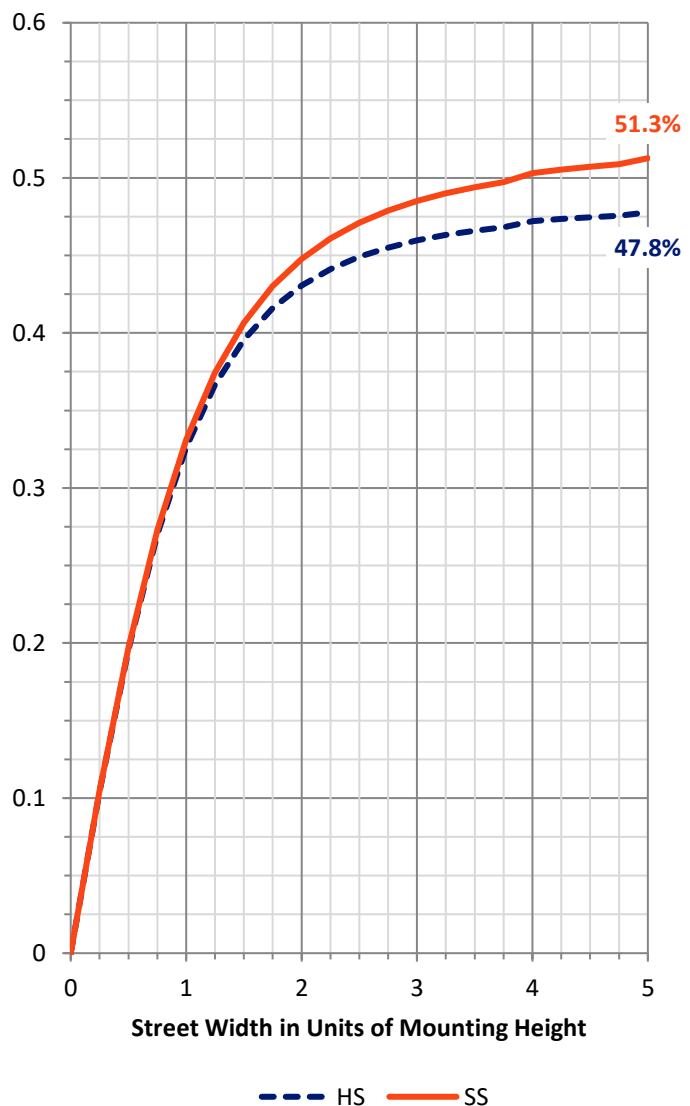
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6750.8	0.0	6750.8
	% Fixture	48.0	0.0	48.0
<b>Street Side</b>	Lumens	7322.0	0.0	7322.0
	% Fixture	52.0	0.0	52.0
<b>Total</b>	Lumens	14072.8	0.0	14072.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.7	0.9
10°-20°	378.1	2.7
20°-30°	771.7	5.5
30°-40°	1380.4	9.8
40°-50°	2211.9	15.7
50°-60°	3048.0	21.7
60°-70°	3157.4	22.4
70°-80°	2299.8	16.3
80°-90°	705.7	5.0
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°	14072.8	100.0
0°-180°	14072.8	100.0

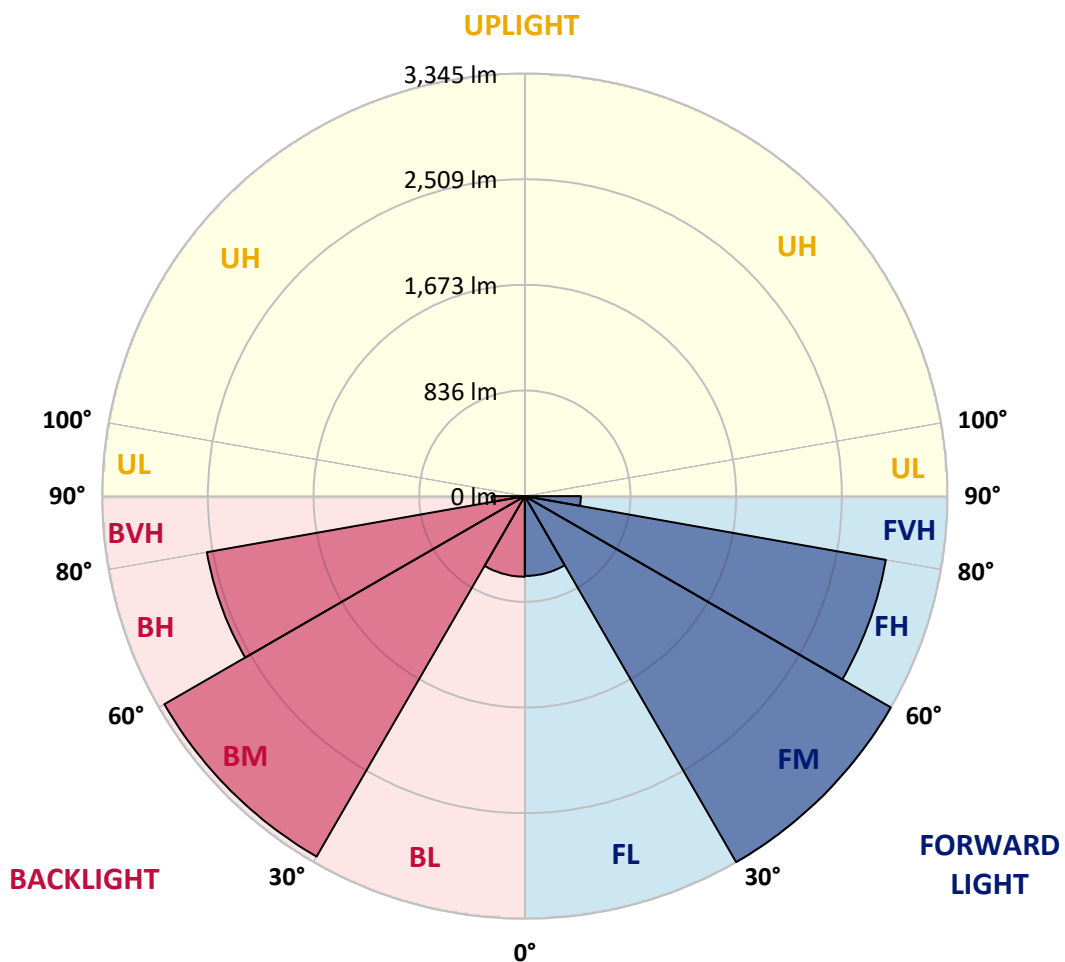


REPORT NUMBER: P879779  
 CATALOG NUMBER: EMM2-HSN-VA7-740-U-RW

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	631.7	4.5			
FM (30°-60°)	3345.3	23.8			
FH (60°-80°)	2901.7	20.6			G2/5000
FVH (80°-90°)	443.3	3.2			G3/500
BL (0°-30°)	637.9	4.5	B2/1000		
BM (30°-60°)	3295.0	23.4	B3/5000		
BH (60°-80°)	2555.6	18.2	B4/5000		G4/5000
BVH (80°-90°)	262.4	1.9			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**  
 Type III Short





REPORT NUMBER: P879779

CATALOG NUMBER: EMM2-HSN-VA7-740-U-RW

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	86°
0°	1261.5	1261.5	1261.5	1261.5	1261.5	1261.5	1261.5	1261.5	1261.5	1261.5	1261.5
2.5°	1262.5	1262.5	1265.4	1267.4	1269.4	1269.4	1270.4	1269.4	1268.4	1267.4	1267.4
5°	1266.4	1266.4	1271.4	1274.4	1274.4	1272.4	1270.4	1266.4	1263.5	1259.5	1259.5
7.5°	1261.5	1260.5	1262.5	1261.5	1260.5	1259.5	1257.5	1255.5	1254.5	1255.5	1255.5
10°	1242.7	1242.7	1242.7	1243.6	1247.6	1253.6	1258.5	1264.5	1269.4	1273.4	1272.4
12.5°	1227.8	1228.8	1231.8	1239.7	1249.6	1262.5	1279.3	1297.2	1312.0	1322.9	1321.9
15°	1216.9	1219.9	1228.8	1244.6	1266.4	1294.2	1326.9	1364.5	1393.3	1407.1	1408.1
17.5°	1217.9	1221.8	1237.7	1261.5	1295.2	1344.7	1399.2	1459.7	1507.2	1521.1	1523.1
20°	1219.9	1222.8	1244.6	1285.3	1342.7	1411.1	1492.4	1575.6	1641.0	1678.7	1680.7
22.5°	1226.8	1228.8	1256.5	1312.0	1392.3	1500.3	1608.3	1725.2	1816.4	1862.0	1879.8
25°	1230.8	1233.7	1273.4	1351.7	1459.7	1603.4	1747.0	1900.6	2017.6	2081.0	2090.9
27.5°	1238.7	1245.6	1293.2	1393.3	1539.9	1724.3	1922.4	2093.9	2251.4	2328.7	2317.8
30°	1255.5	1263.5	1323.9	1444.8	1628.1	1865.0	2085.0	2315.9	2478.4	2568.5	2579.4
32.5°	1274.4	1283.3	1354.6	1502.3	1722.3	1988.8	2272.2	2524.9	2742.0	2848.0	2850.0
35°	1306.1	1316.0	1401.2	1564.7	1819.4	2118.7	2465.5	2758.8	2991.7	3122.5	3137.3
37.5°	1319.9	1329.9	1430.9	1640.0	1913.5	2281.2	2647.8	2985.7	3280.0	3423.7	3435.6
40°	1362.6	1376.4	1474.5	1688.6	2026.5	2418.9	2833.1	3245.4	3559.5	3712.1	3723.0
42.5°	1381.4	1399.2	1526.1	1758.9	2120.6	2552.7	3053.1	3525.8	3859.8	4051.0	4047.0
45°	1408.1	1423.0	1551.8	1837.2	2209.8	2736.0	3296.9	3826.1	4239.3	4473.1	4474.1
47.5°	1465.6	1484.4	1605.3	1895.7	2336.7	2917.4	3545.6	4131.3	4645.6	4874.5	4855.7
50°	1473.5	1497.3	1662.8	1964.1	2451.6	3058.1	3737.9	4414.7	4983.5	5229.2	5200.5
52.5°	1500.3	1518.1	1669.8	2022.5	2506.1	3157.2	3921.2	4662.4	5293.7	5662.3	5617.7
55°	1520.1	1544.9	1710.4	2042.3	2578.5	3303.8	4090.6	4844.8	5508.7	5854.5	5837.7
57.5°	1500.3	1523.1	1698.5	2057.2	2623.0	3344.5	4227.4	5004.3	5603.8	5982.4	5964.5
60°	1470.6	1491.4	1665.8	2033.4	2553.7	3334.5	4178.8	5018.2	5601.8	5952.6	5942.7
62.5°	1424.0	1447.8	1609.3	1965.1	2506.1	3233.5	4101.5	4974.6	5519.6	5967.5	5953.6
65°	1351.7	1367.5	1545.9	1863.0	2423.9	3119.5	3963.8	4767.5	5455.2	5671.2	5691.0
67.5°	1266.4	1279.3	1433.9	1749.0	2271.3	2972.9	3818.1	4634.7	5137.1	5552.3	5553.3
70°	1172.3	1185.2	1319.9	1626.1	2088.9	2770.7	3536.7	4283.9	4932.0	5106.4	5112.3
72.5°	1036.5	1054.4	1197.1	1460.7	1900.6	2504.1	3249.3	3948.9	4467.2	4723.9	4716.9
75°	910.7	924.6	1037.5	1280.3	1679.7	2215.8	2915.4	3550.6	3982.6	4105.5	4134.2
77.5°	767.0	781.9	884.9	1071.2	1419.0	1909.6	2469.4	3019.4	3387.1	3495.1	3544.6
80°	617.4	618.4	698.6	872.0	1138.6	1535.0	1991.8	2477.4	2715.2	2856.9	2866.8
82.5°	450.9	469.7	523.2	652.0	854.2	1147.5	1535.0	1885.8	2090.9	2092.9	2100.8
85°	298.3	307.2	344.9	422.1	562.9	778.9	1014.7	1217.9	1337.8	1338.8	1338.8
87.5°	146.7	152.6	171.4	203.1	267.6	379.5	470.7	574.8	613.4	504.4	513.3
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: P879779

CATALOG NUMBER: EMM2-HSN-VA7-740-U-RW

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1261.5	1261.5	1261.5	1261.5	1261.5	1261.5	1261.5	1261.5	1261.5	1261.5	1261.5
2.5°	1267.4	1266.4	1265.4	1262.5	1259.5	1256.5	1253.6	1251.6	1249.6	1248.6	1249.6
5°	1257.5	1256.5	1252.6	1248.6	1245.6	1242.7	1239.7	1237.7	1236.7	1236.7	1236.7
7.5°	1256.5	1256.5	1255.5	1253.6	1251.6	1246.6	1238.7	1232.7	1228.8	1227.8	1226.8
10°	1273.4	1272.4	1275.4	1269.4	1262.5	1255.5	1242.7	1231.8	1222.8	1217.9	1216.9
12.5°	1325.9	1325.9	1327.9	1315.0	1298.1	1280.3	1259.5	1240.7	1226.8	1217.9	1216.9
15°	1417.1	1416.1	1408.1	1384.4	1352.6	1317.0	1284.3	1249.6	1224.8	1212.9	1211.9
17.5°	1523.1	1532.0	1522.1	1478.5	1427.0	1366.5	1311.0	1265.4	1232.7	1216.9	1214.9
20°	1689.6	1683.6	1658.9	1598.4	1525.1	1438.9	1362.6	1294.2	1250.6	1225.8	1222.8
22.5°	1882.8	1879.8	1839.2	1756.0	1648.9	1533.0	1425.0	1331.8	1270.4	1237.7	1234.7
25°	2096.9	2085.0	2028.5	1930.4	1795.6	1641.0	1498.3	1376.4	1293.2	1249.6	1242.7
27.5°	2339.6	2340.6	2269.3	2124.6	1958.1	1750.0	1582.5	1419.0	1317.0	1266.4	1256.5
30°	2587.4	2572.5	2499.2	2331.7	2111.7	1889.7	1656.9	1474.5	1356.6	1290.2	1282.3
32.5°	2870.8	2855.9	2724.1	2533.9	2278.2	2011.6	1739.1	1535.0	1379.4	1309.0	1300.1
35°	3138.3	3117.5	3004.6	2779.6	2464.5	2136.5	1842.2	1587.5	1429.9	1351.7	1338.8
37.5°	3460.4	3427.7	3261.2	3006.5	2669.6	2287.1	1929.4	1657.9	1471.6	1369.5	1354.6
40°	3750.7	3730.9	3539.7	3252.3	2850.0	2421.9	2019.6	1721.3	1492.4	1389.3	1377.4
42.5°	4096.6	4049.0	3846.9	3509.9	3055.1	2573.5	2145.4	1765.9	1547.9	1444.8	1426.0
45°	4535.6	4467.2	4214.5	3823.1	3256.3	2717.2	2247.5	1847.1	1595.4	1456.7	1434.9
47.5°	4915.1	4824.9	4586.1	4119.4	3515.9	2873.8	2301.0	1912.5	1604.3	1487.4	1466.6
50°	5251.0	5164.8	4900.2	4382.0	3703.2	3016.5	2403.1	1924.4	1648.9	1504.3	1477.5
52.5°	5638.5	5560.2	5257.0	4644.6	3866.7	3115.5	2460.5	1959.1	1642.0	1487.4	1466.6
55°	5855.5	5737.6	5425.5	4775.4	3906.3	3087.8	2452.6	1945.2	1618.2	1458.7	1436.9
57.5°	5961.6	5841.7	5506.7	4797.2	3910.3	3096.7	2378.3	1897.7	1564.7	1414.1	1393.3
60°	5926.9	5807.0	5484.9	4708.0	3849.8	3020.4	2320.8	1824.3	1501.3	1335.8	1314.0
62.5°	5918.0	5820.8	5441.3	4646.6	3761.6	2896.5	2229.6	1710.4	1399.2	1255.5	1236.7
65°	5660.3	5550.3	5197.5	4432.5	3590.2	2728.1	2070.1	1588.5	1295.2	1156.4	1139.6
67.5°	5539.4	5417.5	4932.9	4259.1	3373.2	2545.8	1859.0	1441.8	1170.3	1031.6	1010.8
70°	5077.6	4974.6	4638.6	3840.9	3044.2	2266.3	1707.4	1274.4	1020.7	900.8	882.9
72.5°	4731.8	4604.0	4144.2	3516.9	2725.1	1993.8	1466.6	1090.0	866.1	762.0	741.2
75°	4102.5	3993.5	3655.6	2998.6	2307.9	1697.5	1207.0	880.0	703.6	607.5	604.5
77.5°	3484.2	3388.1	2974.8	2494.2	1883.8	1334.8	933.5	680.8	522.2	453.9	441.0
80°	2790.5	2671.6	2374.3	1909.6	1438.9	958.2	656.0	453.9	353.8	298.3	292.3
82.5°	2041.4	1958.1	1712.4	1313.0	917.6	608.4	393.4	248.7	184.3	155.6	155.6
85°	1303.1	1197.1	958.2	680.8	402.3	225.9	107.0	69.4	48.6	46.6	50.5
87.5°	443.9	324.0	135.8	28.7	7.9	3.0	1.0	1.0	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



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: SP1-2407-176-9

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

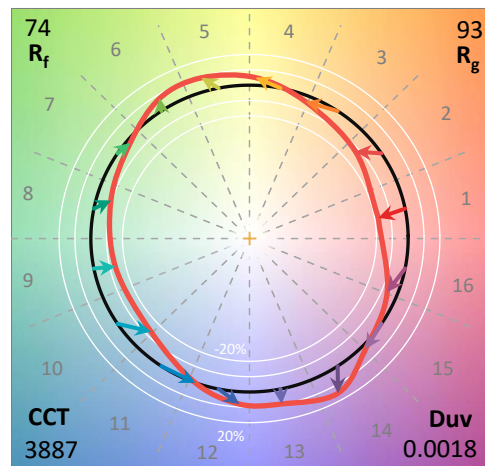
**Test Information**

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**

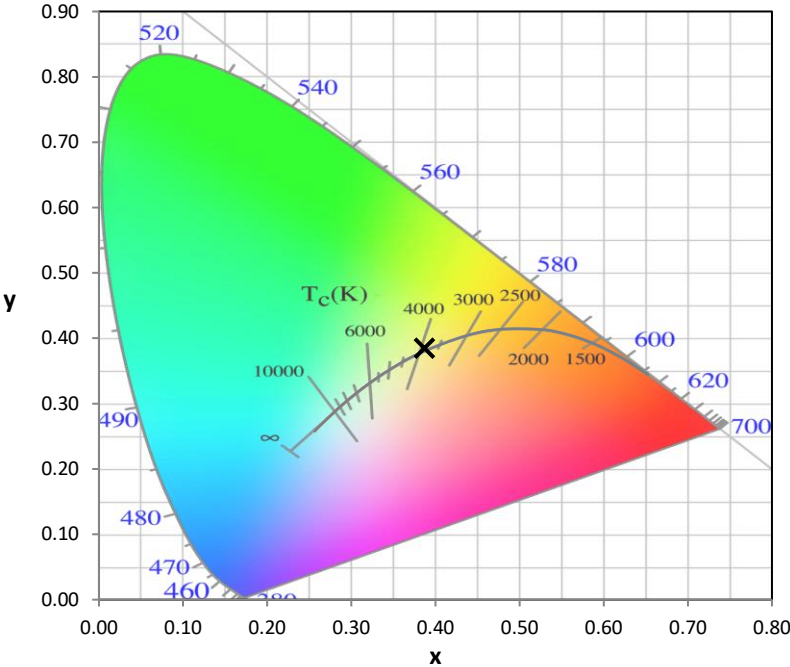
Stabilization Time: 50M  
 Operation Time: 1H 50M  
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-176-9

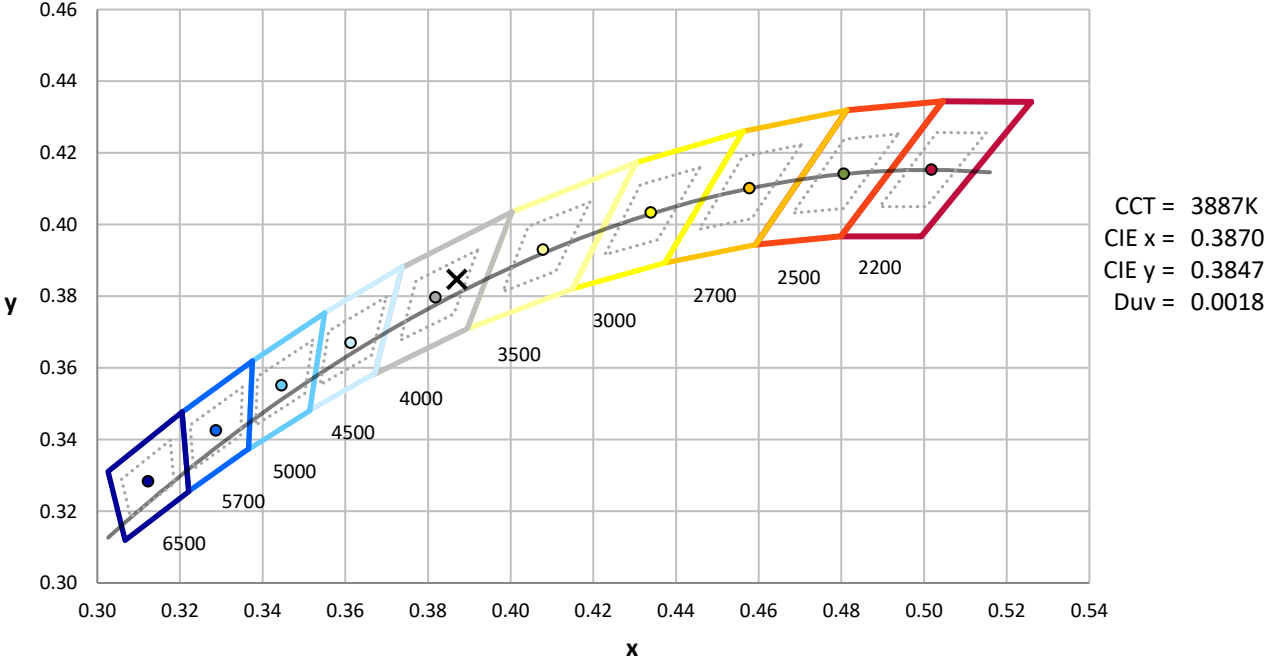
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-176-9

CIE 1931 Chromaticity Diagram



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

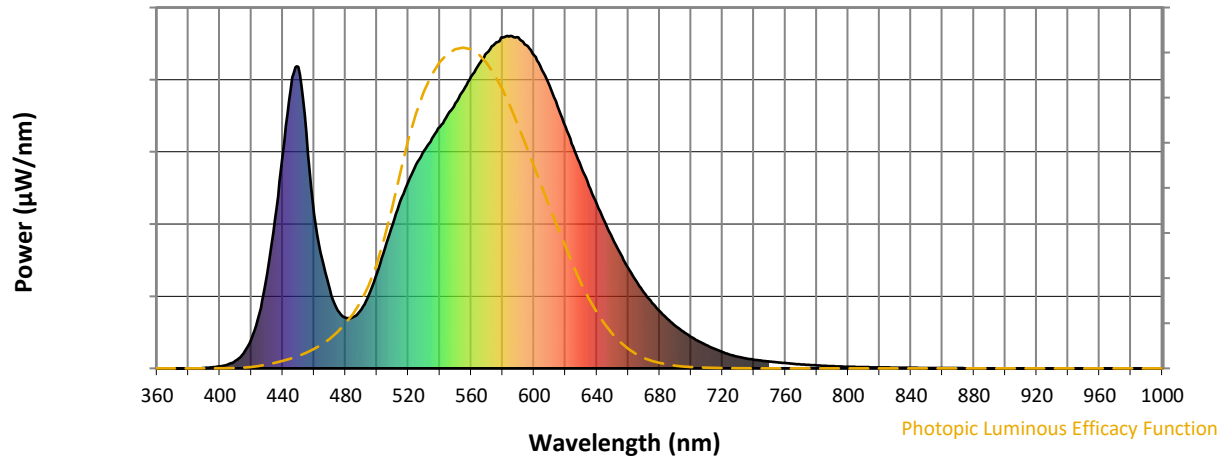


CCT = 3887K  
 CIE x = 0.3870  
 CIE y = 0.3847  
 Duv = 0.0018

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2407-176-9

**Photopic Flux vs. Wavelength**

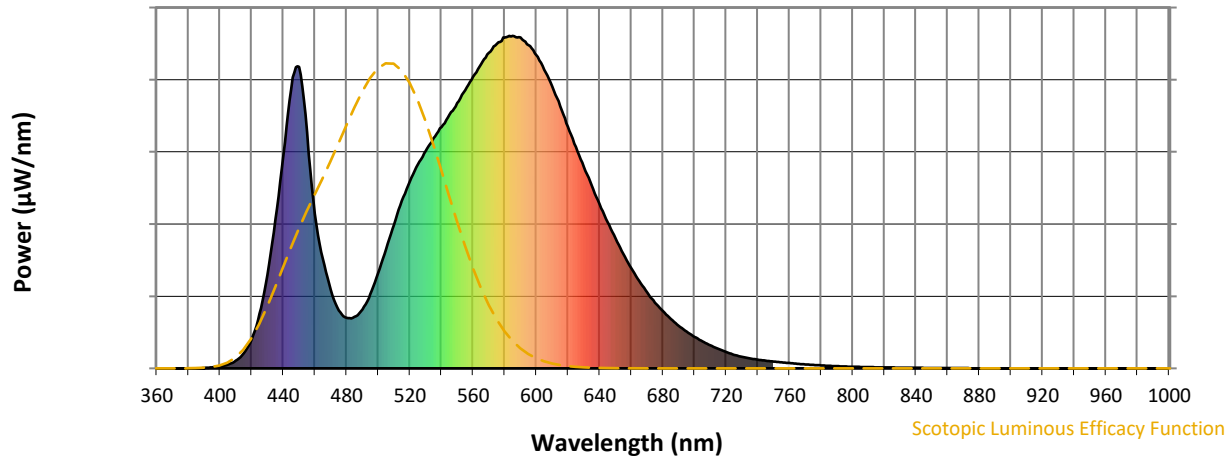


**Photopic Lumens: NR**

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			

REPORT NUMBER: SP1-2407-176-9

**Scotopic Flux vs. Wavelength**



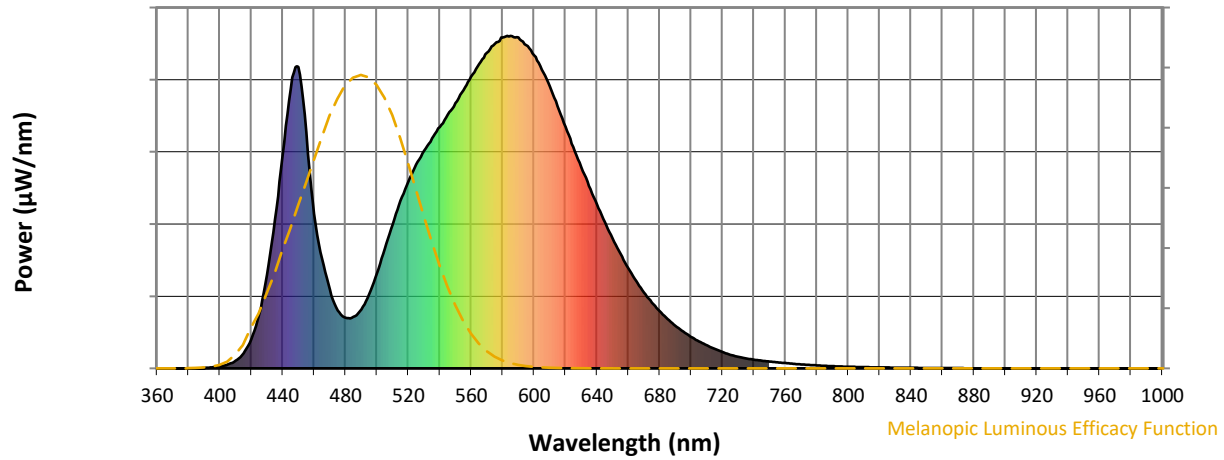
**Scotopic Lumens: NR**

**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			

REPORT NUMBER: SP1-2407-176-9

**Melanopic Flux vs. Wavelength**



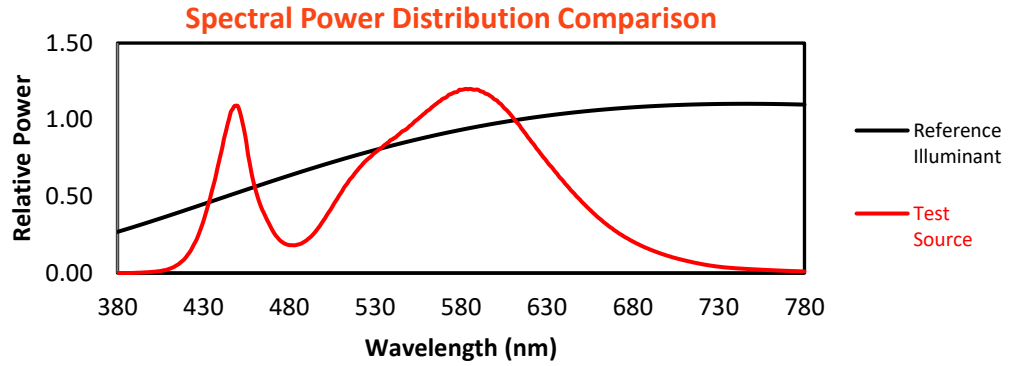
**Melanopic Lumens: NR**

**M/P: 2.89**

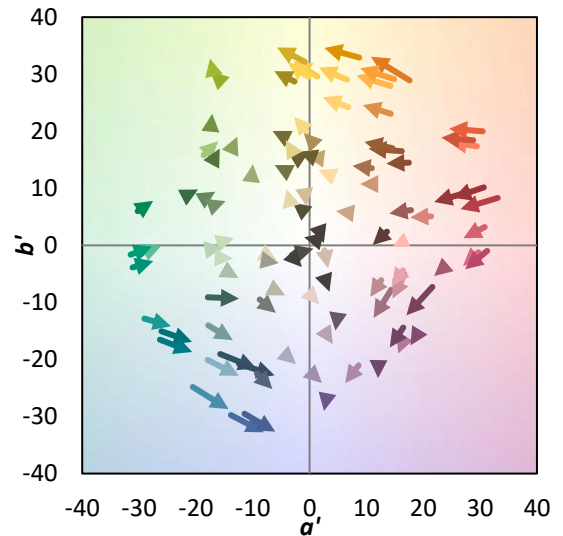
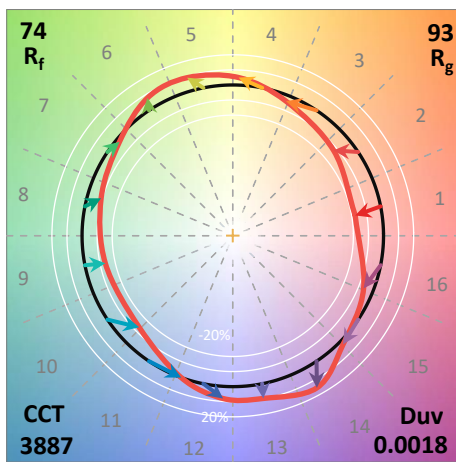
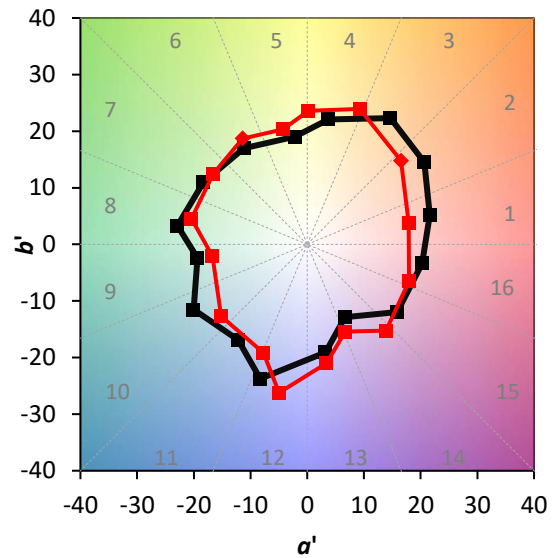
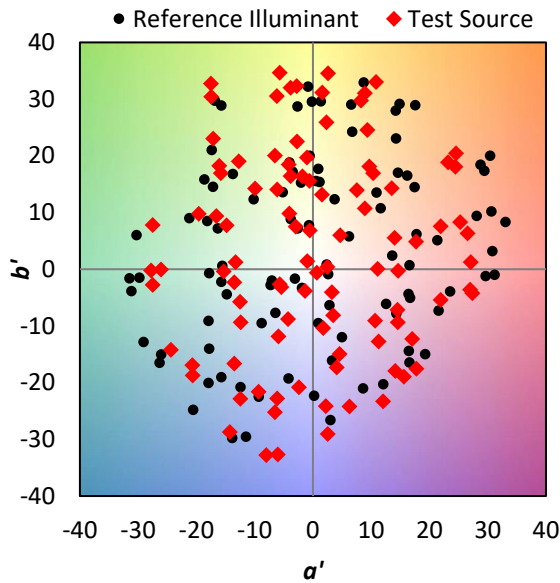
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	177	NR	620	727	NR	750	21	NR	880	0	NR
365	0	NR	495	222	NR	625	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  $R_a = 71.4$   
 $R_g = -36.8$



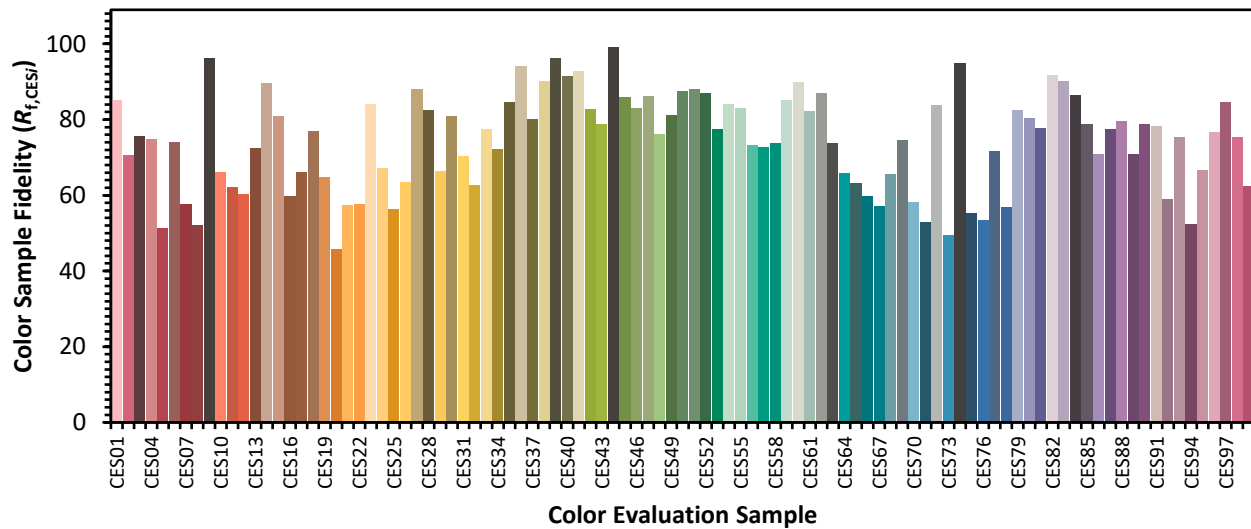
**Color Vector Graphics**



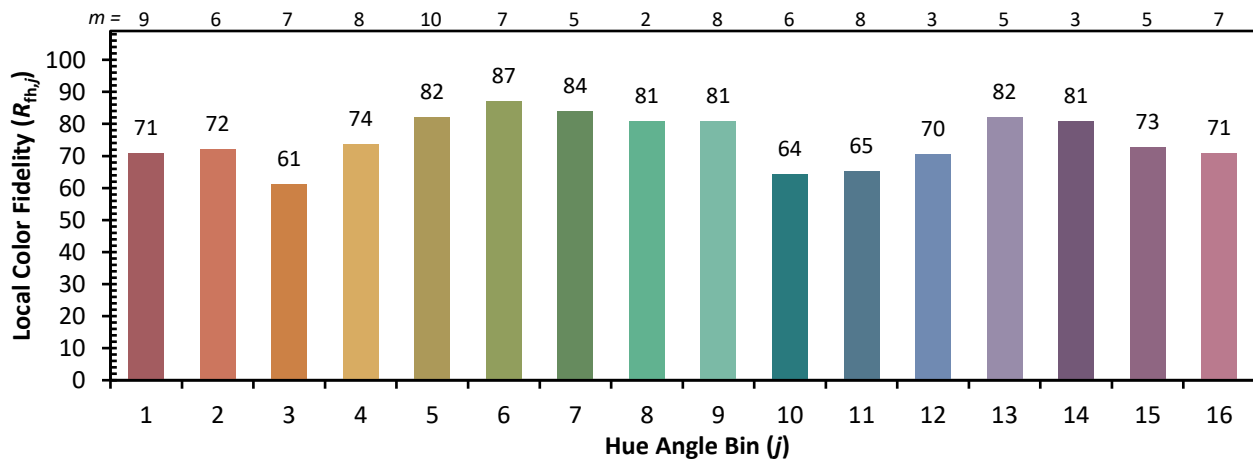
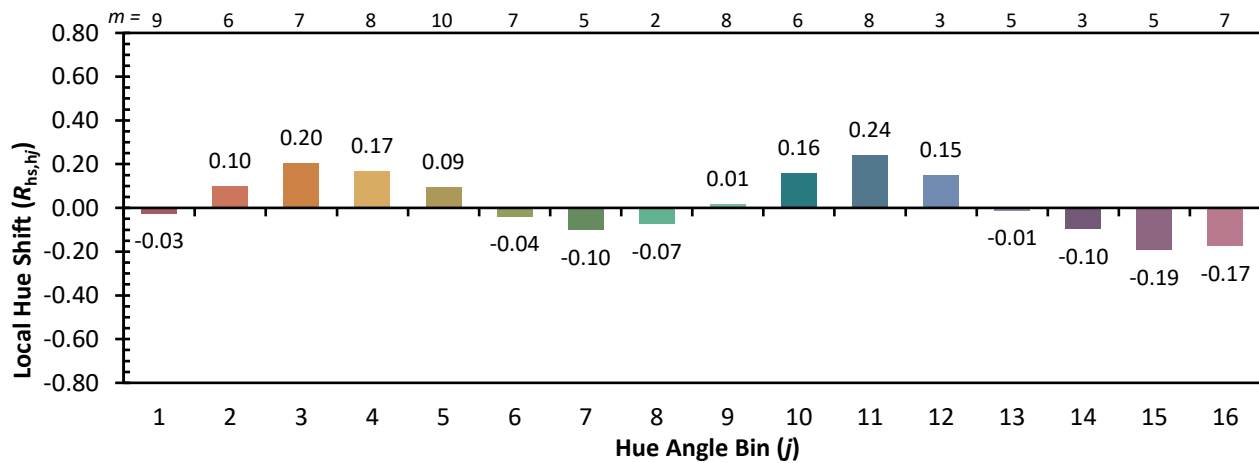
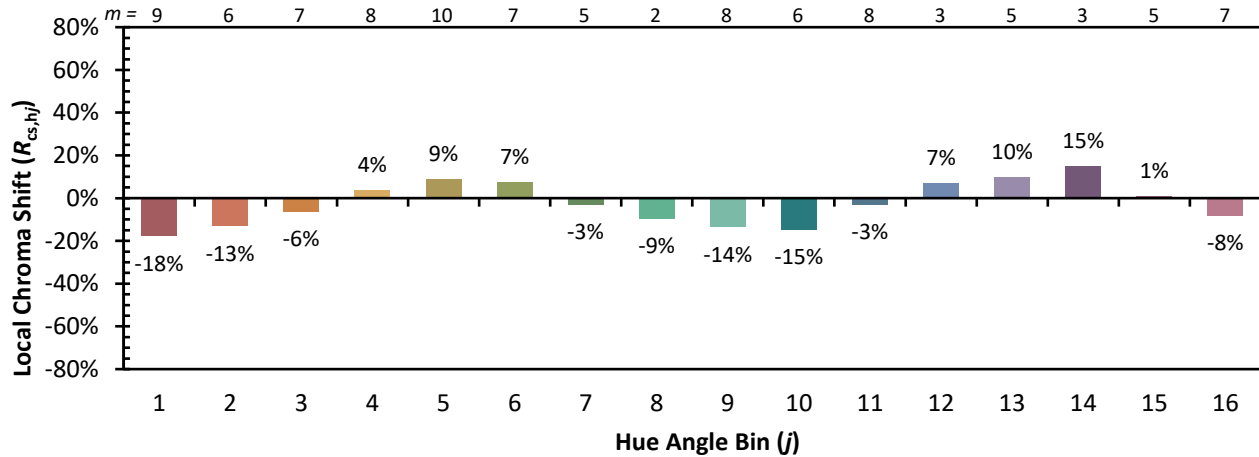


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

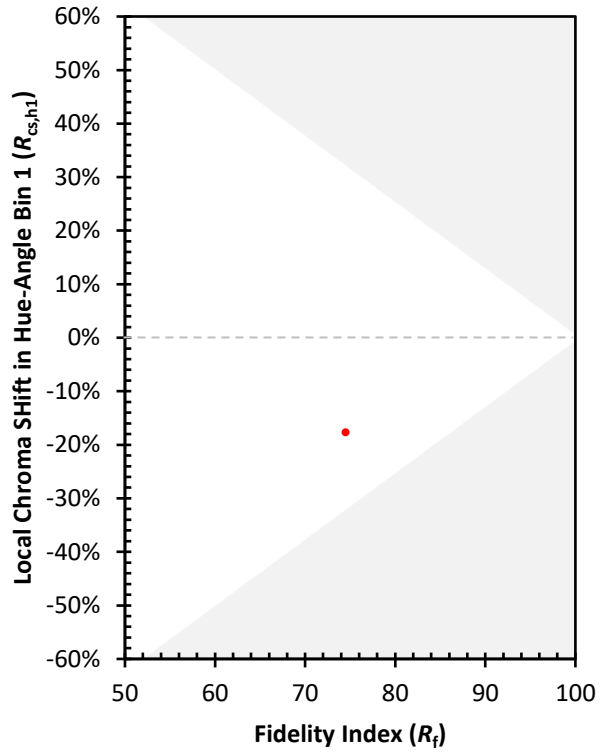
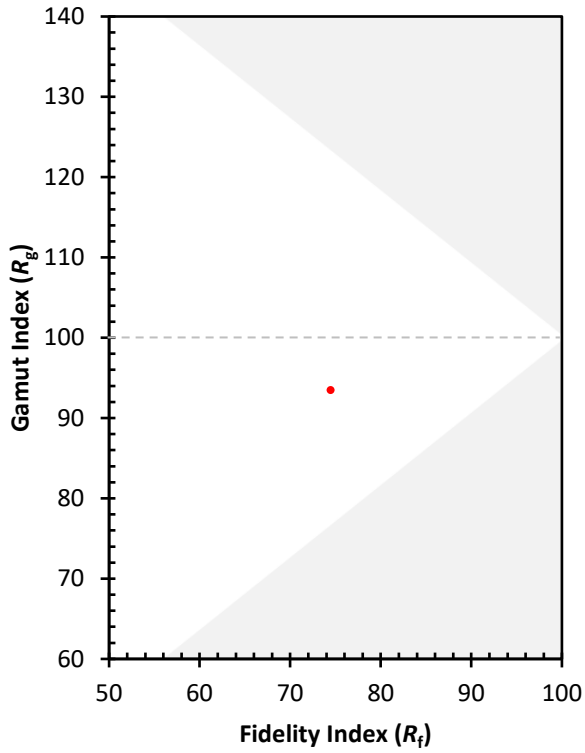
CES01 = 85	CES26 = 63	CES51 = 88	CES76 = 54
CES02 = 61	CES27 = 88	CES52 = 87	CES77 = 72
CES03 = 30	CES28 = 82	CES53 = 77	CES78 = 57
CES04 = 70	CES29 = 66	CES54 = 84	CES79 = 83
CES05 = 47	CES30 = 81	CES55 = 83	CES80 = 80
CES06 = 50	CES31 = 70	CES56 = 73	CES81 = 78
CES07 = 40	CES32 = 63	CES57 = 73	CES82 = 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)