

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: P868919

Luminaire Tested: **EMM2-HSN-SA3A-730-U-T2U-HSS**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868919  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA3A-730-U-T2U-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 130W 70CRI 3000K  
FIXTURE w/ TYPE II URBAN DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (30) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

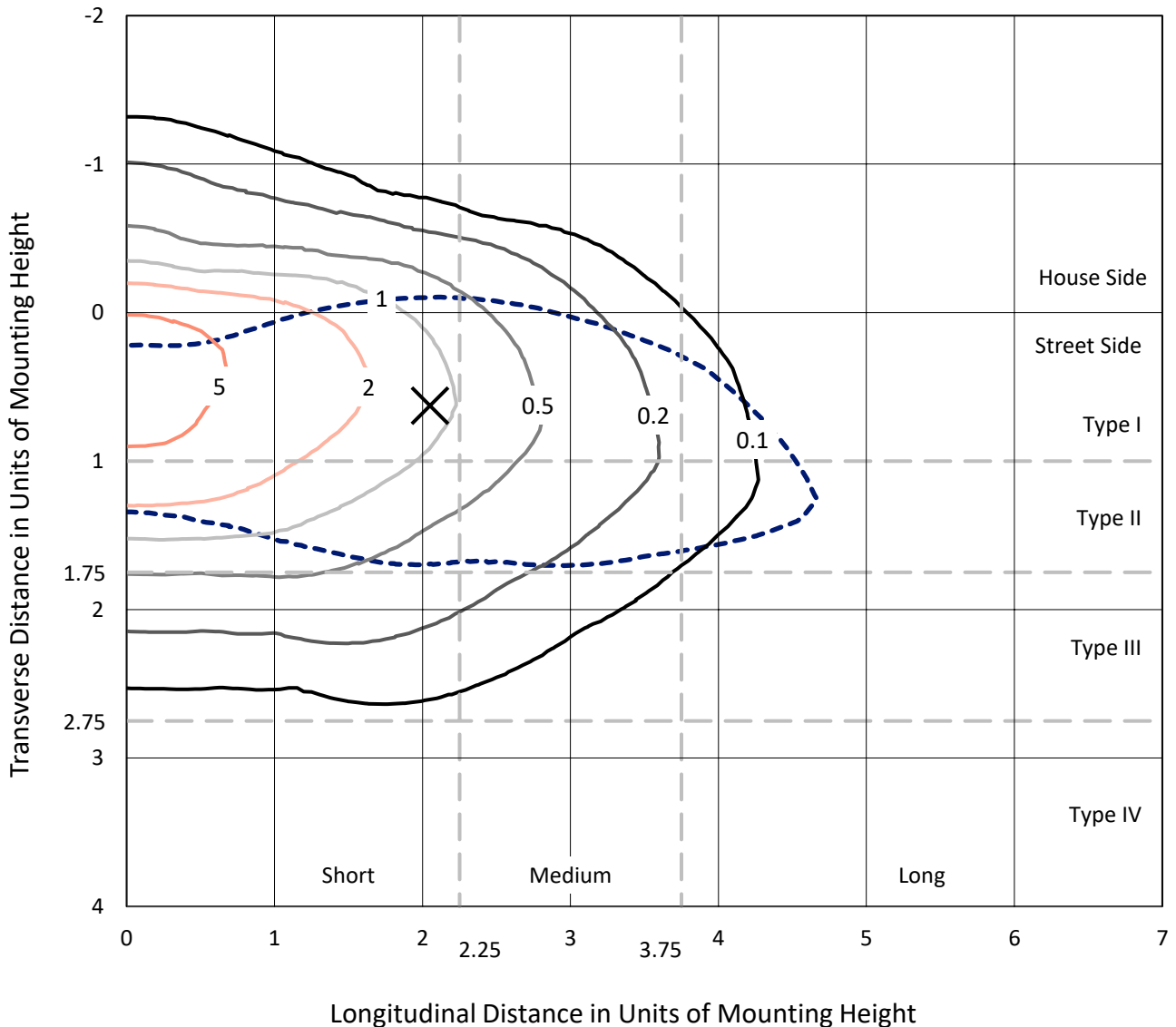
Lumens per Lamp: N/A  
Luminaire Lumens: 10788.4 lumens  
Efficiency: N/A  
Efficacy: 95.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 113  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 7.77%  
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

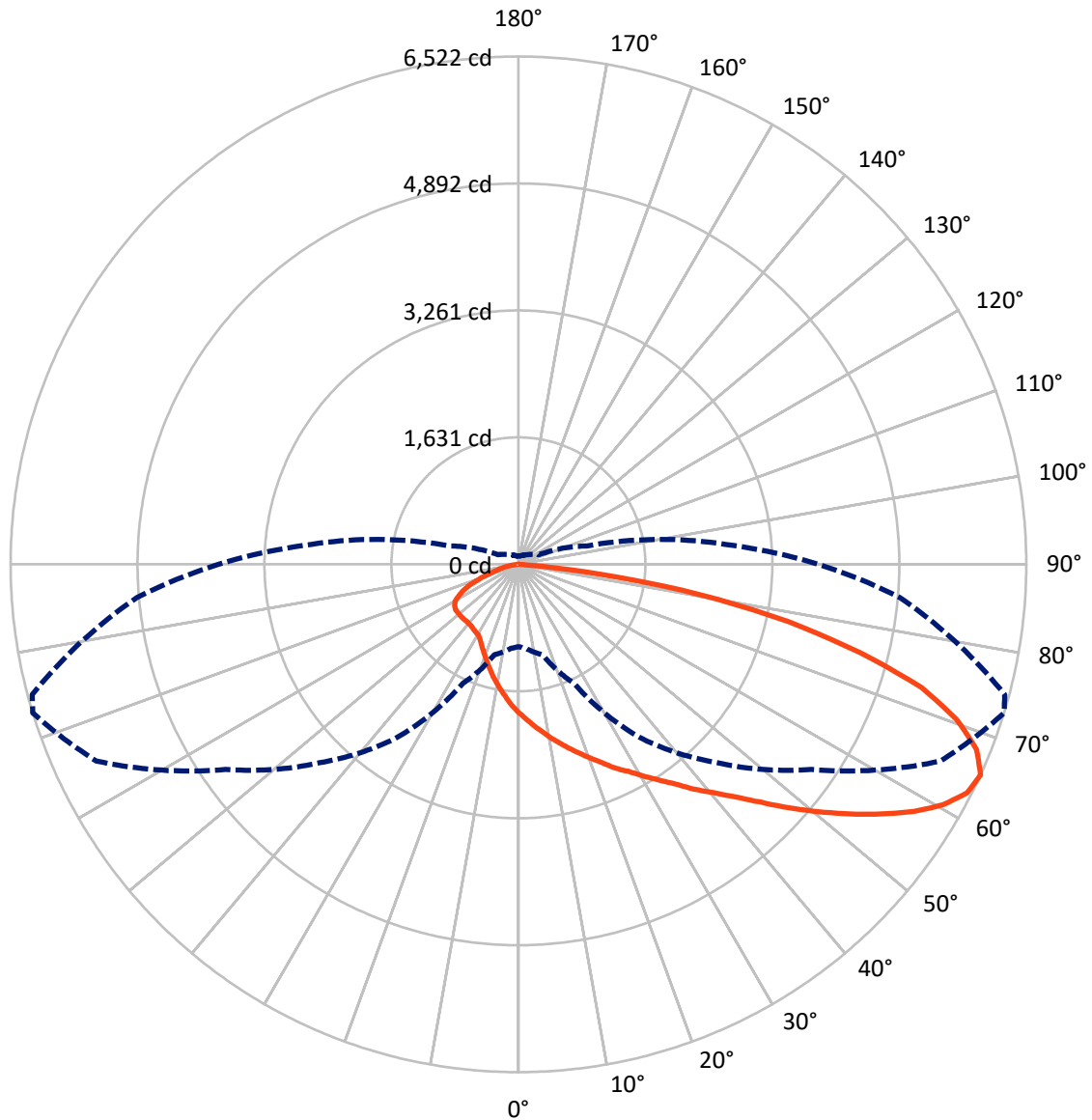
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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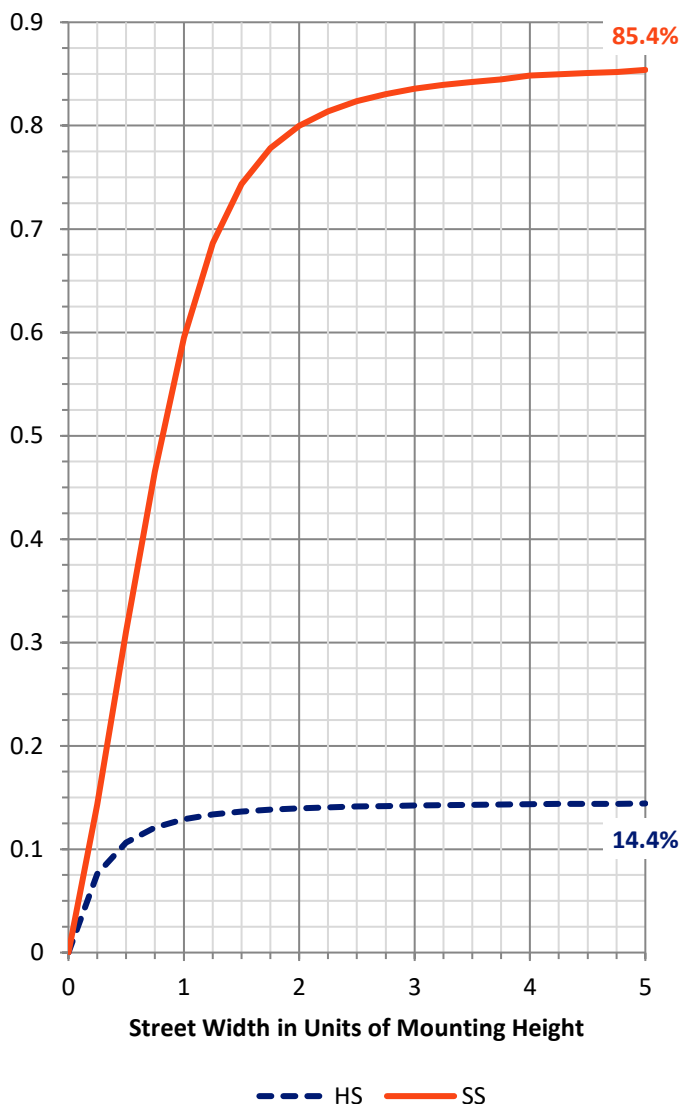
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1568.8	0.0	1568.8
	% Fixture	14.5	0.0	14.5
<b>Street Side</b>	Lumens	9219.6	0.0	9219.6
	% Fixture	85.5	0.0	85.5
<b>Total</b>	Lumens	10788.4	0.0	10788.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.7	1.7
10°-20°	561.5	5.2
20°-30°	940.3	8.7
30°-40°	1418.4	13.1
40°-50°	2004.2	18.6
50°-60°	2255.1	20.9
60°-70°	2022.2	18.7
70°-80°	1229.9	11.4
80°-90°	172.1	1.6
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°	10788.4	100.0
0°-180°	10788.4	100.0

**Coefficient of Utilization**



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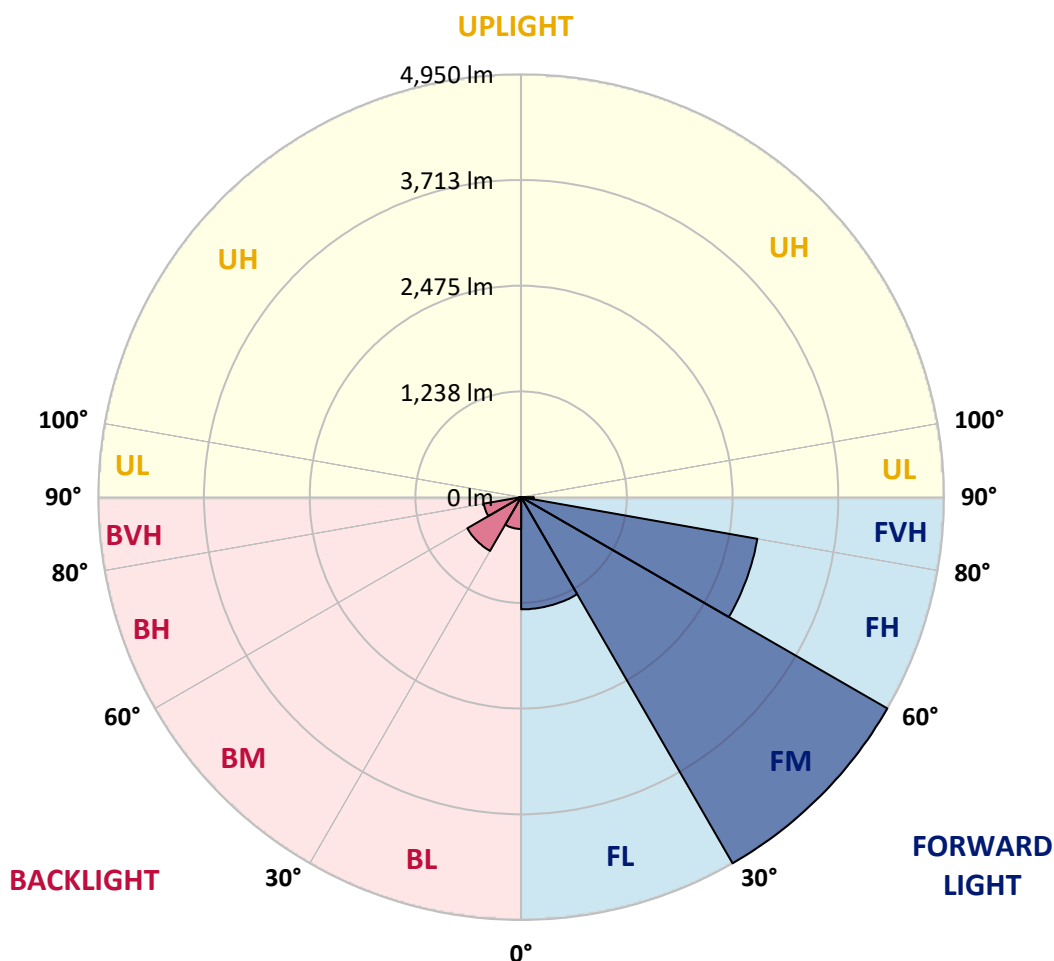
CATALOG NUMBER: EMM2-HSN-SA3A-730-U-T2U-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1313.8	12.2			
FM (30°-60°)	4950.2	45.9			
FH (60°-80°)	2807.8	26.0			G2/5000
FVH (80°-90°)	147.8	1.4			G2/225
BL (0°-30°)	372.7	3.5	B1/500		
BM (30°-60°)	727.5	6.7	B1/1000		
BH (60°-80°)	444.4	4.1	B1/500		G1/500
BVH (80°-90°)	24.3	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9
2.5°	2209.1	2196.4	2177.3	2161.5	2132.9	2094.8	2063.1	2021.8	1993.2	1983.7	1942.5
5°	2529.6	2513.8	2491.5	2453.5	2377.3	2332.8	2250.3	2155.1	2078.9	2063.1	1967.8
7.5°	2859.7	2853.4	2802.6	2745.5	2653.4	2555.0	2428.1	2278.9	2167.8	2142.4	1996.4
10°	3139.0	3110.5	3081.9	3027.9	2929.5	2789.9	2624.8	2418.5	2263.0	2221.8	2025.0
12.5°	3307.2	3297.7	3272.3	3208.9	3113.6	2993.0	2796.2	2555.0	2355.1	2297.9	2053.5
15°	3431.0	3440.5	3415.2	3373.9	3275.5	3161.2	2970.8	2697.8	2453.5	2386.8	2085.3
17.5°	3548.5	3542.1	3538.9	3491.3	3402.5	3288.2	3094.6	2815.3	2551.8	2478.8	2117.0
20°	3615.1	3618.3	3611.9	3592.9	3507.2	3396.1	3215.2	2954.9	2659.8	2577.2	2158.3
22.5°	3650.0	3662.7	3675.4	3672.2	3602.4	3516.7	3329.5	3066.0	2770.8	2685.2	2209.1
25°	3672.2	3681.8	3710.3	3748.4	3684.9	3615.1	3456.4	3199.3	2901.0	2802.6	2269.4
27.5°	3691.3	3704.0	3738.9	3796.0	3745.2	3704.0	3567.5	3313.6	3012.1	2923.2	2339.2
30°	3815.1	3830.9	3830.9	3859.5	3802.4	3792.9	3691.3	3450.1	3151.7	3056.5	2428.1
32.5°	4142.0	4110.3	4053.1	4024.6	3888.1	3891.2	3811.9	3586.6	3300.9	3205.7	2539.2
35°	4424.5	4424.5	4354.6	4262.6	4043.6	3999.2	3951.6	3767.5	3462.8	3370.7	2685.2
37.5°	4697.4	4700.6	4627.6	4548.3	4297.5	4138.8	4113.4	3942.0	3662.7	3554.8	2837.5
40°	4868.8	4887.9	4868.8	4808.5	4567.3	4383.2	4272.1	4138.8	3853.2	3770.6	3012.1
42.5°	4897.4	4935.5	5005.3	5024.3	4764.1	4602.2	4475.3	4341.9	4081.7	3989.6	3212.0
45°	4824.4	4837.1	4992.6	5014.8	4910.1	4776.8	4691.1	4580.0	4354.6	4275.3	3434.2
47.5°	4624.4	4599.0	4653.0	4846.6	4887.9	4881.5	4903.7	4849.8	4672.0	4570.5	3678.6
50°	4195.9	4205.5	4380.0	4614.9	4757.7	4919.6	5062.4	5122.7	4992.6	4891.0	3942.0
52.5°	3415.2	3459.6	3792.9	4348.3	4595.9	4894.2	5176.7	5379.8	5325.9	5227.5	4202.3
55°	2805.8	2872.4	3205.7	3919.8	4373.7	4770.4	5243.3	5649.6	5659.1	5583.0	4440.3
57.5°	2196.4	2250.3	2602.6	3256.5	4056.3	4576.8	5252.9	5881.3	5989.2	5900.4	4649.8
60°	1720.3	1758.4	1964.7	2713.7	3665.9	4300.7	5183.0	6065.4	6268.5	6201.9	4830.7
62.5°	1304.5	1333.1	1517.1	2145.6	3186.6	3976.9	4948.2	6132.1	6465.3	6401.8	4932.3
65°	1056.9	1082.3	1202.9	1685.4	2713.7	3602.4	4592.7	5979.7	6522.4	6465.3	4919.6
67.5°	863.3	872.8	971.2	1314.0	2294.8	3180.3	4072.2	5583.0	6347.9	6344.7	4773.6
70°	698.3	723.7	806.2	1047.4	1907.5	2694.7	3465.9	4960.9	5970.2	6001.9	4481.6
72.5°	593.5	599.9	672.9	866.5	1555.2	2186.8	2869.2	4243.6	5414.7	5440.1	4024.6
75°	501.5	511.0	565.0	701.4	1263.2	1736.1	2307.5	3427.9	4532.4	4640.3	3389.8
77.5°	431.7	434.8	472.9	577.7	898.2	1304.5	1691.7	2570.9	3548.5	3624.6	2662.9
80°	339.6	346.0	387.2	457.0	625.3	847.4	1168.0	1758.4	2370.9	2456.6	1844.1
82.5°	158.7	177.7	187.3	250.7	326.9	419.0	552.3	733.2	1072.8	1069.6	860.1
85°	15.9	12.7	12.7	19.0	28.6	28.6	34.9	41.3	82.5	98.4	76.2
87.5°	0.0	0.0	0.0	3.2	6.3	6.3	6.3	9.5	9.5	9.5	9.5
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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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9
2.5°	1923.4	1894.8	1844.1	1796.4	1764.7	1739.3	1698.1	1672.7	1653.6	1628.2	1625.1
5°	1917.1	1866.3	1764.7	1679.0	1596.5	1526.7	1453.7	1409.2	1361.6	1339.4	1358.4
7.5°	1923.4	1840.9	1682.2	1552.1	1428.3	1317.2	1222.0	1161.7	1117.2	1095.0	1098.2
10°	1926.6	1818.7	1612.4	1431.4	1272.7	1142.6	1034.7	952.2	898.2	885.5	869.7
12.5°	1920.2	1790.1	1542.5	1314.0	1123.6	980.7	853.8	790.3	736.4	711.0	711.0
15°	1926.6	1767.9	1469.5	1206.1	990.3	825.2	717.3	647.5	615.7	593.5	596.7
17.5°	1926.6	1748.8	1399.7	1101.4	860.1	707.8	609.4	552.3	520.5	507.8	504.7
20°	1948.8	1733.0	1333.1	1003.0	745.9	603.0	523.7	479.3	453.9	441.2	434.8
22.5°	1964.7	1720.3	1272.7	907.7	650.7	526.9	460.2	419.0	399.9	393.6	393.6
25°	1993.2	1717.1	1218.8	815.7	574.5	469.7	409.4	377.7	361.8	355.5	355.5
27.5°	2034.5	1723.4	1168.0	736.4	517.4	412.6	368.2	342.8	333.3	330.1	326.9
30°	2094.8	1752.0	1136.3	676.0	463.4	377.7	336.4	320.6	314.2	311.0	311.0
32.5°	2174.1	1802.8	1123.6	644.3	431.7	349.1	314.2	301.5	295.2	295.2	292.0
35°	2272.5	1859.9	1114.1	615.7	409.4	330.1	298.4	285.7	282.5	282.5	282.5
37.5°	2390.0	1920.2	1098.2	596.7	396.7	314.2	285.7	273.0	273.0	273.0	273.0
40°	2520.1	2009.1	1095.0	584.0	387.2	304.7	273.0	260.3	260.3	260.3	260.3
42.5°	2666.1	2104.3	1091.8	574.5	380.9	298.4	260.3	247.6	247.6	247.6	247.6
45°	2843.8	2224.9	1098.2	568.1	380.9	292.0	250.7	234.9	231.7	231.7	231.7
47.5°	3018.4	2339.2	1104.5	561.8	374.5	282.5	238.0	222.2	219.0	215.8	215.8
50°	3205.7	2456.6	1104.5	555.4	368.2	273.0	228.5	206.3	203.1	200.0	200.0
52.5°	3389.8	2555.0	1107.7	545.9	352.3	257.1	212.7	193.6	187.3	184.1	180.9
55°	3567.5	2659.8	1110.9	530.0	333.3	241.2	203.1	180.9	171.4	165.0	165.0
57.5°	3700.8	2745.5	1095.0	498.3	307.9	225.3	187.3	165.0	152.3	146.0	146.0
60°	3827.8	2799.4	1066.4	450.7	282.5	209.5	174.6	149.2	136.5	130.1	130.1
62.5°	3878.6	2808.9	999.8	368.2	250.7	193.6	158.7	136.5	127.0	123.8	123.8
65°	3850.0	2767.7	910.9	292.0	222.2	174.6	146.0	127.0	114.3	104.7	104.7
67.5°	3694.5	2624.8	790.3	231.7	193.6	158.7	133.3	114.3	101.6	92.0	92.0
70°	3399.3	2396.3	615.7	184.1	168.2	139.7	120.6	104.7	92.0	82.5	82.5
72.5°	2964.5	2078.9	447.5	155.5	146.0	123.8	107.9	95.2	82.5	76.2	76.2
75°	2443.9	1602.8	317.4	133.3	130.1	111.1	98.4	85.7	76.2	69.8	69.8
77.5°	1834.5	1117.2	247.6	117.4	114.3	101.6	88.9	79.3	69.8	66.7	63.5
80°	1222.0	691.9	187.3	88.9	85.7	79.3	73.0	66.7	57.1	50.8	50.8
82.5°	545.9	292.0	95.2	50.8	44.4	38.1	31.7	22.2	22.2	19.0	19.0
85°	57.1	38.1	19.0	12.7	12.7	9.5	9.5	9.5	6.3	6.3	6.3
87.5°	9.5	9.5	6.3	6.3	6.3	3.2	3.2	3.2	3.2	3.2	3.2
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: SP1-2407-157-4

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-40-730-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-40-730-U-5WQ-2

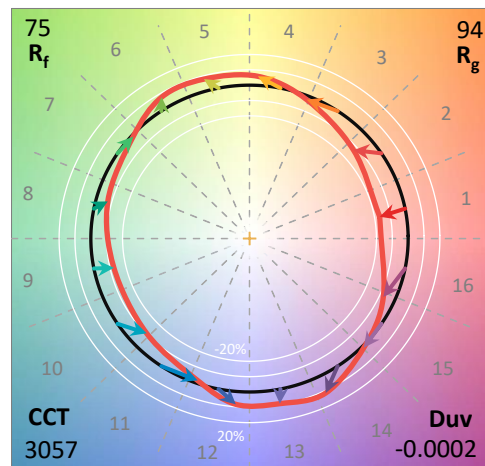
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-4  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 08/20/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Streetworks  
 Catalog Number: **MEM2-HTN-SA-40-730-U-5WQ-2**  
 Description: Epic Modern Light Square 40W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 3057  
 CIE u': 0.2487  
 CIE v': 0.5199  
 Duv: -0.0002  
 CIE x: 0.4326  
 CIE y: 0.4020  
 CIE z: 0.1654  
 Peak Wavelength (nm): 593  
 Dominant Wavelength (nm): 582  
 Purity: 50.50735  
 Rf: 74.6  
 Rg: 94

CRI (Ra):	71.7		
R1:	68.1	R9:	-34.8
R2:	82.0	R10:	58.5
R3:	93.5	R11:	62.5
R4:	67.5	R12:	47.5
R5:	67.2	R13:	70.7
R6:	74.9	R14:	96.4
R7:	77.4	R15:	60.0
R8:	43.1		



**Test Conditions**

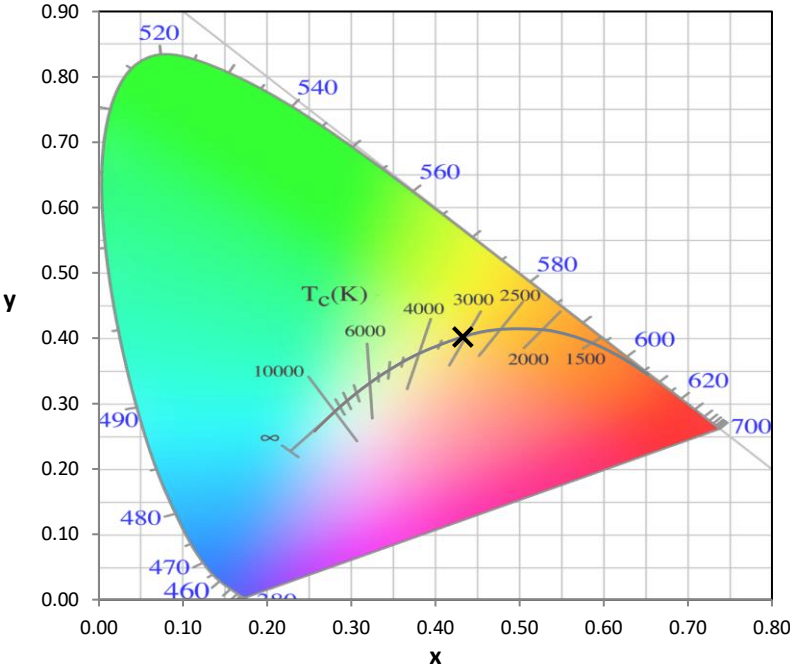
Stabilization Time: 21M  
 Operation Time: 1H 21M  
 Sphere Temperature (°C): 24.2

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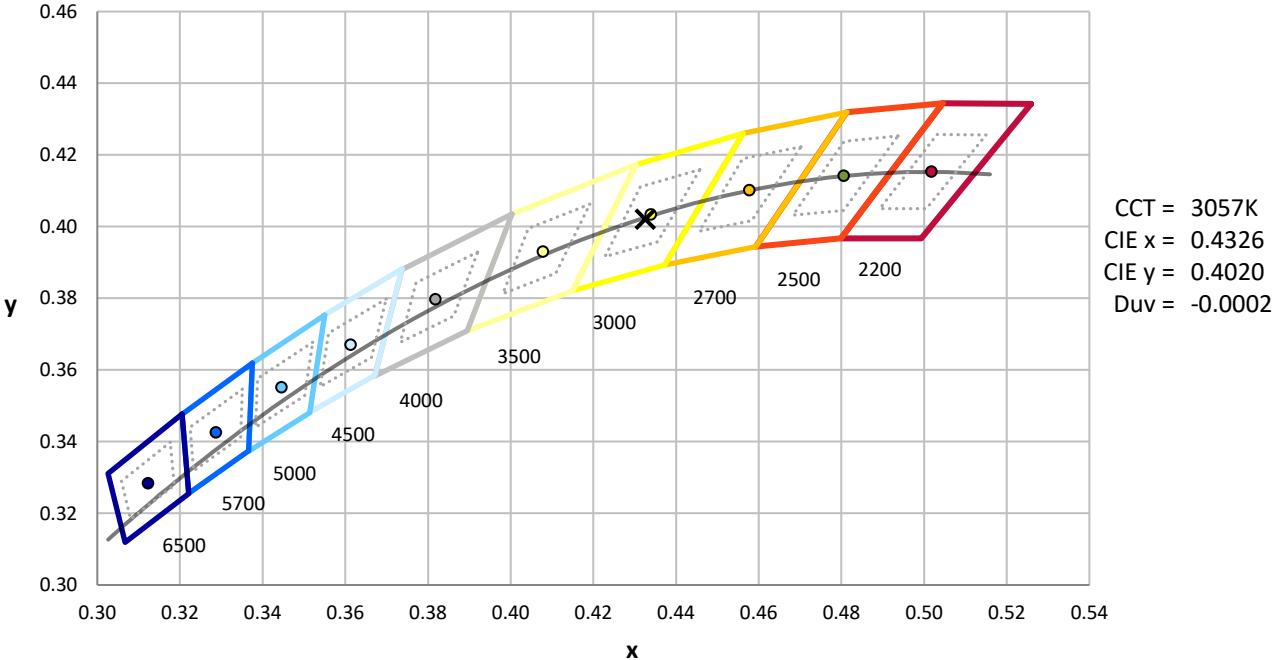
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

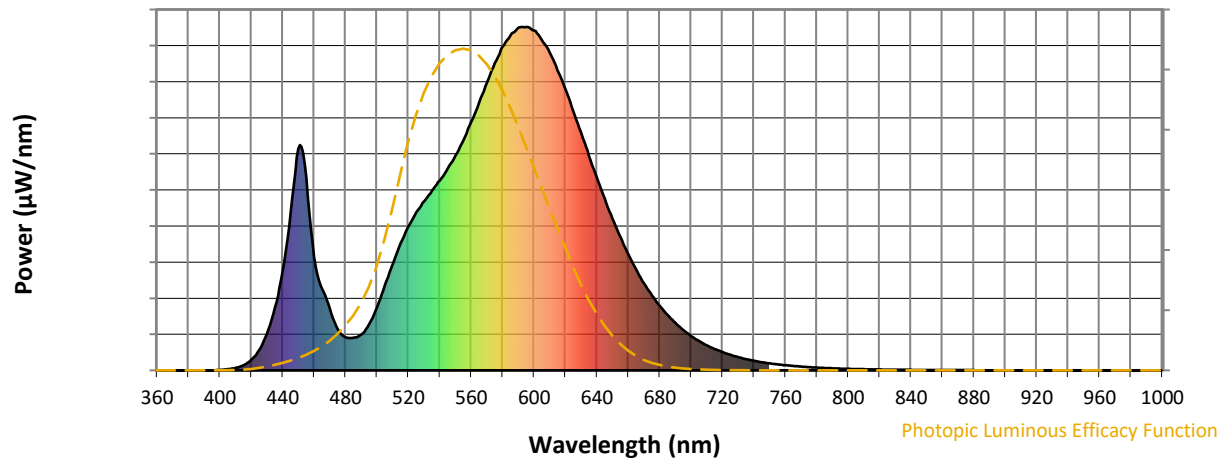


CCT = 3057K  
 CIE x = 0.4326  
 CIE y = 0.4020  
 Duv = -0.0002

Point lies inside the ANSI 3000K 4-step quadrangle

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**Photopic Flux vs. Wavelength**

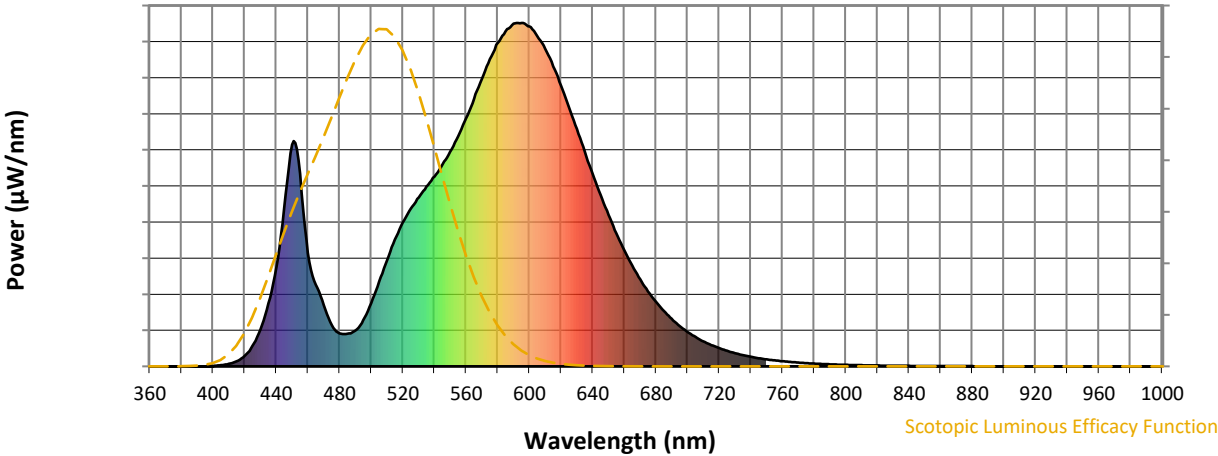


**Photopic Lumens: NR**

$\lambda$ (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	104	NR	620	818	NR	750	20	NR	880	1	NR
365	0	NR	495	135	NR	625	755	NR	755	17	NR	885	0	NR
370	0	NR	500	184	NR	630	691	NR	760	15	NR	890	0	NR
375	0	NR	505	247	NR	635	625	NR	765	13	NR	895	0	NR
380	0	NR	510	309	NR	640	561	NR	770	11	NR	900	0	NR
385	0	NR	515	369	NR	645	499	NR	775	9	NR	905	0	NR
390	0	NR	520	419	NR	650	441	NR	780	8	NR	910	0	NR
395	0	NR	525	460	NR	655	388	NR	785	7	NR	915	0	NR
400	1	NR	530	492	NR	660	338	NR	790	6	NR	920	0	NR
405	3	NR	535	524	NR	665	294	NR	795	5	NR	925	0	NR
410	7	NR	540	553	NR	670	253	NR	800	4	NR	930	0	NR
415	15	NR	545	588	NR	675	218	NR	805	4	NR	935	0	NR
420	31	NR	550	625	NR	680	188	NR	810	3	NR	940	0	NR
425	60	NR	555	670	NR	685	161	NR	815	3	NR	945	0	NR
430	107	NR	560	723	NR	690	139	NR	820	3	NR	950	0	NR
435	183	NR	565	780	NR	695	118	NR	825	2	NR	955	0	NR
440	289	NR	570	837	NR	700	100	NR	830	2	NR	960	0	NR
445	460	NR	575	894	NR	705	85	NR	835	2	NR	965	0	NR
450	646	NR	580	942	NR	710	73	NR	840	1	NR	970	0	NR
455	561	NR	585	976	NR	715	62	NR	845	1	NR	975	0	NR
460	331	NR	590	998	NR	720	53	NR	850	1	NR	980	0	NR
465	238	NR	595	1000	NR	725	45	NR	855	1	NR	985	0	NR
470	178	NR	600	990	NR	730	39	NR	860	1	NR	990	0	NR
475	120	NR	605	962	NR	735	33	NR	865	1	NR	995	0	NR
480	96	NR	610	925	NR	740	28	NR	870	1	NR	1000	0	NR
485	95	NR	615	873	NR	745	24	NR	875	1	NR			

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Scotopic Flux vs. Wavelength



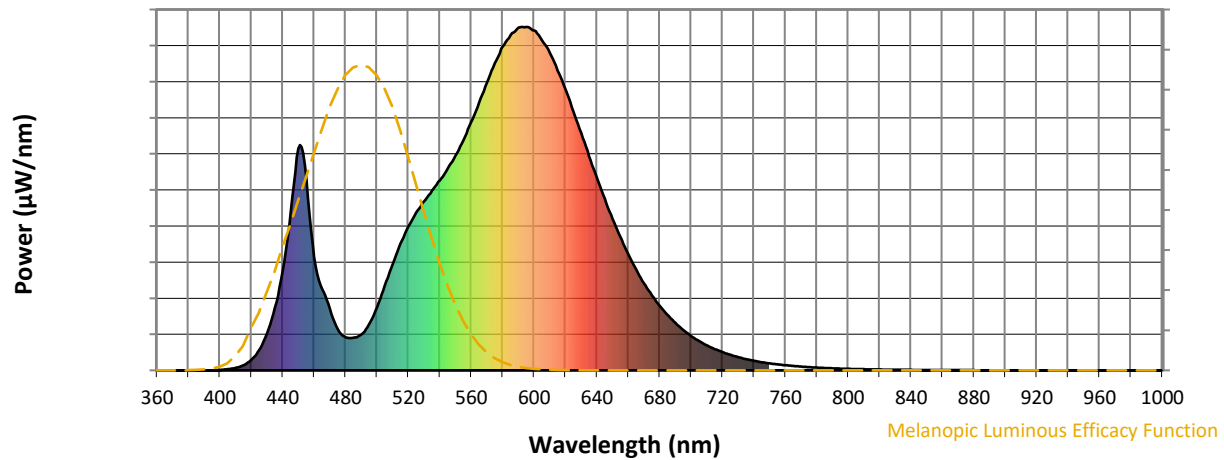
Scotopic Lumens: NR

S/P: 1.23

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	104	NR	620	818	NR	750	20	NR	880	1	NR
365	0	NR	495	135	NR	625	755	NR	755	17	NR	885	0	NR
370	0	NR	500	184	NR	630	691	NR	760	15	NR	890	0	NR
375	0	NR	505	247	NR	635	625	NR	765	13	NR	895	0	NR
380	0	NR	510	309	NR	640	561	NR	770	11	NR	900	0	NR
385	0	NR	515	369	NR	645	499	NR	775	9	NR	905	0	NR
390	0	NR	520	419	NR	650	441	NR	780	8	NR	910	0	NR
395	0	NR	525	460	NR	655	388	NR	785	7	NR	915	0	NR
400	1	NR	530	492	NR	660	338	NR	790	6	NR	920	0	NR
405	3	NR	535	524	NR	665	294	NR	795	5	NR	925	0	NR
410	7	NR	540	553	NR	670	253	NR	800	4	NR	930	0	NR
415	15	NR	545	588	NR	675	218	NR	805	4	NR	935	0	NR
420	31	NR	550	625	NR	680	188	NR	810	3	NR	940	0	NR
425	60	NR	555	670	NR	685	161	NR	815	3	NR	945	0	NR
430	107	NR	560	723	NR	690	139	NR	820	3	NR	950	0	NR
435	183	NR	565	780	NR	695	118	NR	825	2	NR	955	0	NR
440	289	NR	570	837	NR	700	100	NR	830	2	NR	960	0	NR
445	460	NR	575	894	NR	705	85	NR	835	2	NR	965	0	NR
450	646	NR	580	942	NR	710	73	NR	840	1	NR	970	0	NR
455	561	NR	585	976	NR	715	62	NR	845	1	NR	975	0	NR
460	331	NR	590	998	NR	720	53	NR	850	1	NR	980	0	NR
465	238	NR	595	1000	NR	725	45	NR	855	1	NR	985	0	NR
470	178	NR	600	990	NR	730	39	NR	860	1	NR	990	0	NR
475	120	NR	605	962	NR	735	33	NR	865	1	NR	995	0	NR
480	96	NR	610	925	NR	740	28	NR	870	1	NR	1000	0	NR
485	95	NR	615	873	NR	745	24	NR	875	1	NR			

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**Melanopic Flux vs. Wavelength**



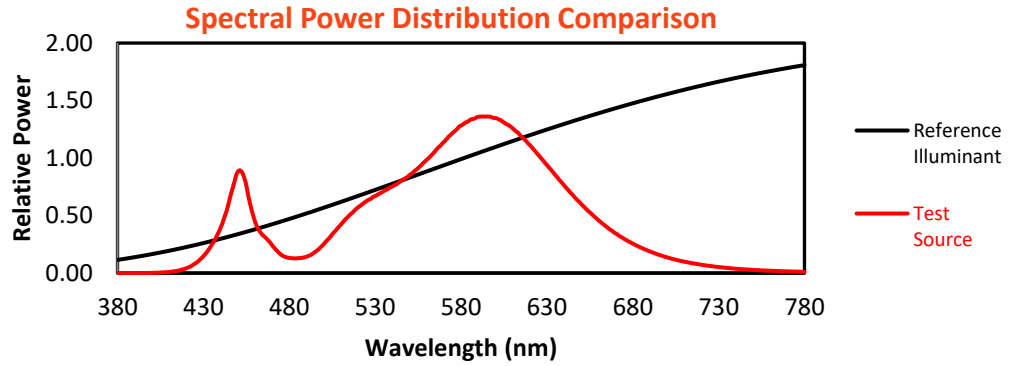
**Melanopic Lumens: NR**

**M/P: 2.27**

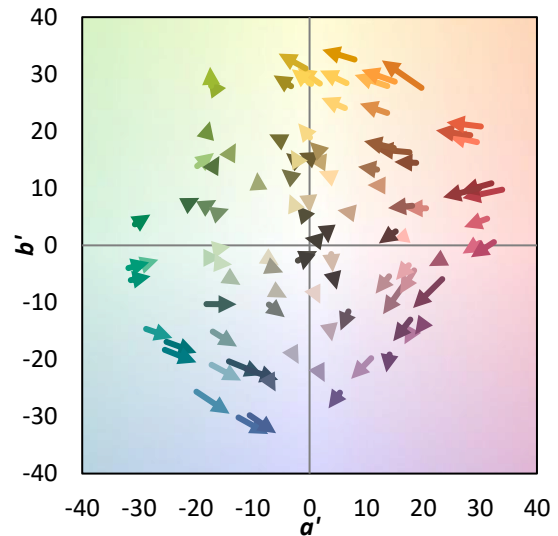
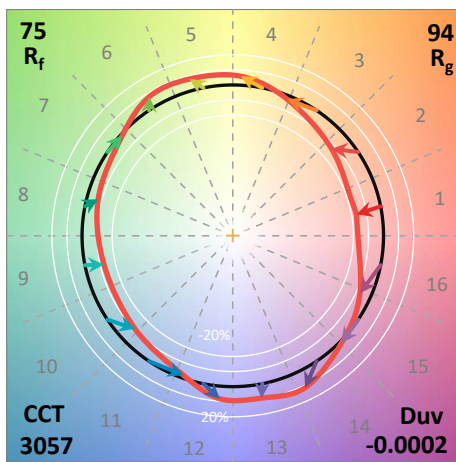
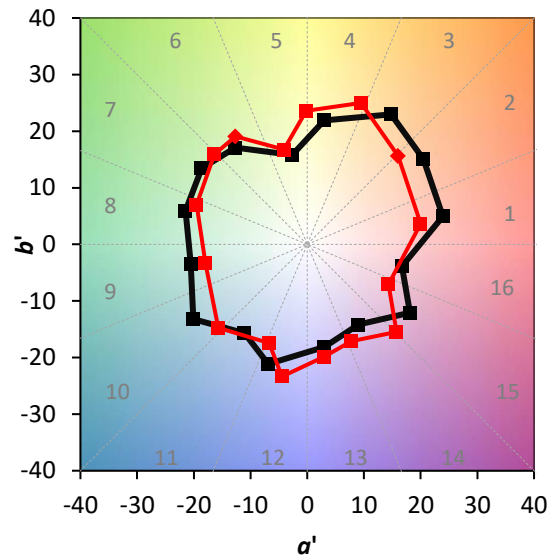
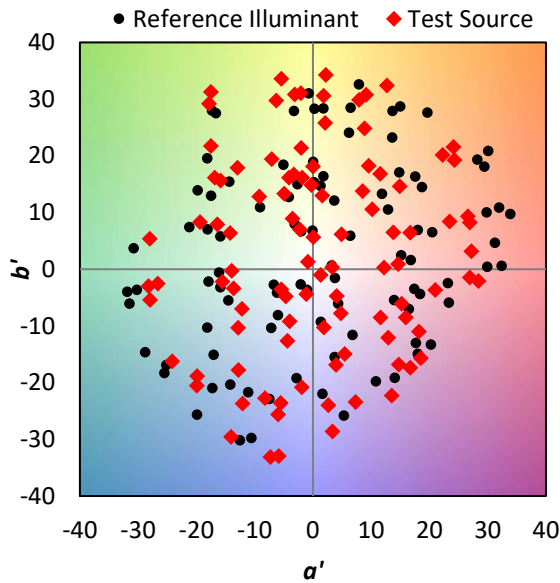
$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)
360	0	NR	490	104	NR	620	818	NR	750	20	NR	880	1	NR
365	0	NR	495	135	NR	625	755	NR	755	17	NR	885	0	NR
370	0	NR	500	184	NR	630	691	NR	760	15	NR	890	0	NR
375	0	NR	505	247	NR	635	625	NR	765	13	NR	895	0	NR
380	0	NR	510	309	NR	640	561	NR	770	11	NR	900	0	NR
385	0	NR	515	369	NR	645	499	NR	775	9	NR	905	0	NR
390	0	NR	520	419	NR	650	441	NR	780	8	NR	910	0	NR
395	0	NR	525	460	NR	655	388	NR	785	7	NR	915	0	NR
400	1	NR	530	492	NR	660	338	NR	790	6	NR	920	0	NR
405	3	NR	535	524	NR	665	294	NR	795	5	NR	925	0	NR
410	7	NR	540	553	NR	670	253	NR	800	4	NR	930	0	NR
415	15	NR	545	588	NR	675	218	NR	805	4	NR	935	0	NR
420	31	NR	550	625	NR	680	188	NR	810	3	NR	940	0	NR
425	60	NR	555	670	NR	685	161	NR	815	3	NR	945	0	NR
430	107	NR	560	723	NR	690	139	NR	820	3	NR	950	0	NR
435	183	NR	565	780	NR	695	118	NR	825	2	NR	955	0	NR
440	289	NR	570	837	NR	700	100	NR	830	2	NR	960	0	NR
445	460	NR	575	894	NR	705	85	NR	835	2	NR	965	0	NR
450	646	NR	580	942	NR	710	73	NR	840	1	NR	970	0	NR
455	561	NR	585	976	NR	715	62	NR	845	1	NR	975	0	NR
460	331	NR	590	998	NR	720	53	NR	850	1	NR	980	0	NR
465	238	NR	595	1000	NR	725	45	NR	855	1	NR	985	0	NR
470	178	NR	600	990	NR	730	39	NR	860	1	NR	990	0	NR
475	120	NR	605	962	NR	735	33	NR	865	1	NR	995	0	NR
480	96	NR	610	925	NR	740	28	NR	870	1	NR	1000	0	NR
485	95	NR	615	873	NR	745	24	NR	875	1	NR			

**Summary**

$R_f = 74.6$   
 $R_g = 94$   
 $CIE R_a = 71.7$   
 $R_9 = -34.8$



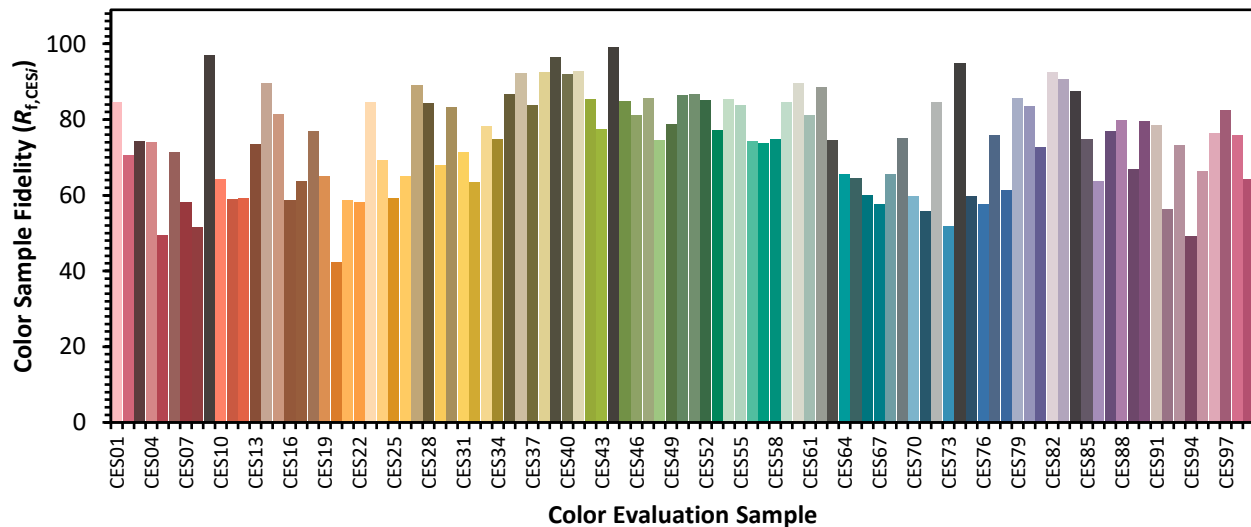
**Color Vector Graphics**



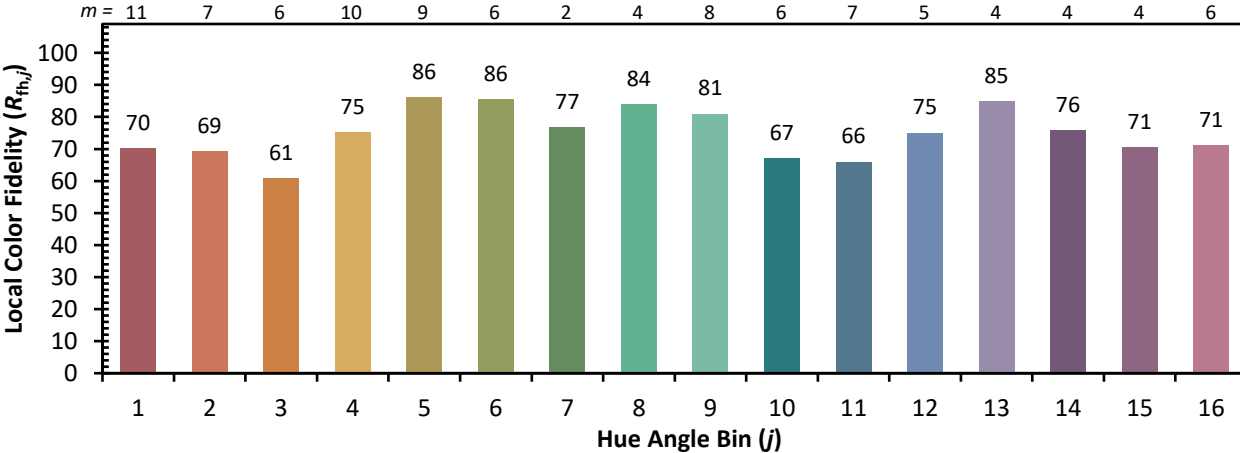
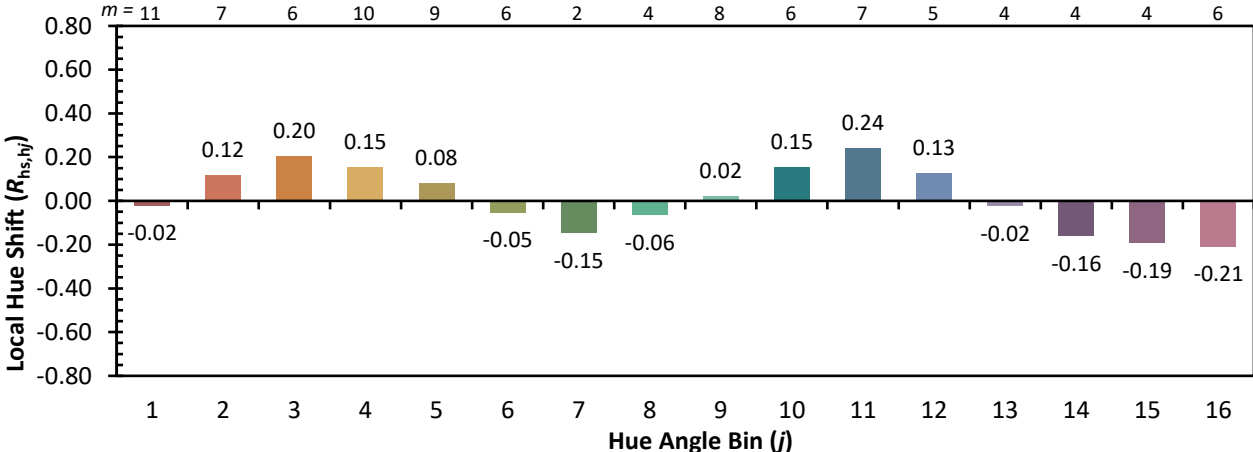
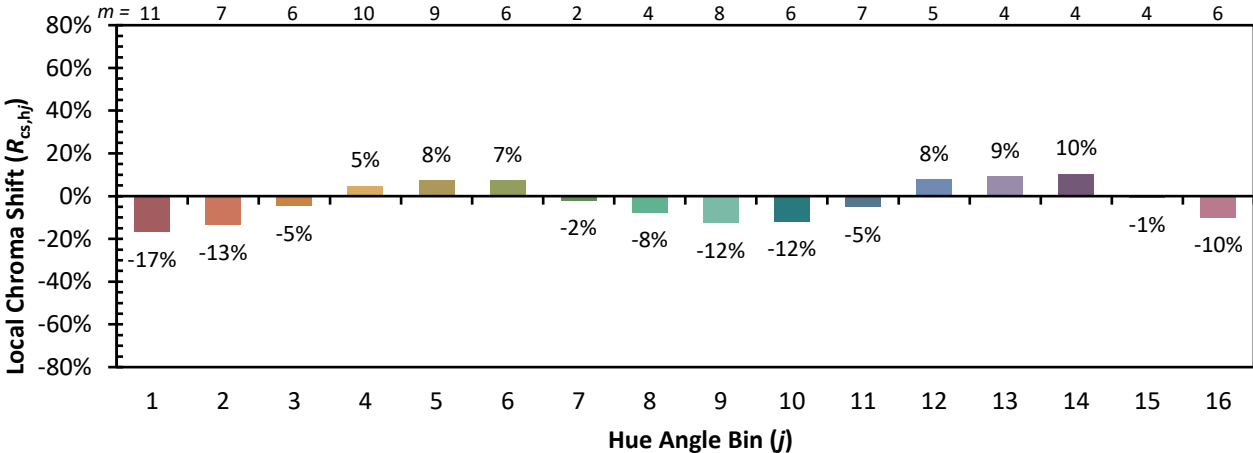


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

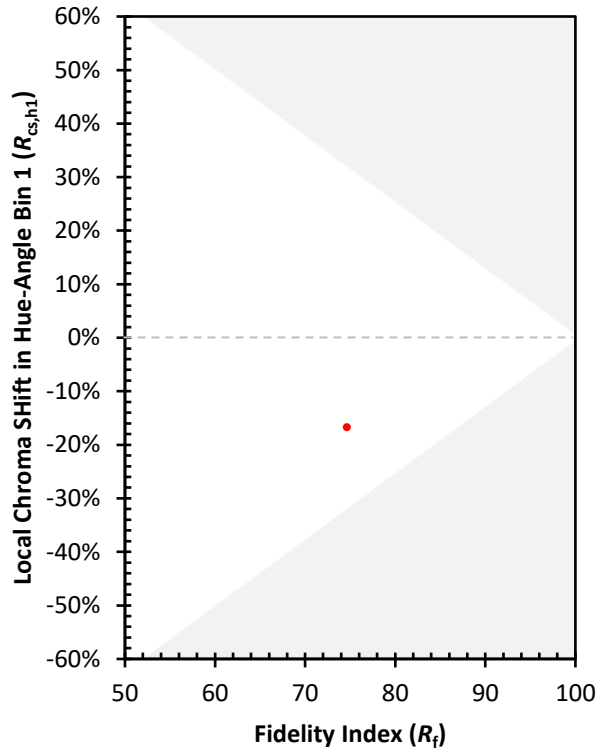
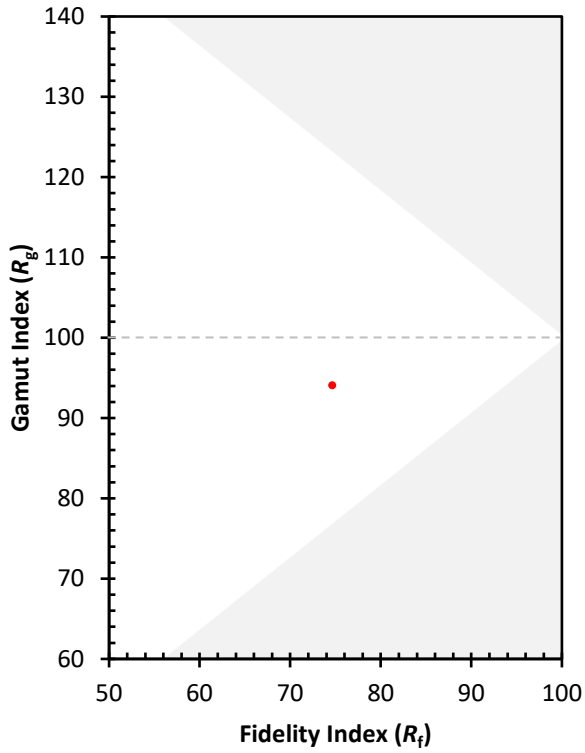
CES01 = 86	CES26 = 65	CES51 = 87	CES76 = 58
CES02 = 62	CES27 = 89	CES52 = 85	CES77 = 76
CES03 = 31	CES28 = 84	CES53 = 77	CES78 = 61
CES04 = 71	CES29 = 68	CES54 = 85	CES79 = 86
CES05 = 49	CES30 = 83	CES55 = 84	CES80 = 83
CES06 = 51	CES31 = 71	CES56 = 74	CES81 = 73
CES07 = 41	CES32 = 64	CES57 = 74	CES82 = 93
CES08 = 40	CES33 = 78	CES58 = 75	CES83 = 91
CES09 = 29	CES34 = 75	CES59 = 85	CES84 = 88
CES10 = 76	CES35 = 87	CES60 = 90	CES85 = 75
CES11 = 59	CES36 = 92	CES61 = 81	CES86 = 64
CES12 = 65	CES37 = 84	CES62 = 89	CES87 = 77
CES13 = 43	CES38 = 92	CES63 = 75	CES88 = 80
CES14 = 74	CES39 = 96	CES64 = 65	CES89 = 67
CES15 = 71	CES40 = 92	CES65 = 64	CES90 = 80
CES16 = 47	CES41 = 93	CES66 = 60	CES91 = 78
CES17 = 50	CES42 = 86	CES67 = 58	CES92 = 56
CES18 = 56	CES43 = 77	CES68 = 66	CES93 = 73
CES19 = 73	CES44 = 99	CES69 = 75	CES94 = 49
CES20 = 66	CES45 = 85	CES70 = 60	CES95 = 66
CES21 = 87	CES46 = 81	CES71 = 56	CES96 = 76
CES22 = 79	CES47 = 86	CES72 = 85	CES97 = 82
CES23 = 92	CES48 = 75	CES73 = 52	CES98 = 76
CES24 = 91	CES49 = 79	CES74 = 95	CES99 = 64
CES25 = 73	CES50 = 86	CES75 = 60	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)