

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: STREETWORKS

Report Number: P870274

Luminaire Tested: **MEM2-HSN-SA-90-830-U-T2R-HSS**

Issue Date: 09/05/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P870274  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: MEM2-HSN-SA-90-830-U-T2R-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 90W 80CRI 3000K  
FITXURE w/ TYPE II ROADWAY DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (20) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

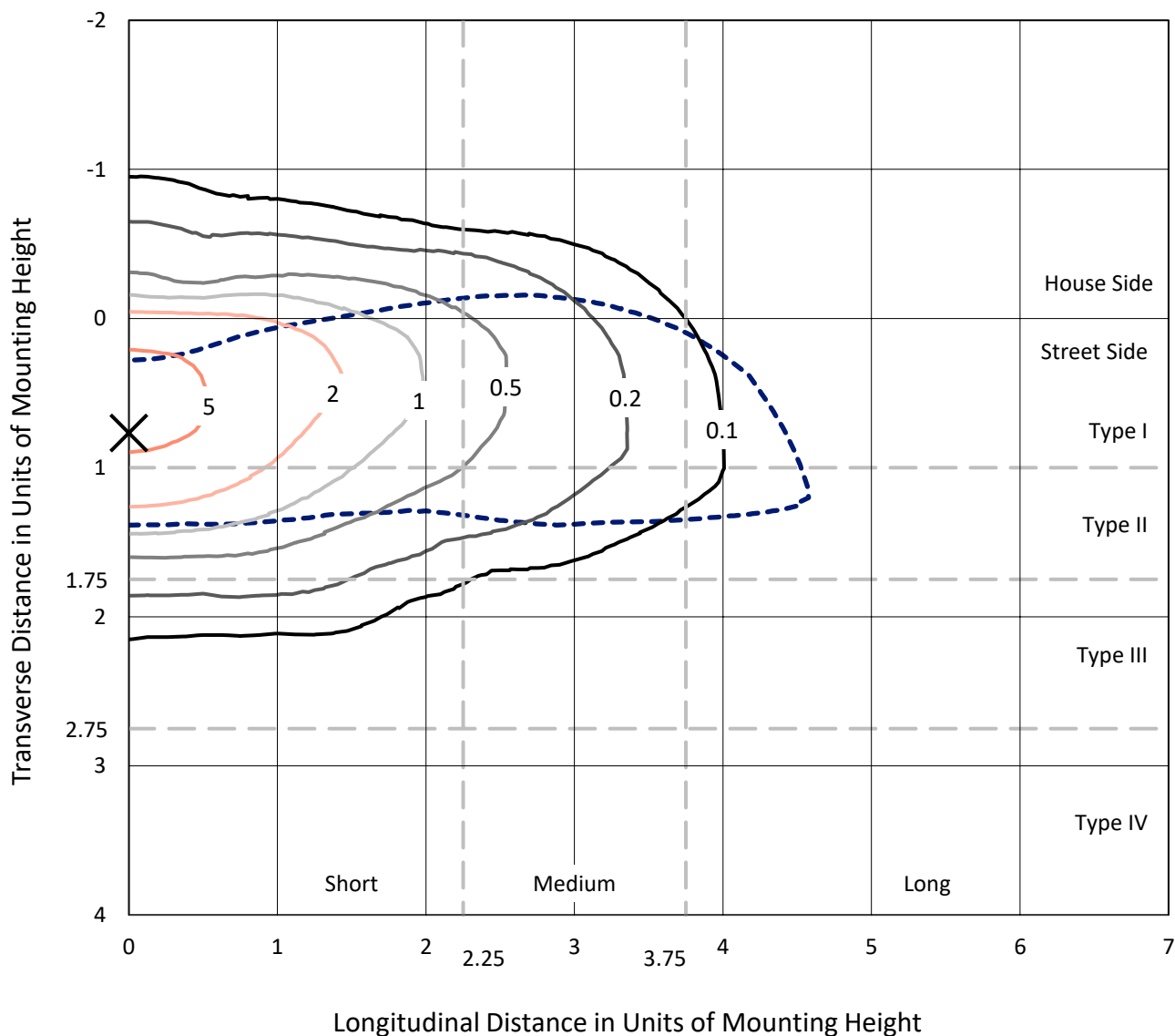
Lumens per Lamp: N/A  
Luminaire Lumens: 8011.7 lumens  
Efficiency: N/A  
Efficacy: 89.0 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 90  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 6.20%  
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

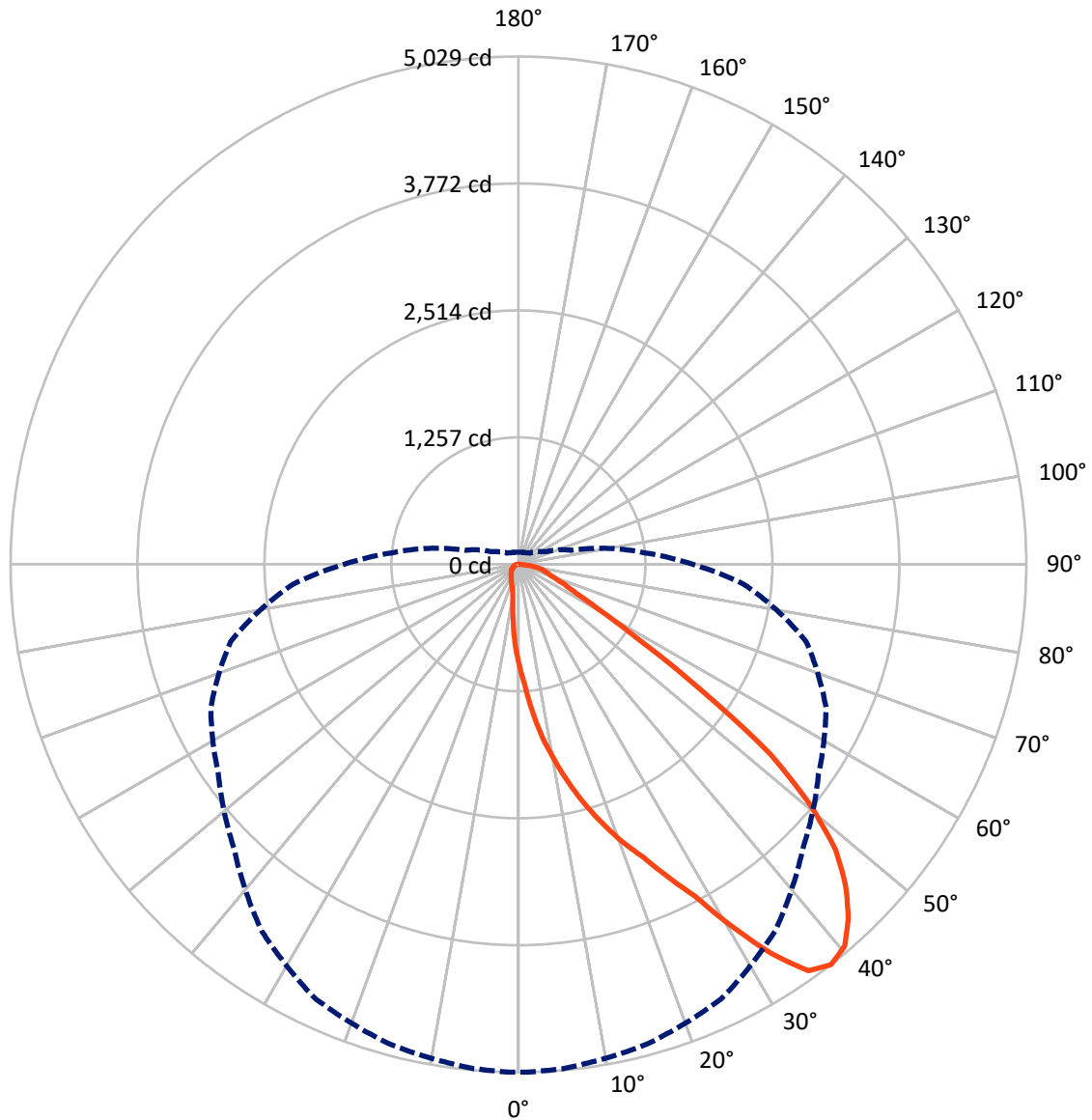
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 37.5-Deg Vertical

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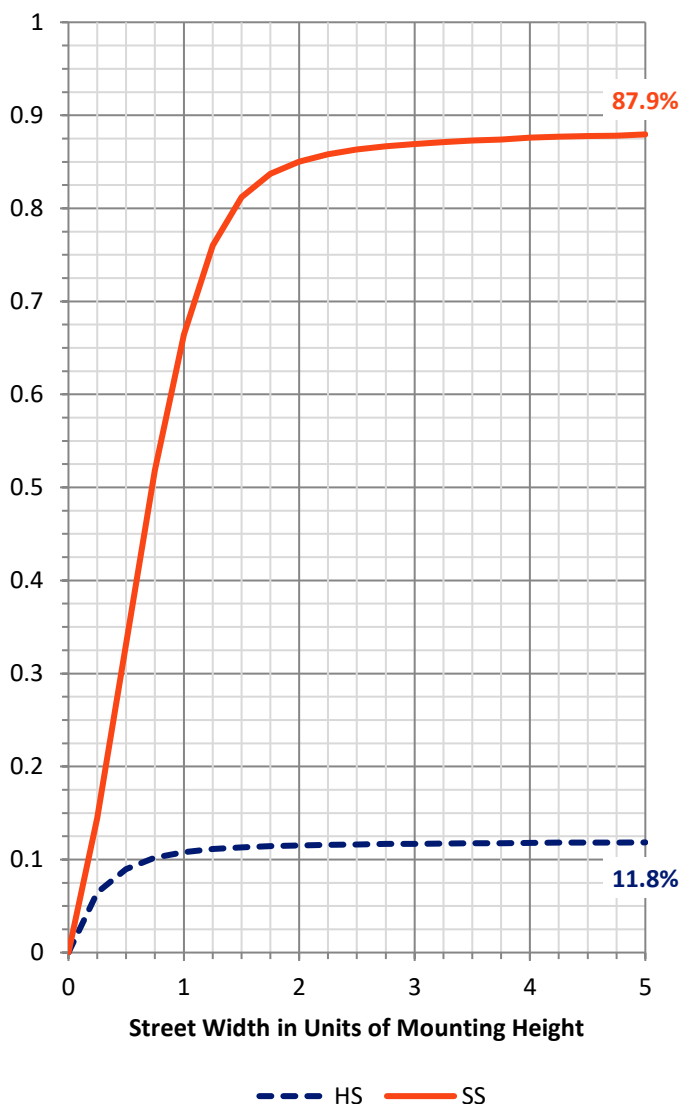
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	955.6	0.0	955.6
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	7056.2	0.0	7056.2
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	8011.7	0.0	8011.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.6	1.2
10°-20°	348.2	4.3
20°-30°	718.3	9.0
30°-40°	1263.9	15.8
40°-50°	1716.1	21.4
50°-60°	1700.3	21.2
60°-70°	1309.0	16.3
70°-80°	759.7	9.5
80°-90°	96.6	1.2
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°	8011.7	100.0
0°-180°	8011.7	100.0

**Coefficient of Utilization**



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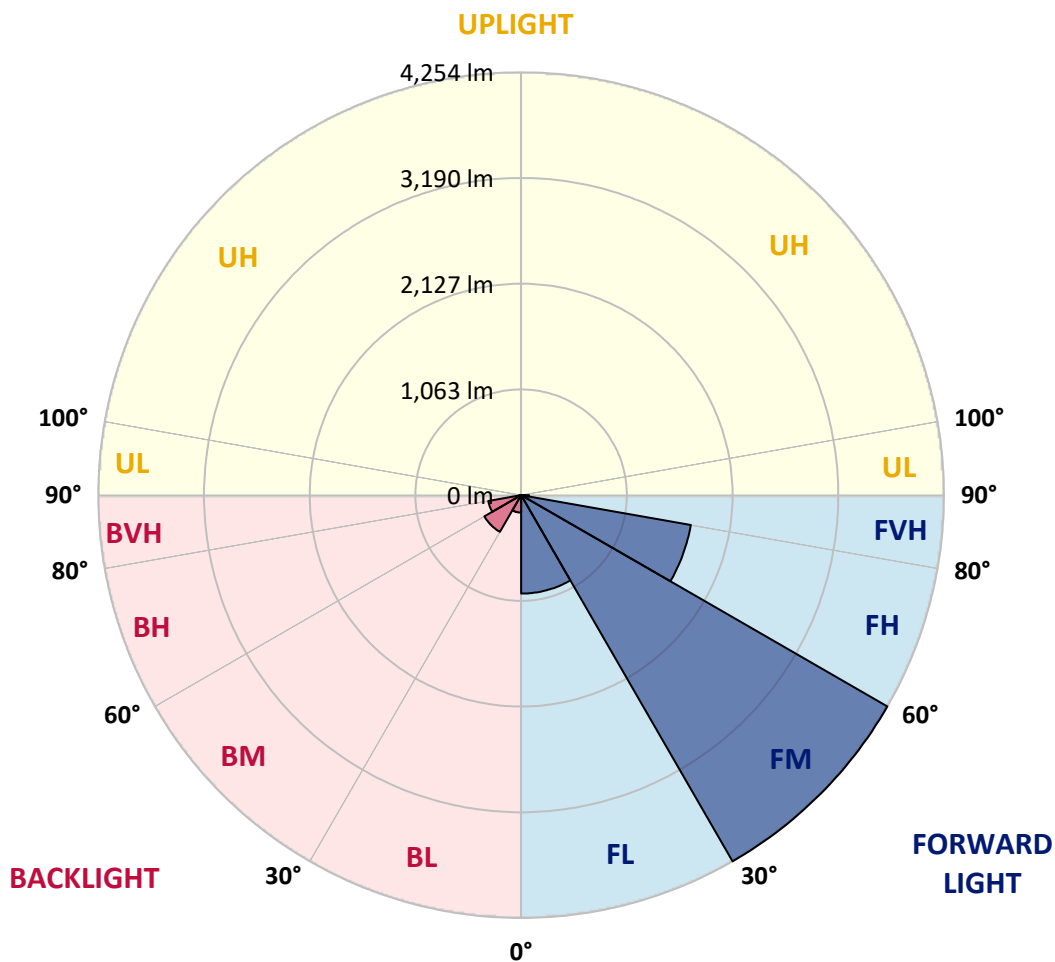
CATALOG NUMBER: MEM2-HSN-SA-90-830-U-T2R-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	990.4	12.4			
FM	(30°-60°)	4253.5	53.1			
FH	(60°-80°)	1733.4	21.6			G1/1800
FVH	(80°-90°)	78.8	1.0			G1/100
BL	(0°-30°)	175.7	2.2	B1/500		
BM	(30°-60°)	426.8	5.3	B1/1000		
BH	(60°-80°)	335.3	4.2	B1/500		G1/500
BVH	(80°-90°)	17.8	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-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	992.8	992.8	992.8	992.8	992.8	992.8	992.8	992.8	992.8	992.8	992.8
2.5°	1196.2	1214.1	1200.7	1189.5	1173.9	1158.2	1135.9	1111.3	1080.0	1042.0	1008.4
5°	1466.8	1475.7	1471.3	1464.6	1415.4	1368.4	1321.4	1263.3	1182.8	1111.3	1035.2
7.5°	1737.3	1732.9	1721.7	1701.6	1656.8	1603.2	1518.2	1422.1	1308.0	1182.8	1064.3
10°	1974.3	1981.1	1972.1	1940.8	1884.9	1811.1	1708.3	1598.7	1444.4	1270.0	1104.6
12.5°	2222.5	2227.0	2227.0	2159.9	2121.9	2007.9	1898.3	1750.8	1578.6	1377.3	1151.5
15°	2466.3	2457.3	2457.3	2412.6	2345.5	2218.1	2095.1	1916.2	1721.7	1478.0	1205.2
17.5°	2698.8	2703.3	2683.1	2634.0	2569.1	2446.1	2294.1	2097.3	1862.6	1598.7	1261.1
20°	2929.1	2915.7	2906.7	2857.6	2788.2	2642.9	2497.6	2274.0	2028.0	1735.1	1339.3
22.5°	3143.8	3150.5	3128.1	3049.8	2985.0	2853.1	2687.6	2481.9	2202.4	1871.5	1424.3
25°	3421.0	3398.7	3418.8	3324.9	3224.2	3067.7	2879.9	2676.4	2392.5	2039.2	1529.4
27.5°	3716.2	3729.6	3718.4	3615.5	3479.1	3269.0	3072.2	2855.3	2584.8	2197.9	1647.9
30°	4156.6	4149.9	4152.2	3997.9	3772.1	3521.6	3280.1	3043.1	2777.1	2392.5	1786.5
32.5°	4592.7	4617.2	4556.9	4420.5	4161.1	3783.2	3488.1	3224.2	2962.6	2560.2	1927.4
35°	4943.7	4937.0	4912.4	4760.3	4503.2	4136.5	3725.1	3425.5	3159.4	2765.9	2083.9
37.5°	5028.7	5028.7	5013.0	4919.1	4749.2	4431.7	3982.2	3626.7	3360.6	2949.2	2236.0
40°	4972.8	4961.6	4952.6	4890.0	4798.4	4610.5	4252.8	3834.7	3575.3	3186.2	2403.7
42.5°	4789.4	4791.7	4780.5	4744.7	4695.5	4624.0	4420.5	4056.0	3785.5	3409.8	2569.1
45°	4543.5	4547.9	4534.5	4530.0	4505.5	4505.5	4458.5	4230.4	3984.5	3637.9	2750.2
47.5°	4228.2	4226.0	4219.2	4208.1	4257.3	4310.9	4353.4	4328.8	4161.1	3883.9	2913.4
50°	3747.5	3743.0	3763.1	3819.0	3939.8	4058.3	4183.5	4299.7	4288.6	4111.9	3110.2
52.5°	3123.6	3094.6	3116.9	3289.1	3537.3	3801.1	3977.8	4161.1	4353.4	4353.4	3304.7
55°	2184.5	2209.1	2222.5	2475.2	2964.9	3418.8	3729.6	3966.6	4328.8	4545.7	3519.4
57.5°	1390.8	1399.7	1440.0	1712.7	2287.4	2855.3	3405.4	3794.4	4237.1	4706.7	3734.0
60°	936.9	905.6	936.9	1093.4	1645.7	2240.4	2929.1	3577.5	4105.2	4823.0	3971.1
62.5°	661.8	659.6	668.6	760.2	1173.9	1683.7	2332.1	3284.6	4000.1	4829.7	4147.7
65°	534.4	518.7	525.4	576.9	787.1	1234.2	1710.5	2754.7	3906.2	4711.2	4234.9
67.5°	429.3	422.6	427.1	460.6	590.3	927.9	1205.2	2095.1	3707.2	4509.9	4185.7
70°	351.0	353.3	355.5	389.1	469.6	702.1	860.8	1437.7	3282.4	4281.9	3964.3
72.5°	304.1	304.1	306.3	328.7	393.5	556.8	650.7	934.6	2656.3	4035.9	3557.4
75°	268.3	268.3	268.3	288.4	335.4	447.2	505.3	639.5	1907.3	3579.8	2942.5
77.5°	232.5	234.8	234.8	252.7	288.4	348.8	389.1	442.7	1216.4	2765.9	2227.0
80°	178.9	178.9	181.1	201.2	246.0	272.8	286.2	313.0	639.5	1737.3	1413.1
82.5°	125.2	127.4	127.4	129.7	165.5	167.7	154.3	156.5	232.5	576.9	536.6
85°	13.4	15.7	17.9	17.9	29.1	35.8	38.0	35.8	38.0	67.1	67.1
87.5°	0.0	0.0	0.0	0.0	2.2	4.5	4.5	6.7	6.7	6.7	6.7
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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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	992.8	992.8	992.8	992.8	992.8	992.8	992.8	992.8	992.8	992.8	992.8
2.5°	990.5	974.9	941.3	912.3	885.4	863.1	847.4	827.3	811.7	811.7	820.6
5°	997.2	961.5	892.1	827.3	775.9	726.7	682.0	652.9	630.5	617.1	617.1
7.5°	1006.2	952.5	847.4	749.0	668.6	590.3	521.0	487.4	453.9	442.7	445.0
10°	1024.1	948.0	807.2	679.7	559.0	460.6	393.5	357.8	339.9	330.9	330.9
12.5°	1044.2	948.0	764.7	601.5	460.6	360.0	319.7	292.9	284.0	279.5	275.0
15°	1071.0	952.5	728.9	518.7	375.6	304.1	275.0	259.4	250.4	246.0	246.0
17.5°	1102.3	957.0	690.9	451.7	319.7	268.3	246.0	234.8	225.8	221.4	221.4
20°	1142.6	968.2	652.9	391.3	279.5	246.0	225.8	214.7	205.7	203.5	201.2
22.5°	1191.8	986.1	614.9	342.1	252.7	223.6	205.7	196.8	190.1	185.6	185.6
25°	1249.9	1008.4	585.8	306.3	232.5	207.9	192.3	181.1	174.4	172.2	172.2
27.5°	1330.4	1046.4	556.8	279.5	216.9	192.3	176.6	167.7	161.0	158.8	156.5
30°	1406.4	1093.4	543.3	272.8	205.7	178.9	167.7	156.5	149.8	147.6	145.3
32.5°	1504.8	1147.0	534.4	272.8	201.2	169.9	156.5	147.6	140.9	138.6	136.4
35°	1609.9	1209.7	534.4	281.7	203.5	163.2	147.6	138.6	131.9	127.4	127.4
37.5°	1723.9	1272.3	538.9	295.1	210.2	158.8	138.6	129.7	123.0	120.7	120.7
40°	1844.7	1357.2	547.8	306.3	216.9	156.5	129.7	123.0	116.3	111.8	111.8
42.5°	1956.5	1424.3	563.5	319.7	221.4	154.3	123.0	116.3	109.6	107.3	107.3
45°	2086.1	1498.1	576.9	328.7	221.4	147.6	116.3	109.6	105.1	102.9	100.6
47.5°	2189.0	1558.5	583.6	333.2	216.9	140.9	109.6	105.1	100.6	96.1	98.4
50°	2314.2	1623.3	594.8	335.4	207.9	131.9	105.1	98.4	93.9	91.7	91.7
52.5°	2435.0	1688.1	603.7	330.9	196.8	120.7	98.4	93.9	89.4	85.0	85.0
55°	2578.1	1759.7	617.1	324.2	178.9	109.6	91.7	87.2	80.5	78.3	76.0
57.5°	2741.3	1853.6	628.3	310.8	156.5	98.4	87.2	80.5	71.6	67.1	67.1
60°	2891.1	1960.9	637.2	277.3	136.4	91.7	80.5	73.8	64.8	62.6	62.6
62.5°	3052.1	2072.7	637.2	219.1	116.3	82.7	76.0	69.3	60.4	58.1	58.1
65°	3163.9	2173.3	617.1	163.2	98.4	78.3	73.8	64.8	55.9	53.7	53.7
67.5°	3195.2	2236.0	561.2	116.3	85.0	73.8	69.3	60.4	53.7	49.2	49.2
70°	3094.6	2186.8	458.4	89.4	73.8	67.1	62.6	55.9	49.2	47.0	47.0
72.5°	2806.1	1998.9	342.1	76.0	64.8	62.6	58.1	51.4	47.0	44.7	44.7
75°	2350.0	1661.3	241.5	67.1	60.4	55.9	51.4	47.0	42.5	42.5	42.5
77.5°	1779.8	1200.7	149.8	60.4	51.4	51.4	47.0	42.5	40.2	38.0	38.0
80°	1149.3	758.0	85.0	42.5	35.8	38.0	33.5	29.1	29.1	26.8	26.8
82.5°	487.4	299.6	44.7	24.6	17.9	15.7	11.2	11.2	8.9	8.9	8.9
85°	49.2	17.9	8.9	6.7	6.7	4.5	4.5	4.5	4.5	2.2	2.2
87.5°	6.7	6.7	6.7	4.5	4.5	4.5	2.2	2.2	2.2	2.2	2.2
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: SP1-2407-157-7

Test Date: 09/05/2024

Luminaire Tested: MEM2-HTN-SA-30-830-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-30-830-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-7  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 09/05/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Streetworks  
 Catalog Number: **MEM2-HTN-SA-30-830-U-5WQ**  
 Description: Epic Modern Light Square 30W 5WQ Optic

**Spectral Parameters**

CCT (K): 3126  
 CIE u': 0.2465  
 CIE v': 0.5182  
 Duv: -0.0004  
 CIE x: 0.4277  
 CIE y: 0.3997  
 CIE z: 0.1727  
 Peak Wavelength (nm): 601  
 Dominant Wavelength (nm): 582  
 Purity: 48.31913  
 Rf: 84.4  
 Rg: 94.7

CRI (Ra):	82.6		
R1:	81.4	R9:	5.1
R2:	92.2	R10:	82.2
R3:	94.9	R11:	79.8
R4:	80.1	R12:	70.4
R5:	81.8	R13:	84.2
R6:	90.5	R14:	97.9
R7:	81.8	R15:	73.6
R8:	58.0		



**Test Conditions**

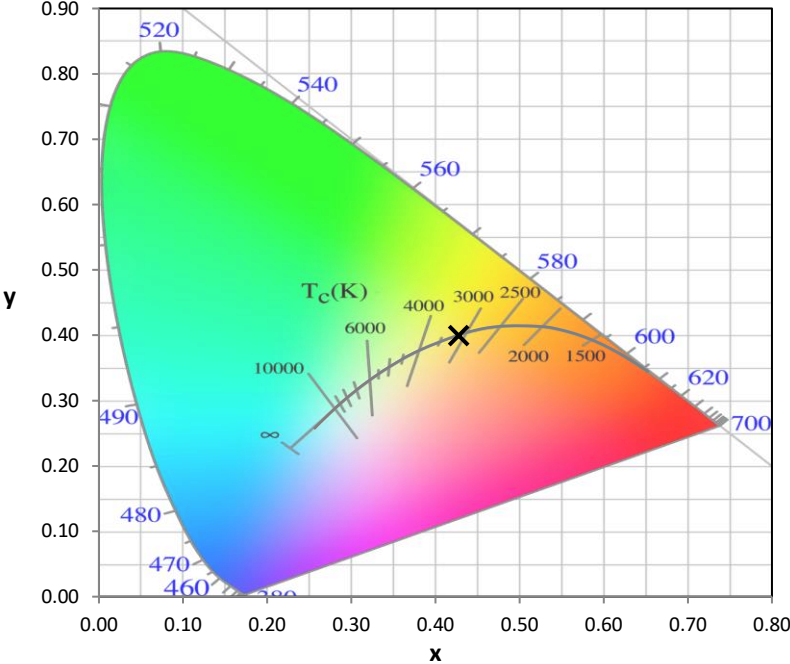
Stabilization Time: 22M  
 Operation Time: 1H 22M  
 Sphere Temperature (°C): 24.3

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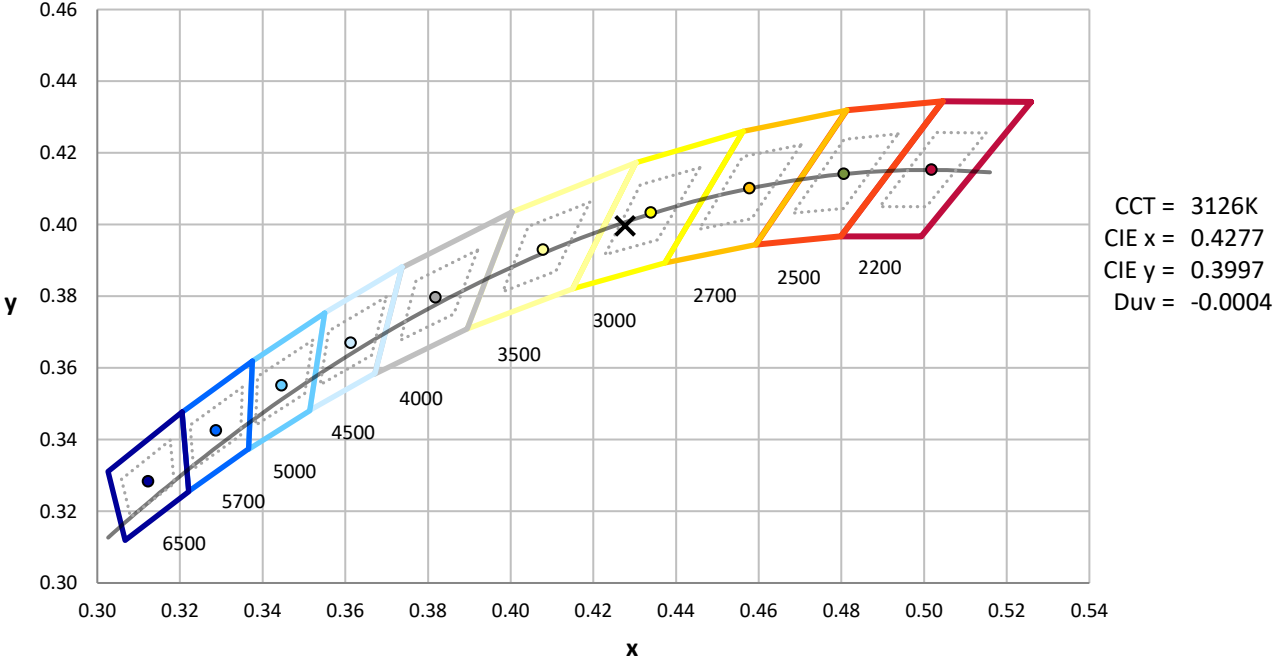
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

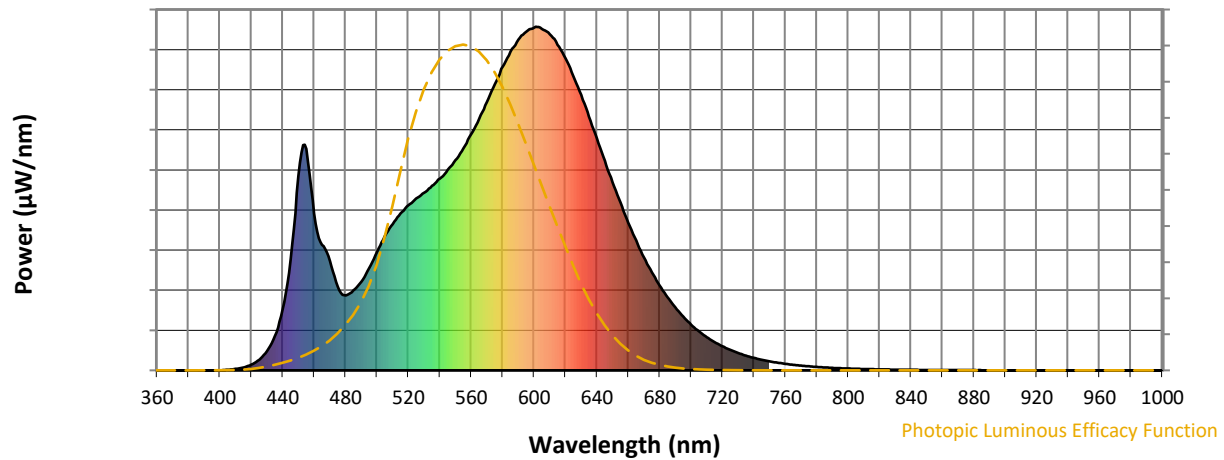


CCT = 3126K  
 CIE x = 0.4277  
 CIE y = 0.3997  
 Duv = -0.0004

Point lies inside the ANSI 3000K 4-step quadrangle

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**Photopic Flux vs. Wavelength**

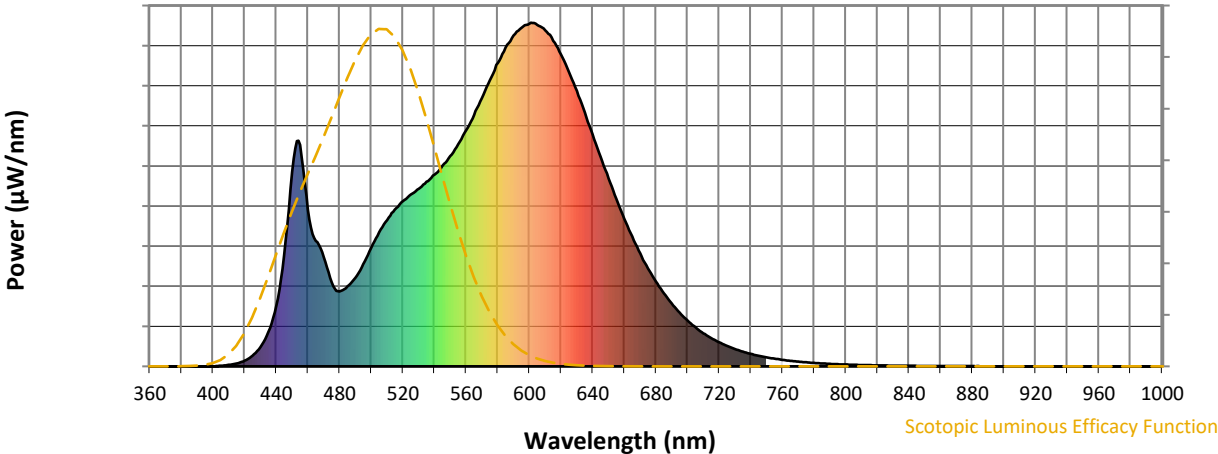


**Photopic Lumens: NR**

$\lambda$ (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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR S/P: 1.42

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.79

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

**Summary**

$R_f = 84.4$   
 $R_g = 94.7$   
 $CIE R_a = 82.6$   
 $R_9 = 5.1$



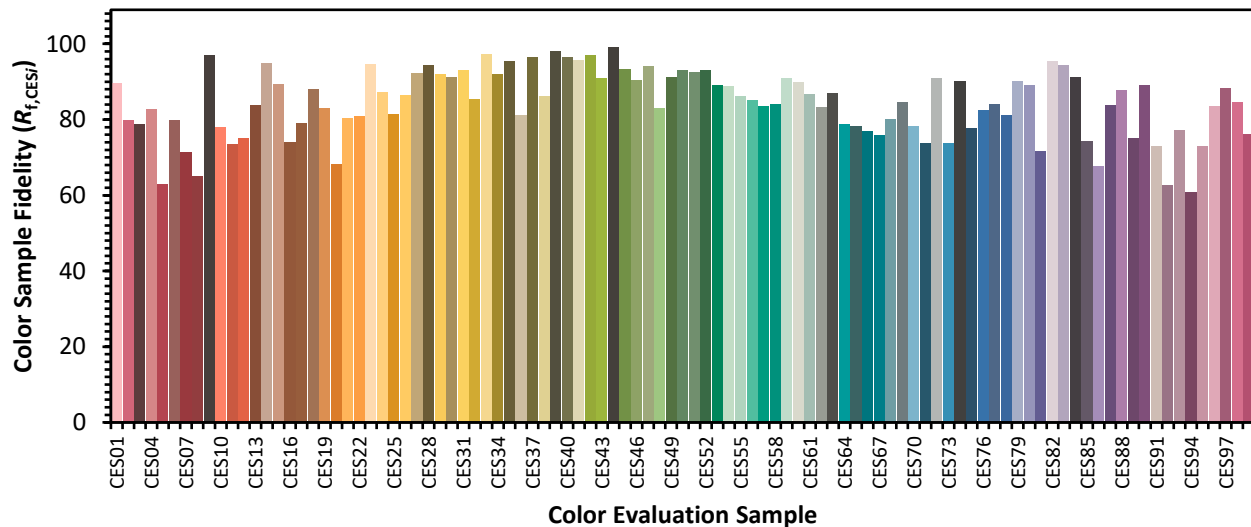
**Color Vector Graphics**



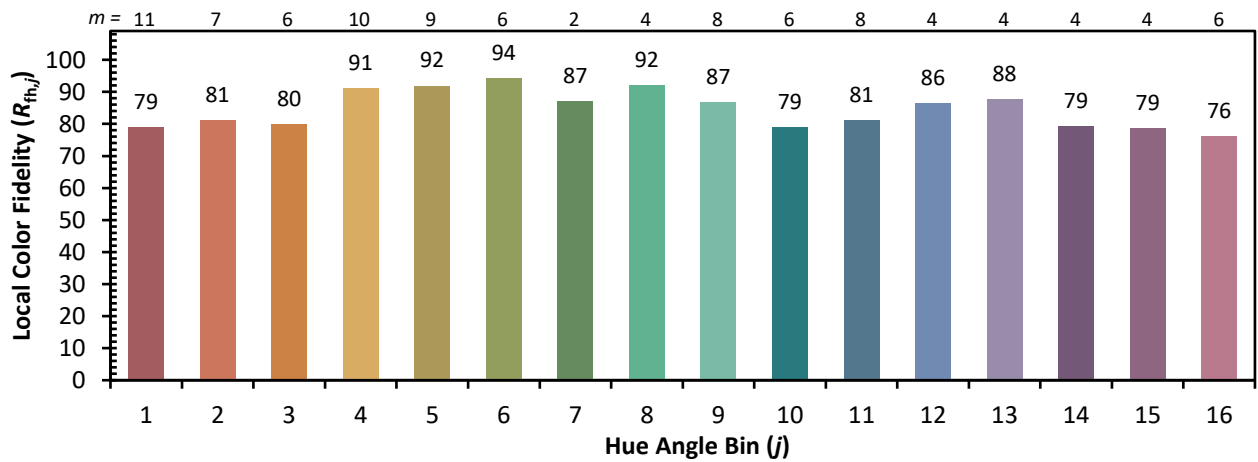


Individual Sample Fidelity Index ( $R_{f,i}$ )

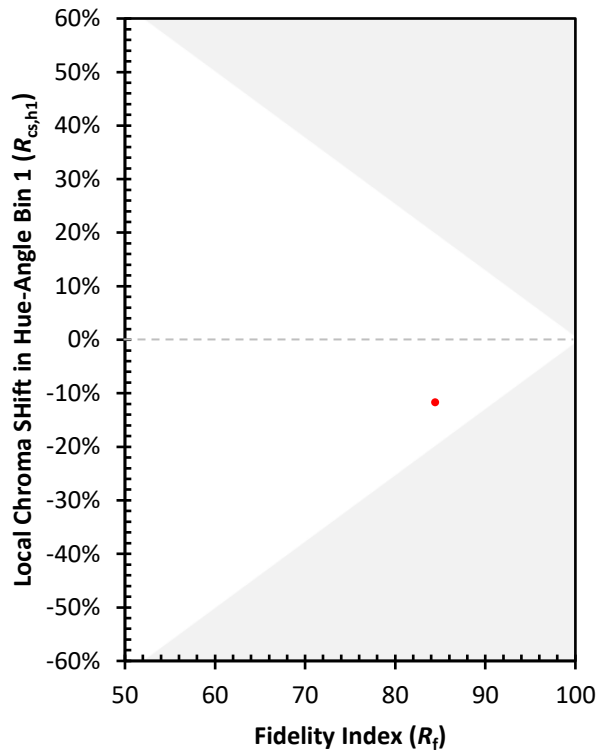
CES01 = 86	CES26 = 86	CES51 = 93	CES76 = 82
CES02 = 63	CES27 = 92	CES52 = 93	CES77 = 84
CES03 = 31	CES28 = 94	CES53 = 89	CES78 = 81
CES04 = 70	CES29 = 92	CES54 = 89	CES79 = 90
CES05 = 49	CES30 = 91	CES55 = 86	CES80 = 89
CES06 = 51	CES31 = 93	CES56 = 85	CES81 = 72
CES07 = 42	CES32 = 85	CES57 = 83	CES82 = 95
CES08 = 41	CES33 = 97	CES58 = 84	CES83 = 94
CES09 = 29	CES34 = 92	CES59 = 91	CES84 = 91
CES10 = 76	CES35 = 96	CES60 = 90	CES85 = 74
CES11 = 59	CES36 = 81	CES61 = 87	CES86 = 68
CES12 = 65	CES37 = 96	CES62 = 83	CES87 = 84
CES13 = 43	CES38 = 86	CES63 = 87	CES88 = 88
CES14 = 74	CES39 = 98	CES64 = 79	CES89 = 75
CES15 = 71	CES40 = 96	CES65 = 78	CES90 = 89
CES16 = 47	CES41 = 96	CES66 = 77	CES91 = 73
CES17 = 50	CES42 = 97	CES67 = 76	CES92 = 63
CES18 = 56	CES43 = 91	CES68 = 80	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 85	CES94 = 61
CES20 = 66	CES45 = 93	CES70 = 78	CES95 = 73
CES21 = 87	CES46 = 90	CES71 = 74	CES96 = 84
CES22 = 79	CES47 = 94	CES72 = 91	CES97 = 88
CES23 = 92	CES48 = 83	CES73 = 74	CES98 = 85
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 76
CES25 = 72	CES50 = 93	CES75 = 78	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)