

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: P871070

Luminaire Tested: **EMM2-HSN-SA1B-830-U-T2R-HSS**

Issue Date: 09/05/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P871070  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA1B-830-U-T2R-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 60W 80CRI 3000K  
FITXURE w/ TYPE II ROADWAY DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (10) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

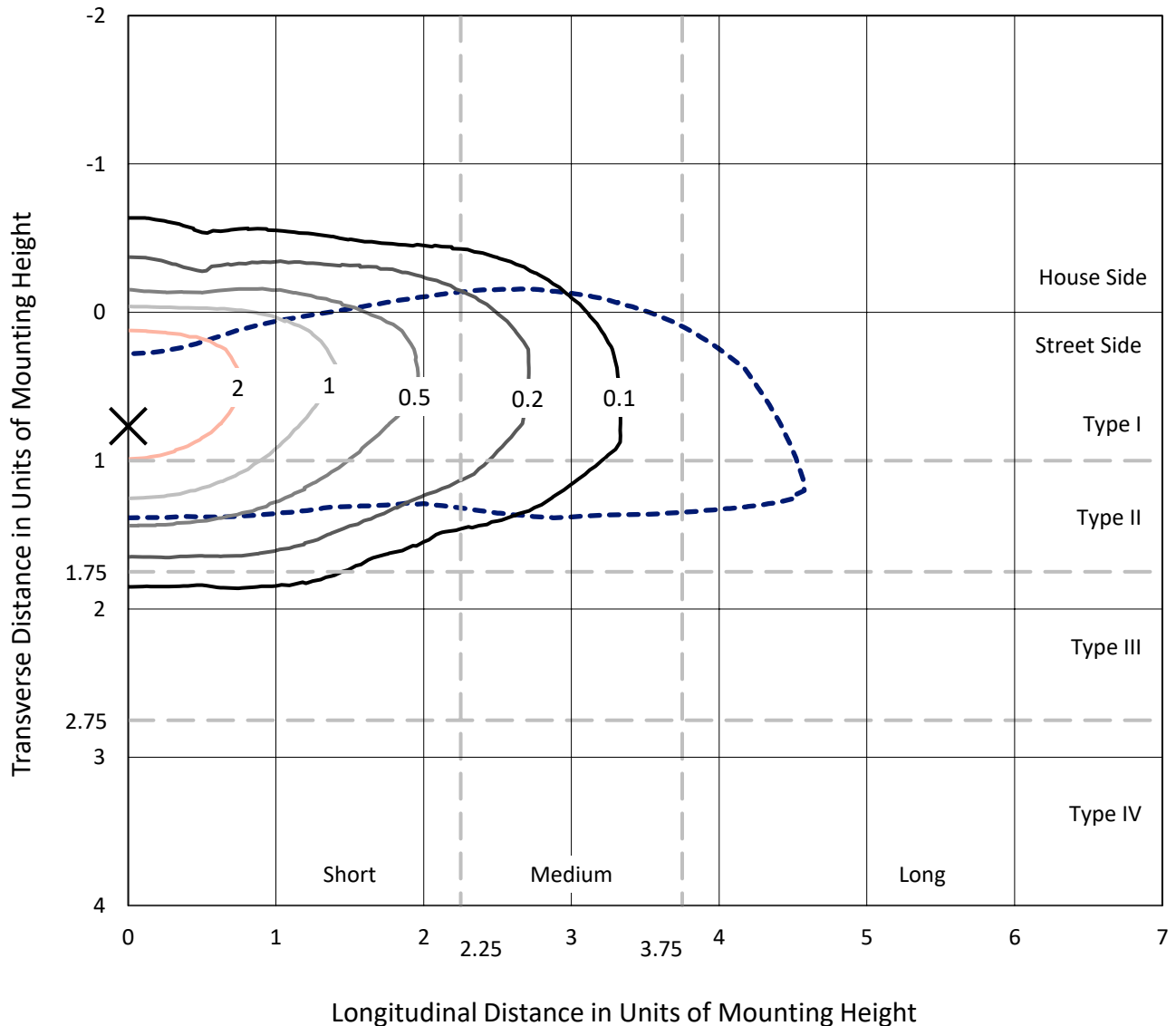
Lumens per Lamp: N/A  
Luminaire Lumens: 3902.9 lumens  
Efficiency: N/A  
Efficacy: 88.7 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 44  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 6.91%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P871070  
 CATALOG NUMBER: EMM2-HSN-SA1B-830-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

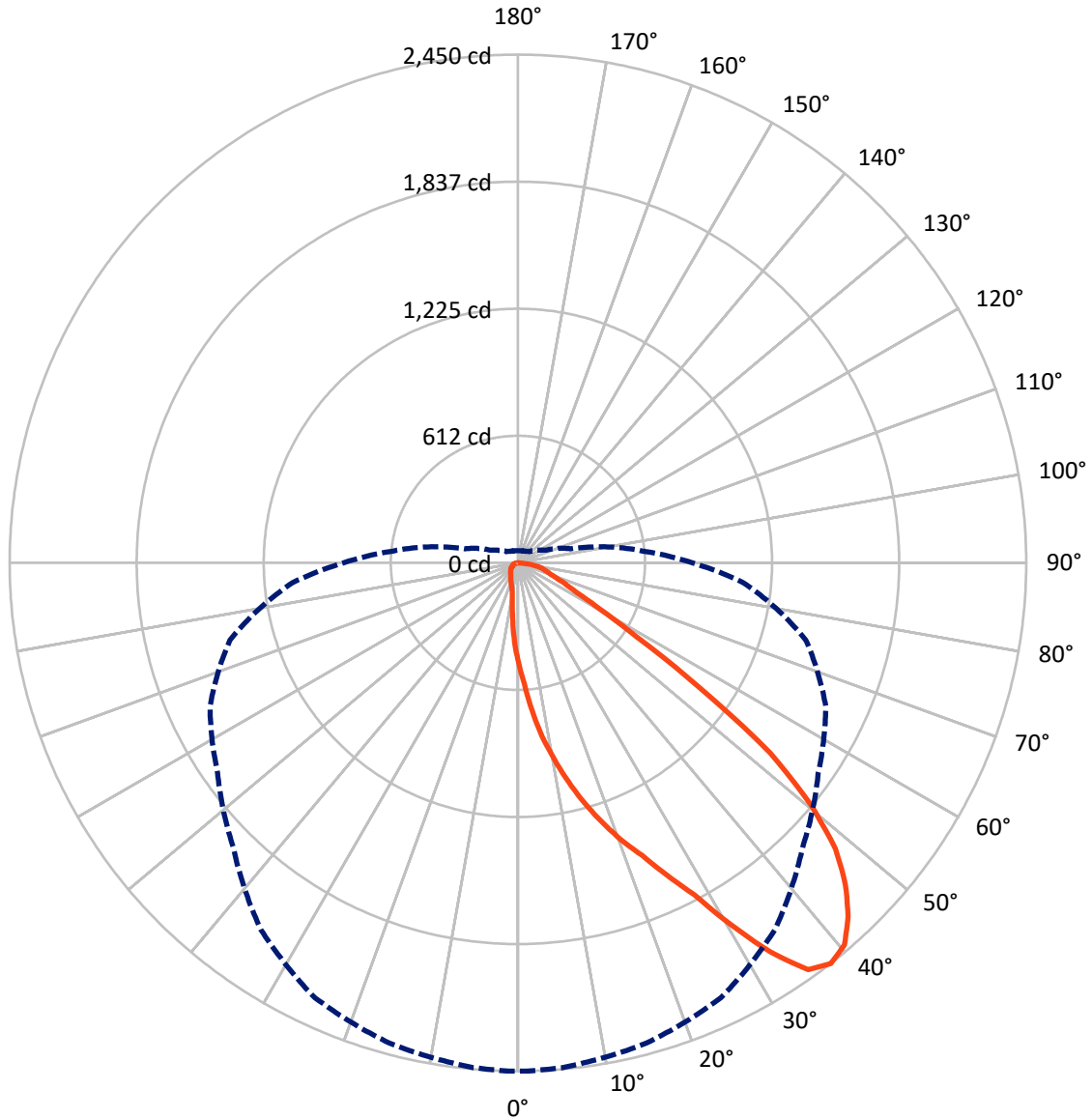
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.3 fc  
 Type II - Short - N/A

REPORT NUMBER: P871070  
CATALOG NUMBER: EMM2-HSN-SA1B-830-U-T2R-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P871070

CATALOG NUMBER: EMM2-HSN-SA1B-830-U-T2R-HSS

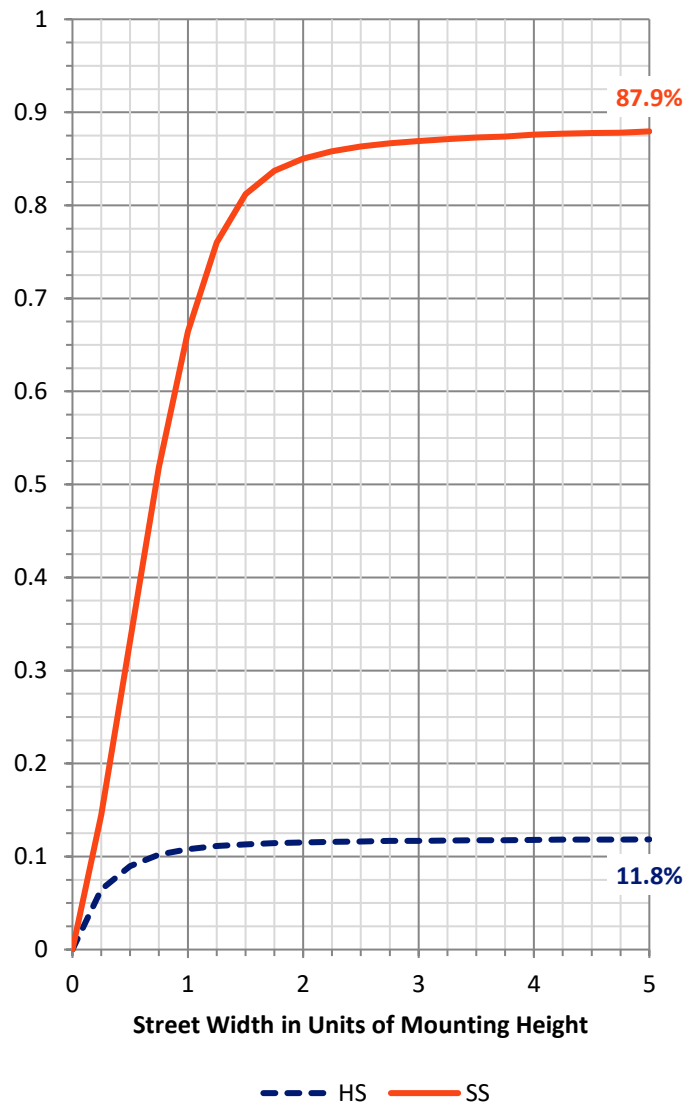
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	465.5	0.0	465.5
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	3437.4	0.0	3437.4
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	3902.9	0.0	3902.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.5	1.2
10°-20°	169.6	4.3
20°-30°	349.9	9.0
30°-40°	615.7	15.8
40°-50°	836.0	21.4
50°-60°	828.3	21.2
60°-70°	637.7	16.3
70°-80°	370.1	9.5
80°-90°	47.1	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°	3902.9	100.0
0°-180°	3902.9	100.0



REPORT NUMBER: P871070

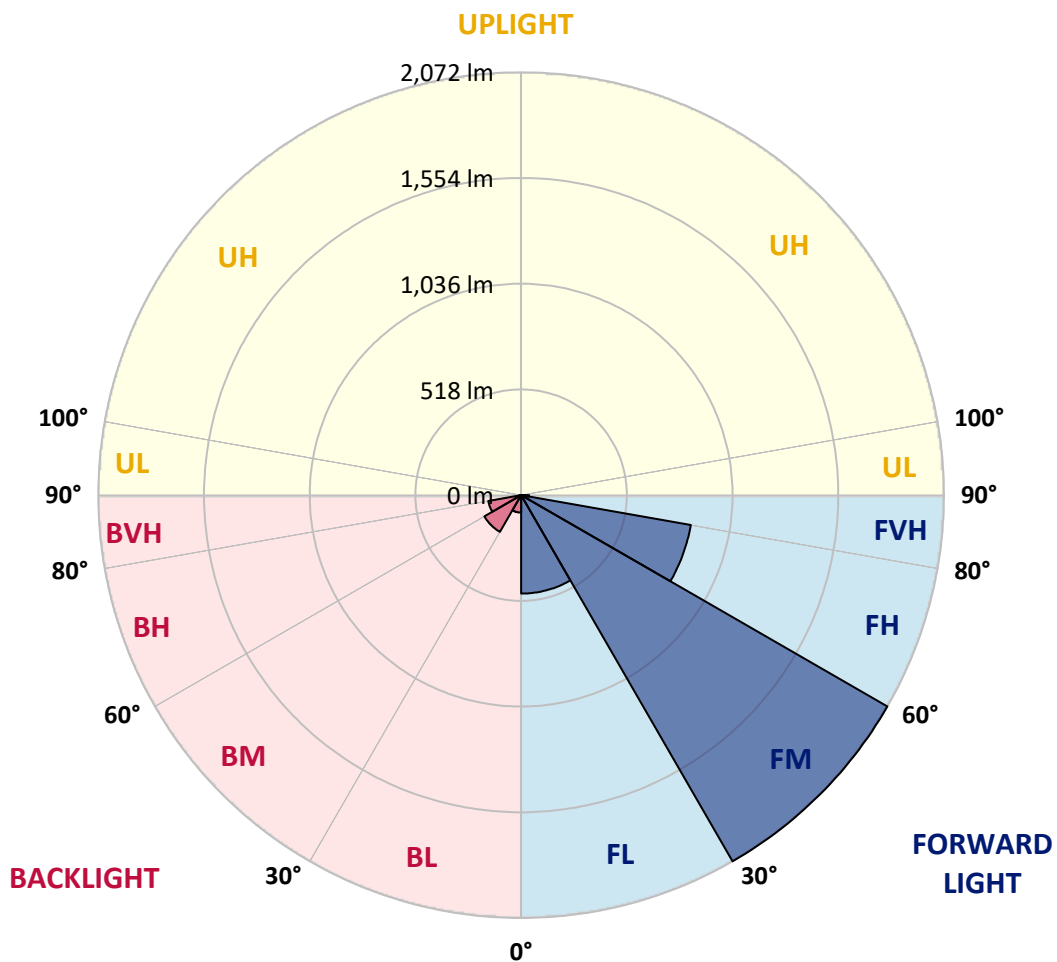
CATALOG NUMBER: EMM2-HSN-SA1B-830-U-T2R-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	482.5	12.4			
FM (30°-60°)	2072.1	53.1			
FH (60°-80°)	844.4	21.6			G1/1800
FVH (80°-90°)	38.4	1.0			G1/100
BL (0°-30°)	85.6	2.2	B0/110		
BM (30°-60°)	207.9	5.3	B0/220		
BH (60°-80°)	163.3	4.2	B1/500		G1/500
BVH (80°-90°)	8.7	0.2			G0/10
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





REPORT NUMBER: P871070

CATALOG NUMBER: EMM2-HSN-SA1B-830-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6
2.5°	582.7	591.5	584.9	579.5	571.8	564.2	553.3	541.3	526.1	507.6	491.2
5°	714.5	718.9	716.7	713.4	689.5	666.6	643.7	615.4	576.2	541.3	504.3
7.5°	846.3	844.2	838.7	828.9	807.1	781.0	739.6	692.8	637.2	576.2	518.5
10°	961.8	965.1	960.7	945.5	918.2	882.3	832.2	778.8	703.6	618.7	538.1
12.5°	1082.7	1084.9	1084.9	1052.2	1033.7	978.1	924.8	852.9	769.0	671.0	561.0
15°	1201.4	1197.1	1197.1	1175.3	1142.6	1080.5	1020.6	933.5	838.7	720.0	587.1
17.5°	1314.7	1316.9	1307.1	1283.1	1251.5	1191.6	1117.6	1021.7	907.3	778.8	614.3
20°	1426.9	1420.4	1416.0	1392.0	1358.3	1287.5	1216.7	1107.8	987.9	845.2	652.5
22.5°	1531.5	1534.7	1523.8	1485.7	1454.1	1389.9	1309.3	1209.0	1072.9	911.7	693.8
25°	1666.5	1655.6	1665.4	1619.7	1570.7	1494.4	1402.9	1303.8	1165.5	993.4	745.0
27.5°	1810.3	1816.8	1811.4	1761.3	1694.8	1592.5	1496.6	1391.0	1259.2	1070.7	802.8
30°	2024.9	2021.6	2022.7	1947.6	1837.5	1715.5	1597.9	1482.4	1352.8	1165.5	870.3
32.5°	2237.3	2249.3	2219.9	2153.4	2027.1	1843.0	1699.2	1570.7	1443.2	1247.2	938.9
35°	2408.3	2405.0	2393.0	2319.0	2193.7	2015.1	1814.7	1668.7	1539.1	1347.4	1015.2
37.5°	2449.7	2449.7	2442.1	2396.3	2313.5	2158.9	1939.9	1766.7	1637.1	1436.7	1089.2
40°	2422.5	2417.0	2412.7	2382.2	2337.5	2246.0	2071.7	1868.0	1741.7	1552.2	1170.9
42.5°	2333.1	2334.2	2328.8	2311.4	2287.4	2252.5	2153.4	1975.9	1844.1	1661.1	1251.5
45°	2213.3	2215.5	2209.0	2206.8	2194.8	2194.8	2171.9	2060.8	1941.0	1772.2	1339.8
47.5°	2059.7	2058.7	2055.4	2049.9	2073.9	2100.0	2120.7	2108.8	2027.1	1892.0	1419.3
50°	1825.6	1823.4	1833.2	1860.4	1919.2	1977.0	2038.0	2094.6	2089.2	2003.1	1515.1
52.5°	1521.7	1507.5	1518.4	1602.3	1723.2	1851.7	1937.7	2027.1	2120.7	2120.7	1609.9
55°	1064.2	1076.2	1082.7	1205.8	1444.3	1665.4	1816.8	1932.3	2108.8	2214.4	1714.5
57.5°	677.5	681.9	701.5	834.4	1114.3	1391.0	1658.9	1848.4	2064.1	2292.8	1819.0
60°	456.4	441.1	456.4	532.6	801.7	1091.4	1426.9	1742.8	1999.8	2349.5	1934.5
62.5°	322.4	321.3	325.7	370.3	571.8	820.2	1136.1	1600.1	1948.6	2352.7	2020.5
65°	260.3	252.7	256.0	281.0	383.4	601.3	833.3	1341.9	1902.9	2295.0	2063.0
67.5°	209.1	205.9	208.0	224.4	287.6	452.0	587.1	1020.6	1805.9	2197.0	2039.0
70°	171.0	172.1	173.2	189.5	228.7	342.0	419.4	700.4	1599.0	2085.9	1931.2
72.5°	148.1	148.1	149.2	160.1	191.7	271.2	317.0	455.3	1294.0	1966.1	1733.0
75°	130.7	130.7	130.7	140.5	163.4	217.8	246.2	311.5	929.1	1743.9	1433.4
77.5°	113.3	114.4	114.4	123.1	140.5	169.9	189.5	215.7	592.5	1347.4	1084.9
80°	87.1	87.1	88.2	98.0	119.8	132.9	139.4	152.5	311.5	846.3	688.4
82.5°	61.0	62.1	62.1	63.2	80.6	81.7	75.2	76.2	113.3	281.0	261.4
85°	6.5	7.6	8.7	8.7	14.2	17.4	18.5	17.4	18.5	32.7	32.7
87.5°	0.0	0.0	0.0	0.0	1.1	2.2	2.2	3.3	3.3	3.3	3.3
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: P871070

CATALOG NUMBER: EMM2-HSN-SA1B-830-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6
2.5°	482.5	474.9	458.6	444.4	431.3	420.4	412.8	403.0	395.4	395.4	399.7
5°	485.8	468.4	434.6	403.0	378.0	354.0	332.2	318.1	307.2	300.6	300.6
7.5°	490.2	464.0	412.8	364.9	325.7	287.6	253.8	237.5	221.1	215.7	216.8
10°	498.9	461.8	393.2	331.1	272.3	224.4	191.7	174.3	165.6	161.2	161.2
12.5°	508.7	461.8	372.5	293.0	224.4	175.4	155.8	142.7	138.3	136.2	134.0
15°	521.7	464.0	355.1	252.7	183.0	148.1	134.0	126.4	122.0	119.8	119.8
17.5°	537.0	466.2	336.6	220.0	155.8	130.7	119.8	114.4	110.0	107.8	107.8
20°	556.6	471.6	318.1	190.6	136.2	119.8	110.0	104.6	100.2	99.1	98.0
22.5°	580.6	480.4	299.5	166.7	123.1	108.9	100.2	95.9	92.6	90.4	90.4
25°	608.9	491.2	285.4	149.2	113.3	101.3	93.7	88.2	85.0	83.9	83.9
27.5°	648.1	509.8	271.2	136.2	105.7	93.7	86.0	81.7	78.4	77.3	76.2
30°	685.1	532.6	264.7	132.9	100.2	87.1	81.7	76.2	73.0	71.9	70.8
32.5°	733.1	558.8	260.3	132.9	98.0	82.8	76.2	71.9	68.6	67.5	66.4
35°	784.2	589.3	260.3	137.2	99.1	79.5	71.9	67.5	64.3	62.1	62.1
37.5°	839.8	619.8	262.5	143.8	102.4	77.3	67.5	63.2	59.9	58.8	58.8
40°	898.6	661.2	266.9	149.2	105.7	76.2	63.2	59.9	56.6	54.5	54.5
42.5°	953.1	693.8	274.5	155.8	107.8	75.2	59.9	56.6	53.4	52.3	52.3
45°	1016.3	729.8	281.0	160.1	107.8	71.9	56.6	53.4	51.2	50.1	49.0
47.5°	1066.4	759.2	284.3	162.3	105.7	68.6	53.4	51.2	49.0	46.8	47.9
50°	1127.4	790.8	289.7	163.4	101.3	64.3	51.2	47.9	45.7	44.7	44.7
52.5°	1186.2	822.4	294.1	161.2	95.9	58.8	47.9	45.7	43.6	41.4	41.4
55°	1255.9	857.2	300.6	157.9	87.1	53.4	44.7	42.5	39.2	38.1	37.0
57.5°	1335.4	903.0	306.1	151.4	76.2	47.9	42.5	39.2	34.9	32.7	32.7
60°	1408.4	955.3	310.4	135.1	66.4	44.7	39.2	35.9	31.6	30.5	30.5
62.5°	1486.8	1009.7	310.4	106.7	56.6	40.3	37.0	33.8	29.4	28.3	28.3
65°	1541.3	1058.7	300.6	79.5	47.9	38.1	35.9	31.6	27.2	26.1	26.1
67.5°	1556.5	1089.2	273.4	56.6	41.4	35.9	33.8	29.4	26.1	24.0	24.0
70°	1507.5	1065.3	223.3	43.6	35.9	32.7	30.5	27.2	24.0	22.9	22.9
72.5°	1367.0	973.8	166.7	37.0	31.6	30.5	28.3	25.1	22.9	21.8	21.8
75°	1144.8	809.3	117.6	32.7	29.4	27.2	25.1	22.9	20.7	20.7	20.7
77.5°	867.0	584.9	73.0	29.4	25.1	25.1	22.9	20.7	19.6	18.5	18.5
80°	559.9	369.3	41.4	20.7	17.4	18.5	16.3	14.2	14.2	13.1	13.1
82.5°	237.5	146.0	21.8	12.0	8.7	7.6	5.4	5.4	4.4	4.4	4.4
85°	24.0	8.7	4.4	3.3	3.3	2.2	2.2	2.2	2.2	1.1	1.1
87.5°	3.3	3.3	3.3	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1
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-40-830-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-40-830-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-40-830-U-5WQ**  
 Description: Epic Modern Light Square 40W 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

REPORT NUMBER: SP1-2407-157-7

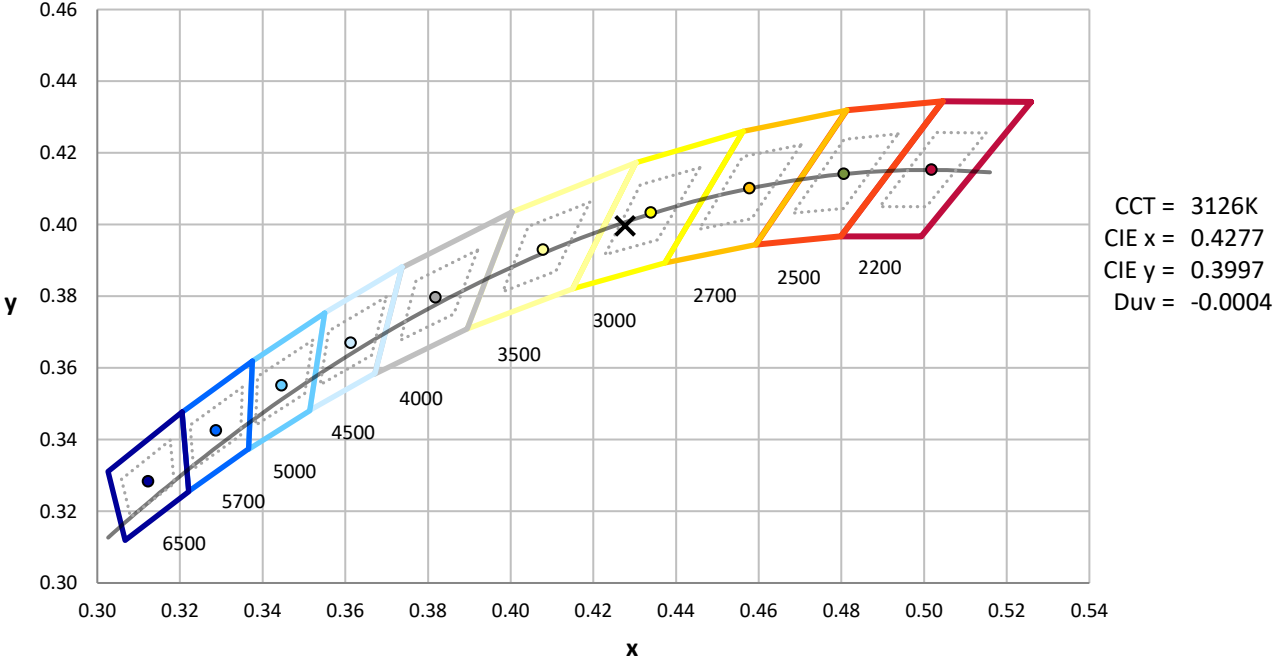
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-157-7

CIE 1931 Chromaticity Diagram



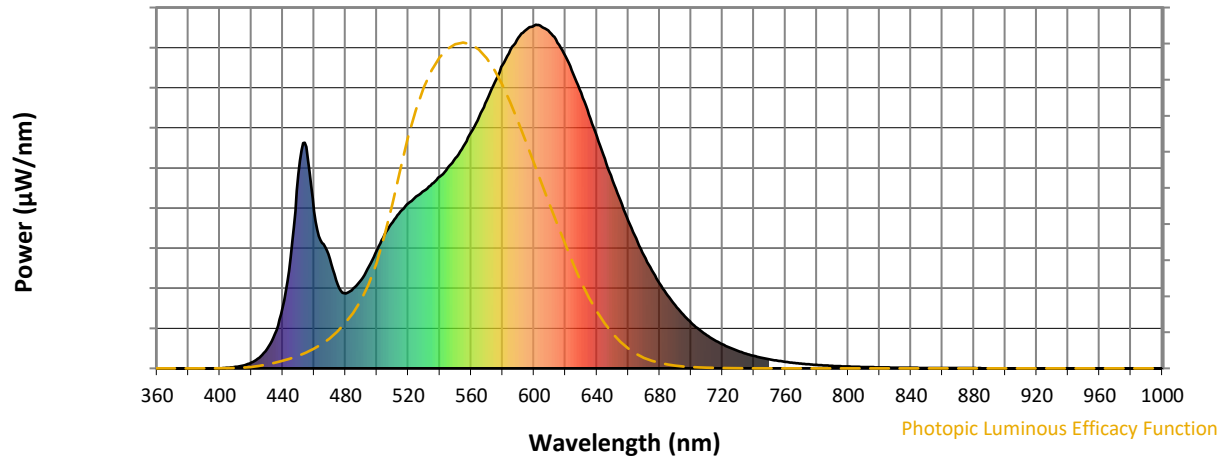
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-7

**Photopic Flux vs. Wavelength**

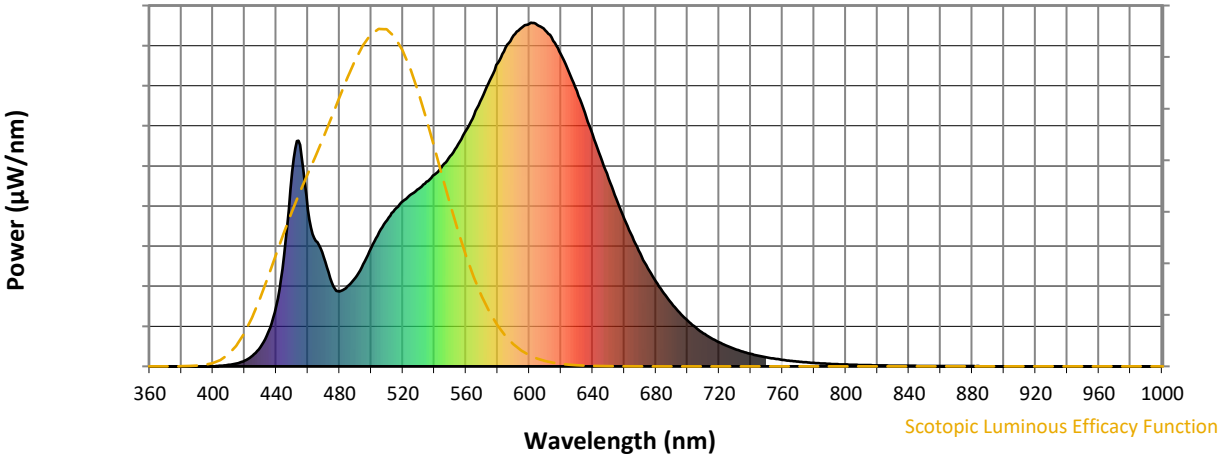


**Photopic Lumens: NR**

$\lambda$ (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			

REPORT NUMBER: SP1-2407-157-7

Scotopic Flux vs. Wavelength

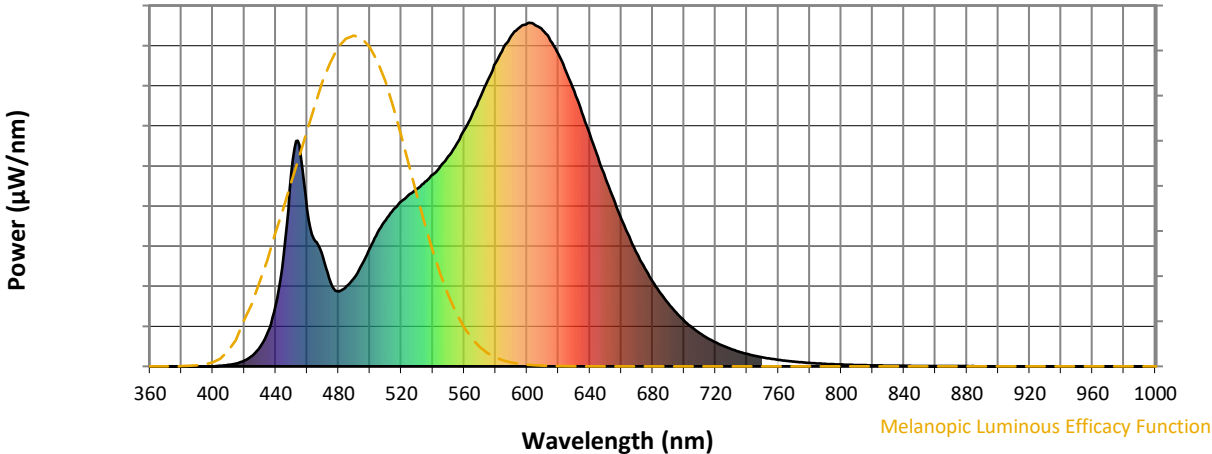


Scotopic Lumens: NR S/P: 1.42

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			

REPORT NUMBER: SP1-2407-157-7

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.79

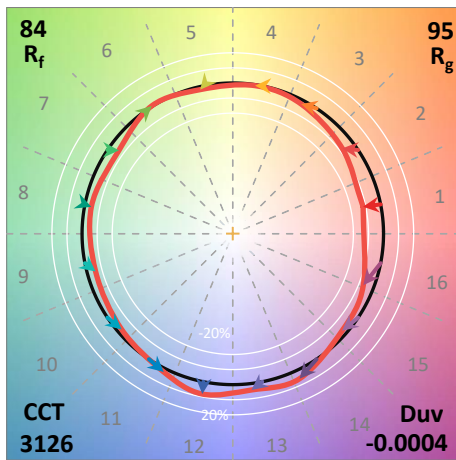
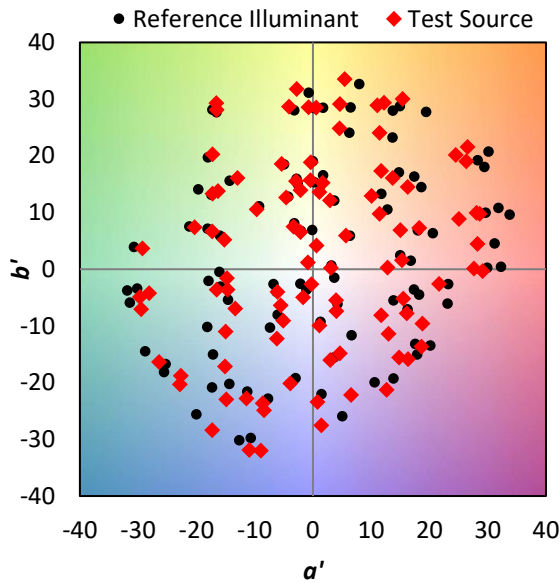
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	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**

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



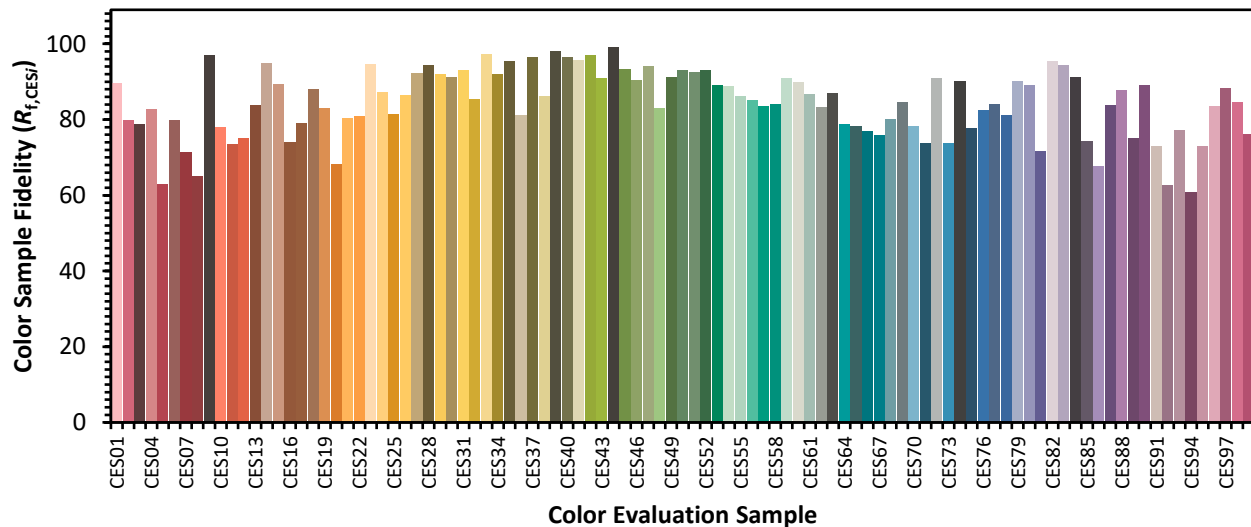
**Color Vector Graphics**



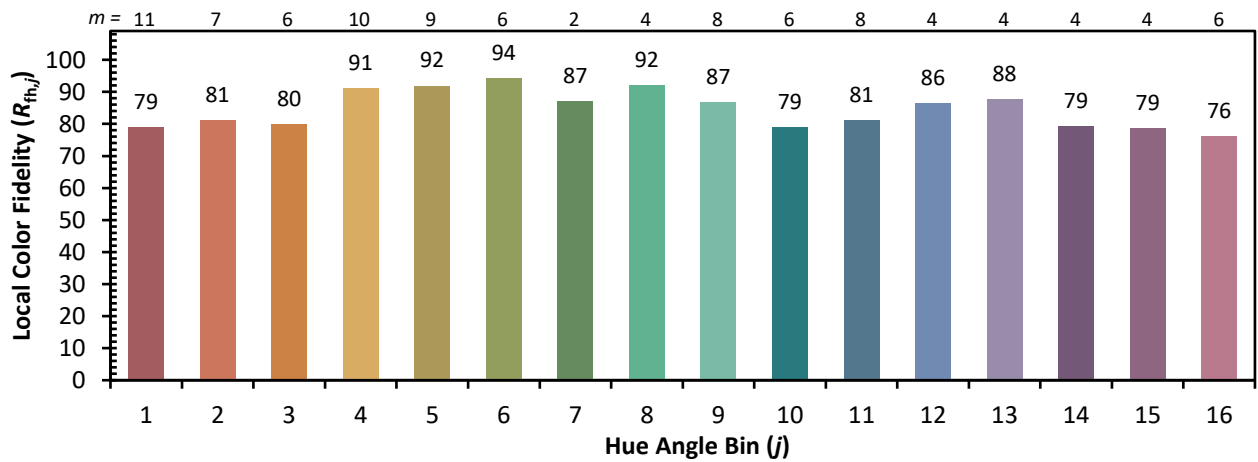


Individual Sample Fidelity Index ( $R_{f,i}$ )

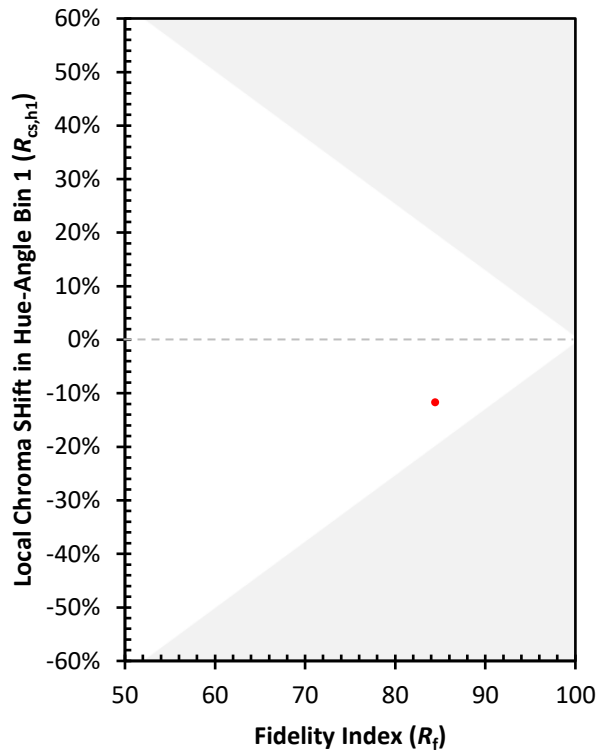
CES01 = 86	CES26 = 86	CES51 = 93	CES76 = 82
CES02 = 63	CES27 = 92	CES52 = 93	CES77 = 84
CES03 = 31	CES28 = 94	CES53 = 89	CES78 = 81
CES04 = 70	CES29 = 92	CES54 = 89	CES79 = 90
CES05 = 49	CES30 = 91	CES55 = 86	CES80 = 89
CES06 = 51	CES31 = 93	CES56 = 85	CES81 = 72
CES07 = 42	CES32 = 85	CES57 = 83	CES82 = 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)