

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: P868047

Luminaire Tested: **MEM2-HSN-SA-90-740-U-T3**

Issue Date: 08/21/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868047  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: MEM2-HSN-SA-90-740-U-T3  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 90W 70CRI 4000K  
FITXURE w/ TYPE III DISTRIBUTION OPTIC  
Light Source: (20) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

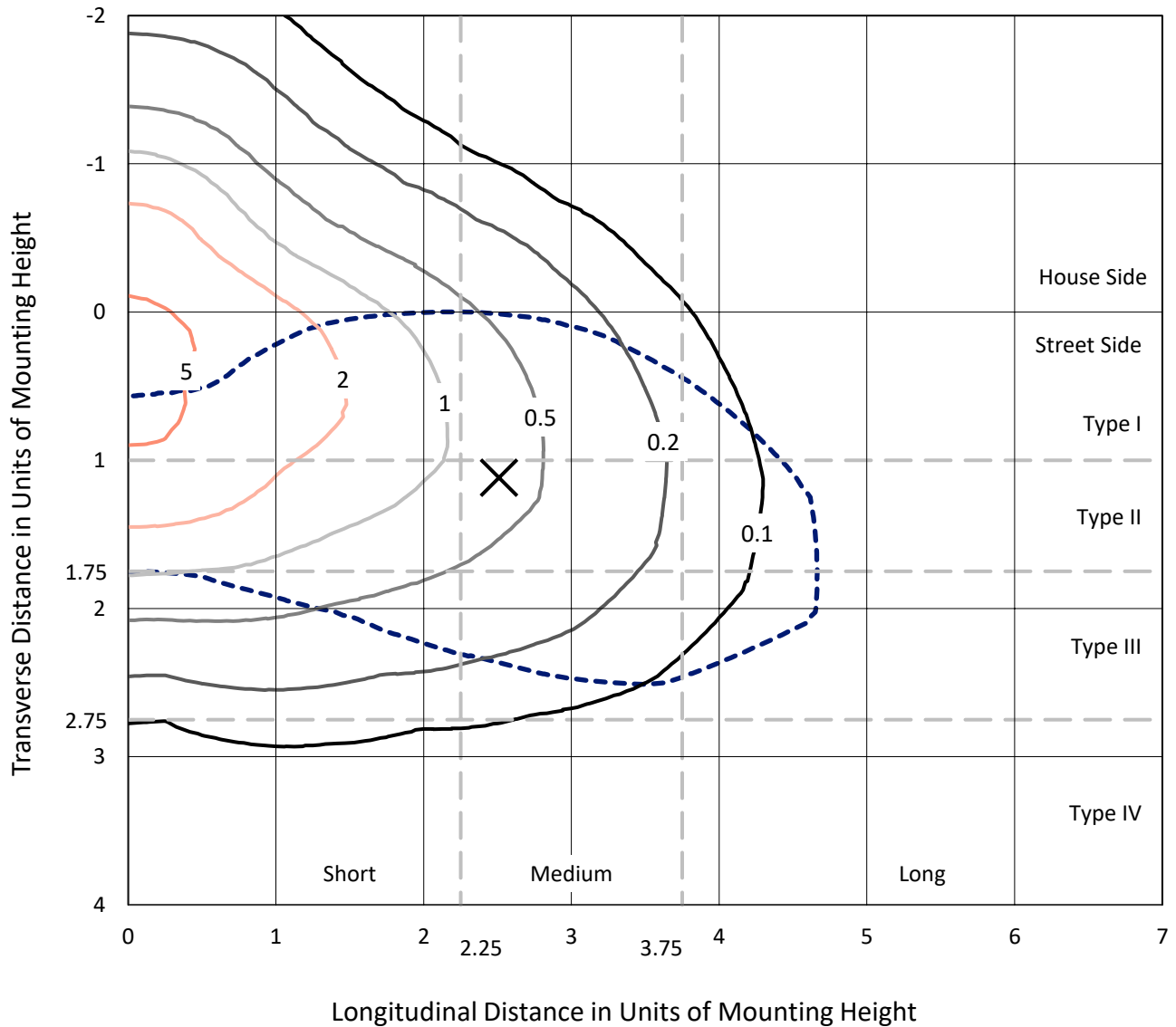
Lumens per Lamp: N/A  
Luminaire Lumens: 12884.4 lumens  
Efficiency: N/A  
Efficacy: 143.2 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G2

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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 CATALOG NUMBER: MEM2-HSN-SA-90-740-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

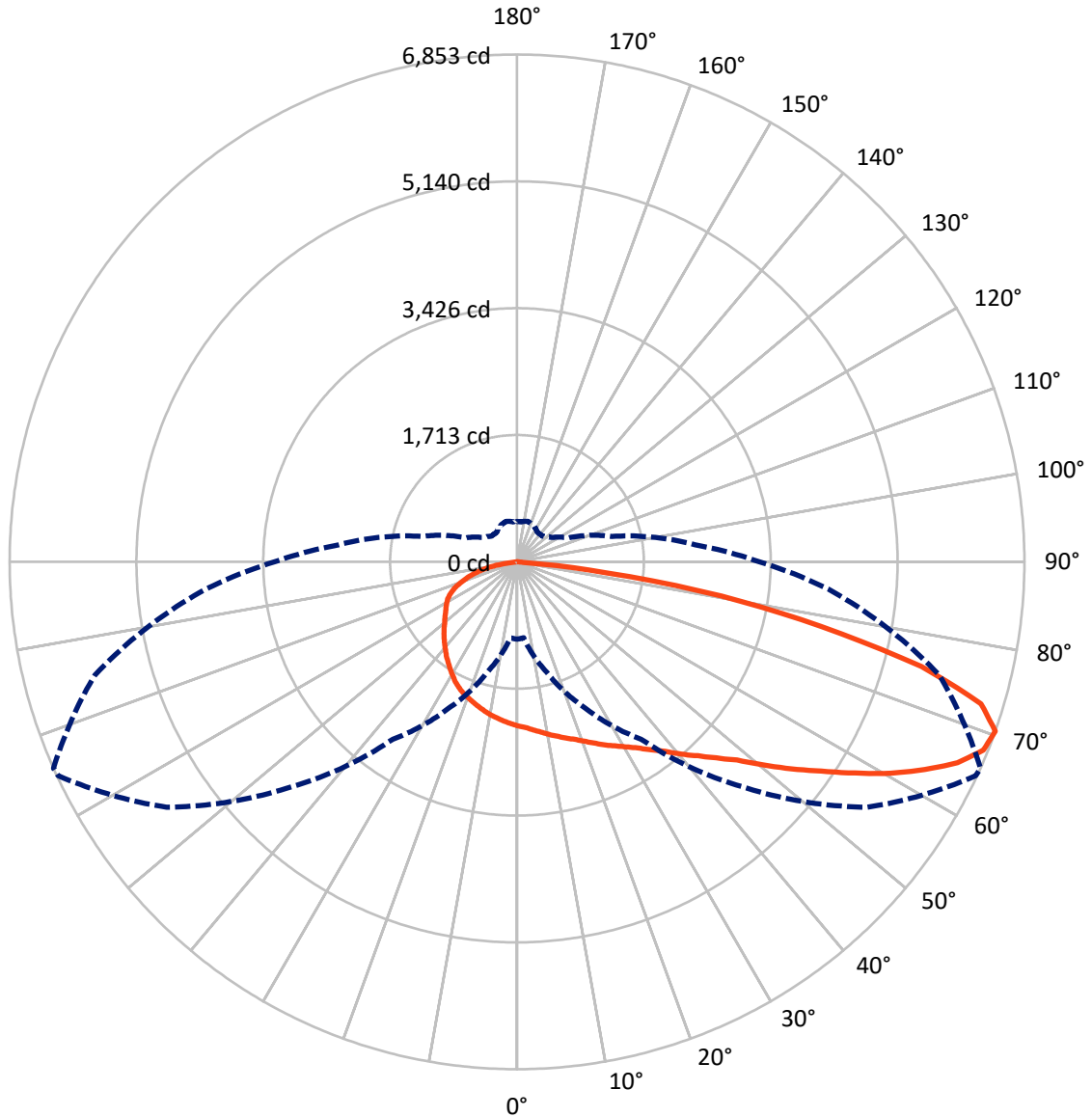
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.9 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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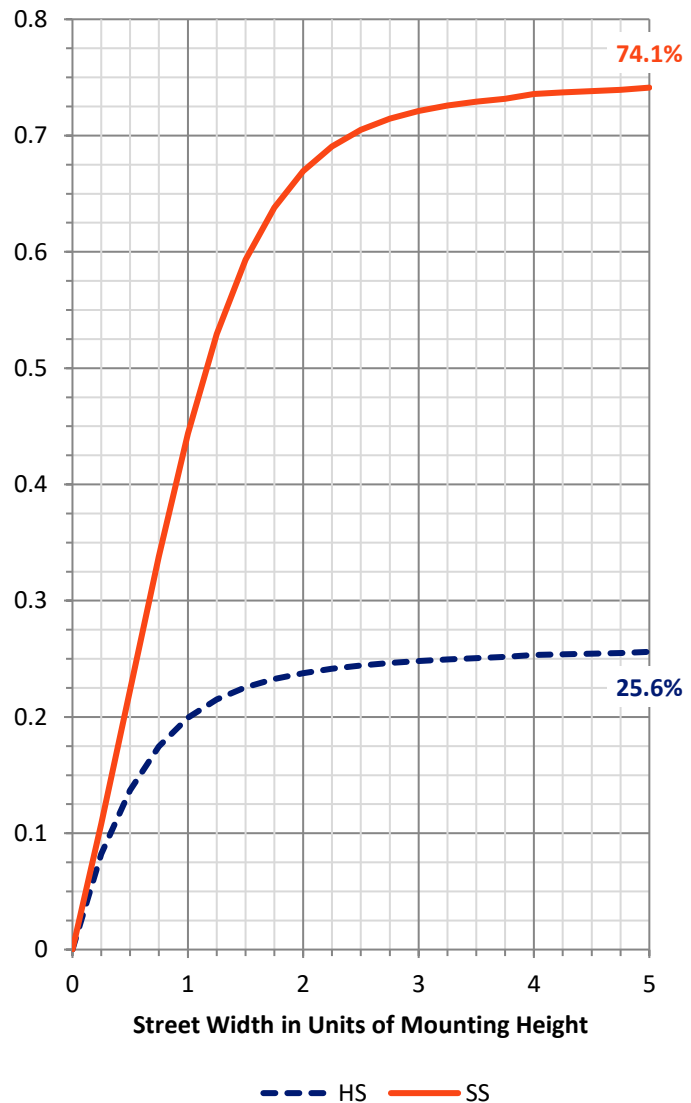
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3320.4	0.0	3320.4
	% Fixture	25.8	0.0	25.8
<b>Street Side</b>	Lumens	9564.0	0.0	9564.0
	% Fixture	74.2	0.0	74.2
<b>Total</b>	Lumens	12884.4	0.0	12884.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.2	1.6
10°-20°	631.9	4.9
20°-30°	1061.4	8.2
30°-40°	1599.1	12.4
40°-50°	2170.9	16.8
50°-60°	2579.7	20.0
60°-70°	2632.7	20.4
70°-80°	1760.9	13.7
80°-90°	235.6	1.8
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°	12884.4	100.0
0°-180°	12884.4	100.0



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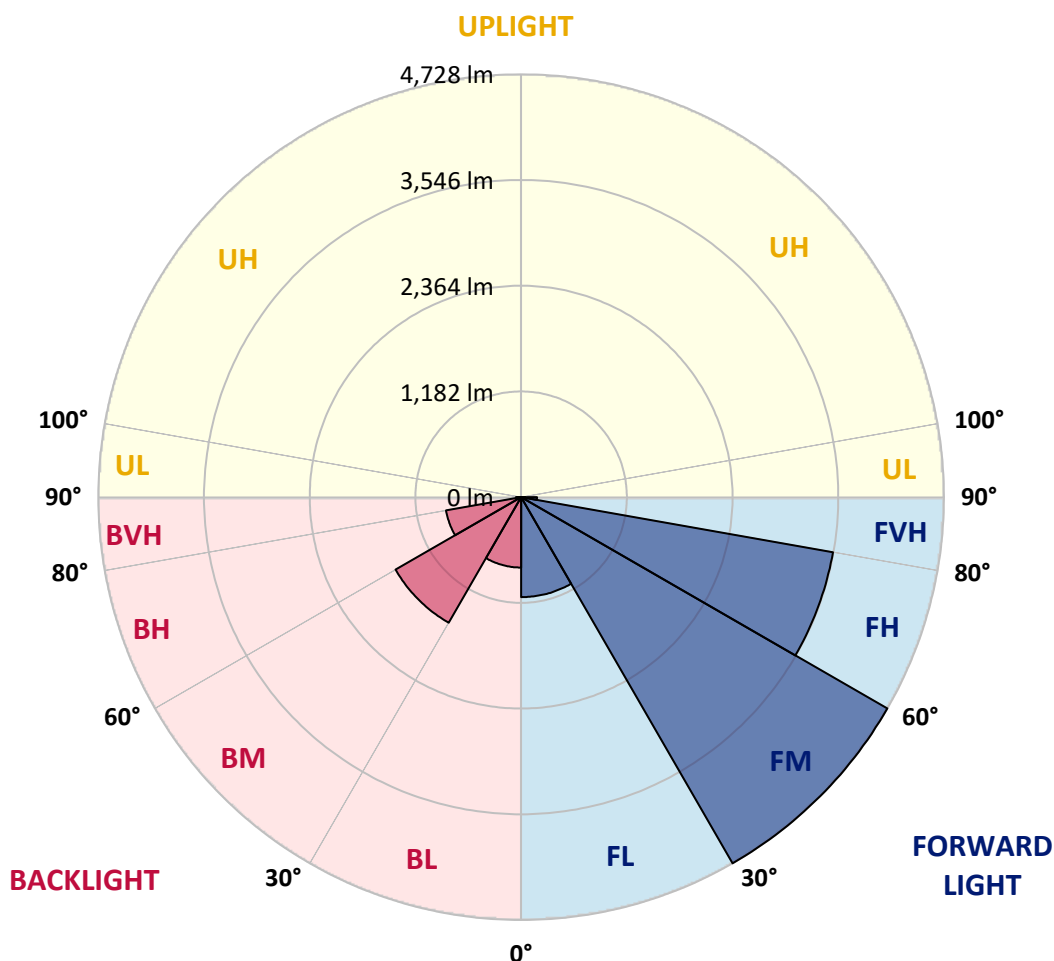
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1118.1	8.7			
FM (30°-60°)	4728.3	36.7			
FH (60°-80°)	3541.1	27.5			G2/5000
FVH (80°-90°)	176.4	1.4			G2/225
BL (0°-30°)	787.3	6.1	B2/1000		
BM (30°-60°)	1621.4	12.6	B2/2500		
BH (60°-80°)	852.6	6.6	B2/1000		G2/1000
BVH (80°-90°)	59.1	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8
2.5°	2296.2	2285.9	2278.3	2283.4	2268.0	2273.1	2255.2	2242.4	2239.9	2234.7	2229.6
5°	2367.9	2367.9	2355.1	2355.1	2337.1	2334.6	2309.0	2280.8	2280.8	2262.9	2242.4
7.5°	2444.6	2439.5	2424.2	2421.6	2401.1	2396.0	2367.9	2324.3	2321.8	2288.5	2257.8
10°	2498.4	2501.0	2490.7	2490.7	2475.4	2462.6	2421.6	2375.5	2370.4	2326.9	2278.3
12.5°	2539.4	2544.5	2541.9	2541.9	2529.1	2529.1	2483.0	2421.6	2416.5	2360.2	2291.1
15°	2582.9	2580.3	2588.0	2590.6	2585.4	2577.8	2544.5	2472.8	2470.2	2396.0	2309.0
17.5°	2621.3	2618.7	2621.3	2634.1	2636.6	2636.6	2603.4	2529.1	2518.9	2439.5	2324.3
20°	2644.3	2649.4	2659.7	2675.0	2682.7	2703.2	2675.0	2595.7	2585.4	2485.6	2357.6
22.5°	2731.4	2716.0	2723.7	2733.9	2744.1	2772.3	2746.7	2664.8	2657.1	2554.7	2396.0
25°	2879.8	2879.8	2861.9	2844.0	2831.2	2844.0	2823.5	2744.1	2739.0	2616.2	2439.5
27.5°	3138.4	3138.4	3100.0	3033.4	2948.9	2925.9	2910.5	2828.6	2813.3	2682.7	2467.7
30°	3466.0	3476.3	3407.1	3294.5	3138.4	3036.0	2997.6	2908.0	2900.3	2749.3	2511.2
32.5°	3816.7	3837.2	3786.0	3622.2	3366.2	3166.5	3105.1	3012.9	2995.0	2828.6	2567.5
35°	4131.6	4152.1	4082.9	3929.4	3601.7	3356.0	3233.1	3128.1	3117.9	2931.0	2652.0
37.5°	4387.6	4392.7	4349.2	4162.3	3798.8	3514.7	3391.8	3266.4	3245.9	3053.9	2741.6
40°	4658.9	4679.4	4635.9	4405.5	3978.0	3686.2	3550.5	3432.7	3414.8	3181.9	2826.1
42.5°	4943.1	4940.5	4940.5	4615.4	4157.2	3829.5	3722.0	3591.5	3581.2	3312.4	2918.2
45°	5117.1	5127.4	5099.2	4740.8	4420.8	3978.0	3888.4	3793.7	3775.8	3494.2	3038.5
47.5°	5160.6	5137.6	5009.6	4838.1	4717.8	4131.6	4098.3	4042.0	4001.0	3693.9	3187.0
50°	5101.8	5065.9	4991.7	4881.6	4827.9	4315.9	4310.8	4338.9	4310.8	3937.0	3358.5
52.5°	4881.6	4876.5	4863.7	4889.3	4802.3	4461.8	4551.4	4648.7	4643.6	4185.3	3537.7
55°	4418.3	4451.6	4605.2	4766.4	4705.0	4561.6	4820.2	5007.0	4986.6	4477.2	3722.0
57.5°	3944.7	3978.0	4175.1	4559.1	4610.3	4669.1	5122.2	5414.1	5380.8	4794.6	3891.0
60°	3532.6	3496.7	3693.9	4246.8	4477.2	4766.4	5421.7	5826.2	5798.0	5112.0	4065.0
62.5°	2879.8	2915.7	3230.5	3791.1	4290.3	4827.9	5667.5	6199.9	6182.0	5403.8	4205.8
65°	2278.3	2229.6	2703.2	3312.4	3967.8	4807.4	5880.0	6550.6	6537.8	5690.5	4313.3
67.5°	1548.7	1515.4	2140.0	2836.3	3530.0	4643.6	5928.6	6786.1	6791.3	5859.5	4341.5
70°	1044.4	1029.1	1538.5	2181.0	2923.3	4290.3	5777.6	6834.8	6852.7	5903.0	4216.1
72.5°	770.5	768.0	1126.3	1556.4	2175.9	3622.2	5365.4	6517.4	6550.6	5595.8	3847.4
75°	606.7	614.4	803.8	1105.9	1451.4	2680.2	4513.0	5588.1	5639.3	4833.0	3194.7
77.5°	496.6	496.6	563.2	793.6	970.2	1663.9	3245.9	4090.6	4193.0	3729.7	2460.0
80°	401.9	409.6	417.3	552.9	642.5	949.7	1889.2	2728.8	2803.0	2598.2	1776.5
82.5°	220.1	235.5	227.8	286.7	322.5	440.3	750.0	1103.3	1215.9	1082.8	806.3
85°	15.4	10.2	17.9	23.0	28.2	43.5	58.9	81.9	76.8	110.1	56.3
87.5°	2.6	2.6	2.6	5.1	5.1	7.7	10.2	10.2	10.2	10.2	10.2
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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CATALOG NUMBER: MEM2-HSN-SA-90-740-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8
2.5°	2227.1	2214.3	2193.8	2188.7	2181.0	2170.7	2160.5	2145.1	2140.0	2145.1	2150.3
5°	2229.6	2211.7	2178.4	2157.9	2137.5	2119.5	2099.1	2078.6	2065.8	2068.4	2078.6
7.5°	2237.3	2211.7	2160.5	2127.2	2093.9	2065.8	2032.5	2009.5	1994.1	1996.7	2004.4
10°	2247.5	2211.7	2150.3	2093.9	2047.9	2006.9	1973.6	1945.5	1930.1	1927.6	1930.1
12.5°	2250.1	2209.1	2127.2	2058.1	2001.8	1948.0	1912.2	1886.6	1871.2	1863.6	1868.7
15°	2257.8	2201.5	2104.2	2019.7	1950.6	1894.3	1850.8	1820.0	1809.8	1804.7	1802.1
17.5°	2268.0	2198.9	2083.7	1981.3	1899.4	1835.4	1797.0	1766.3	1753.5	1748.4	1753.5
20°	2283.4	2201.5	2060.7	1942.9	1853.3	1789.3	1745.8	1715.1	1704.9	1702.3	1699.7
22.5°	2303.9	2206.6	2042.8	1907.1	1802.1	1738.1	1694.6	1674.1	1666.5	1669.0	1669.0
25°	2324.3	2211.7	2017.2	1858.4	1748.4	1681.8	1651.1	1635.7	1640.9	1651.1	1651.1
27.5°	2342.3	2209.1	1981.3	1807.2	1684.4	1622.9	1599.9	1602.5	1615.3	1633.2	1635.7
30°	2365.3	2209.1	1942.9	1743.3	1612.7	1553.8	1548.7	1569.2	1589.7	1607.6	1607.6
32.5°	2401.1	2224.5	1912.2	1679.3	1538.5	1492.4	1515.4	1543.6	1566.6	1584.5	1589.7
35°	2462.6	2257.8	1891.7	1615.3	1466.8	1433.5	1477.0	1523.1	1538.5	1551.3	1553.8
37.5°	2521.4	2288.5	1866.1	1553.8	1392.6	1379.8	1438.6	1487.3	1489.8	1497.5	1497.5
40°	2577.8	2311.5	1832.8	1487.3	1320.9	1320.9	1390.0	1431.0	1425.8	1418.2	1420.7
42.5°	2639.2	2324.3	1794.4	1425.8	1262.0	1262.0	1318.3	1354.2	1351.6	1361.8	1369.5
45°	2713.4	2349.9	1743.3	1369.5	1200.6	1190.3	1236.4	1267.1	1305.5	1351.6	1364.4
47.5°	2815.8	2385.8	1702.3	1308.1	1149.4	1113.5	1131.4	1195.4	1239.0	1277.4	1282.5
50°	2923.3	2437.0	1666.5	1244.1	1087.9	1023.9	1039.3	1111.0	1136.6	1151.9	1159.6
52.5°	3038.5	2477.9	1635.7	1190.3	1023.9	931.8	952.3	1021.4	1039.3	1052.1	1054.7
55°	3138.4	2511.2	1597.3	1139.1	954.8	844.7	870.3	936.9	954.8	970.2	970.2
57.5°	3243.3	2541.9	1571.7	1095.6	880.6	773.1	791.0	857.5	883.1	888.3	895.9
60°	3330.4	2570.1	1548.7	1054.7	811.5	709.1	721.9	780.8	811.5	814.0	819.1
62.5°	3391.8	2588.0	1535.9	1003.5	742.4	645.1	655.3	714.2	750.0	757.7	760.3
65°	3430.2	2598.2	1512.9	936.9	683.5	591.3	591.3	650.2	686.0	704.0	709.1
67.5°	3412.3	2580.3	1451.4	860.1	629.7	537.6	535.0	593.9	624.6	634.8	637.4
70°	3274.0	2475.4	1326.0	765.4	573.4	488.9	483.8	537.6	565.7	542.7	545.2
72.5°	2992.5	2237.3	1154.5	670.7	514.5	442.9	437.7	483.8	486.4	486.4	483.8
75°	2521.4	1827.7	921.5	570.8	453.1	394.2	396.8	432.6	435.2	448.0	440.3
77.5°	1932.7	1354.2	719.3	455.7	384.0	350.7	363.5	376.3	394.2	412.1	394.2
80°	1405.4	934.3	499.2	340.5	296.9	296.9	302.1	314.9	340.5	358.4	340.5
82.5°	601.6	412.1	230.4	168.9	145.9	143.4	145.9	145.9	179.2	184.3	161.3
85°	46.1	38.4	28.2	28.2	23.0	12.8	12.8	10.2	7.7	7.7	7.7
87.5°	10.2	7.7	7.7	7.7	5.1	5.1	5.1	5.1	5.1	5.1	5.1
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: SP1-2407-157-5

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-30-740-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-30-740-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-5  
 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-30-740-U-5WQ-2**  
 Description: Epic Modern Light Square 30W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 3915  
 CIE u': 0.2262  
 CIE v': 0.5044  
 Duv: 0.0010  
 CIE x: 0.3850  
 CIE y: 0.3816  
 CIE z: 0.2334  
 Peak Wavelength (nm): 449  
 Dominant Wavelength (nm): 578  
 Purity: 30.05482  
 Rf: 73.2  
 Rg: 93.9

CRI (Ra):	71.0		
R1:	67.6	R9:	-38.4
R2:	78.3	R10:	48.9
R3:	87.1	R11:	65.3
R4:	69.7	R12:	40.4
R5:	67.4	R13:	69.3
R6:	69.3	R14:	92.6
R7:	79.7	R15:	59.9
R8:	48.7		



**Test Conditions**

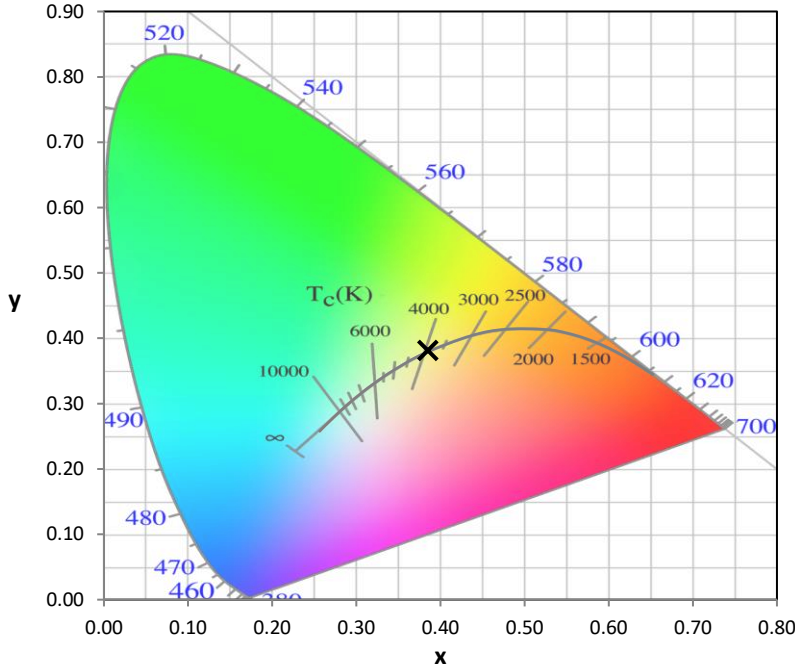
Stabilization Time: 21M  
 Operation Time: 1H 21M  
 Sphere Temperature (°C): 24.2

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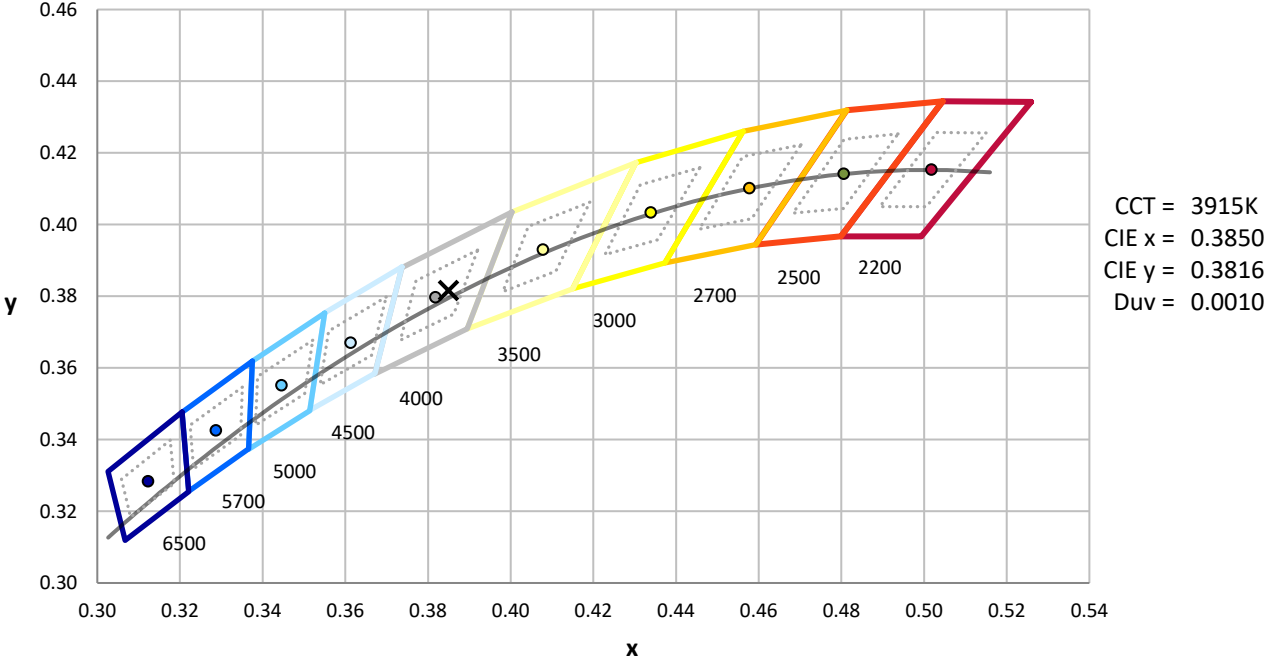
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



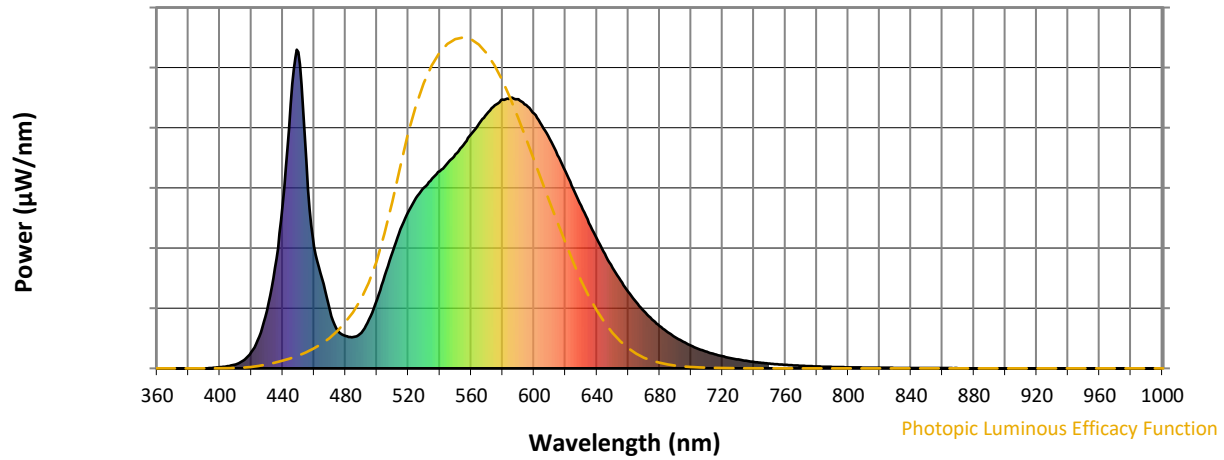
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



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	112	NR	620	618	NR	750	15	NR	880	0	NR
365	0	NR	495	153	NR	625	563	NR	755	13	NR	885	0	NR
370	0	NR	500	216	NR	630	510	NR	760	11	NR	890	0	NR
375	0	NR	505	291	NR	635	456	NR	765	9	NR	895	0	NR
380	0	NR	510	366	NR	640	407	NR	770	8	NR	900	0	NR
385	0	NR	515	436	NR	645	359	NR	775	7	NR	905	0	NR
390	0	NR	520	492	NR	650	316	NR	780	6	NR	910	0	NR
395	2	NR	525	536	NR	655	277	NR	785	5	NR	915	0	NR
400	4	NR	530	567	NR	660	240	NR	790	4	NR	920	0	NR
405	7	NR	535	596	NR	665	208	NR	795	4	NR	925	0	NR
410	12	NR	540	619	NR	670	179	NR	800	3	NR	930	0	NR
415	25	NR	545	644	NR	675	154	NR	805	3	NR	935	0	NR
420	51	NR	550	671	NR	680	133	NR	810	3	NR	940	0	NR
425	100	NR	555	701	NR	685	114	NR	815	2	NR	945	0	NR
430	180	NR	560	735	NR	690	98	NR	820	2	NR	950	0	NR
435	315	NR	565	768	NR	695	83	NR	825	2	NR	955	0	NR
440	514	NR	570	798	NR	700	71	NR	830	1	NR	960	0	NR
445	828	NR	575	825	NR	705	61	NR	835	1	NR	965	0	NR
450	992	NR	580	843	NR	710	52	NR	840	1	NR	970	0	NR
455	652	NR	585	848	NR	715	44	NR	845	1	NR	975	0	NR
460	382	NR	590	844	NR	720	38	NR	850	1	NR	980	0	NR
465	282	NR	595	826	NR	725	32	NR	855	1	NR	985	0	NR
470	180	NR	600	800	NR	730	28	NR	860	1	NR	990	0	NR
475	119	NR	605	762	NR	735	24	NR	865	1	NR	995	0	NR
480	101	NR	610	719	NR	740	20	NR	870	1	NR	1000	0	NR
485	98	NR	615	669	NR	745	17	NR	875	0	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.49**

$\lambda$ (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	112	NR	620	618	NR	750	15	NR	880	0	NR
365	0	NR	495	153	NR	625	563	NR	755	13	NR	885	0	NR
370	0	NR	500	216	NR	630	510	NR	760	11	NR	890	0	NR
375	0	NR	505	291	NR	635	456	NR	765	9	NR	895	0	NR
380	0	NR	510	366	NR	640	407	NR	770	8	NR	900	0	NR
385	0	NR	515	436	NR	645	359	NR	775	7	NR	905	0	NR
390	0	NR	520	492	NR	650	316	NR	780	6	NR	910	0	NR
395	2	NR	525	536	NR	655	277	NR	785	5	NR	915	0	NR
400	4	NR	530	567	NR	660	240	NR	790	4	NR	920	0	NR
405	7	NR	535	596	NR	665	208	NR	795	4	NR	925	0	NR
410	12	NR	540	619	NR	670	179	NR	800	3	NR	930	0	NR
415	25	NR	545	644	NR	675	154	NR	805	3	NR	935	0	NR
420	51	NR	550	671	NR	680	133	NR	810	3	NR	940	0	NR
425	100	NR	555	701	NR	685	114	NR	815	2	NR	945	0	NR
430	180	NR	560	735	NR	690	98	NR	820	2	NR	950	0	NR
435	315	NR	565	768	NR	695	83	NR	825	2	NR	955	0	NR
440	514	NR	570	798	NR	700	71	NR	830	1	NR	960	0	NR
445	828	NR	575	825	NR	705	61	NR	835	1	NR	965	0	NR
450	992	NR	580	843	NR	710	52	NR	840	1	NR	970	0	NR
455	652	NR	585	848	NR	715	44	NR	845	1	NR	975	0	NR
460	382	NR	590	844	NR	720	38	NR	850	1	NR	980	0	NR
465	282	NR	595	826	NR	725	32	NR	855	1	NR	985	0	NR
470	180	NR	600	800	NR	730	28	NR	860	1	NR	990	0	NR
475	119	NR	605	762	NR	735	24	NR	865	1	NR	995	0	NR
480	101	NR	610	719	NR	740	20	NR	870	1	NR	1000	0	NR
485	98	NR	615	669	NR	745	17	NR	875	0	NR			

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**Melanopic Flux vs. Wavelength**



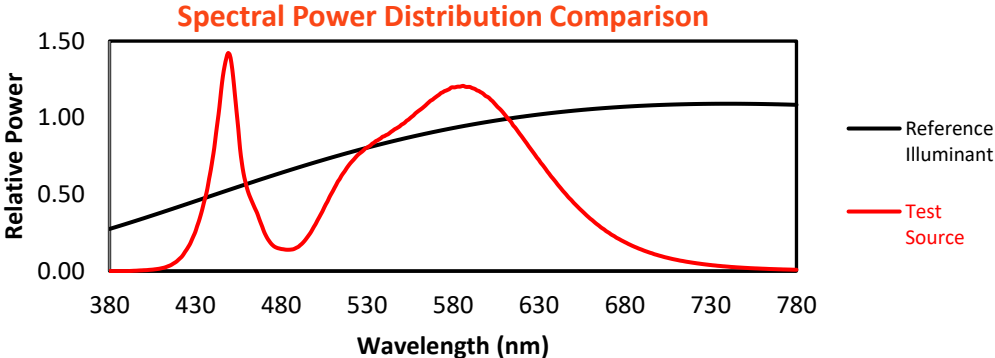
**Melanopic Lumens: NR**

**M/P: 2.88**

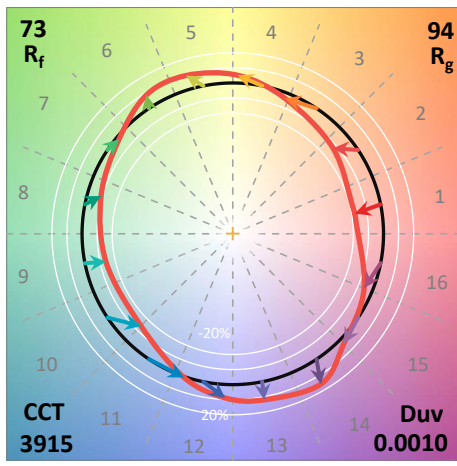
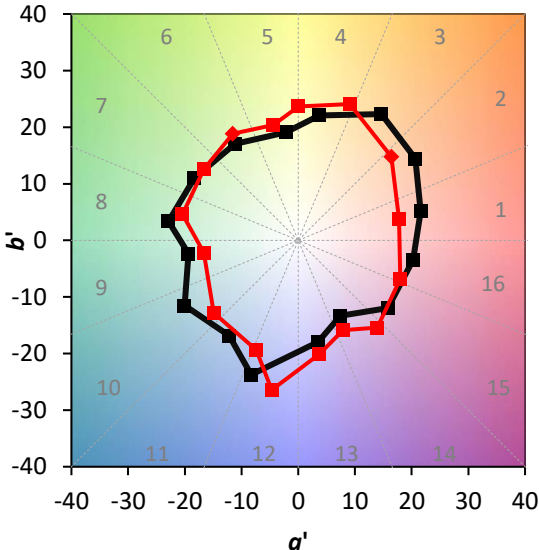
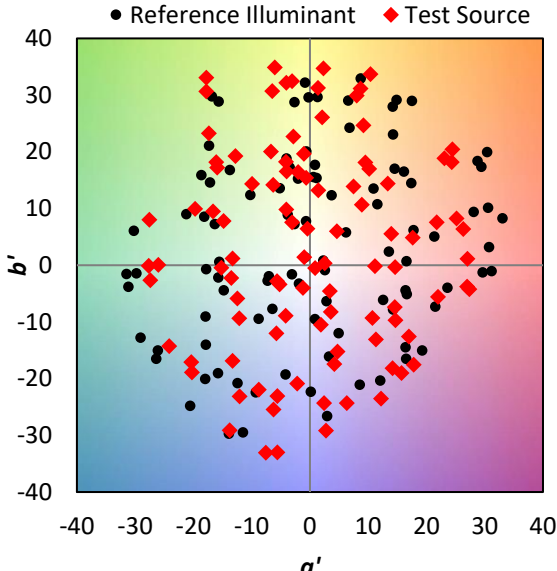
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	112	NR	620	618	NR	750	15	NR	880	0	NR
365	0	NR	495	153	NR	625	563	NR	755	13	NR	885	0	NR
370	0	NR	500	216	NR	630	510	NR	760	11	NR	890	0	NR
375	0	NR	505	291	NR	635	456	NR	765	9	NR	895	0	NR
380	0	NR	510	366	NR	640	407	NR	770	8	NR	900	0	NR
385	0	NR	515	436	NR	645	359	NR	775	7	NR	905	0	NR
390	0	NR	520	492	NR	650	316	NR	780	6	NR	910	0	NR
395	2	NR	525	536	NR	655	277	NR	785	5	NR	915	0	NR
400	4	NR	530	567	NR	660	240	NR	790	4	NR	920	0	NR
405	7	NR	535	596	NR	665	208	NR	795	4	NR	925	0	NR
410	12	NR	540	619	NR	670	179	NR	800	3	NR	930	0	NR
415	25	NR	545	644	NR	675	154	NR	805	3	NR	935	0	NR
420	51	NR	550	671	NR	680	133	NR	810	3	NR	940	0	NR
425	100	NR	555	701	NR	685	114	NR	815	2	NR	945	0	NR
430	180	NR	560	735	NR	690	98	NR	820	2	NR	950	0	NR
435	315	NR	565	768	NR	695	83	NR	825	2	NR	955	0	NR
440	514	NR	570	798	NR	700	71	NR	830	1	NR	960	0	NR
445	828	NR	575	825	NR	705	61	NR	835	1	NR	965	0	NR
450	992	NR	580	843	NR	710	52	NR	840	1	NR	970	0	NR
455	652	NR	585	848	NR	715	44	NR	845	1	NR	975	0	NR
460	382	NR	590	844	NR	720	38	NR	850	1	NR	980	0	NR
465	282	NR	595	826	NR	725	32	NR	855	1	NR	985	0	NR
470	180	NR	600	800	NR	730	28	NR	860	1	NR	990	0	NR
475	119	NR	605	762	NR	735	24	NR	865	1	NR	995	0	NR
480	101	NR	610	719	NR	740	20	NR	870	1	NR	1000	0	NR
485	98	NR	615	669	NR	745	17	NR	875	0	NR			

**Summary**

$R_f = 73.2$   
 $R_g = 93.9$   
 CIE  $R_a = 71.0$   
 $R_g = -38.4$



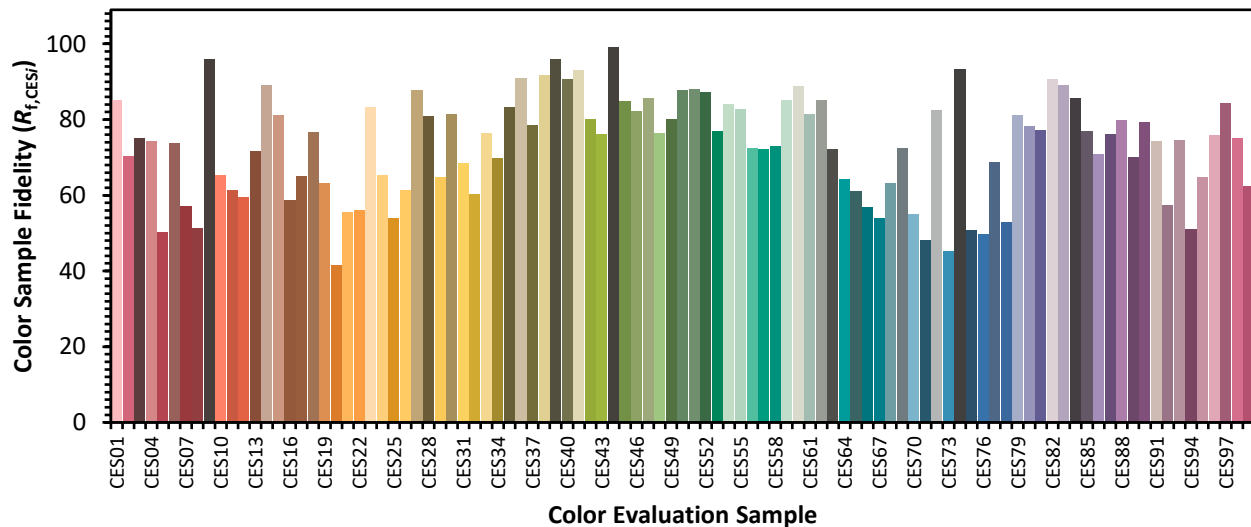
**Color Vector Graphics**



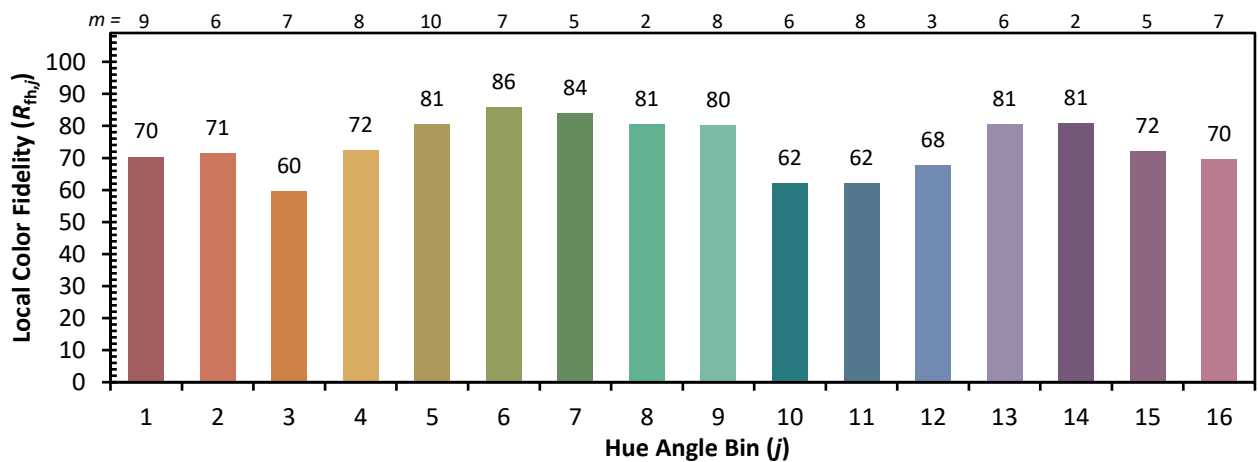
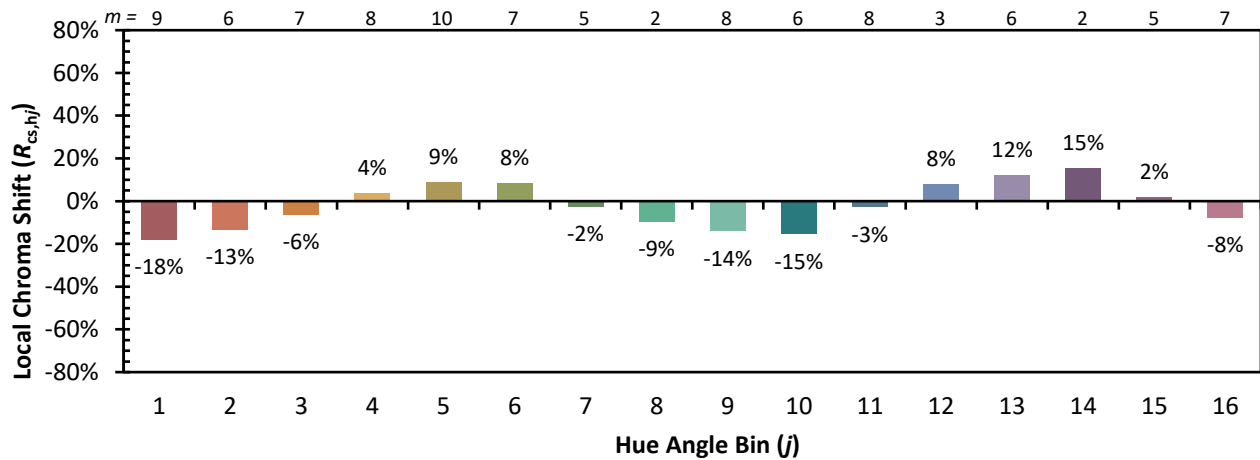


Individual Sample Fidelity Index ( $R_{f,i}$ )

CES01 = 85	CES26 = 61	CES51 = 88	CES76 = 50
CES02 = 61	CES27 = 88	CES52 = 87	CES77 = 69
CES03 = 30	CES28 = 81	CES53 = 77	CES78 = 53
CES04 = 70	CES29 = 65	CES54 = 84	CES79 = 81
CES05 = 47	CES30 = 81	CES55 = 83	CES80 = 78
CES06 = 50	CES31 = 69	CES56 = 73	CES81 = 77
CES07 = 40	CES32 = 60	CES57 = 72	CES82 = 91
CES08 = 39	CES33 = 76	CES58 = 73	CES83 = 89
CES09 = 29	CES34 = 70	CES59 = 85	CES84 = 86
CES10 = 74	CES35 = 83	CES60 = 89	CES85 = 77
CES11 = 57	CES36 = 91	CES61 = 81	CES86 = 71
CES12 = 63	CES37 = 79	CES62 = 85	CES87 = 76
CES13 = 42	CES38 = 92	CES63 = 72	CES88 = 80
CES14 = 74	CES39 = 96	CES64 = 64	CES89 = 70
CES15 = 71	CES40 = 91	CES65 = 61	CES90 = 79
CES16 = 46	CES41 = 93	CES66 = 57	CES91 = 74
CES17 = 49	CES42 = 80	CES67 = 54	CES92 = 57
CES18 = 56	CES43 = 76	CES68 = 63	CES93 = 74
CES19 = 72	CES44 = 99	CES69 = 73	CES94 = 51
CES20 = 65	CES45 = 85	CES70 = 55	CES95 = 65
CES21 = 86	CES46 = 82	CES71 = 48	CES96 = 76
CES22 = 78	CES47 = 86	CES72 = 83	CES97 = 84
CES23 = 92	CES48 = 77	CES73 = 45	CES98 = 75
CES24 = 91	CES49 = 80	CES74 = 93	CES99 = 62
CES25 = 72	CES50 = 88	CES75 = 51	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)