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: P871253

Luminaire Tested: **EMM2-HSN-SA2A-840-U-T4W**

Issue Date: 09/05/2024

Report Generated By 670245763

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P871253
Test Lab:	INNOVATION CENTER(G3)
Issue Date:	09/05/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	INVUE
Catalog Number:	EMM2-HSN-SA2A-840-U-T4W
Description:	EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 70W 80CRI 4000K FIXTURE w/ TYPE IV WIDE DISTRIBUTION OPTIC
Light Source:	(20) 4000K CCT, 80 CRI LEDS
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	8738.8 lumens
Efficiency:	N/A
Efficacy:	143.3 lumens/watt
Luminous Opening:	Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U0 - G2

Input Watts (W):	61
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	0.99
Total Harmonic Distortion (THDi):	9.89%
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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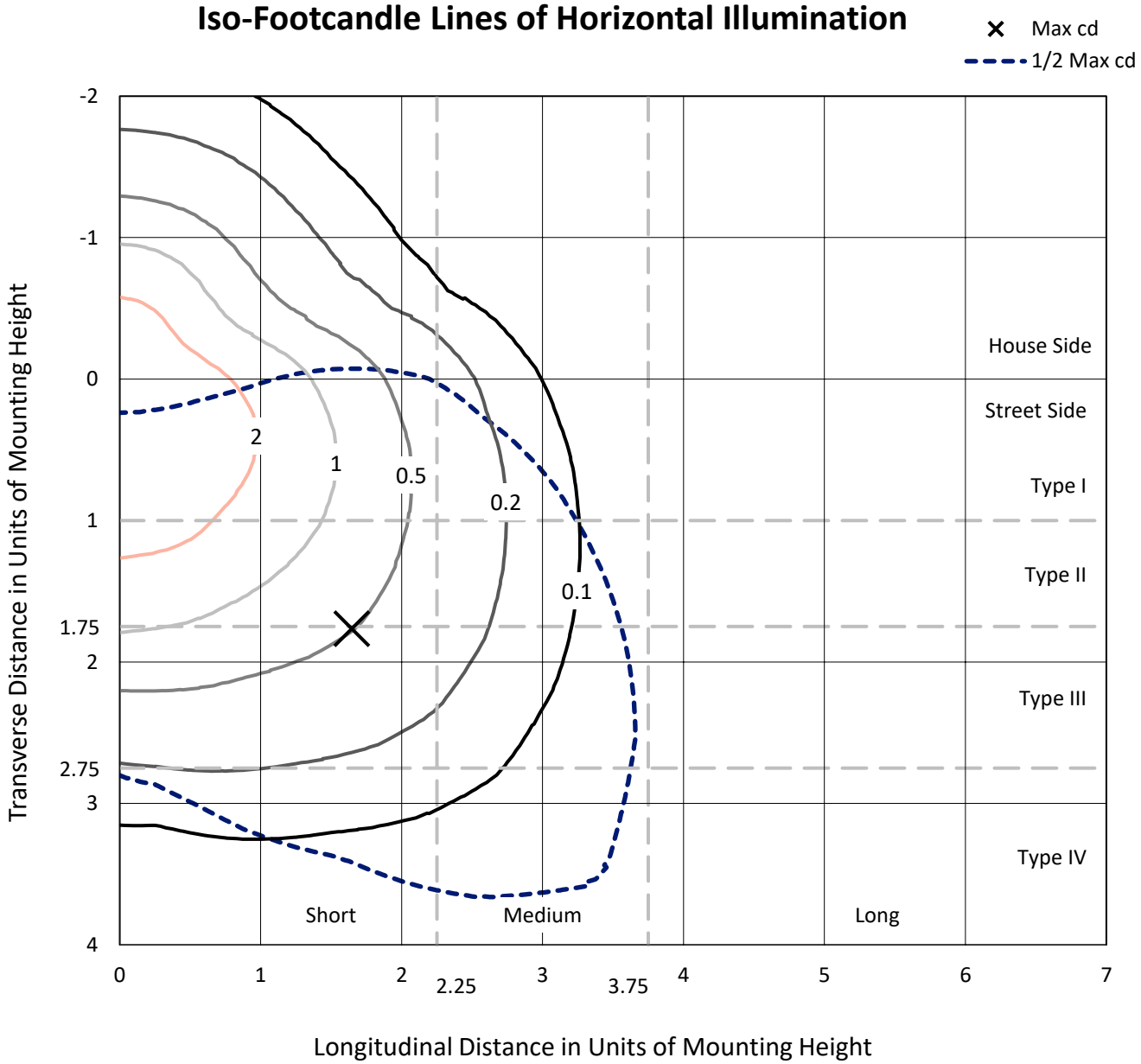
REPORT NUMBER: P871253
CATALOG NUMBER: EMM2-HSN-SA2A-840-U-T4W

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 4.2 fc
Type IV - Short - N/A

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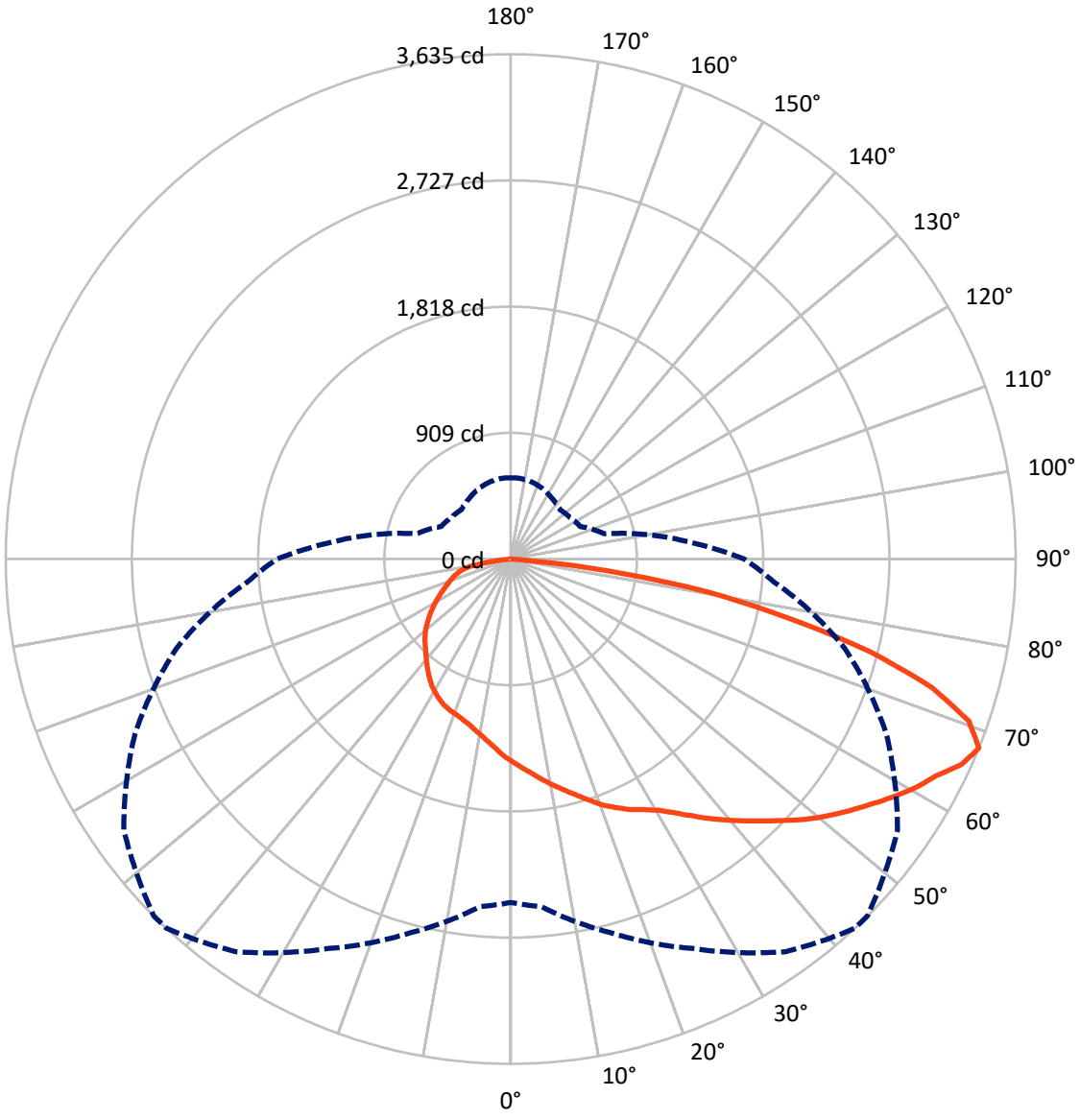
Luminous Intensity Polar Plot



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REPORT NUMBER: P871253
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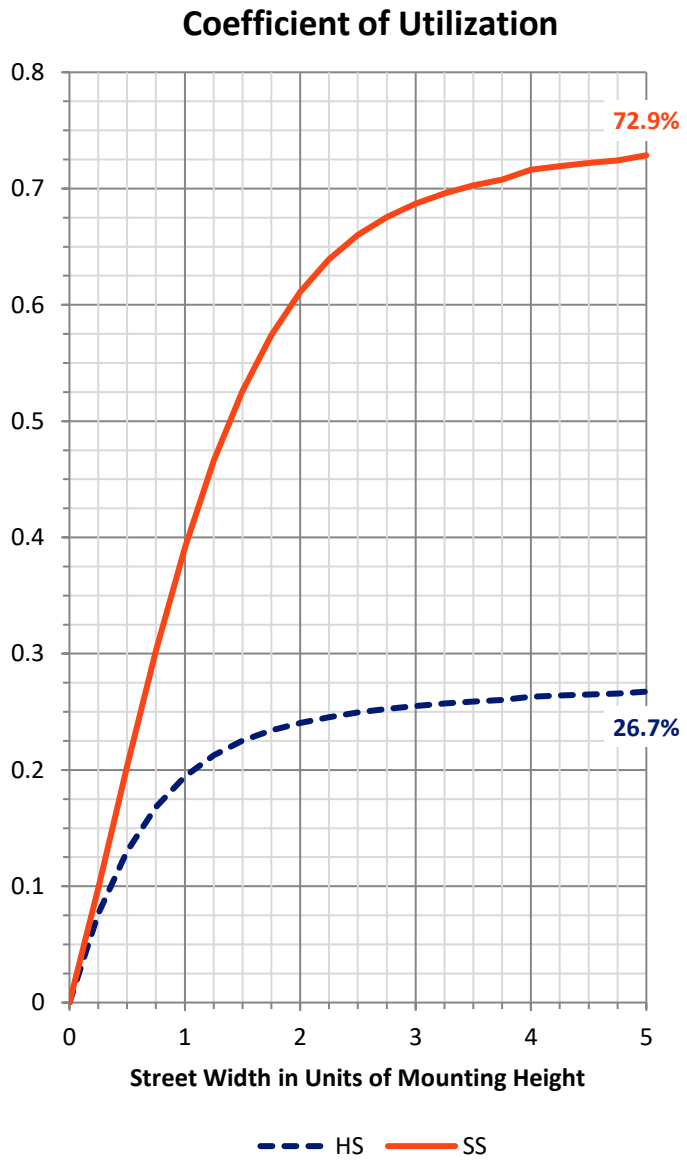
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2350.8	0.0	2350.8
	% Fixture	26.9	0.0	26.9
Street Side	Lumens	6388.0	0.0	6388.0
	% Fixture	73.1	0.0	73.1
Total	Lumens	8738.8	0.0	8738.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.6	1.6
10°-20°	426.3	4.9
20°-30°	727.4	8.3
30°-40°	1060.9	12.1
40°-50°	1425.2	16.3
50°-60°	1744.7	20.0
60°-70°	1836.1	21.0
70°-80°	1198.7	13.7
80°-90°	179.8	2.1
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°	8738.8	100.0
0°-180°	8738.8	100.0



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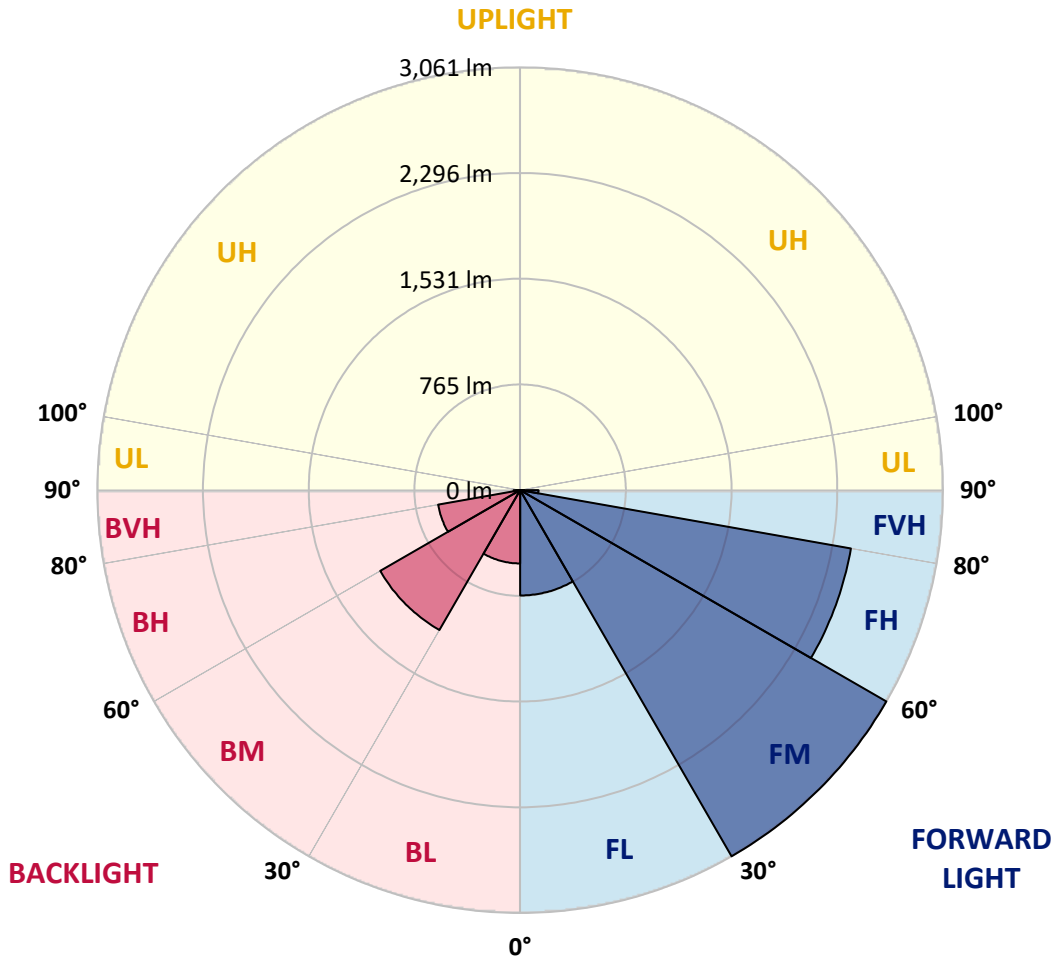
REPORT NUMBER: P871253
CATALOG NUMBER: EMM2-HSN-SA2A-840-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	762.6	8.7			
FM	(30°-60°)	3061.1	35.0			
FH	(60°-80°)	2431.6	27.8			G2/5000
FVH	(80°-90°)	132.7	1.5			G2/225
BL	(0°-30°)	530.7	6.1	B2/1000		
BM	(30°-60°)	1169.6	13.4	B2/2500		
BH	(60°-80°)	603.3	6.9	B2/1000		G2/1000
BVH	(80°-90°)	47.1	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 IV Short



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REPORT NUMBER: P871253
CATALOG NUMBER: EMM2-HSN-SA2A-840-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	43°	45°	55°	65°	75°	85°
0°	1458.8	1458.8	1458.8	1458.8	1458.8	*1458.8*	1458.8	1458.8	1458.8	1458.8	1458.8
2.5°	1526.0	1524.2	1518.9	1515.3	1504.7	*1503.0*	1503.0	1492.4	1480.0	1472.9	1465.8
5°	1594.9	1586.1	1582.5	1575.5	1557.8	*1547.2*	1550.7	1531.3	1506.5	1488.8	1469.4
7.5°	1656.8	1653.3	1640.9	1632.0	1610.8	*1600.2*	1596.7	1566.6	1534.8	1508.3	1476.4
10°	1731.1	1722.2	1715.2	1697.5	1669.2	*1653.3*	1648.0	1609.1	1568.4	1533.0	1490.6
12.5°	1798.3	1787.7	1778.8	1761.1	1732.8	*1706.3*	1699.2	1655.0	1603.8	1556.0	1503.0
15°	1849.5	1851.3	1842.5	1826.6	1794.7	*1762.9*	1757.6	1699.2	1637.4	1579.0	1515.3
17.5°	1897.3	1904.4	1899.0	1888.4	1856.6	*1824.8*	1819.5	1754.1	1679.8	1605.5	1529.5
20°	1943.3	1943.3	1941.5	1934.4	1911.4	*1890.2*	1879.6	1814.2	1720.5	1633.8	1548.9
22.5°	1969.8	1976.8	1976.8	1976.8	1962.7	*1945.0*	1941.5	1877.8	1775.3	1669.2	1566.6
25°	2010.4	2019.3	2019.3	2015.7	2003.4	*1998.1*	1992.8	1932.6	1828.3	1709.9	1586.1
27.5°	2097.1	2095.3	2081.2	2063.5	2045.8	*2044.0*	2037.0	1994.5	1890.2	1754.1	1612.6
30°	2217.3	2220.9	2203.2	2148.4	2107.7	*2098.9*	2100.6	2063.5	1962.7	1805.3	1642.7
32.5°	2401.2	2401.2	2332.3	2261.5	2203.2	*2180.2*	2174.9	2143.1	2037.0	1861.9	1676.3
35°	2539.1	2533.8	2494.9	2411.8	2339.3	*2273.9*	2265.1	2222.6	2120.1	1925.6	1713.4
37.5°	2643.5	2654.1	2624.0	2560.4	2489.6	*2376.5*	2358.8	2298.7	2196.1	1987.5	1750.5
40°	2845.0	2818.5	2746.0	2687.7	2602.8	*2477.2*	2461.3	2387.1	2273.9	2056.4	1796.5
42.5°	2991.8	2954.7	2871.6	2793.8	2687.7	*2578.0*	2563.9	2482.6	2364.1	2134.2	1844.2
45°	3202.2	3119.1	3004.2	2935.2	2784.9	*2687.7*	2670.0	2581.6	2457.8	2217.3	1904.4
47.5°	3405.6	3260.6	3138.6	3106.7	2891.0	*2806.1*	2792.0	2689.4	2558.6	2307.5	1962.7
50°	3379.0	3283.5	3242.9	3212.8	2983.0	*2917.5*	2903.4	2799.1	2661.1	2403.0	2021.1
52.5°	3311.8	3320.7	3322.4	3250.0	3069.6	*3021.9*	3007.7	2917.5	2767.2	2486.1	2077.6
55°	3382.6	3393.2	3391.4	3281.8	3170.4	*3126.2*	3117.3	3037.8	2869.8	2563.9	2118.3
57.5°	3490.4	3455.1	3449.8	3361.4	3278.2	*3237.6*	3227.0	3158.0	2956.4	2620.5	2150.1
60°	3509.9	3439.2	3462.1	3379.0	3359.6	*3347.2*	3343.7	3262.3	3037.8	2666.4	2162.5
62.5°	3292.4	3280.0	3370.2	3336.6	3402.0	*3437.4*	3439.2	3336.6	3082.0	2684.1	2150.1
65°	2921.1	2970.6	3165.1	3262.3	3465.7	*3566.5*	3562.9	3380.8	3076.7	2632.9	2074.1
67.5°	*2473.7*	*2512.6*	*2786.7*	*3094.4*	*3451.5*	*3635.4*	*3633.7*	*3400.3*	*2984.7*	*2491.4*	*1902.6*
70°	1876.1	1998.1	2387.1	2792.0	3260.6	*3499.3*	3529.3	3290.6	2774.3	2233.2	1642.7
72.5°	1426.9	1446.4	1916.7	2341.1	2919.3	*3175.7*	3170.4	2940.5	2422.4	1881.4	1368.6
75°	1013.2	1055.6	1442.9	1814.2	2392.4	*2677.1*	2664.7	2411.8	1932.6	1464.1	1046.8
77.5°	755.0	770.9	1055.6	1345.6	1789.4	*2045.8*	2040.5	1782.3	1421.6	1075.1	779.8
80°	551.7	578.2	760.3	938.9	1213.0	*1434.0*	1426.9	1182.9	912.4	751.5	569.4
82.5°	309.4	328.9	442.1	567.6	640.1	*709.0*	679.0	567.6	415.5	323.6	279.4
85°	8.8	10.6	15.9	19.5	33.6	*56.6*	61.9	54.8	65.4	40.7	44.2
87.5°	3.5	3.5	3.5	3.5	3.5	*5.3*	5.3	5.3	5.3	5.3	5.3
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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Scaled Data Report

REPORT NUMBER: P871253
CATALOG NUMBER: EMM2-HSN-SA2A-840-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1458.8	1458.8	1458.8	1458.8	1458.8	1458.8	1458.8	1458.8	1458.8	1458.8	1458.8
2.5°	1462.3	1455.2	1441.1	1432.2	1426.9	1419.9	1409.3	1402.2	1396.9	1404.0	1402.2
5°	1460.5	1446.4	1421.6	1404.0	1386.3	1372.1	1356.2	1343.8	1336.8	1340.3	1338.5
7.5°	1460.5	1442.9	1404.0	1375.7	1349.1	1327.9	1310.2	1294.3	1287.3	1289.0	1287.3
10°	1467.6	1442.9	1391.6	1350.9	1315.5	1290.8	1271.3	1257.2	1251.9	1257.2	1259.0
12.5°	1474.7	1442.9	1381.0	1329.7	1283.7	1257.2	1239.5	1230.7	1234.2	1236.0	1237.7
15°	1478.2	1441.1	1370.4	1304.9	1253.7	1225.4	1214.8	1213.0	1221.8	1230.7	1232.4
17.5°	1487.1	1439.3	1354.4	1280.2	1227.1	1204.1	1198.8	1205.9	1223.6	1236.0	1239.5
20°	1497.7	1442.9	1336.8	1250.1	1200.6	1182.9	1191.8	1207.7	1228.9	1246.6	1250.1
22.5°	1508.3	1444.6	1320.8	1223.6	1172.3	1168.8	1188.2	1211.2	1236.0	1253.7	1257.2
25°	1520.7	1444.6	1299.6	1190.0	1144.0	1149.3	1179.4	1209.4	1232.4	1255.4	1259.0
27.5°	1533.0	1448.2	1276.6	1152.9	1108.7	1124.6	1161.7	1198.8	1223.6	1246.6	1251.9
30°	1554.2	1455.2	1257.2	1121.0	1073.3	1094.5	1138.7	1181.2	1207.7	1232.4	1237.7
32.5°	1575.5	1465.8	1241.3	1087.4	1037.9	1062.7	1112.2	1159.9	1188.2	1211.2	1214.8
35°	1603.8	1480.0	1228.9	1053.8	1002.6	1022.0	1075.1	1128.1	1159.9	1177.6	1186.5
37.5°	1633.8	1499.4	1218.3	1023.8	963.7	981.4	1037.9	1094.5	1128.1	1145.8	1149.3
40°	1670.9	1526.0	1211.2	995.5	926.5	940.7	997.3	1059.2	1091.0	1103.4	1110.4
42.5°	1711.6	1554.2	1205.9	967.2	885.9	900.0	960.1	1020.3	1052.1	1062.7	1068.0
45°	1762.9	1591.4	1202.4	937.1	852.3	864.7	924.8	984.9	1011.4	1025.6	1030.9
47.5°	1810.6	1628.5	1191.8	901.8	815.1	832.8	887.6	940.7	970.7	979.6	984.9
50°	1858.4	1660.3	1170.5	862.9	781.5	797.5	847.0	885.9	908.9	919.5	923.0
52.5°	1904.4	1683.3	1137.0	822.2	746.2	756.8	797.5	834.6	850.5	854.0	864.7
55°	1934.4	1695.7	1089.2	774.5	710.8	714.4	744.4	778.0	786.8	788.6	788.6
57.5°	1955.6	1688.6	1032.6	726.7	675.5	675.5	693.1	719.7	723.2	725.0	728.5
60°	1959.2	1663.9	960.1	682.5	636.6	631.2	648.9	664.8	666.6	670.1	673.7
62.5°	1932.6	1609.1	882.3	640.1	599.4	587.0	603.0	618.9	627.7	633.0	636.6
65°	1851.3	1497.7	793.9	597.7	564.1	542.8	562.3	588.8	606.5	608.3	608.3
67.5°	*1681.6*	*1317.3*	*700.2*	*553.4*	*521.6*	*502.2*	*526.9*	*555.2*	*576.4*	*585.3*	*583.5*
70°	1425.2	1117.5	613.6	507.5	479.2	466.8	493.3	525.2	542.8	549.9	553.4
72.5°	1147.6	894.7	537.5	461.5	442.1	435.0	461.5	493.3	518.1	528.7	530.5
75°	892.9	703.7	473.9	413.8	397.8	399.6	427.9	459.7	486.3	491.6	475.6
77.5°	693.1	560.5	413.8	357.2	348.3	360.7	389.0	422.6	438.5	443.8	433.2
80°	500.4	429.7	334.2	281.1	281.1	300.6	325.3	364.2	369.6	362.5	366.0
82.5°	236.9	208.6	164.4	136.2	127.3	141.5	150.3	162.7	176.8	180.4	171.5
85°	31.8	21.2	15.9	17.7	15.9	10.6	7.1	7.1	7.1	5.3	5.3
87.5°	5.3	5.3	3.5	3.5	3.5	3.5	3.5	3.5	1.8	1.8	1.8
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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LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2407-157-8

Test Date: 09/05/2024

Luminaire Tested: MEM2-HTN-SA-40-840-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-40-840-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

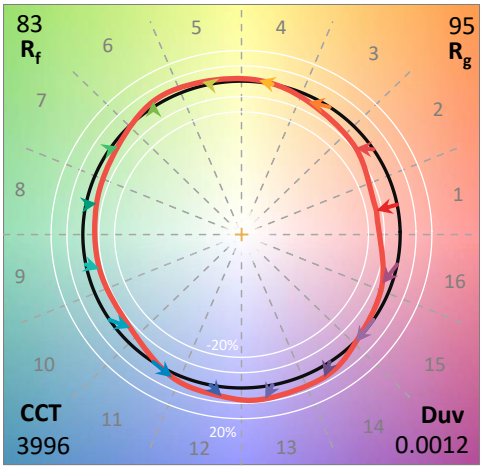
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-157-8
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-40-840-U-5WQ**
Description:	Epic Modern Light Square 40W 5WQ Optic

Spectral Parameters

CCT (K):	3996
CIE u':	0.2245
CIE v':	0.5031
Duv:	0.0012
CIE x:	0.3815
CIE y:	0.3799
CIE z:	0.2386
Peak Wavelength (nm):	449
Dominant Wavelength (nm):	578
Purity:	28.49233
Rf:	82.6
Rg:	95.1

CRI (Ra):	80.6
R1:	78.1
R2:	87.1
R3:	94.5
R4:	79.7
R5:	78.7
R6:	82.7
R7:	84.3
R8:	59.5
R9:	-5.8
R10:	70.3
R11:	78.7
R12:	60.5
R13:	80.2
R14:	97.2
R15:	70.6



Test Conditions

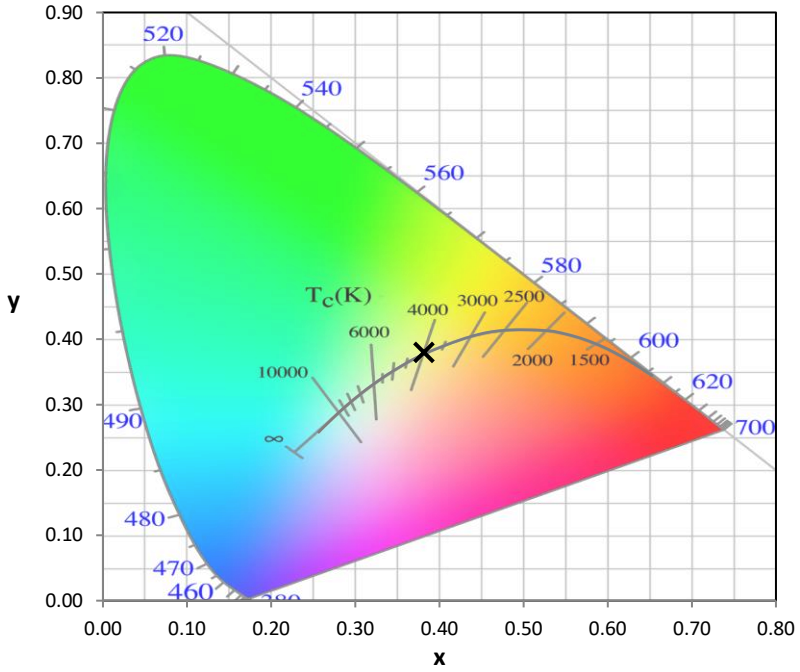
Stabilization Time:	29M
Operation Time:	1H 29M
Sphere Temperature (°C):	24.3

REPORT NUMBER: SP1-2407-157-8

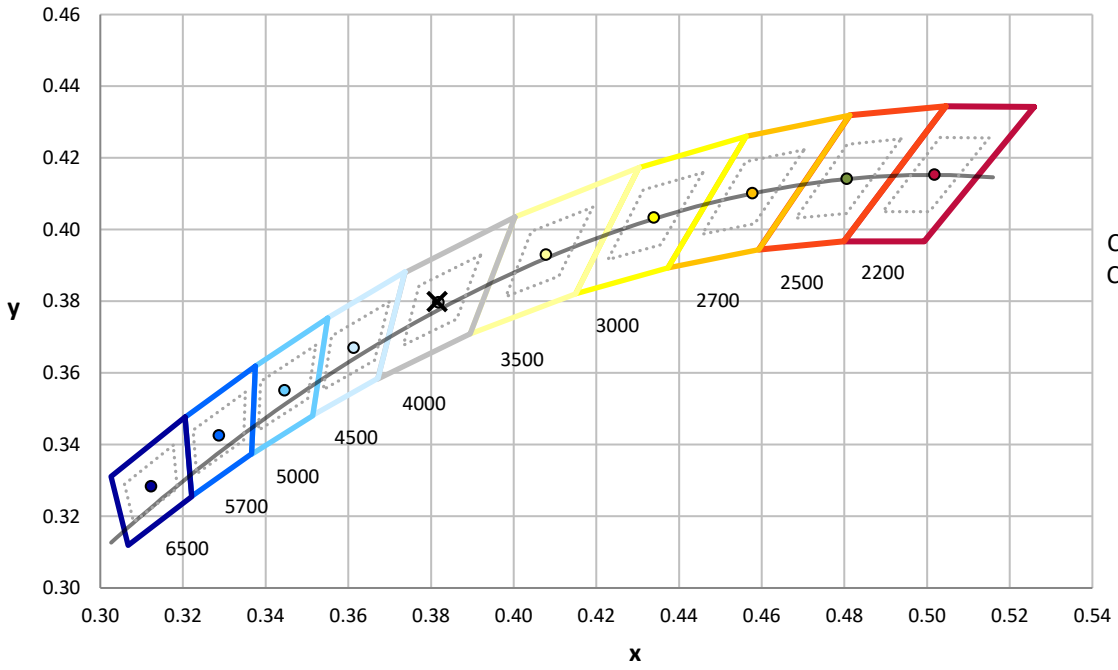
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-157-8

CIE 1931 Chromaticity Diagram



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

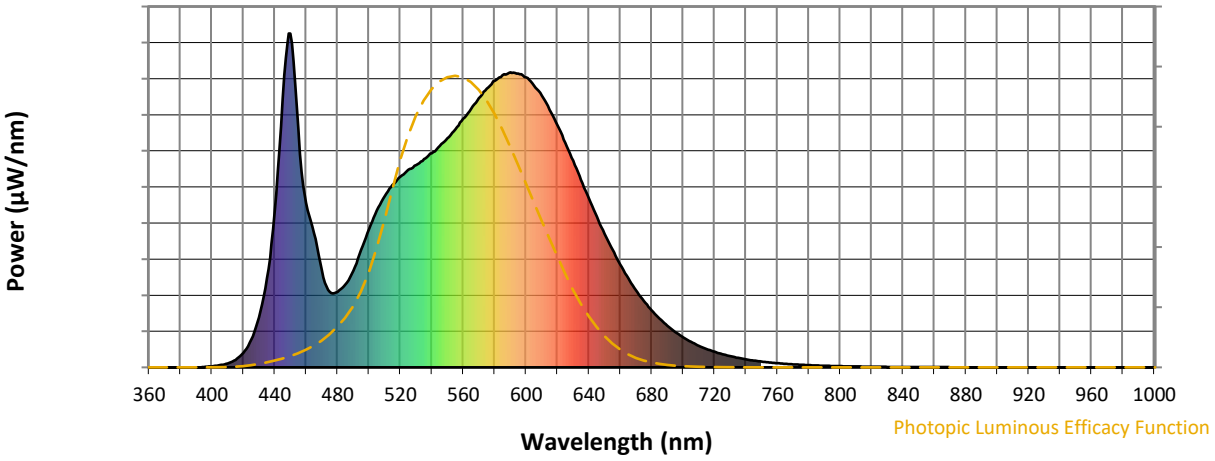


CCT = 3996K
CIE x = 0.3815
CIE y = 0.3799
Duv = 0.0012

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-8

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

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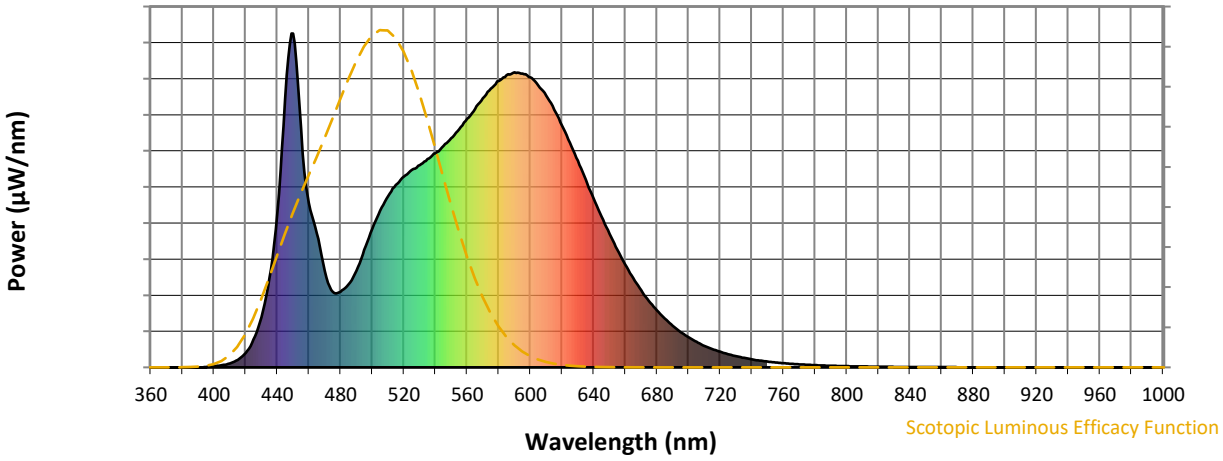
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.66**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

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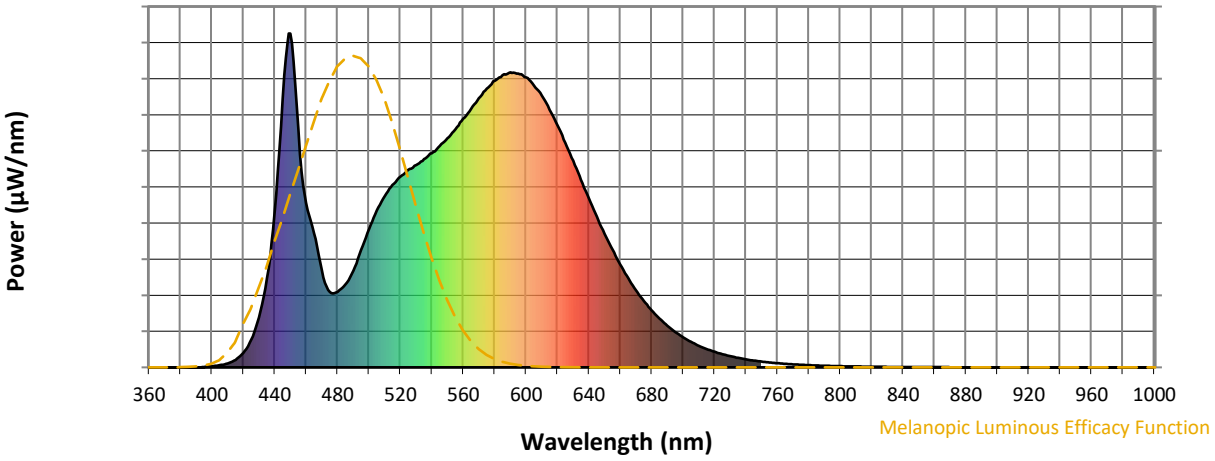
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.37**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

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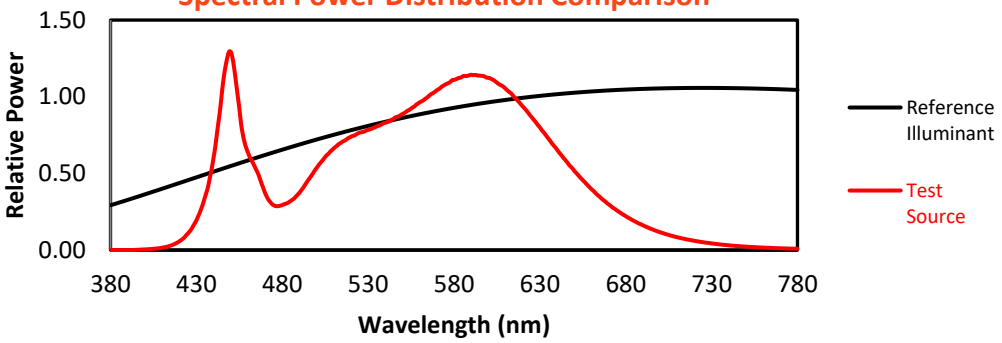
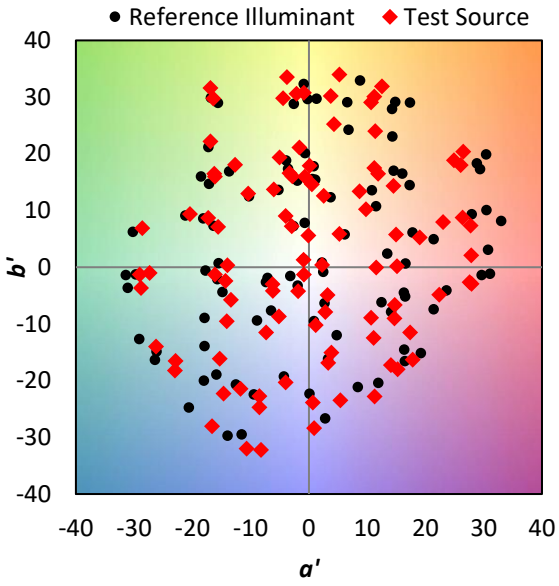
Summary

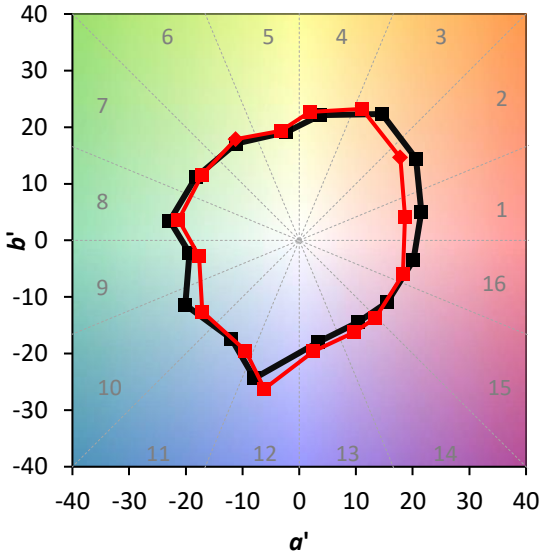
R_f = 82.6
R_g = 95.1
CIE R_a = 80.6
R_9 = -5.8

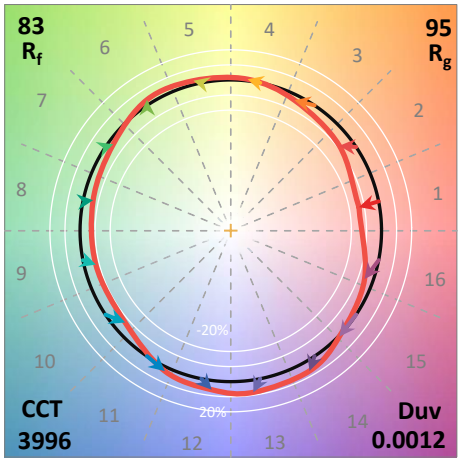
Spectral Power Distribution Comparison

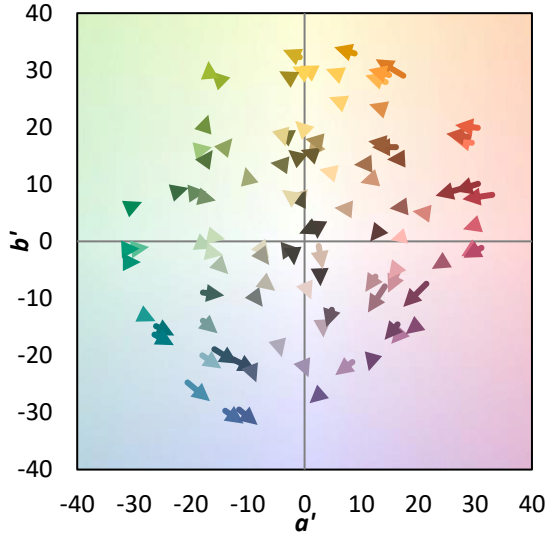


Color Vector Graphics









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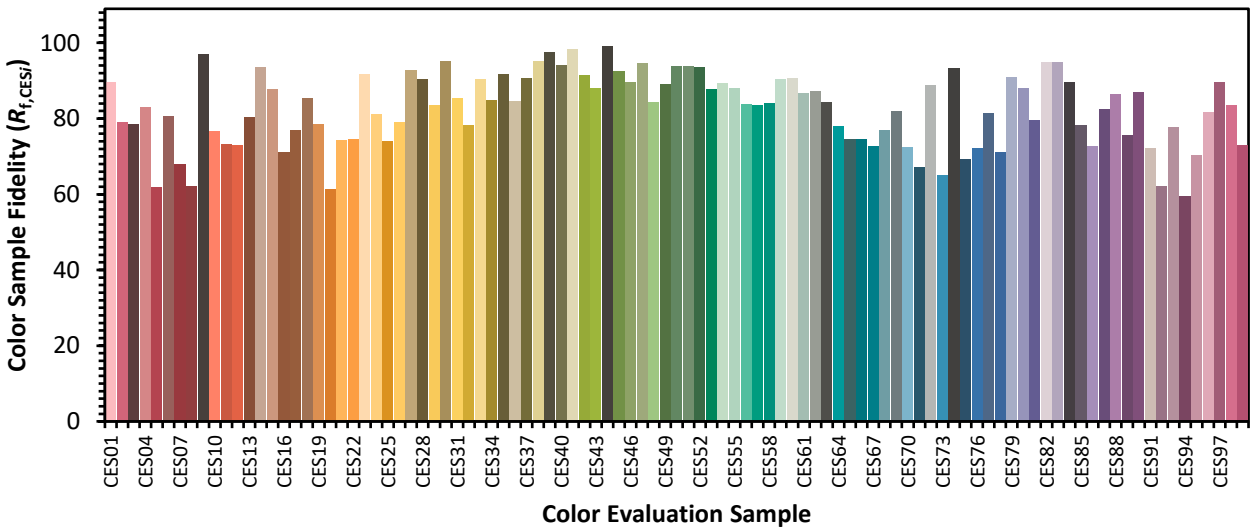
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 85	CES26 = 79	CES51 = 94	CES76 = 72
CES02 = 61	CES27 = 93	CES52 = 94	CES77 = 82
CES03 = 31	CES28 = 90	CES53 = 88	CES78 = 71
CES04 = 69	CES29 = 83	CES54 = 89	CES79 = 91
CES05 = 48	CES30 = 95	CES55 = 88	CES80 = 88
CES06 = 50	CES31 = 86	CES56 = 84	CES81 = 80
CES07 = 40	CES32 = 78	CES57 = 84	CES82 = 95
CES08 = 39	CES33 = 90	CES58 = 84	CES83 = 95
CES09 = 29	CES34 = 85	CES59 = 90	CES84 = 90
CES10 = 74	CES35 = 92	CES60 = 91	CES85 = 78
CES11 = 57	CES36 = 85	CES61 = 87	CES86 = 73
CES12 = 63	CES37 = 91	CES62 = 87	CES87 = 83
CES13 = 42	CES38 = 95	CES63 = 84	CES88 = 86
CES14 = 74	CES39 = 98	CES64 = 78	CES89 = 76
CES15 = 71	CES40 = 94	CES65 = 75	CES90 = 87
CES16 = 46	CES41 = 98	CES66 = 75	CES91 = 72
CES17 = 49	CES42 = 92	CES67 = 73	CES92 = 62
CES18 = 56	CES43 = 88	CES68 = 77	CES93 = 78
CES19 = 71	CES44 = 99	CES69 = 82	CES94 = 60
CES20 = 65	CES45 = 93	CES70 = 72	CES95 = 70
CES21 = 86	CES46 = 90	CES71 = 67	CES96 = 82
CES22 = 78	CES47 = 95	CES72 = 89	CES97 = 90
CES23 = 91	CES48 = 84	CES73 = 65	CES98 = 84
CES24 = 90	CES49 = 89	CES74 = 93	CES99 = 73
CES25 = 71	CES50 = 94	CES75 = 69	



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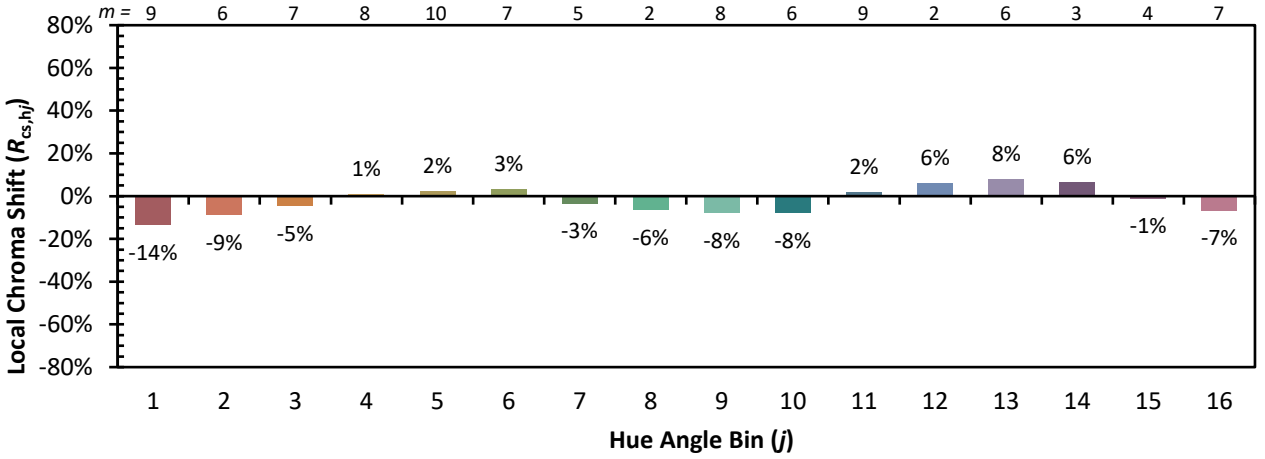
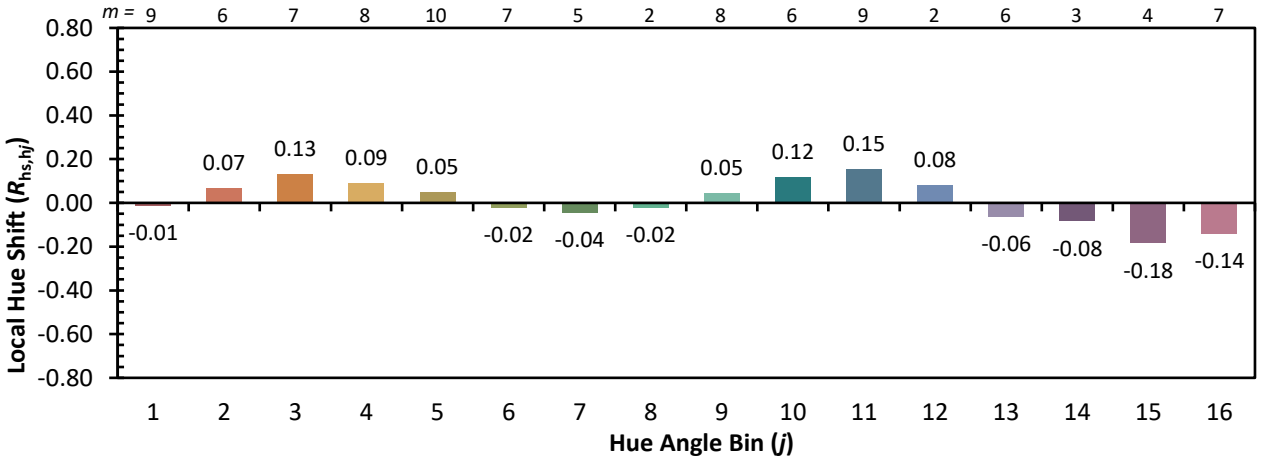
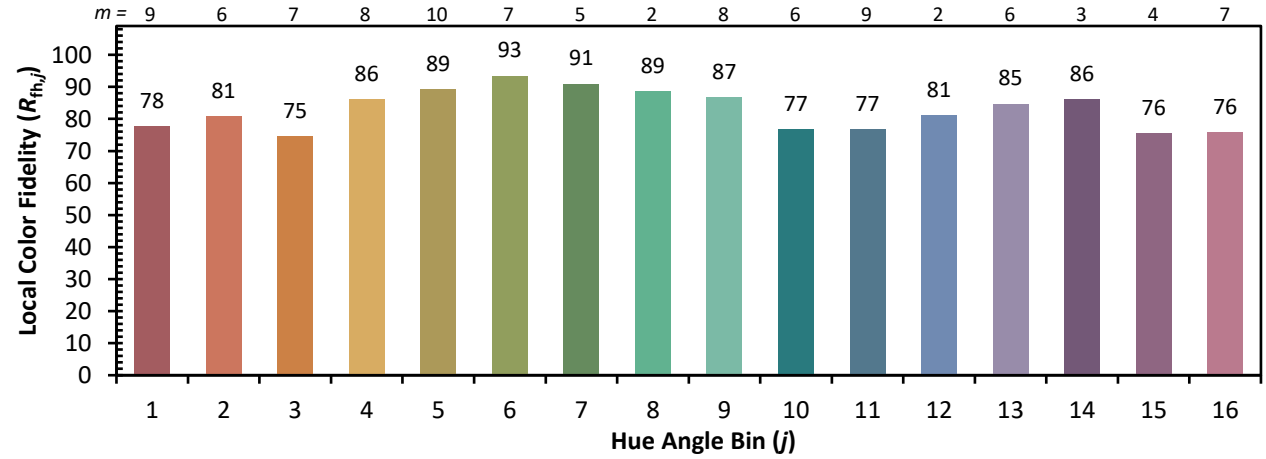
Color Rendition by Hue-Angle Bin







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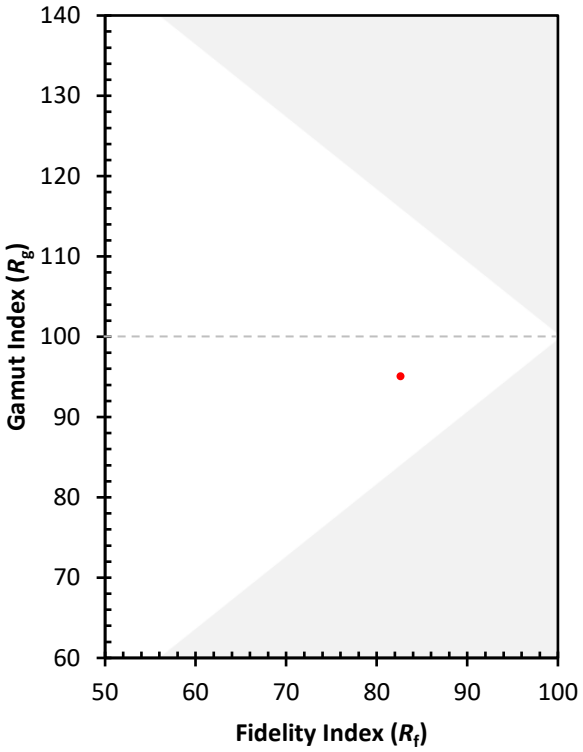
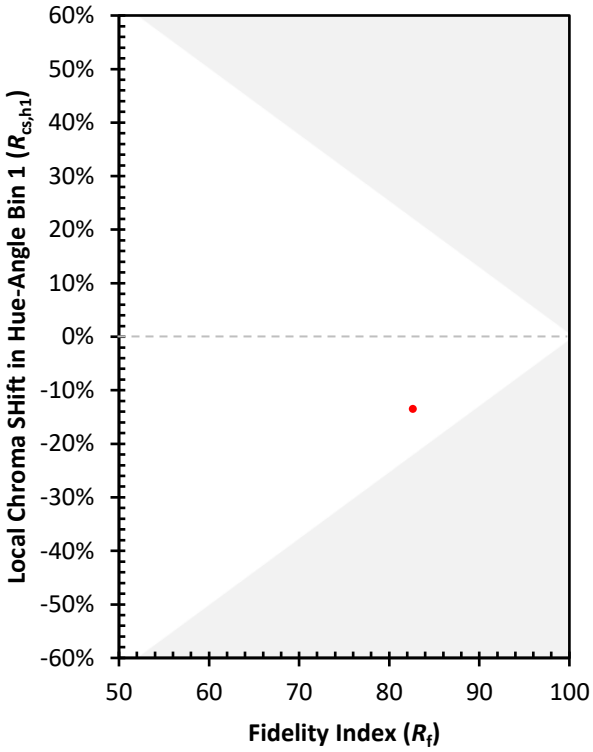
Measure Comparisons





(END OF REPORT)