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

Scaled data based on original data using

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P634537

Luminaire Tested: GWS-SA3B-830-U-T3-W-GRSWH

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

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

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P634537
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-25)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3B-830-U-T3-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	7052.4 lumens
Efficiency:	N/A
Efficacy:	103.3 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

Input Watts (W):	68.3
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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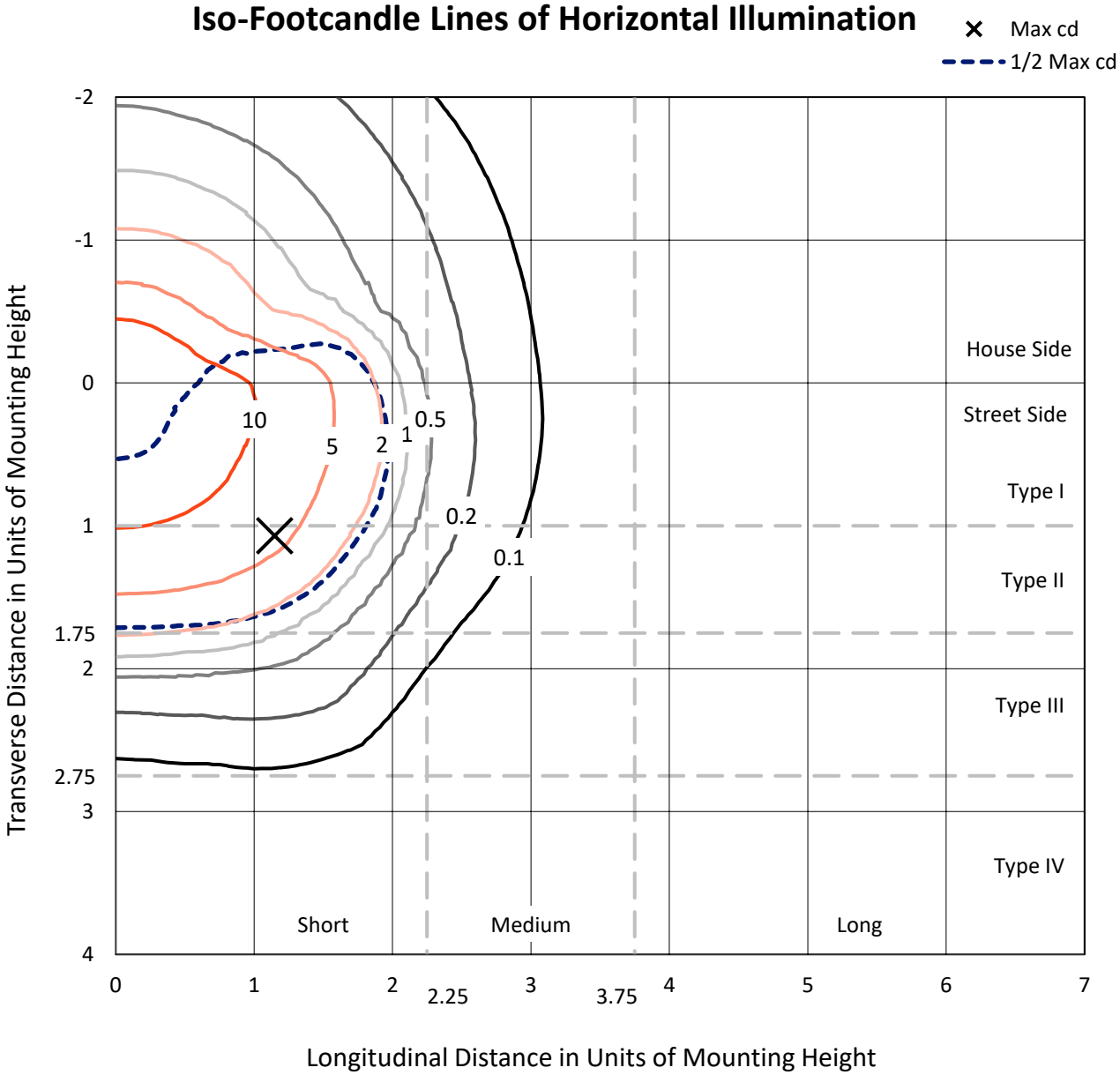
Scaled Data Report

REPORT NUMBER: P634537
CATALOG NUMBER: GWS-SA3B-830-U-T3-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 14.6 fc
Type II - Short - N/A

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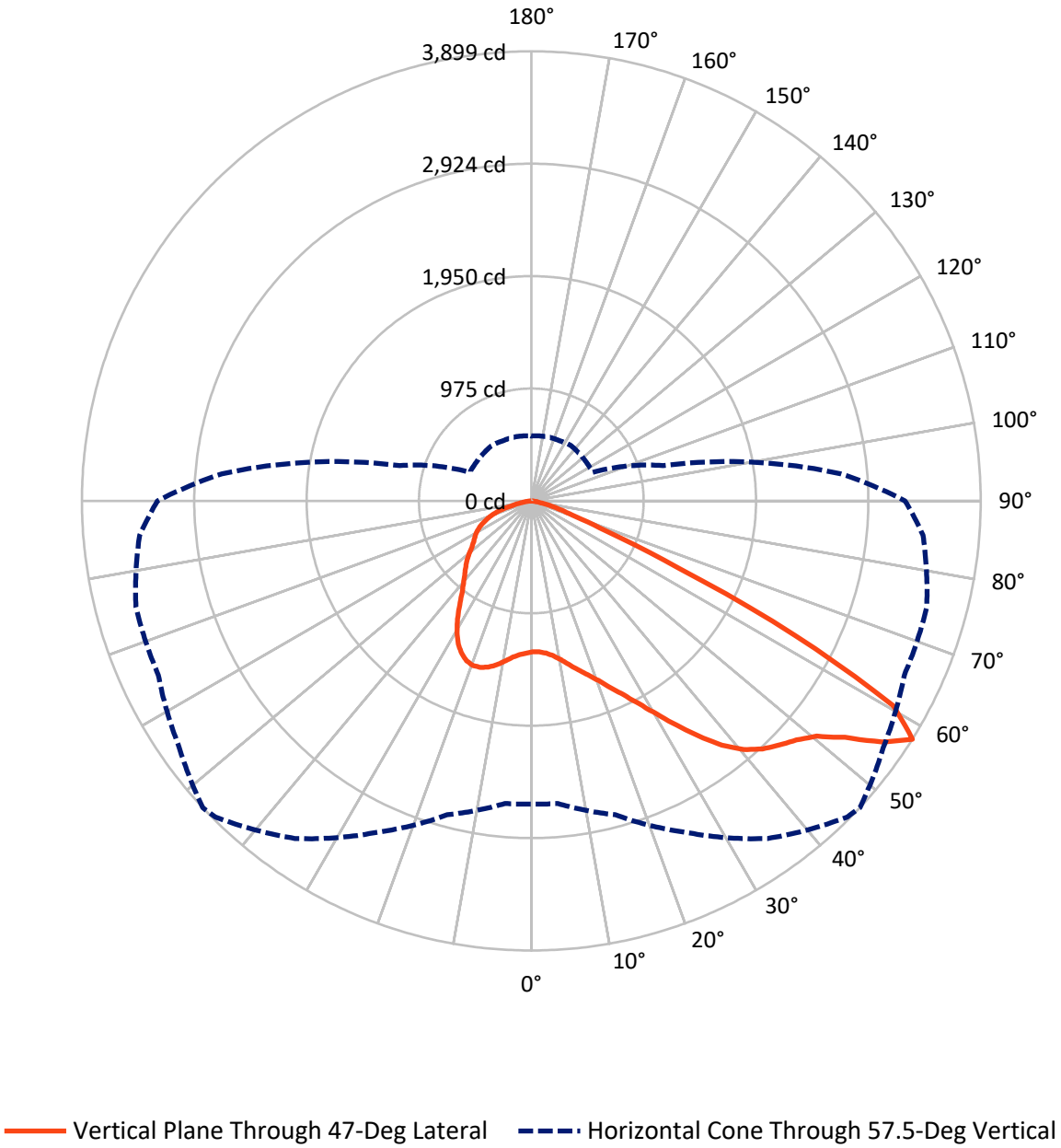
Luminous Intensity Polar Plot



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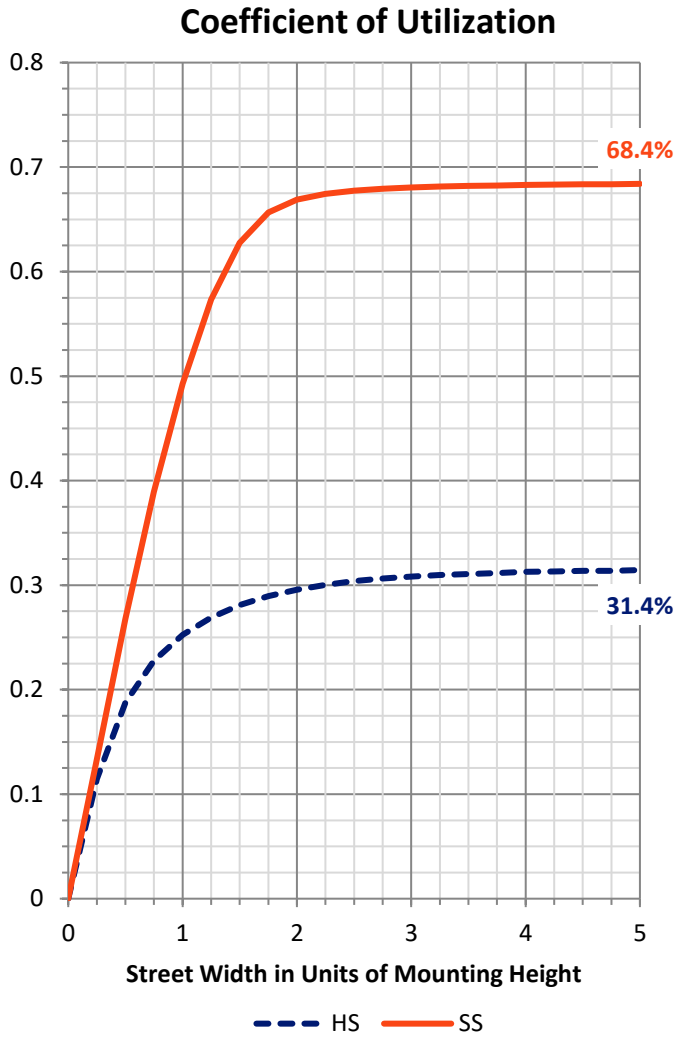
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2232.1	0.0	2232.1
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	4820.3	0.0	4820.3
	% Fixture	68.4	0.0	68.4
Total	Lumens	7052.4	0.0	7052.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.0	1.8
10°-20°	424.3	6.0
20°-30°	764.0	10.8
30°-40°	1153.9	16.4
40°-50°	1553.8	22.0
50°-60°	1867.2	26.5
60°-70°	909.3	12.9
70°-80°	224.0	3.2
80°-90°	26.9	0.4
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°	7052.4	100.0
0°-180°	7052.4	100.0



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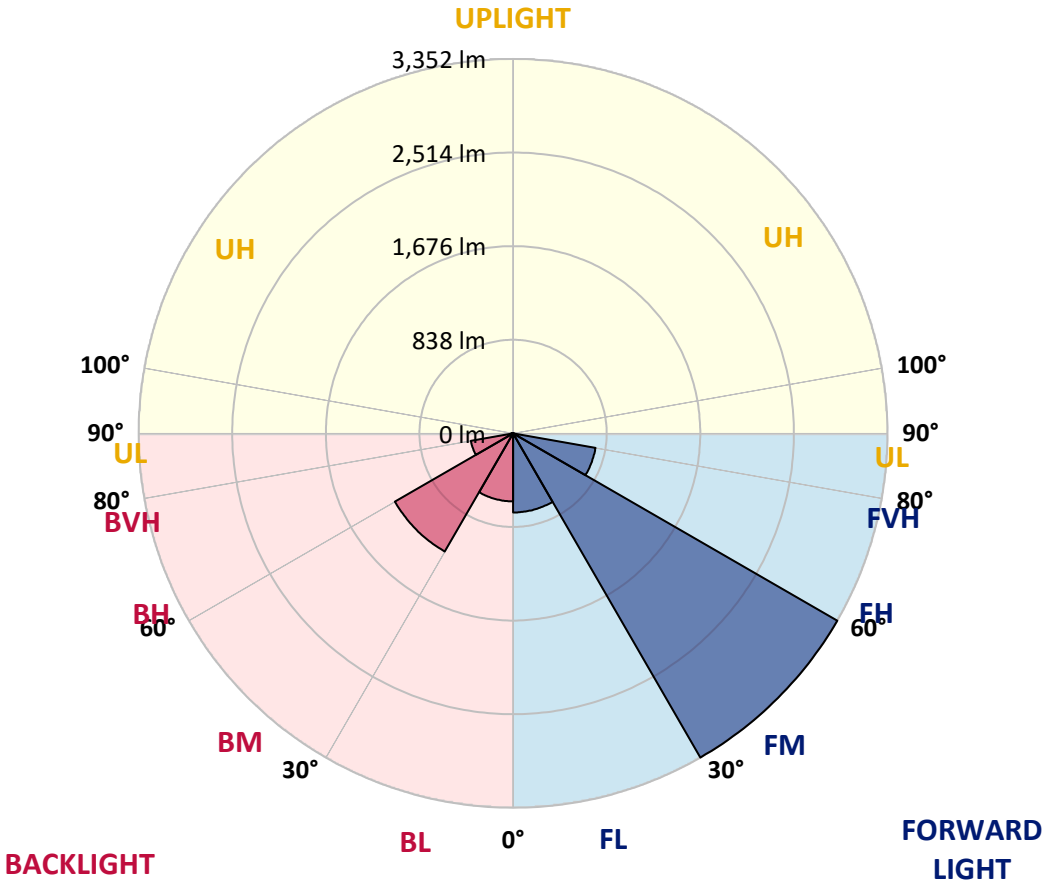
CATALOG NUMBER: GWS-SA3B-830-U-T3-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	708.4	10.0			
FM	(30°-60°)	3352.4	47.5			
FH	(60°-80°)	749.5	10.6			G1/1800
FVH	(80°-90°)	10.1	0.1			G1/100
BL	(0°-30°)	608.9	8.6	B2/1000		
BM	(30°-60°)	1222.5	17.3	B2/2500		
BH	(60°-80°)	383.9	5.4	B1/500		G1/500
BVH	(80°-90°)	16.8	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
Type II Short



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REPORT NUMBER: P634537
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1307.9	1307.9	1307.9	1307.9	1307.9	1307.9	*1307.9*	1307.9	1307.9	1307.9	1307.9
2.5°	1305.5	1304.9	1304.9	1308.5	1308.5	1309.7	*1311.4*	1313.2	1313.8	1310.8	1304.3
5°	1319.7	1319.7	1319.7	1322.7	1322.7	1323.9	*1326.2*	1326.8	1326.2	1321.5	1315.0
7.5°	1342.2	1342.2	1342.8	1346.4	1349.3	1351.1	*1355.3*	1354.7	1352.9	1345.2	1336.9
10°	1379.0	1380.7	1382.5	1386.7	1392.6	1396.7	*1399.7*	1399.7	1397.3	1385.5	1374.8
12.5°	1431.1	1433.5	1435.2	1438.8	1443.5	1450.6	*1457.1*	1457.1	1454.2	1439.4	1423.4
15°	1492.1	1494.5	1493.9	1495.1	1503.9	1514.0	*1519.3*	1522.9	1524.1	1503.3	1478.5
17.5°	1562.0	1564.4	1562.0	1558.4	1559.6	1575.6	*1585.1*	1598.1	1605.8	1578.0	1538.3
20°	1625.4	1623.0	1623.0	1625.4	1628.9	1648.5	*1662.7*	1684.0	1693.5	1659.7	1598.1
22.5°	1692.3	1697.6	1695.3	1695.3	1709.5	1742.1	*1759.2*	1787.1	1797.1	1753.3	1670.4
25°	1778.8	1783.5	1782.3	1783.5	1800.1	1846.3	*1863.5*	1915.0	1925.1	1862.3	1750.4
27.5°	1873.6	1881.3	1884.8	1883.6	1910.3	1970.7	*1992.0*	2063.7	2082.1	1984.3	1835.6
30°	1996.8	2005.1	2008.0	2006.8	2038.2	2120.6	*2144.8*	2226.6	2252.7	2128.9	1944.0
32.5°	2139.5	2147.8	2156.7	2160.2	2200.5	2284.6	*2319.6*	2404.3	2441.6	2295.9	2075.0
35°	2281.1	2288.2	2305.4	2333.2	2388.3	2474.2	*2505.0*	2588.5	2624.6	2469.4	2233.1
37.5°	2437.5	2442.2	2457.0	2495.5	2574.9	2656.6	*2687.4*	2767.4	2771.5	2637.1	2412.0
40°	2608.6	2608.6	2605.7	2643.6	2726.5	2808.9	*2835.5*	2881.7	2857.4	2766.2	2586.1
42.5°	2753.8	2751.4	2753.8	2789.3	2850.9	2917.8	*2940.9*	2932.1	2901.3	2865.1	2743.7
45°	2884.7	2886.5	2907.8	2935.0	2967.0	3006.7	*3020.3*	2970.0	2942.1	2944.5	2869.9
47.5°	2973.5	2975.3	3025.1	3070.7	3090.2	3102.7	*3096.7*	3026.8	3012.6	3039.3	2967.0
50°	2985.4	2994.9	3080.7	3174.3	3222.9	3224.7	*3208.1*	3122.8	3118.6	3148.9	3019.1
52.5°	2987.7	2997.2	3104.4	3273.2	3399.4	3426.1	*3407.1*	3318.3	3275.0	3244.8	3083.1
55°	2978.9	2989.5	3108.0	3339.6	3581.3	3687.9	*3689.7*	3564.1	3426.1	3405.9	3265.5
57.5°	*2630.0*	*2634.1*	*2817.7*	*3170.8*	*3574.2*	*3876.2*	*3899.3*	*3728.8*	*3571.2*	*3552.2*	*3411.9*
60°	1832.1	1848.7	2048.3	2514.5	3002.6	3535.1	*3609.7*	3559.9	3454.5	3316.5	2927.3
62.5°	917.5	931.7	1132.0	1572.7	2070.8	2491.4	*2571.3*	2624.0	2648.9	2500.8	1993.2
65°	395.1	405.8	530.1	821.6	1172.2	1375.4	*1403.2*	1466.6	1621.8	1447.1	1073.9
67.5°	264.2	271.3	334.7	501.1	690.7	703.7	*699.5*	713.2	746.9	616.6	485.1
70°	202.6	208.5	251.2	367.2	496.4	424.7	*402.2*	364.9	396.3	404.0	393.3
72.5°	146.9	151.6	183.6	250.6	311.0	271.3	*267.7*	286.7	329.3	341.2	334.7
75°	94.8	97.1	116.7	137.4	160.5	174.1	*181.3*	215.6	258.9	267.7	260.0
77.5°	63.4	65.2	76.4	88.3	91.2	91.8	*94.2*	109.6	139.2	155.8	154.0
80°	33.2	33.2	37.3	37.3	42.6	50.9	*53.3*	63.4	77.0	85.3	85.9
82.5°	13.0	13.6	16.0	17.8	21.3	26.1	*27.8*	33.2	40.3	46.2	51.5
85°	5.3	5.9	6.5	7.7	9.5	11.8	*12.4*	14.2	19.0	23.7	26.7
87.5°	0.0	0.0	0.6	0.6	1.2	1.8	*1.8*	2.4	3.0	5.3	7.1
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: P634537
CATALOG NUMBER: GWS-SA3B-830-U-T3-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1307.9	1307.9	1307.9	1307.9	1307.9	1307.9	1307.9	1307.9	1307.9	1307.9	1307.9
2.5°	1312.0	1304.3	1312.0	1314.4	1320.9	1323.3	1319.1	1318.5	1318.5	1312.6	1310.8
5°	1320.9	1313.8	1321.5	1325.1	1334.5	1340.5	1341.6	1346.4	1349.3	1347.0	1346.4
7.5°	1342.8	1333.9	1342.2	1347.6	1360.0	1369.5	1373.6	1384.3	1392.0	1390.8	1390.2
10°	1381.3	1369.5	1379.0	1387.8	1401.5	1412.7	1413.3	1419.2	1426.9	1424.6	1423.4
12.5°	1425.8	1414.5	1425.2	1434.0	1450.0	1454.8	1447.1	1444.7	1445.9	1442.9	1440.6
15°	1480.2	1464.3	1473.7	1483.8	1492.7	1487.4	1470.8	1464.3	1463.7	1459.5	1457.1
17.5°	1534.7	1514.6	1521.7	1527.0	1522.9	1506.3	1485.6	1474.3	1469.0	1460.7	1458.3
20°	1588.6	1563.2	1562.0	1557.8	1538.9	1508.7	1480.8	1458.3	1444.7	1433.5	1429.3
22.5°	1650.2	1614.7	1596.9	1578.0	1536.5	1487.4	1445.3	1413.3	1391.4	1377.2	1372.4
25°	1716.6	1666.2	1629.5	1591.6	1512.8	1441.7	1383.1	1339.3	1313.2	1297.8	1292.5
27.5°	1782.3	1713.0	1657.9	1593.4	1465.4	1376.0	1297.2	1238.0	1211.9	1199.5	1195.3
30°	1871.2	1775.2	1691.7	1570.3	1403.2	1284.8	1186.4	1126.6	1109.4	1100.6	1097.0
32.5°	1973.7	1854.0	1736.7	1521.7	1323.9	1178.2	1074.5	1033.0	1021.2	1004.0	1003.4
35°	2108.7	1966.6	1779.4	1450.0	1223.8	1063.8	988.6	959.0	937.7	910.4	908.1
37.5°	2266.3	2106.9	1802.5	1358.8	1107.1	969.7	924.6	891.5	857.1	821.0	816.2
40°	2429.2	2271.0	1804.3	1251.0	992.8	907.5	869.5	826.3	783.7	743.4	738.1
42.5°	2600.4	2423.8	1772.9	1126.6	899.2	853.6	815.1	760.6	712.6	685.3	682.4
45°	2753.2	2547.0	1701.8	995.7	829.9	808.5	759.4	700.7	675.3	655.7	651.6
47.5°	2873.4	2628.8	1605.8	878.4	773.6	762.3	698.4	668.2	648.6	630.8	626.7
50°	2932.7	2647.1	1480.8	783.1	721.5	707.8	664.0	640.9	627.9	613.7	610.1
52.5°	3006.1	2667.9	1373.0	703.1	670.5	652.2	635.6	617.2	607.7	598.9	595.9
55°	3174.9	2746.1	1316.2	639.1	622.0	613.7	611.3	595.9	592.9	587.0	581.7
57.5°	*3243.6*	*2695.7*	*1181.7*	*587.0*	*583.5*	*584.6*	*590.6*	*576.3*	*573.4*	*566.3*	*562.7*
60°	2608.6	2037.6	800.2	542.0	551.5	559.2	565.1	550.9	546.7	545.5	540.8
62.5°	1671.6	1253.4	558.6	499.9	514.1	523.6	527.2	513.6	510.6	520.1	520.7
65°	870.1	683.0	453.1	454.9	466.8	481.0	488.1	483.3	482.2	492.2	492.8
67.5°	444.3	417.6	395.1	401.6	411.1	429.4	446.0	466.8	473.9	475.1	475.6
70°	378.5	366.7	355.4	359.5	369.6	379.7	395.7	405.8	393.9	390.9	389.8
72.5°	322.2	313.3	308.0	312.8	318.1	316.3	311.6	316.3	318.1	318.7	319.3
75°	250.6	244.0	239.9	240.5	240.5	234.0	225.1	219.8	213.8	209.1	209.1
77.5°	153.4	154.6	158.7	158.2	157.6	155.2	146.3	141.6	127.4	123.2	123.2
80°	87.7	89.4	93.6	94.8	94.8	91.8	82.9	77.6	71.1	68.1	67.5
82.5°	53.3	55.7	58.0	59.2	59.8	56.3	48.6	44.4	40.9	37.9	37.9
85°	27.8	29.0	31.4	32.0	30.2	26.7	22.5	20.7	17.2	16.6	16.6
87.5°	7.7	8.3	9.5	7.7	7.1	5.3	3.0	2.4	1.2	0.6	0.6
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

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

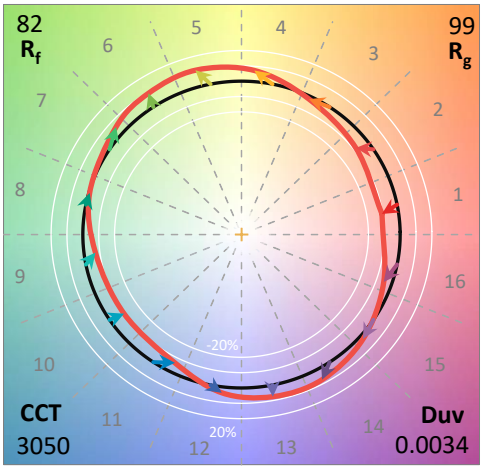
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2408-195-9
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	08/07/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**GALN-SB1A-830-U-5WQ**
Description:	GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K):	3050	CRI (Ra):	81.0		
CIE u':	0.2476	R1:	79.6	R9:	7.1
CIE v':	0.5251	R2:	85.6	R10:	67.0
Duv:	0.0034	R3:	92.0	R11:	82.7
CIE x:	0.4383	R4:	82.6	R12:	63.2
CIE y:	0.4131	R5:	78.9	R13:	80.3
CIE z:	0.1487	R6:	81.7	R14:	95.0
Peak Wavelength (nm):	603	R7:	85.2	R15:	71.7
Dominant Wavelength (nm):	581	R8:	62.0		
Purity:	55.55201				

Rf:	81.5
Rg:	99.2



Test Conditions

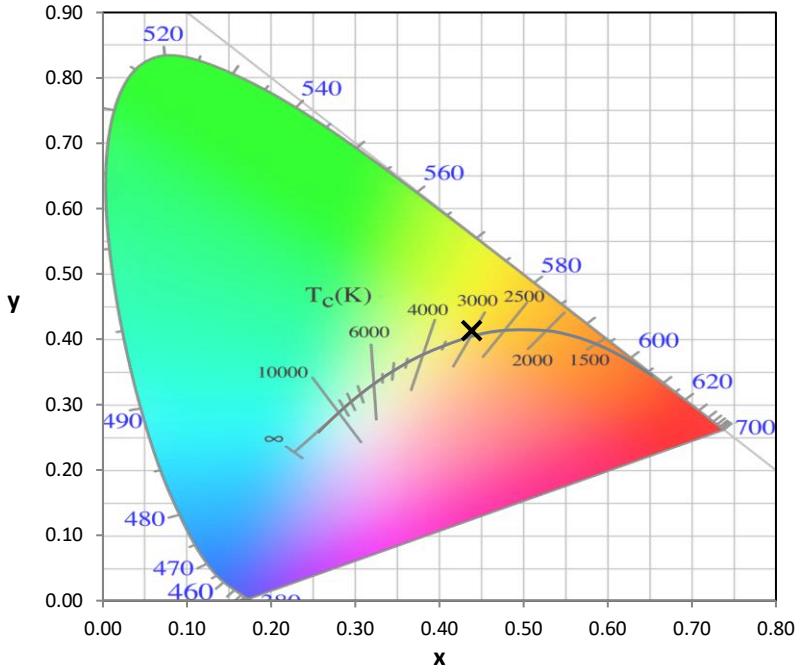
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

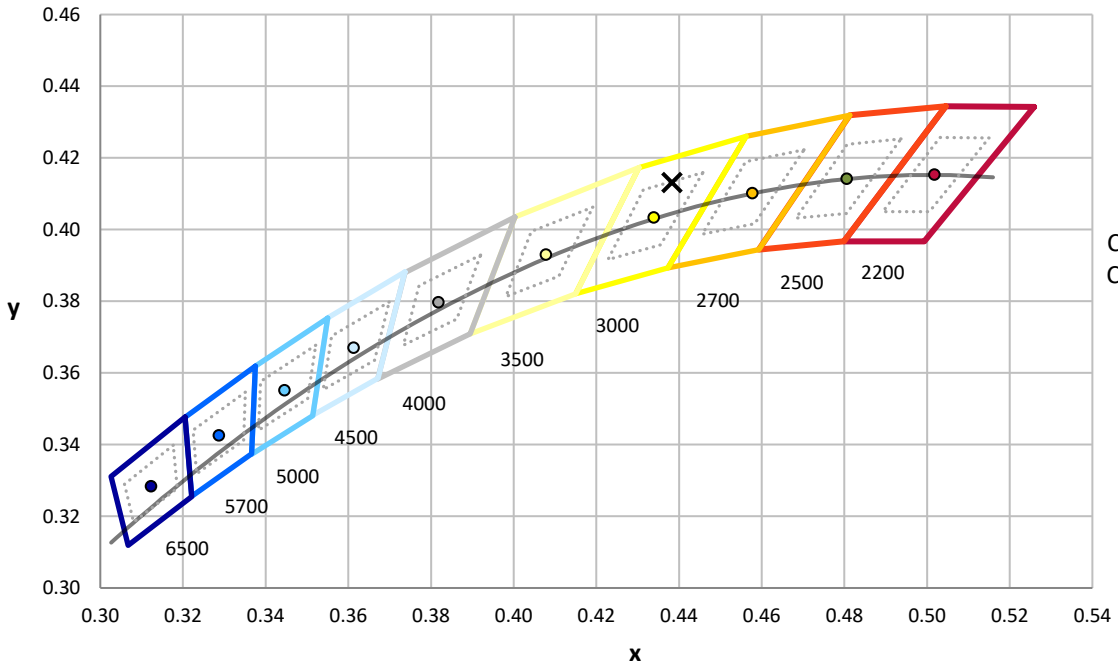
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



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

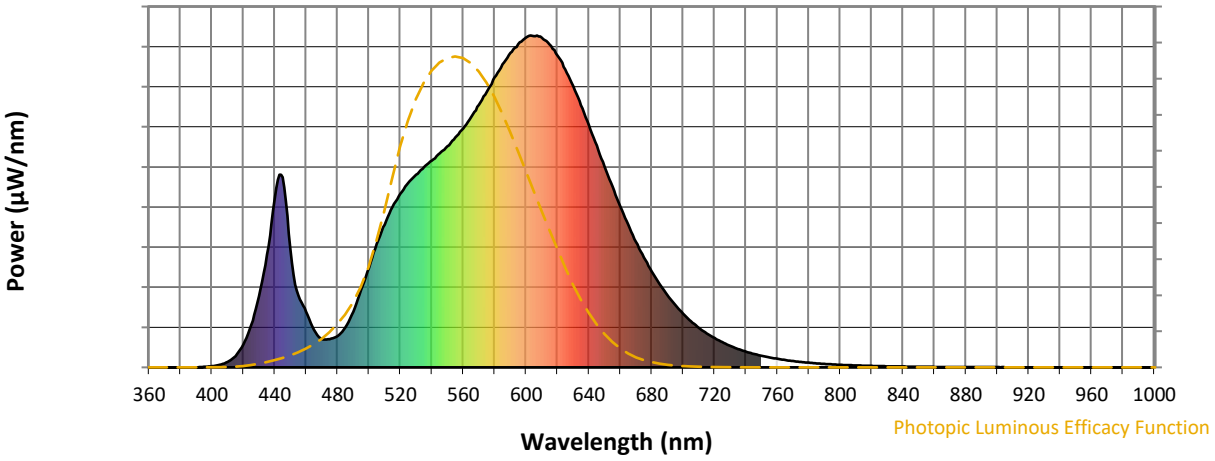


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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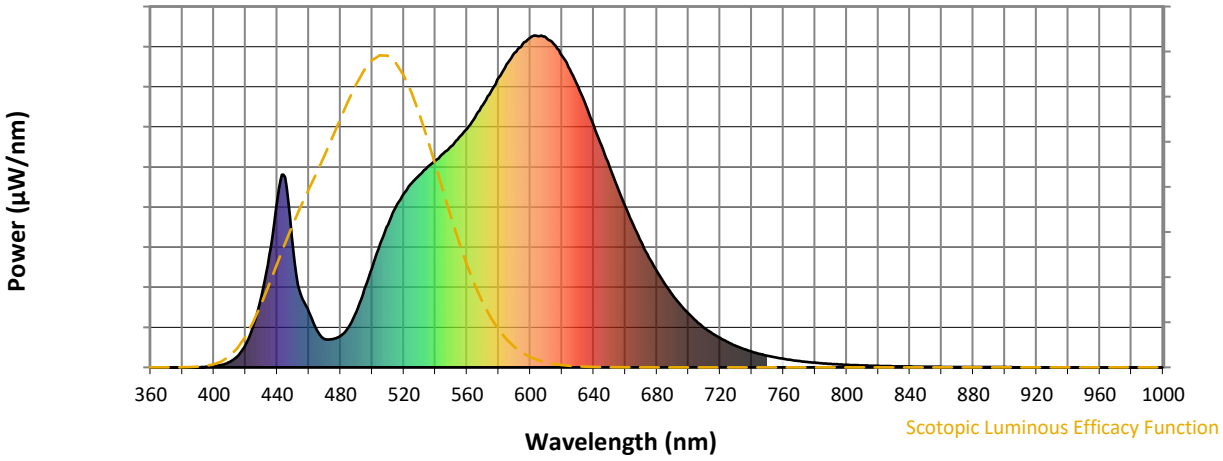
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.27**

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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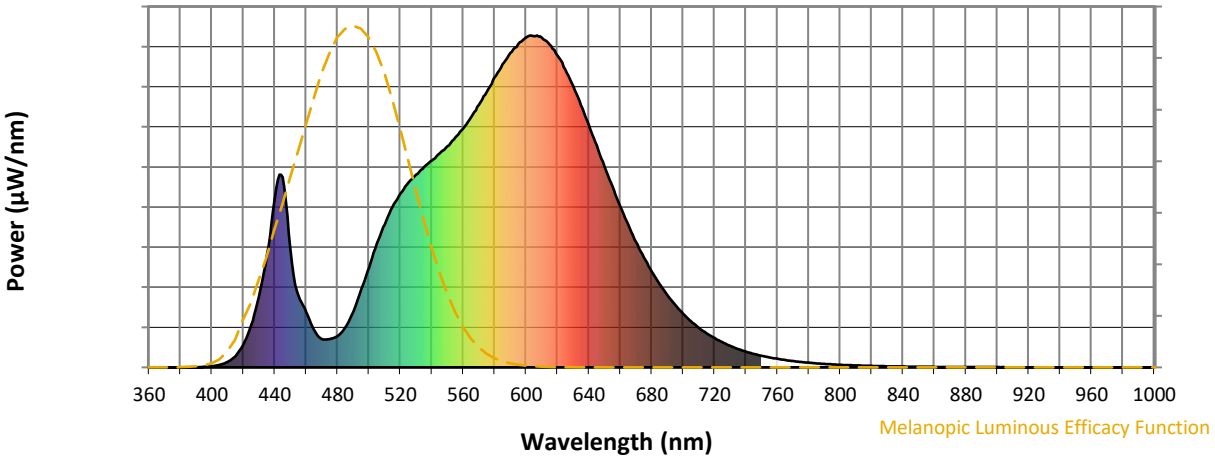
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.32**

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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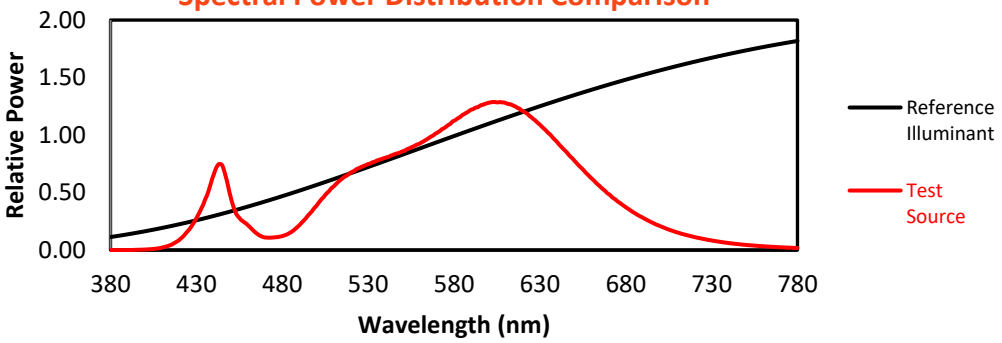
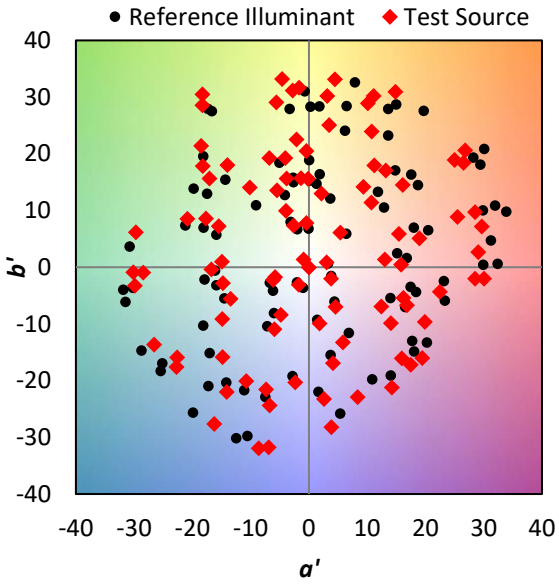
Summary

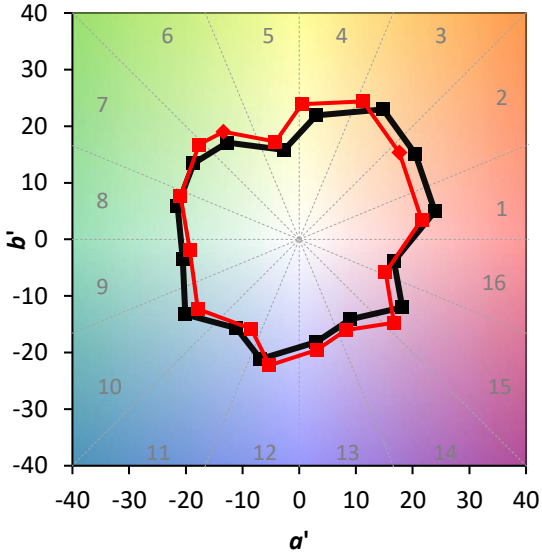
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

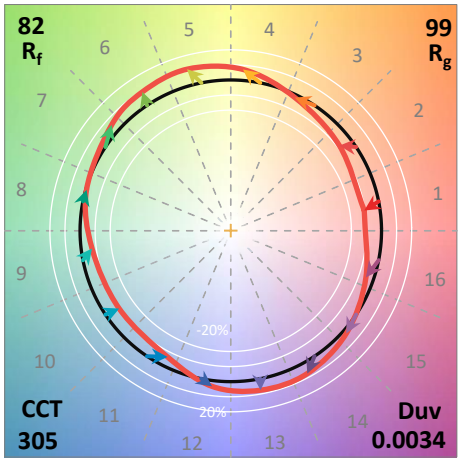
Spectral Power Distribution Comparison

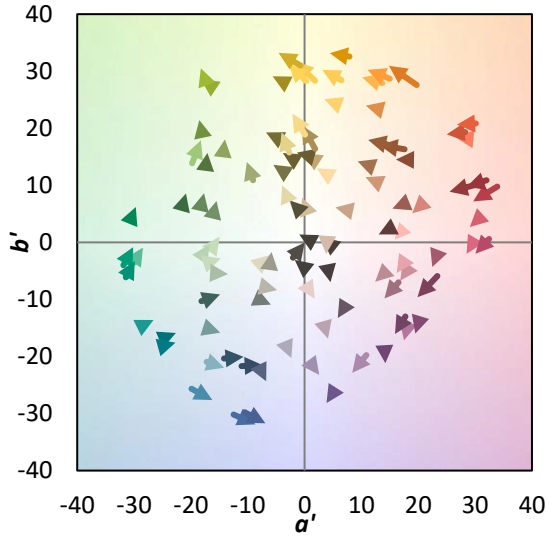


Color Vector Graphics









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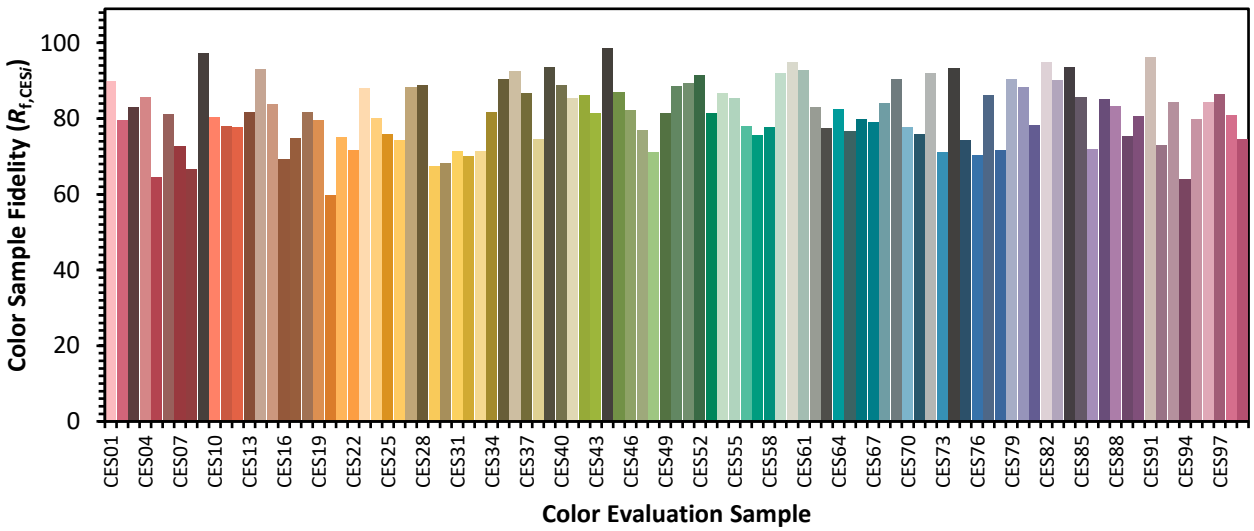
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



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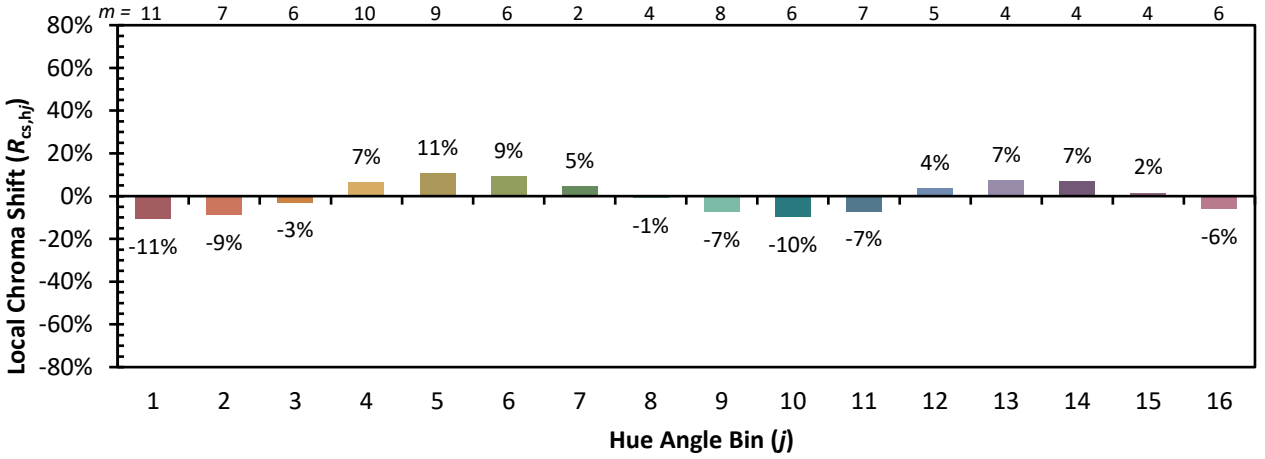
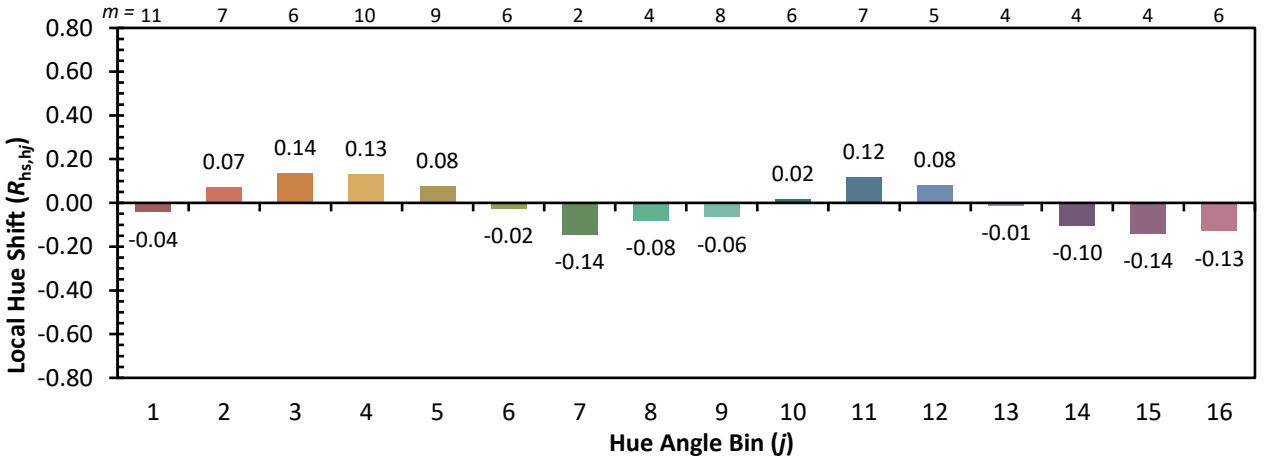
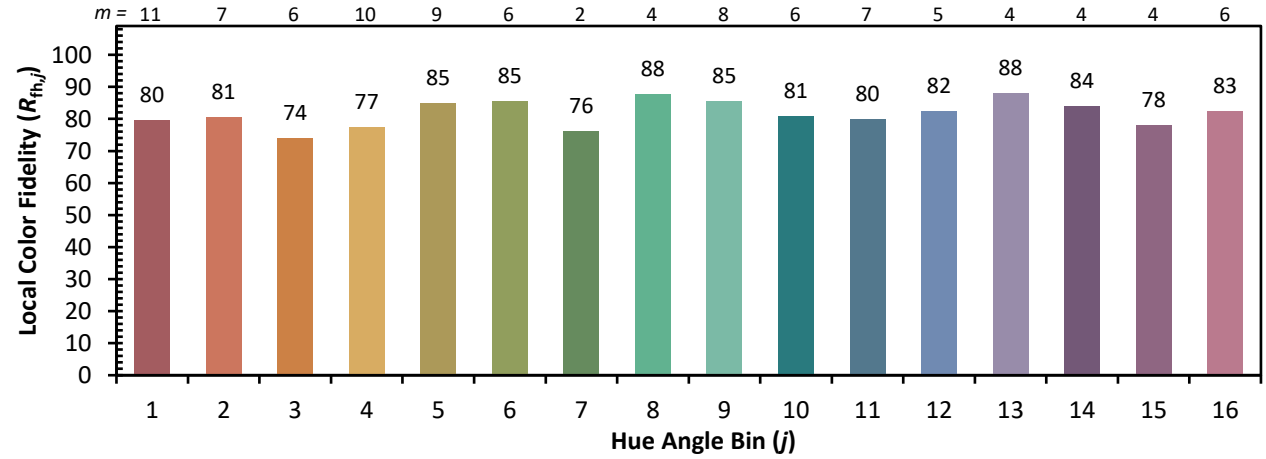
Color Rendition by Hue-Angle Bin







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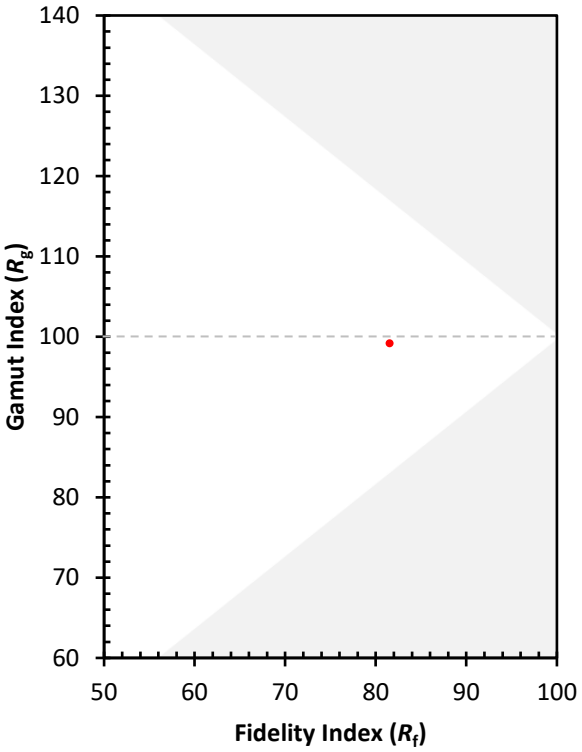
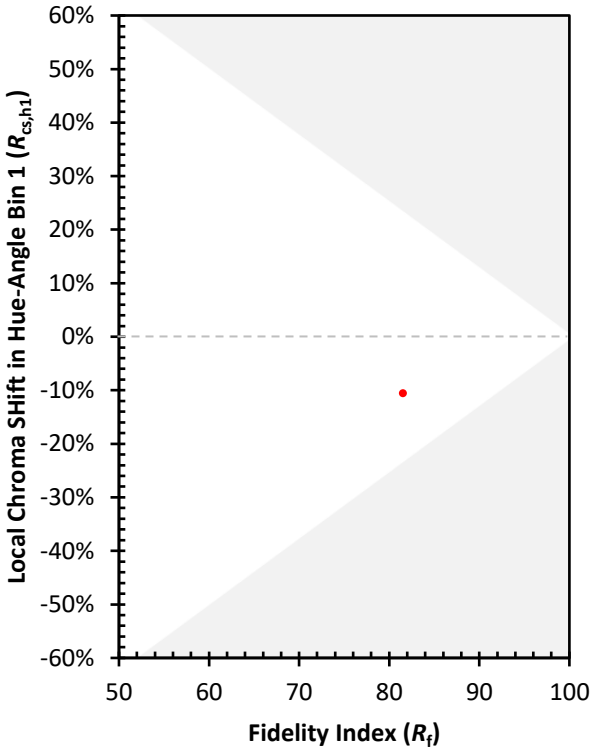
Measure Comparisons





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