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: P637017

Luminaire Tested: GWS-SA4B-830-U-T3R-W-HSS

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:	P637017
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-18)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4B-830-U-T3R-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	9001.1 lumens
Efficiency:	N/A
Efficacy:	95.4 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B1 - U0 - G2

Input Watts (W):	94.4
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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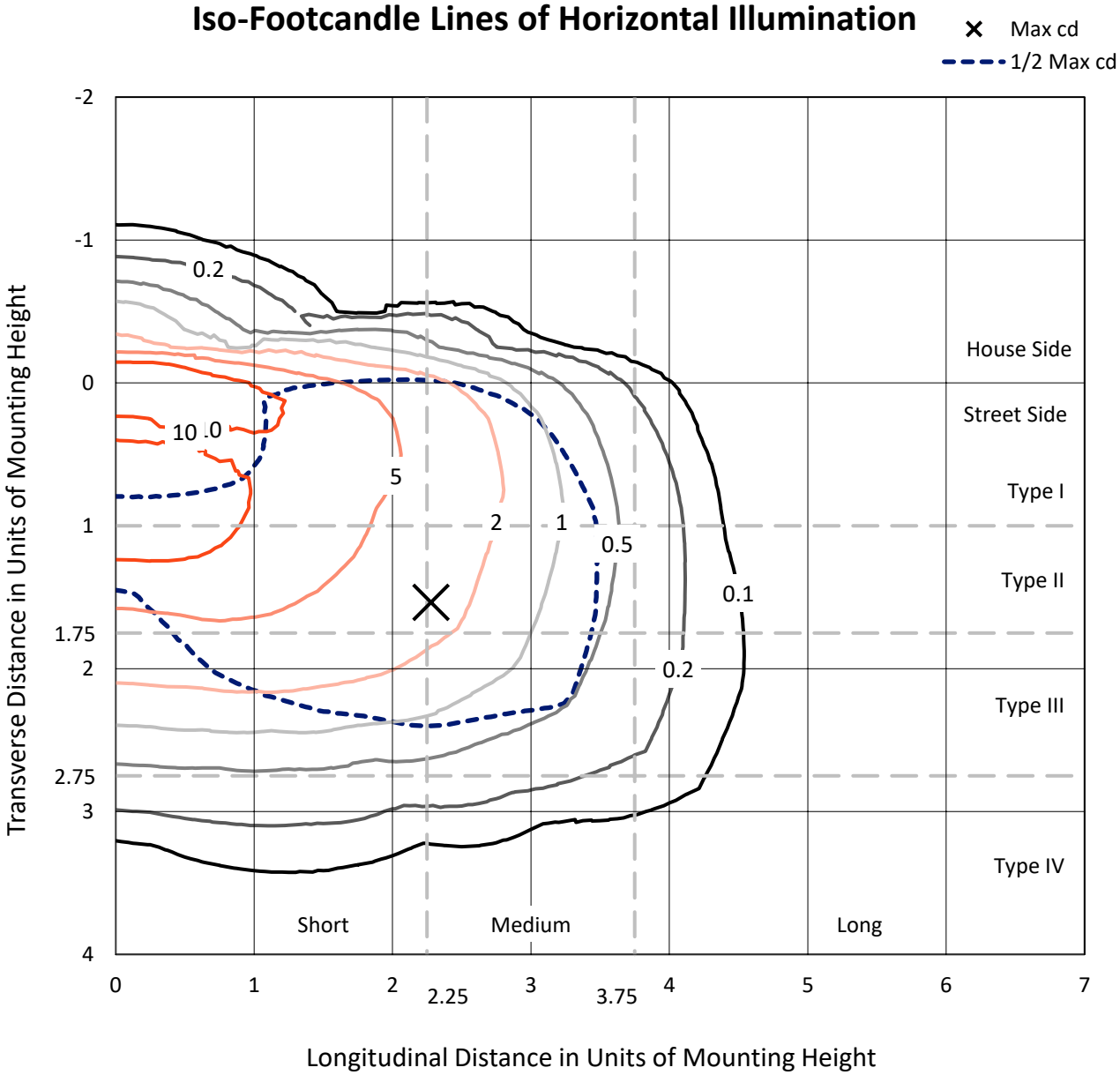
REPORT NUMBER: P637017
CATALOG NUMBER: GWS-SA4B-830-U-T3R-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 17.1 fc
Type III - Medium - N/A

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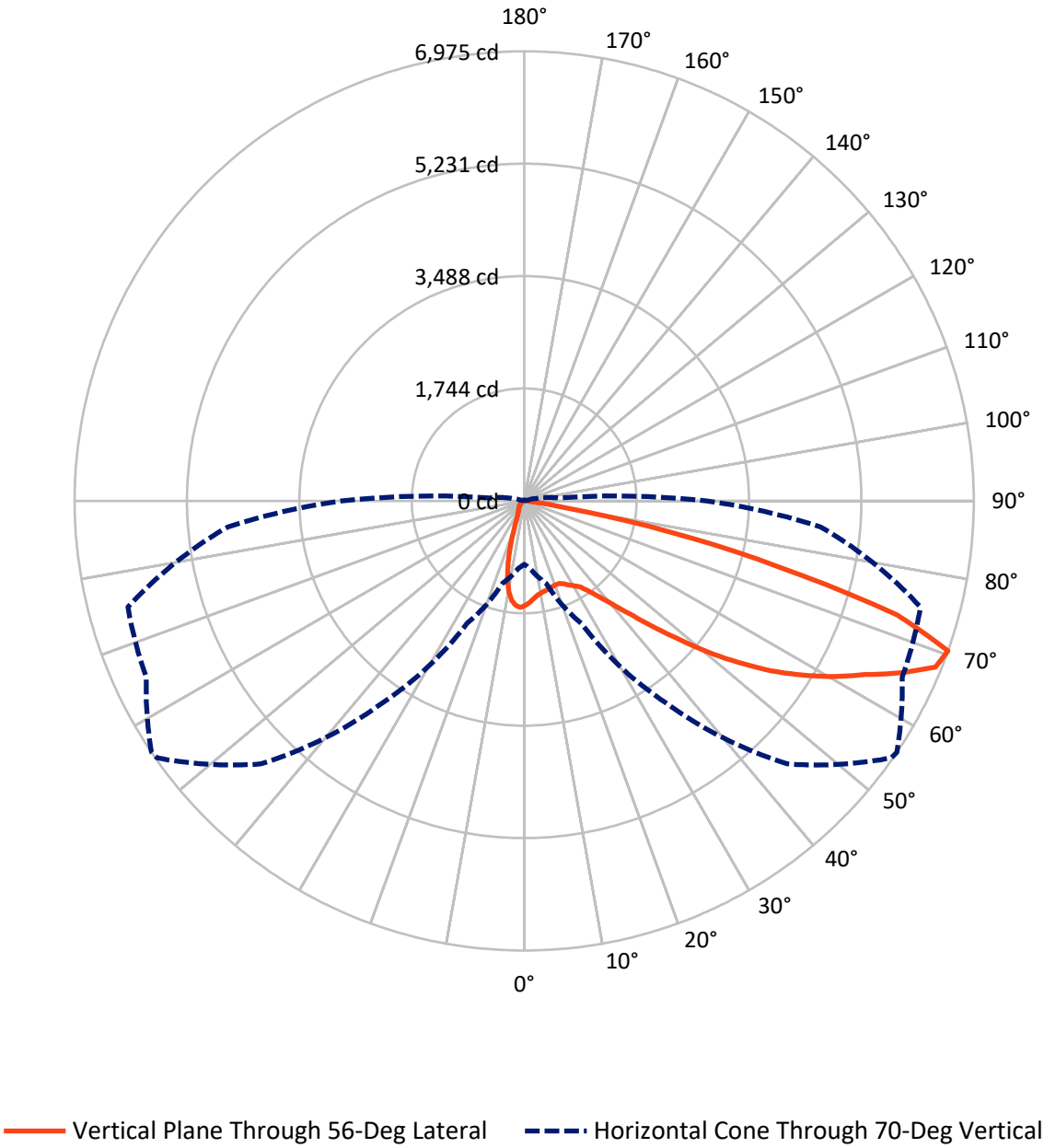
Luminous Intensity Polar Plot



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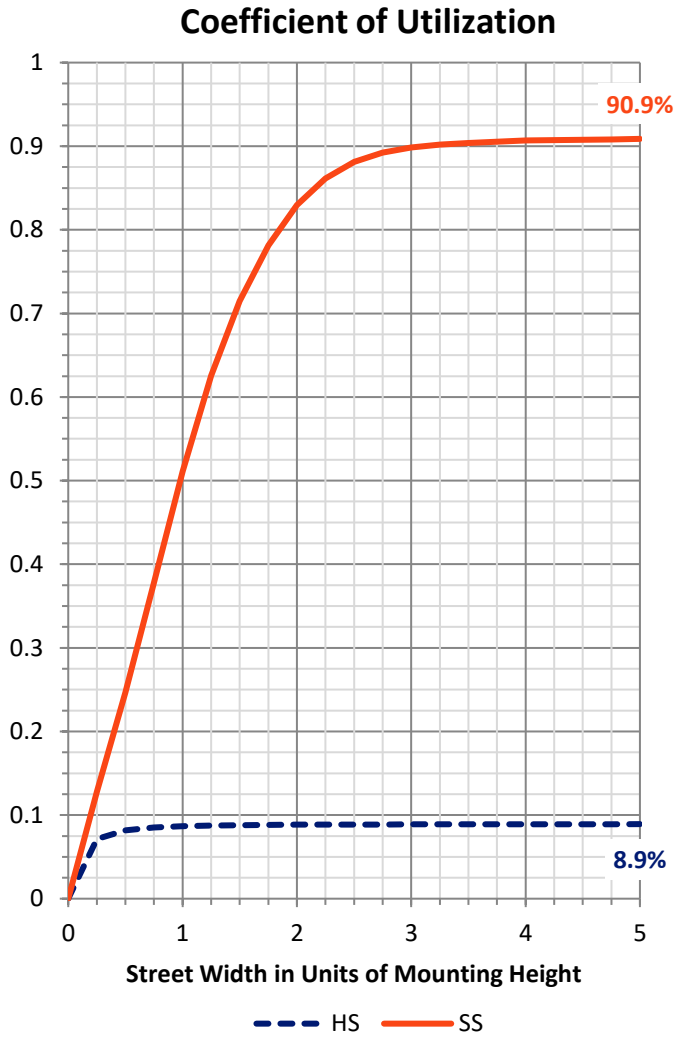
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	808.5	0.0	808.5
	% Fixture	9.0	0.0	9.0
Street Side	Lumens	8192.6	0.0	8192.6
	% Fixture	91.0	0.0	91.0
Total	Lumens	9001.1	0.0	9001.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.3	1.5
10°-20°	313.4	3.5
20°-30°	496.4	5.5
30°-40°	856.1	9.5
40°-50°	1445.7	16.1
50°-60°	2124.2	23.6
60°-70°	2518.3	28.0
70°-80°	1073.9	11.9
80°-90°	33.7	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°	9001.1	100.0
0°-180°	9001.1	100.0



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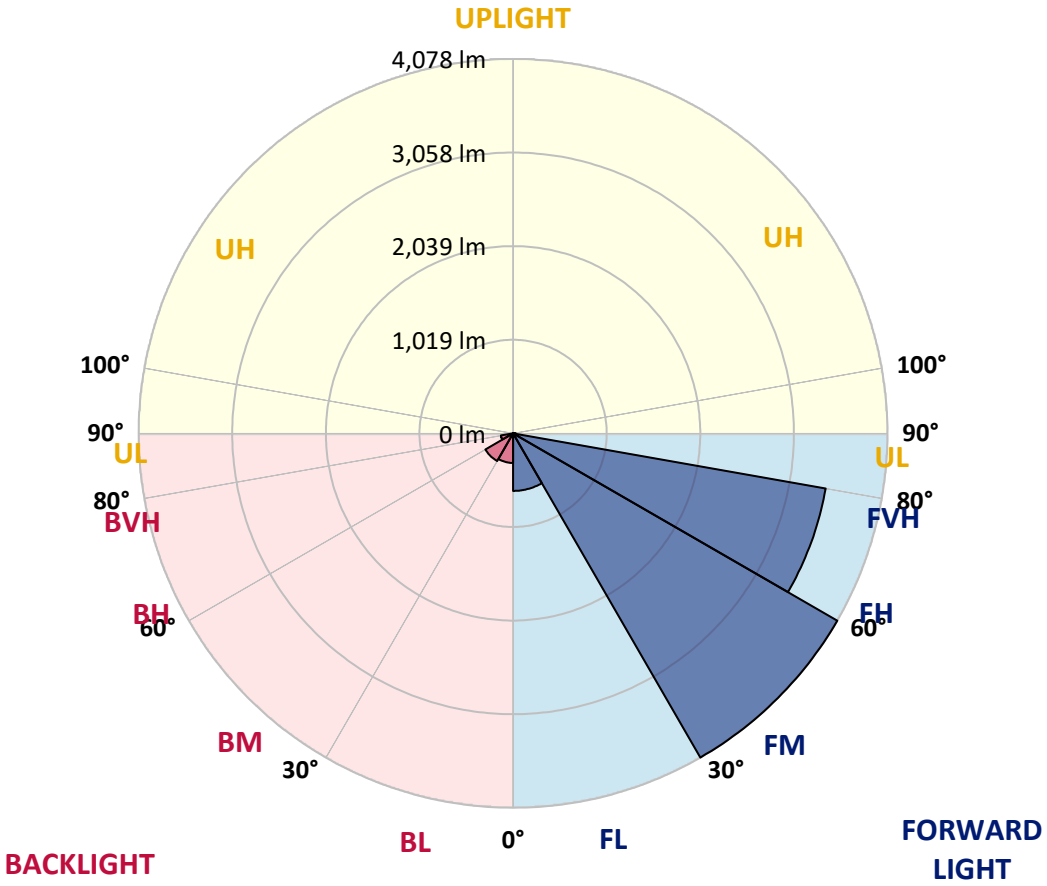
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	627.2	7.0			
FM	(30°-60°)	4077.7	45.3			
FH	(60°-80°)	3457.4	38.4			G2/5000
FVH	(80°-90°)	30.3	0.3			G1/100
BL	(0°-30°)	322.0	3.6	B1/500		
BM	(30°-60°)	348.2	3.9	B1/1000		
BH	(60°-80°)	134.8	1.5	B1/500		G1/500
BVH	(80°-90°)	3.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
Type III Medium



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REPORT NUMBER: P637017
CATALOG NUMBER: GWS-SA4B-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	1623.0	1623.0	1623.0	1623.0	1623.0	1623.0	1623.0	*1623.0*	1623.0	1623.0	1623.0
2.5°	1510.9	1508.4	1510.1	1522.4	1545.5	1556.2	1574.4	*1577.7*	1592.5	1611.4	1618.9
5°	1412.8	1404.6	1408.7	1426.0	1452.4	1482.0	1515.8	*1524.9*	1562.0	1604.0	1635.4
7.5°	1323.0	1313.9	1323.8	1351.0	1388.1	1420.2	1470.5	*1476.3*	1535.6	1609.8	1666.7
10°	1182.0	1184.5	1204.3	1252.1	1308.9	1375.7	1443.3	*1451.5*	1524.9	1628.8	1717.0
12.5°	1074.0	1068.3	1089.7	1144.1	1224.0	1321.3	1422.7	*1433.4*	1525.7	1657.6	1781.2
15°	1023.7	1022.1	1031.2	1070.7	1148.2	1262.8	1403.7	*1417.7*	1536.4	1684.0	1842.2
17.5°	1025.4	1022.9	1022.1	1045.2	1102.9	1219.1	1383.1	*1401.3*	1545.5	1712.8	1906.5
20°	1097.1	1085.6	1065.0	1054.2	1088.9	1191.1	1369.1	*1389.7*	1558.7	1743.3	1975.0
22.5°	1247.1	1251.2	1196.0	1138.3	1121.8	1194.4	1367.5	*1391.4*	1587.5	1791.1	2059.0
25°	1547.2	1540.6	1438.4	1308.9	1219.1	1232.3	1396.3	*1425.2*	1644.4	1859.6	2138.2
27.5°	1923.0	1928.8	1788.7	1582.6	1394.7	1310.6	1449.1	*1477.9*	1710.4	1902.4	2190.9
30°	2332.7	2326.9	2176.9	1948.6	1643.6	1440.8	1501.8	*1527.4*	1743.3	1925.5	2245.3
32.5°	2720.1	2706.9	2558.5	2319.5	1960.9	1646.1	1574.4	*1589.2*	1787.0	1975.8	2318.7
35°	3050.6	3049.8	2920.4	2665.7	2287.4	1903.2	1698.8	*1711.2*	1868.6	2055.7	2426.7
37.5°	3391.9	3380.3	3235.3	3002.8	2622.8	2185.1	1889.2	*1884.3*	1997.2	2173.6	2559.4
40°	3672.1	3664.7	3553.4	3330.1	2971.5	2496.7	2120.0	*2105.2*	2149.7	2336.8	2744.0
42.5°	3879.8	3880.7	3846.0	3710.0	3340.8	2856.9	2410.2	*2387.1*	2386.3	2583.3	2988.0
45°	4037.3	4048.0	4099.9	4079.3	3776.8	3276.5	2781.9	*2758.0*	2717.6	2903.1	3267.4
47.5°	4110.6	4124.7	4281.3	4363.7	4158.4	3692.7	3224.5	*3174.3*	3095.1	3328.4	3579.8
50°	4103.2	4127.9	4346.4	4597.0	4504.6	4114.8	3706.7	*3682.8*	3553.4	3778.5	3888.9
52.5°	3935.1	3987.8	4350.5	4738.7	4770.9	4503.8	4205.4	*4160.9*	4098.3	4248.3	4179.1
55°	3478.4	3542.7	4176.6	4784.1	4978.6	4843.4	4693.4	*4657.1*	4553.3	4691.7	4432.1
57.5°	3230.3	3285.5	3810.6	4761.8	5155.0	5157.5	5127.8	*5098.1*	5012.4	5130.3	4728.8
60°	3081.1	3136.3	3615.3	4680.2	5314.9	5488.8	5535.8	*5532.5*	5408.9	5628.9	5076.7
62.5°	2862.7	2938.5	3411.7	4468.4	5428.6	5815.2	5957.0	*5934.7*	5797.1	6148.2	5421.2
65°	2421.7	2487.6	2994.6	4118.9	5361.9	6085.6	6413.6	*6425.2*	6266.1	6637.0	5693.2
67.5°	1698.0	1746.6	2250.3	3385.3	4908.5	6174.6	6881.0	*6880.2*	6609.0	6887.6	5572.9
70°	*984.2*	*1050.9*	*1329.5*	*2092.8*	*3818.8*	*5769.9*	*6951.1*	*6975.0*	*6469.7*	*6364.2*	*4611.8*
72.5°	380.8	436.0	753.4	1111.9	1991.4	4419.7	5979.3	*6049.3*	5414.6	4909.4	3209.7
75°	113.7	126.9	354.4	591.8	799.5	2134.9	4048.0	*4067.8*	3714.2	3062.2	1645.2
77.5°	84.9	94.0	155.0	299.2	280.3	647.1	2094.5	*2287.4*	1971.7	1093.8	453.3
80°	57.7	68.4	110.5	145.9	103.9	172.3	588.5	*646.2*	601.7	245.6	113.7
82.5°	25.6	33.0	78.3	73.4	37.9	49.5	181.3	*192.9*	124.5	74.2	39.6
85°	2.5	3.3	29.7	32.1	14.0	11.5	37.9	*37.9*	27.2	25.6	16.5
87.5°	0.0	0.0	0.8	1.6	1.6	2.5	3.3	*4.1*	4.9	6.6	8.2
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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Scaled Data Report

REPORT NUMBER: P637017
CATALOG NUMBER: GWS-SA4B-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1623.0	1623.0	1623.0	1623.0	1623.0	1623.0	1623.0	1623.0	1623.0	1623.0	1623.0
2.5°	1637.8	1627.9	1640.3	1650.2	1652.7	1634.5	1623.8	1608.2	1604.9	1605.7	1601.6
5°	1660.1	1655.1	1664.2	1653.5	1625.5	1572.7	1527.4	1477.1	1449.9	1434.2	1432.6
7.5°	1701.3	1698.8	1688.9	1640.3	1552.9	1435.9	1323.0	1212.5	1144.1	1119.4	1115.2
10°	1762.3	1757.3	1717.0	1601.6	1415.3	1190.2	1000.7	842.4	746.0	717.9	683.3
12.5°	1832.4	1822.5	1734.3	1518.3	1207.6	896.0	659.4	482.2	398.9	374.2	374.2
15°	1899.9	1878.5	1724.4	1380.7	952.0	582.8	368.4	278.6	253.1	246.5	246.5
17.5°	1969.2	1928.0	1685.6	1192.7	657.8	344.5	245.6	228.3	225.0	225.9	226.7
20°	2034.3	1970.0	1617.2	966.9	419.6	240.7	220.1	216.0	214.3	216.0	215.1
22.5°	2105.2	2008.7	1513.4	720.4	272.8	216.8	209.4	206.1	204.4	206.9	206.9
25°	2175.3	2036.8	1375.7	484.7	216.8	201.9	197.8	194.5	192.9	193.7	193.7
27.5°	2211.5	2026.1	1195.2	309.1	194.5	187.1	183.0	178.9	176.4	175.6	176.4
30°	2236.2	1993.1	974.3	220.1	176.4	167.3	163.2	159.9	153.3	149.2	150.8
32.5°	2275.0	1960.1	734.4	184.6	161.6	147.5	141.0	132.7	123.6	119.5	119.5
35°	2321.1	1914.8	515.2	166.5	145.9	131.1	118.7	104.7	94.0	90.7	90.7
37.5°	2382.1	1871.9	342.9	154.1	132.7	117.0	99.7	83.3	71.7	70.1	69.2
40°	2473.6	1835.7	241.5	145.1	121.2	102.2	81.6	64.3	56.1	53.6	53.6
42.5°	2592.3	1798.6	191.2	136.0	111.3	88.2	65.1	51.1	44.5	42.9	42.0
45°	2739.1	1754.9	166.5	127.8	101.4	73.4	51.9	42.9	37.9	36.3	36.3
47.5°	2898.1	1695.5	155.0	117.0	89.8	59.3	43.7	37.1	34.6	33.8	33.0
50°	3054.7	1615.6	145.1	107.2	76.7	48.6	37.9	33.8	32.1	31.3	31.3
52.5°	3191.6	1522.4	132.7	95.6	62.6	42.0	33.8	31.3	29.7	28.0	27.2
55°	3308.6	1421.0	117.0	82.4	51.1	37.1	31.3	28.8	27.2	25.6	24.7
57.5°	3459.5	1363.3	94.0	66.8	42.0	33.0	28.8	26.4	24.7	22.3	22.3
60°	3626.8	1321.3	70.1	52.8	36.3	30.5	26.4	23.9	22.3	19.8	19.8
62.5°	3761.1	1258.7	55.2	42.9	31.3	27.2	23.9	21.4	19.8	17.3	17.3
65°	3812.3	1129.3	45.3	33.8	25.6	23.9	21.4	19.8	17.3	14.8	14.8
67.5°	3581.5	870.4	37.9	27.2	21.4	20.6	19.0	18.1	14.8	13.2	12.4
70°	*2836.3*	*530.8*	*31.3*	*22.3*	*18.1*	*17.3*	*17.3*	*15.7*	*13.2*	*12.4*	*11.5*
72.5°	1943.6	273.7	25.6	18.1	15.7	15.7	14.8	14.0	12.4	11.5	11.5
75°	1009.7	91.5	19.8	14.0	12.4	13.2	13.2	12.4	11.5	11.5	10.7
77.5°	289.3	41.2	14.8	10.7	9.9	9.9	10.7	10.7	10.7	9.9	9.9
80°	75.0	23.9	10.7	8.2	8.2	8.2	8.2	9.1	9.9	9.1	9.1
82.5°	30.5	13.2	7.4	6.6	6.6	6.6	6.6	7.4	8.2	8.2	8.2
85°	19.0	6.6	5.8	5.8	5.8	4.9	4.9	5.8	5.8	6.6	6.6
87.5°	11.5	4.9	4.9	4.9	4.9	4.1	4.1	4.1	4.1	4.1	4.1
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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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

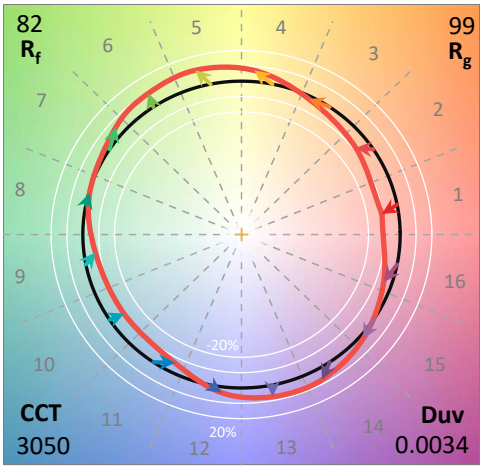
Test Information

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

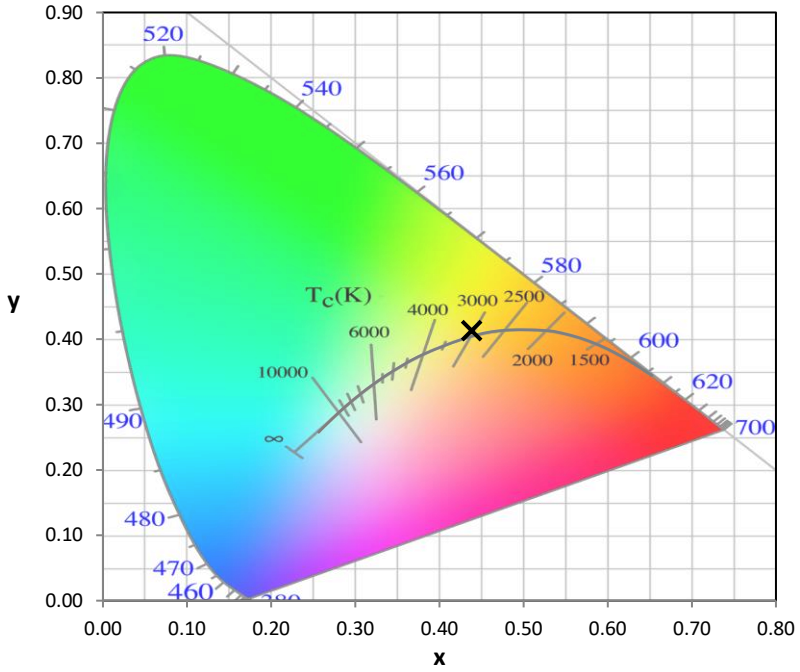
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

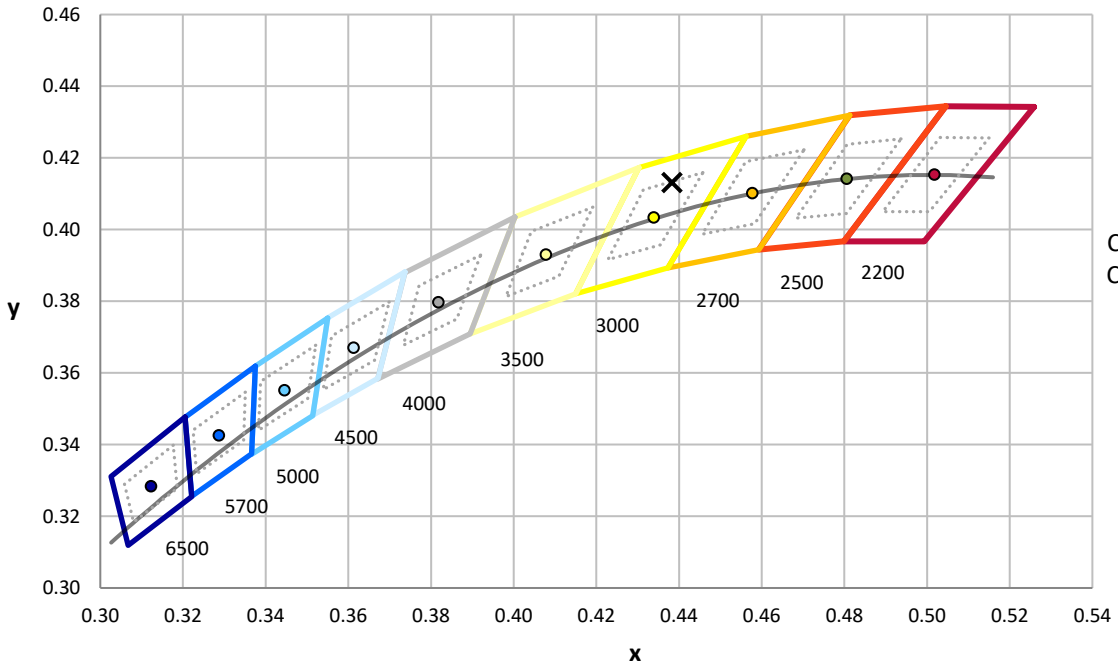
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

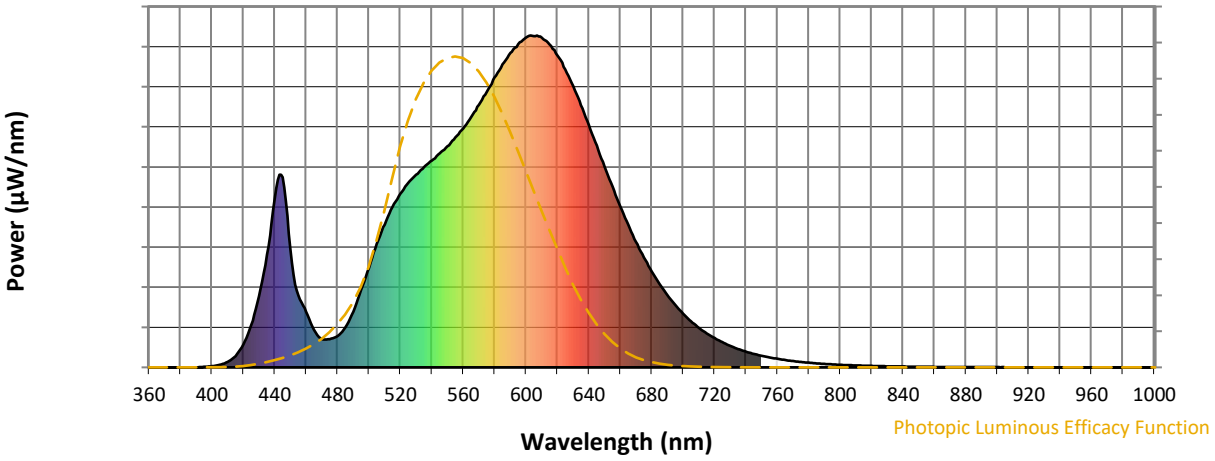


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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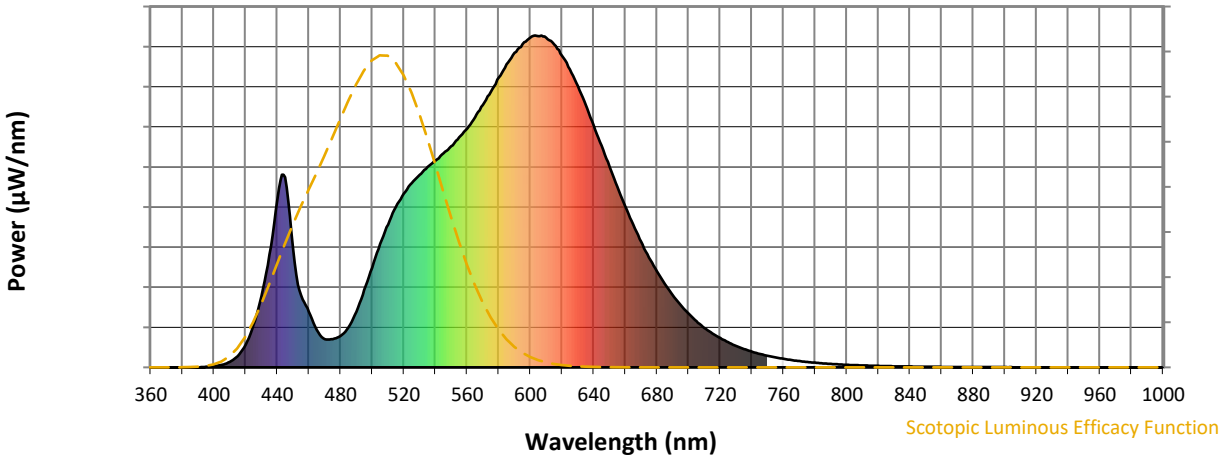
Scotopic Flux vs. Wavelength



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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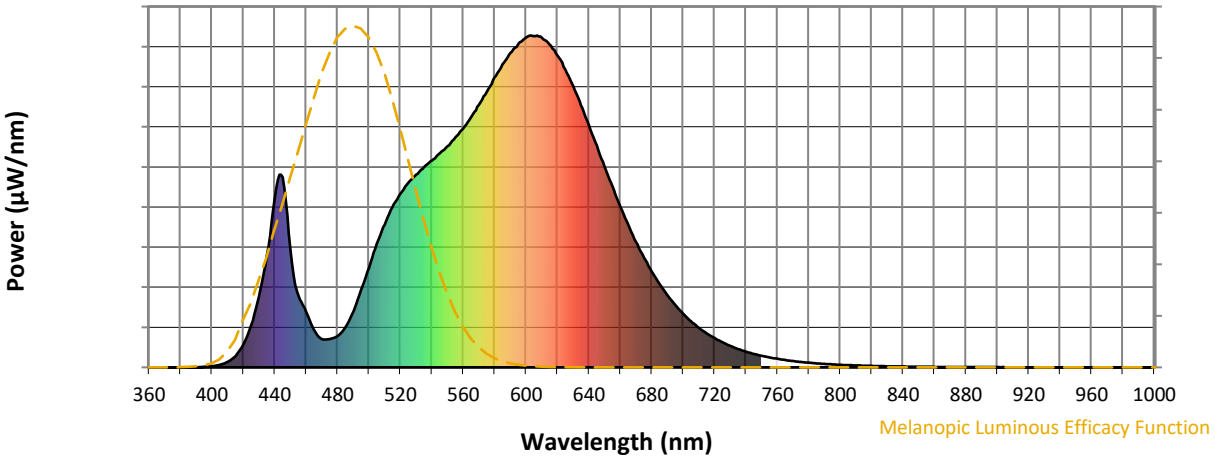
Melanopic Flux vs. Wavelength



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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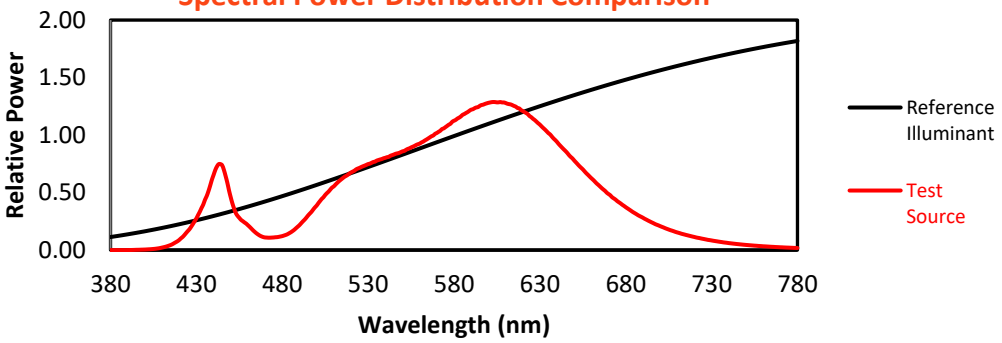
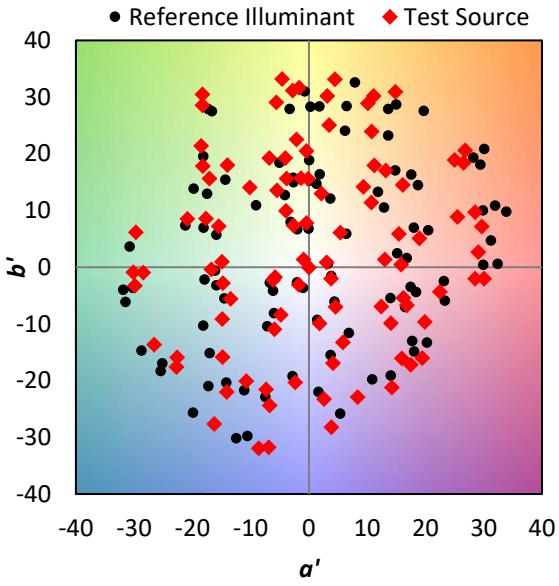
Summary

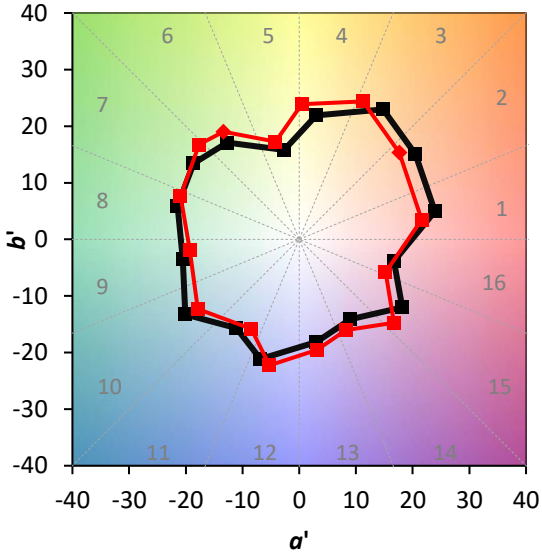
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

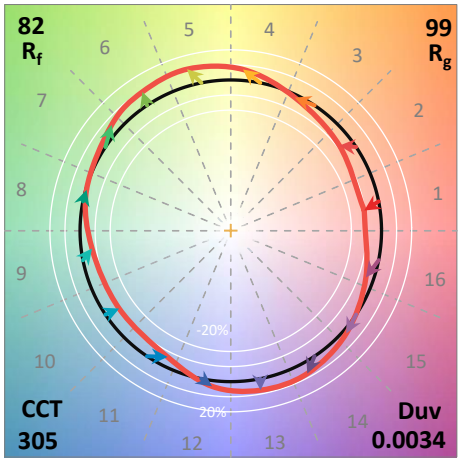
Spectral Power Distribution Comparison

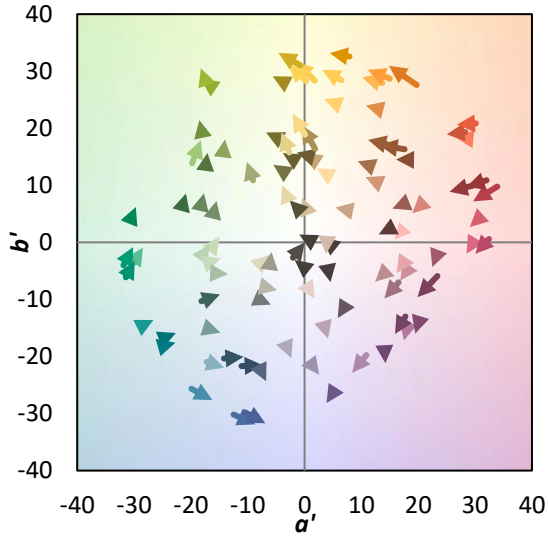


Color Vector Graphics









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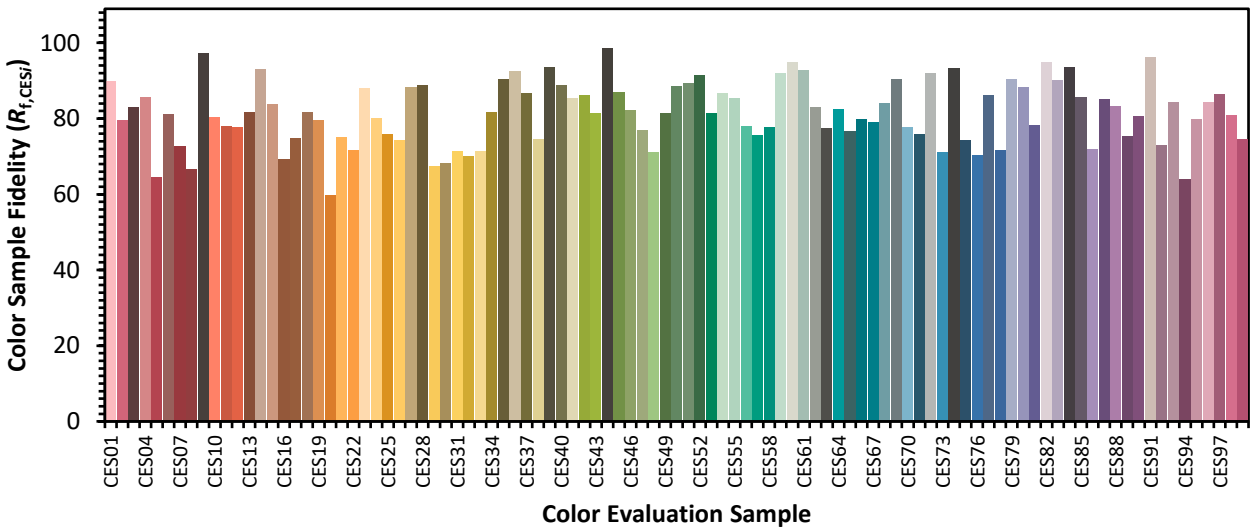
Individual Sample Fidelity Index ($R_{f,i}$)

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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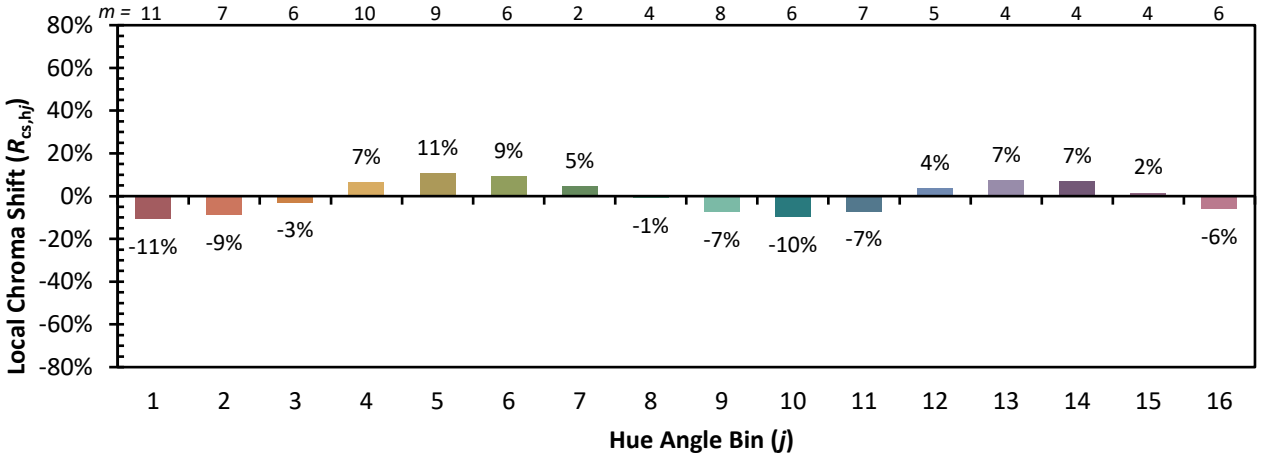
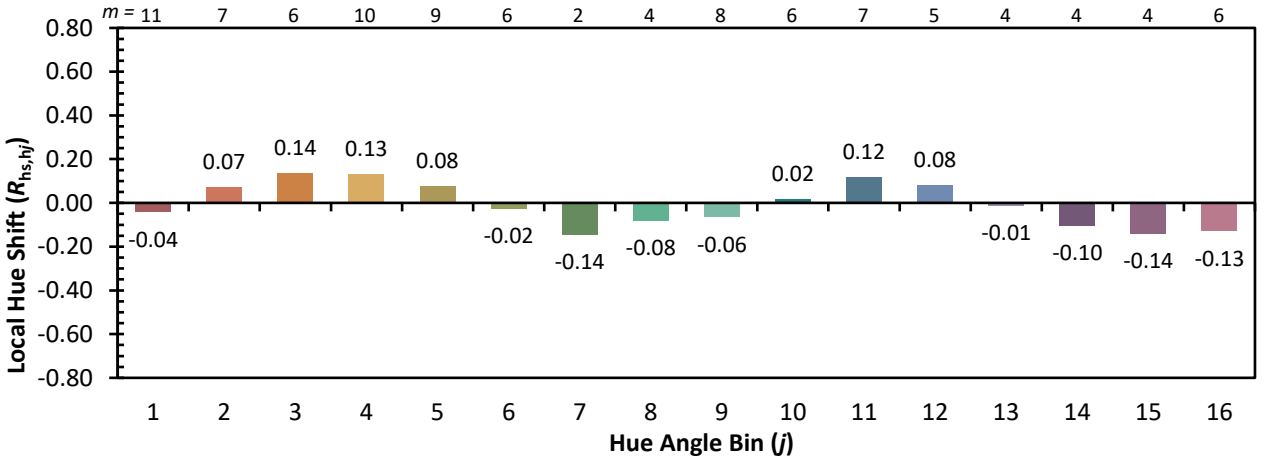
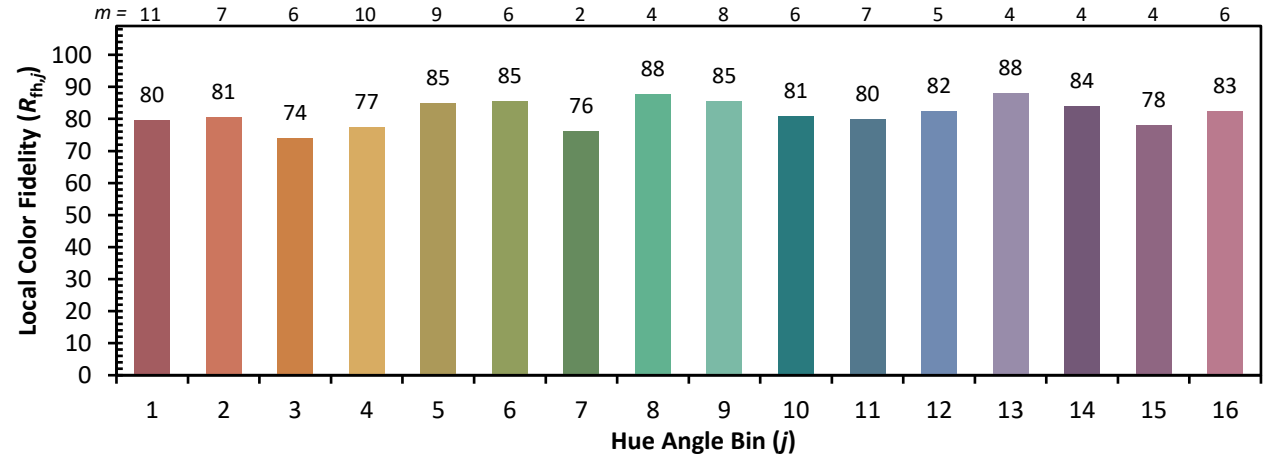
Color Rendition by Hue-Angle Bin







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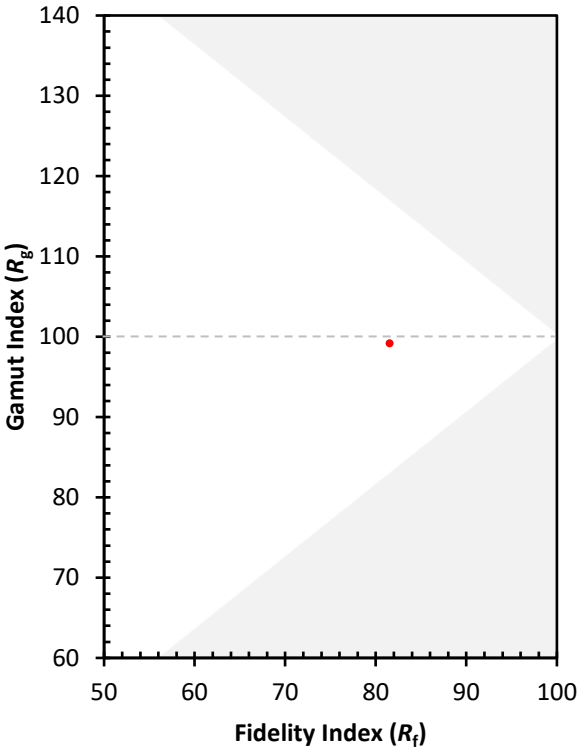
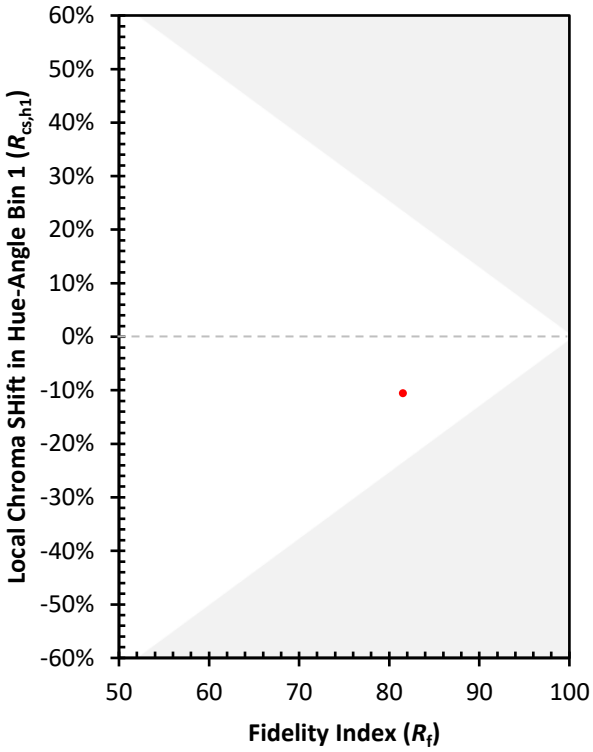
Measure Comparisons





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