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: P631051

Luminaire Tested: GWS-SA1E-830-U-SL3-W

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:	P631051
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-31)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1E-830-U-SL3-W
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5898.1 lumens
Efficiency:	N/A
Efficacy:	101.0 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B1 - U0 - G2

Input Watts (W):	58.4
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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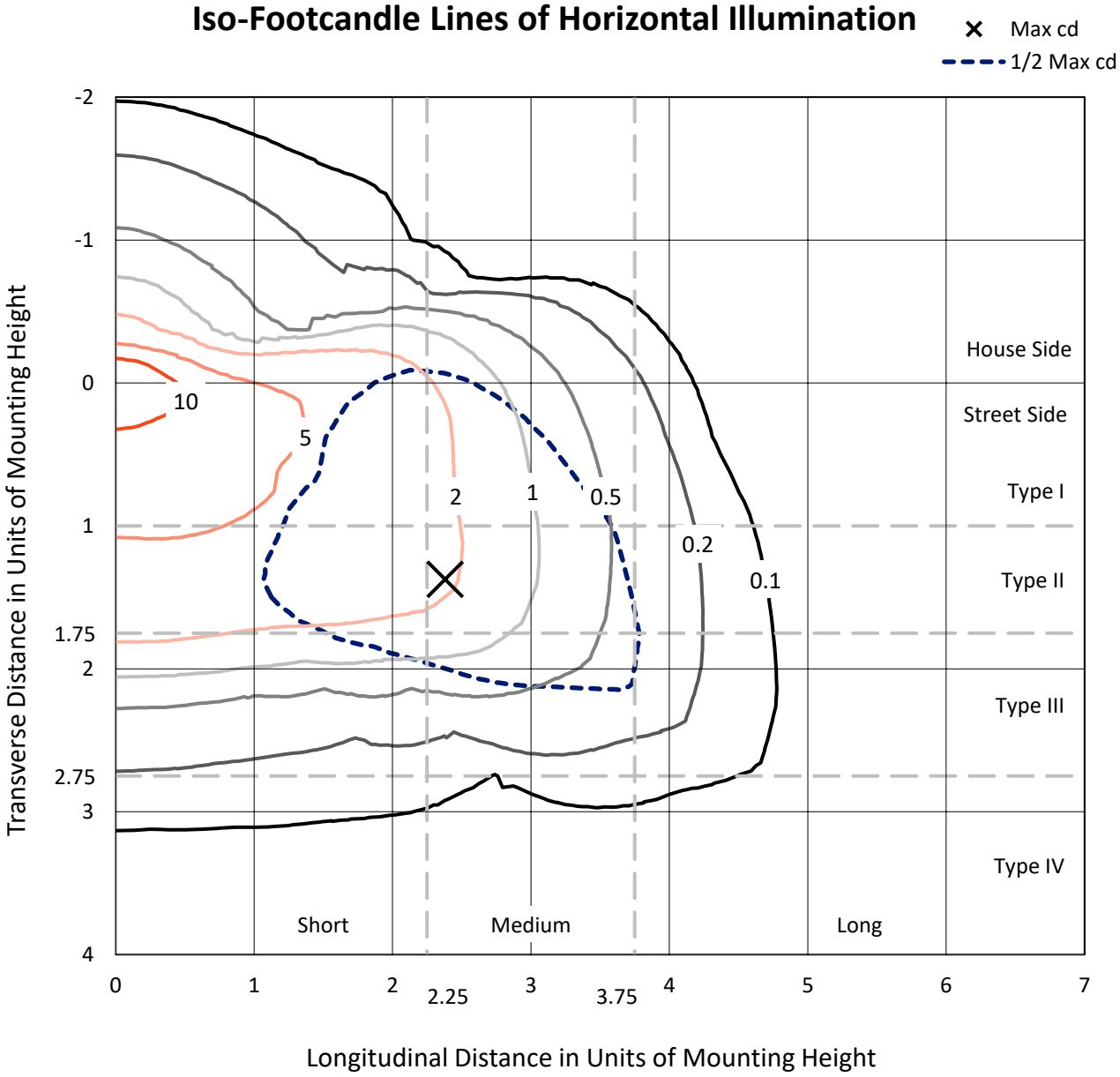
Scaled Data Report

REPORT NUMBER: P631051
CATALOG NUMBER: GWS-SA1E-830-U-SL3-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 16.3 fc
Type III - Medium - N/A

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REPORT NUMBER: P631051
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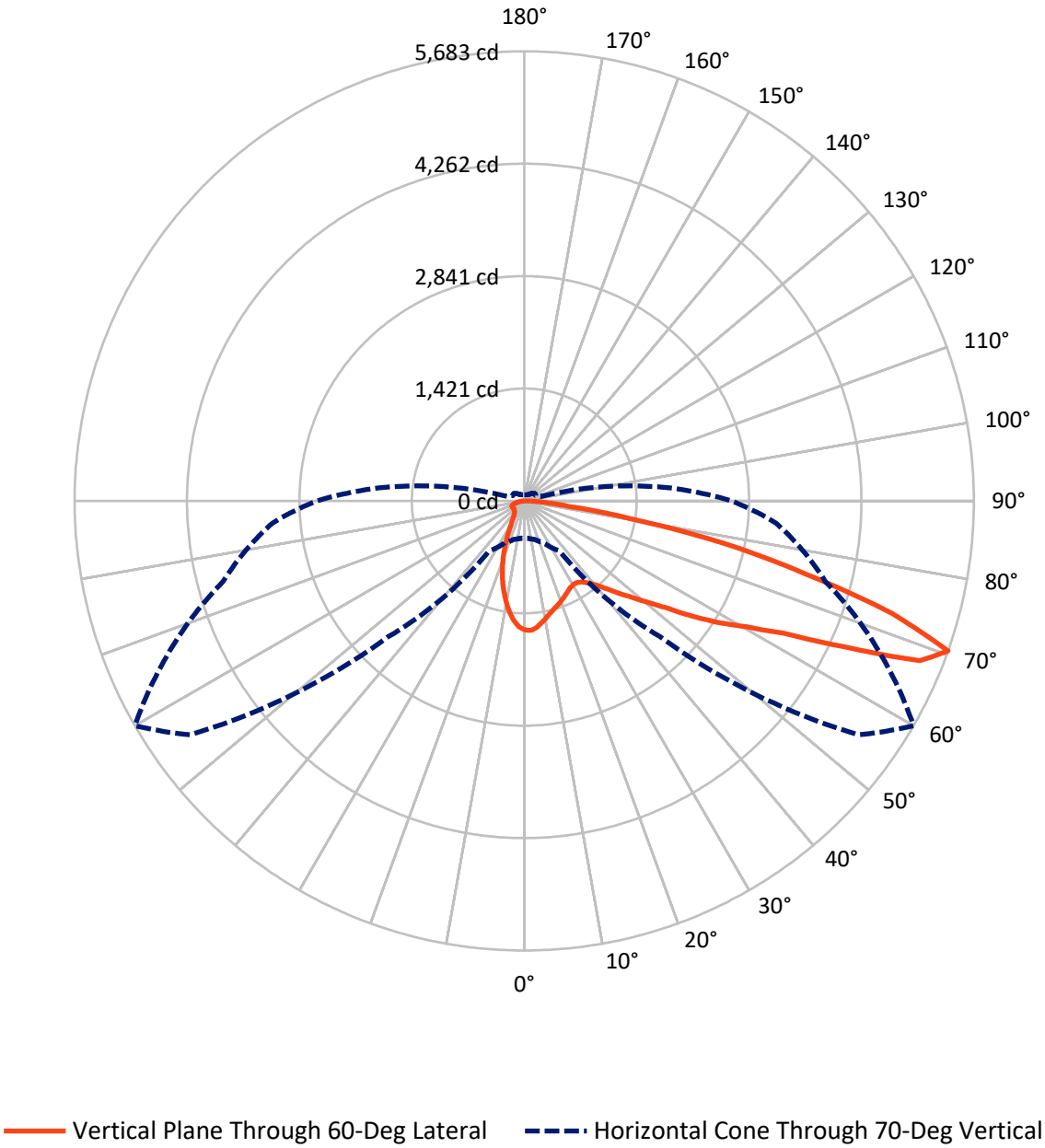
Luminous Intensity Polar Plot



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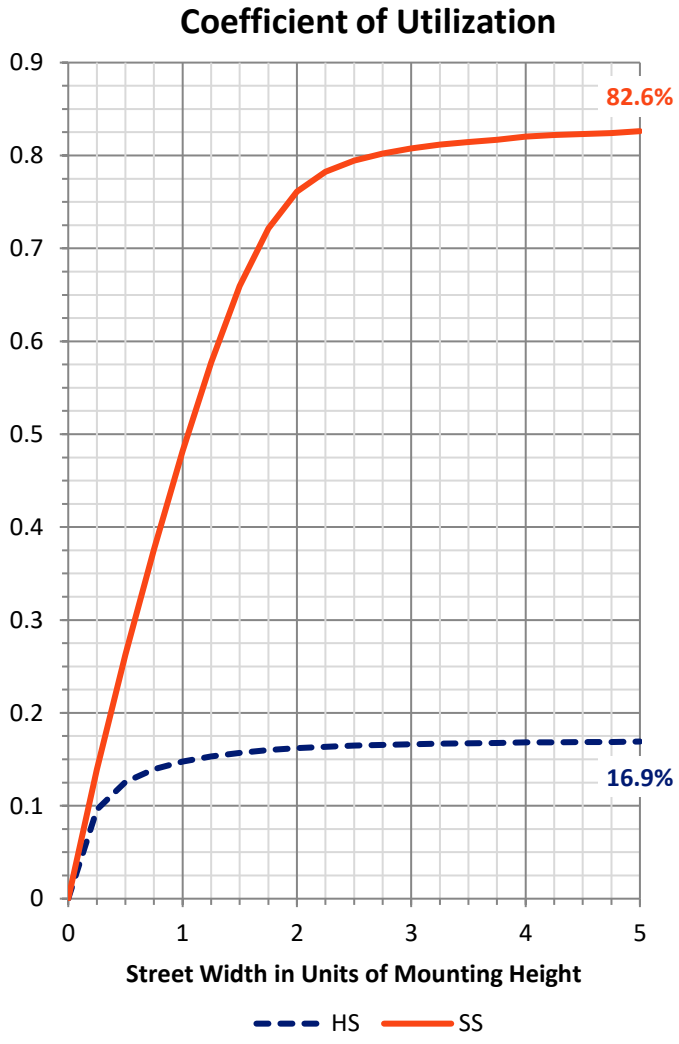
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1008.7	0.0	1008.7
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	4889.4	0.0	4889.4
	% Fixture	82.9	0.0	82.9
Total	Lumens	5898.1	0.0	5898.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.7	2.4
10°-20°	315.2	5.3
20°-30°	403.6	6.8
30°-40°	530.5	9.0
40°-50°	769.6	13.0
50°-60°	1200.8	20.4
60°-70°	1572.0	26.7
70°-80°	869.3	14.7
80°-90°	96.5	1.6
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°	5898.1	100.0
0°-180°	5898.1	100.0



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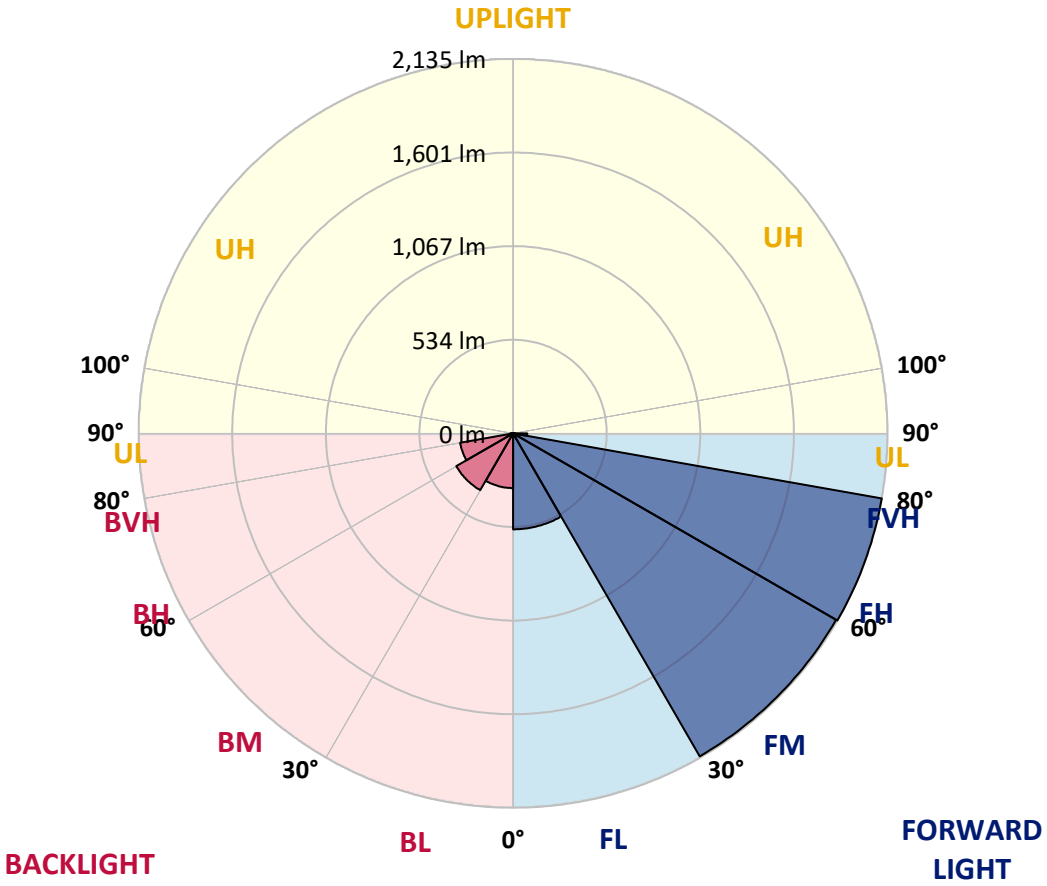
REPORT NUMBER: P631051
CATALOG NUMBER: GWS-SA1E-830-U-SL3-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	547.4	9.3			
FM	(30°-60°)	2126.8	36.1			
FH	(60°-80°)	2134.8	36.2			G2/5000
FVH	(80°-90°)	80.4	1.4			G1/100
BL	(0°-30°)	312.1	5.3	B1/500		
BM	(30°-60°)	374.0	6.3	B1/1000		
BH	(60°-80°)	306.5	5.2	B1/500		G1/500
BVH	(80°-90°)	16.1	0.3			G1/100
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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Scaled Data Report

REPORT NUMBER: P631051
CATALOG NUMBER: GWS-SA1E-830-U-SL3-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	1632.1	1632.1	1632.1	1632.1	1632.1	1632.1	1632.1	*1632.1*	1632.1	1632.1	1632.1
2.5°	1609.2	1610.9	1615.7	1622.6	1629.5	1632.9	1641.6	*1639.0*	1637.3	1633.8	1629.5
5°	1538.0	1541.5	1545.8	1559.2	1574.3	1586.3	1605.8	*1607.9*	1608.8	1610.5	1603.6
7.5°	1447.4	1448.2	1458.6	1476.3	1496.1	1516.9	1549.2	*1558.3*	1566.1	1574.7	1569.1
10°	1347.3	1349.4	1357.2	1382.7	1416.7	1447.4	1491.0	*1506.1*	1522.5	1541.5	1533.7
12.5°	1265.3	1265.7	1278.2	1305.4	1342.5	1383.9	1438.3	*1456.4*	1478.0	1507.8	1500.9
15°	1200.1	1200.1	1211.8	1235.1	1277.8	1326.6	1391.3	*1414.6*	1443.9	1484.1	1472.0
17.5°	1148.3	1148.8	1156.1	1180.7	1218.7	1272.6	1349.4	*1380.9*	1413.3	1466.4	1448.2
20°	1121.1	1119.0	1120.3	1135.4	1167.7	1220.0	1307.6	*1344.2*	1387.8	1454.3	1426.7
22.5°	1119.8	1116.0	1110.3	1111.6	1130.6	1173.8	1262.7	*1307.1*	1361.9	1444.4	1404.7
25°	1141.9	1137.5	1127.6	1116.4	1114.7	1140.6	1220.4	*1270.9*	1335.2	1440.0	1383.5
27.5°	1179.0	1175.9	1163.0	1146.2	1128.5	1127.6	1188.5	*1241.1*	1315.8	1444.4	1368.4
30°	1228.2	1223.0	1214.8	1193.2	1166.4	1138.8	1175.9	*1225.1*	1302.8	1458.2	1361.9
32.5°	1283.8	1280.8	1273.0	1251.5	1223.0	1179.0	1185.9	*1228.6*	1302.8	1482.3	1363.2
35°	1342.9	1342.5	1342.5	1328.3	1296.8	1242.0	1225.1	*1257.9*	1322.7	1521.2	1377.0
37.5°	1400.3	1399.9	1413.7	1418.9	1383.1	1324.0	1292.0	*1316.6*	1366.3	1578.6	1411.1
40°	1447.0	1448.7	1478.9	1504.8	1484.9	1430.1	1385.2	*1397.8*	1437.0	1660.1	1470.7
42.5°	1494.0	1498.7	1544.0	1589.8	1597.6	1550.1	1504.8	*1512.1*	1538.4	1768.0	1559.6
45°	1545.3	1547.5	1610.9	1674.8	1712.3	1684.3	1647.2	*1657.1*	1663.2	1901.4	1692.1
47.5°	1595.0	1600.6	1682.6	1770.2	1841.4	1838.8	1818.1	*1815.1*	1816.3	2063.6	1848.7
50°	1662.7	1670.9	1767.2	1872.9	1977.3	2025.2	2031.3	*2008.4*	1998.9	2244.0	2043.8
52.5°	1791.3	1791.3	1877.6	1981.6	2121.9	2240.6	2281.1	*2243.6*	2213.4	2434.7	2250.9
55°	1952.3	1959.2	2027.8	2112.0	2289.7	2467.1	2604.3	*2562.9*	2477.5	2642.3	2468.0
57.5°	2023.9	2032.5	2141.3	2272.1	2509.4	2724.7	2915.0	*2900.4*	2775.7	2858.1	2693.2
60°	1894.5	1912.6	2062.3	2281.5	2708.3	3140.3	3274.5	*3231.8*	3053.6	3084.6	2937.5
62.5°	1580.3	1600.1	1766.3	2072.3	2680.7	3589.5	3841.1	*3683.6*	3400.5	3370.8	3262.9
65°	942.9	942.0	1141.9	1547.5	2340.2	3714.3	4737.9	*4444.0*	3936.5	3763.5	3597.7
67.5°	599.4	598.1	640.0	819.9	1557.4	3408.7	5314.4	*5390.8*	4664.5	4052.2	3625.4
70°	*473.0*	*472.5*	*502.7*	*584.7*	*770.3*	*2425.7*	*5153.9*	*5682.5*	*5104.2*	*3942.1*	*3192.1*
72.5°	344.8	345.7	392.3	489.8	594.2	1217.8	4173.4	*4862.2*	4694.7	3479.9	2591.4
75°	247.7	249.0	277.0	375.0	548.1	665.9	2775.2	*3656.0*	3571.8	2789.5	1782.7
77.5°	157.5	159.2	183.8	262.8	442.8	537.7	1682.6	*2581.0*	2376.5	1571.7	633.9
80°	96.2	101.8	122.6	195.9	353.9	403.5	841.1	*1359.8*	1190.2	431.1	213.2
82.5°	49.6	53.9	73.8	121.3	243.8	354.3	476.0	*571.4*	368.5	180.4	113.5
85°	15.5	18.1	25.9	49.2	116.1	219.7	315.0	*284.0*	169.2	85.0	52.6
87.5°	3.9	3.9	4.3	4.3	4.7	9.9	60.8	*64.3*	44.9	26.8	21.6
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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REPORT NUMBER: P631051
CATALOG NUMBER: GWS-SA1E-830-U-SL3-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1632.1	1632.1	1632.1	1632.1	1632.1	1632.1	1632.1	1632.1	1632.1	1632.1	1632.1
2.5°	1620.9	1610.5	1606.2	1605.8	1595.0	1579.4	1569.1	1561.7	1557.4	1556.6	1556.6
5°	1591.9	1578.6	1560.9	1547.5	1518.6	1489.2	1464.6	1450.8	1434.9	1432.7	1432.3
7.5°	1553.5	1534.1	1500.5	1462.9	1412.4	1363.7	1322.2	1294.2	1266.1	1261.0	1259.2
10°	1512.1	1485.8	1428.4	1362.4	1286.8	1213.9	1150.5	1100.9	1068.1	1044.8	1040.4
12.5°	1471.1	1436.2	1352.0	1253.6	1150.1	1050.4	955.0	873.9	815.2	781.1	775.0
15°	1432.7	1383.9	1268.7	1143.1	1008.5	872.1	737.1	631.8	549.3	520.0	513.1
17.5°	1397.8	1336.9	1188.0	1028.8	860.9	682.7	529.1	435.4	387.1	372.4	369.0
20°	1362.8	1288.6	1106.0	908.4	704.3	504.5	386.7	342.6	324.5	318.9	317.2
22.5°	1325.3	1235.5	1016.7	789.7	545.9	377.6	316.3	296.9	291.3	291.7	291.3
25°	1287.7	1181.6	923.1	660.7	406.5	306.4	276.2	268.8	270.1	274.0	274.9
27.5°	1256.6	1133.7	831.1	519.1	317.6	263.7	249.4	249.0	253.7	258.9	259.8
30°	1234.2	1090.9	740.5	399.2	261.5	234.3	228.7	231.3	236.9	240.8	242.1
32.5°	1218.2	1054.2	643.9	313.7	229.1	213.6	211.0	213.6	217.1	220.9	221.8
35°	1212.6	1027.5	548.9	255.9	207.1	198.5	196.8	198.1	199.8	202.0	202.8
37.5°	1225.1	1014.1	449.7	222.7	193.8	188.6	186.0	185.1	185.6	186.4	186.9
40°	1262.3	1020.2	368.5	203.3	185.1	180.4	176.1	174.3	173.9	174.8	174.3
42.5°	1326.1	1045.6	309.8	192.0	178.2	171.3	166.6	164.8	164.8	167.0	167.0
45°	1419.8	1095.7	267.6	183.8	172.2	163.6	158.4	157.5	159.2	162.7	163.1
47.5°	1557.0	1169.0	242.1	177.8	166.6	156.6	151.5	151.0	154.5	160.1	160.5
50°	1719.7	1274.8	228.3	173.5	162.7	151.0	145.9	146.3	150.2	156.2	157.5
52.5°	1915.6	1418.9	229.1	171.8	160.5	147.6	142.4	141.5	145.4	151.5	152.8
55°	2118.0	1594.1	246.0	172.2	157.5	145.9	139.0	135.9	139.4	143.7	144.1
57.5°	2340.7	1791.8	287.8	171.3	153.6	144.1	135.9	129.0	131.2	133.8	135.1
60°	2591.8	2024.3	378.0	173.0	151.9	140.3	129.9	120.8	120.4	122.1	122.6
62.5°	2927.6	2340.7	479.4	176.1	155.8	135.5	120.8	111.3	109.6	110.5	110.9
65°	3184.3	2491.7	447.5	173.5	164.0	132.1	112.2	102.3	98.8	98.0	98.0
67.5°	3079.9	2291.9	311.6	166.6	167.9	132.5	105.3	92.8	88.5	86.3	85.9
70°	*2620.7*	*1861.7*	*216.6*	*159.7*	*163.6*	*131.6*	*98.0*	*85.0*	*79.4*	*76.4*	*76.0*
72.5°	2070.5	1421.5	175.2	145.9	148.4	118.7	87.2	76.4	71.6	67.8	67.8
75°	1332.6	867.4	146.3	129.9	121.3	92.3	75.5	68.2	63.4	59.6	59.6
77.5°	448.4	321.9	113.5	110.0	90.6	69.5	63.4	58.7	54.8	51.4	50.9
80°	182.1	152.8	83.3	83.3	63.4	53.1	49.6	47.5	44.9	40.6	40.6
82.5°	105.7	92.8	58.3	50.5	42.3	36.7	34.5	32.4	32.4	29.3	29.3
85°	50.9	51.4	35.0	31.1	24.2	21.1	20.3	19.0	18.6	16.8	16.4
87.5°	27.6	28.1	17.7	13.8	9.5	8.2	6.9	6.5	6.0	5.6	5.6
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

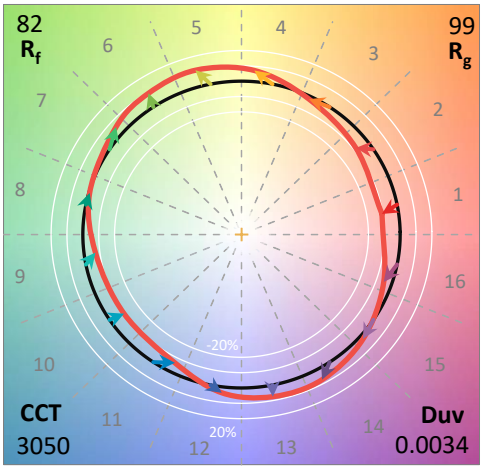
Test Information

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

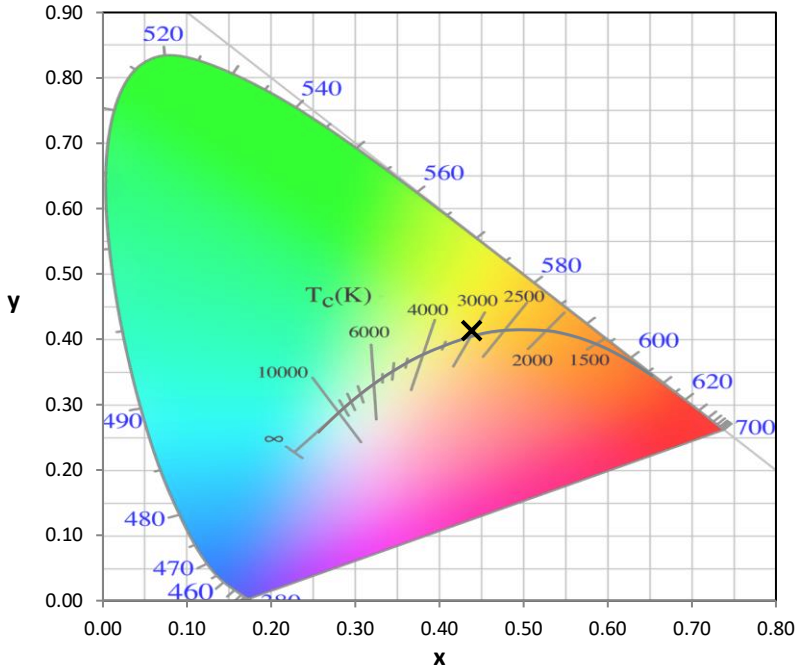
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

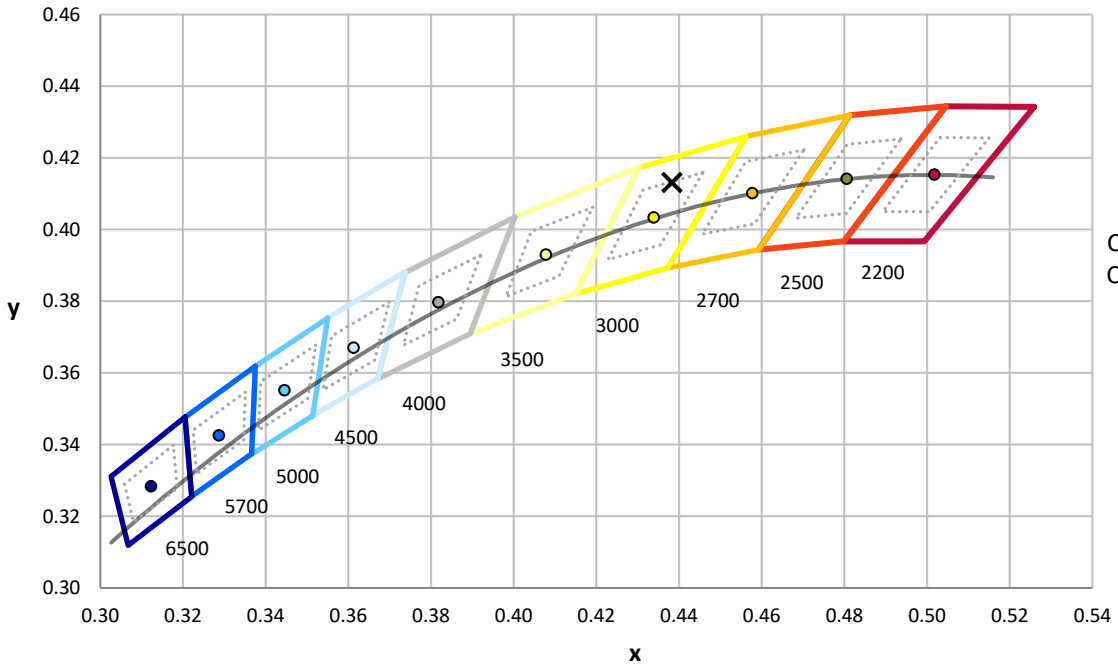
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

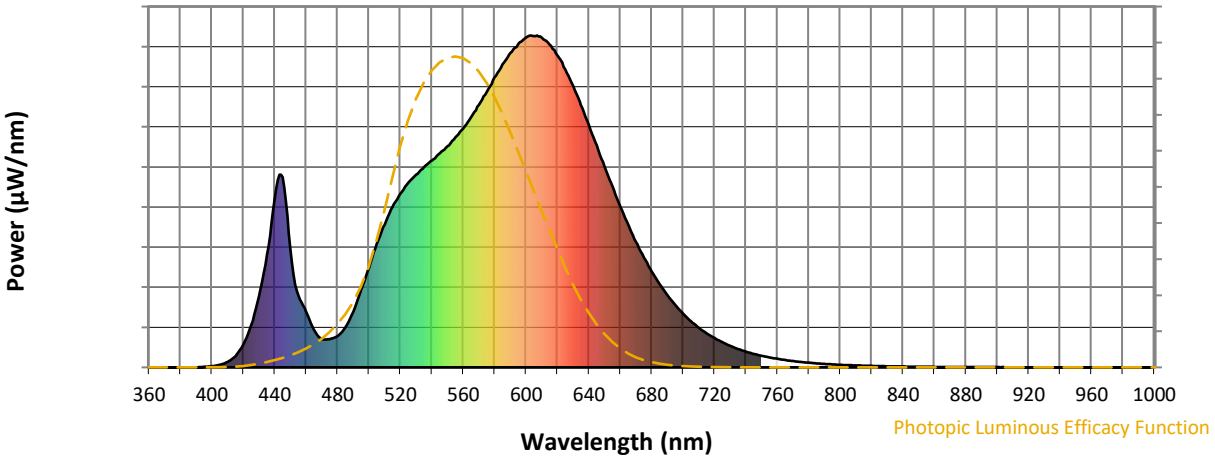


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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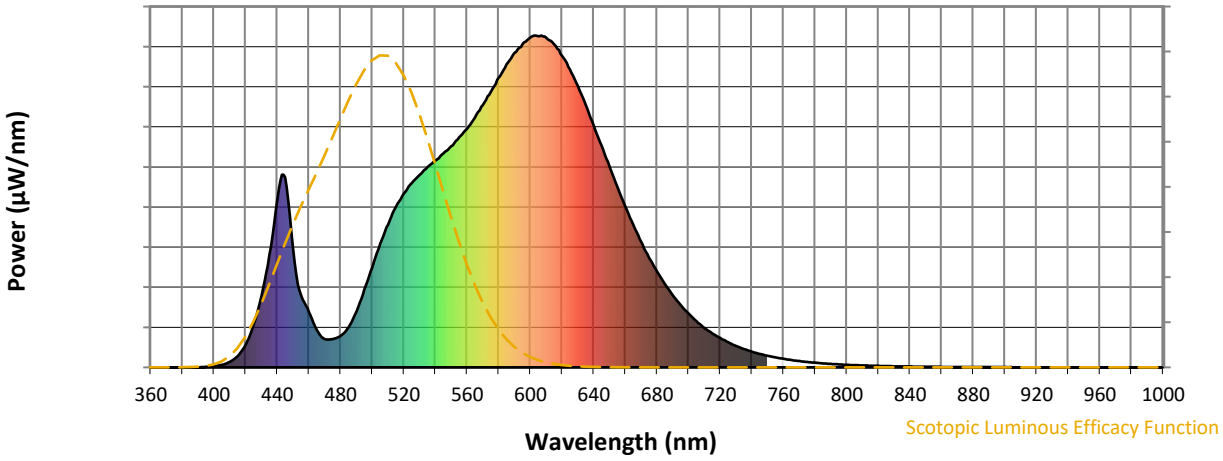
Scotopic Flux vs. Wavelength



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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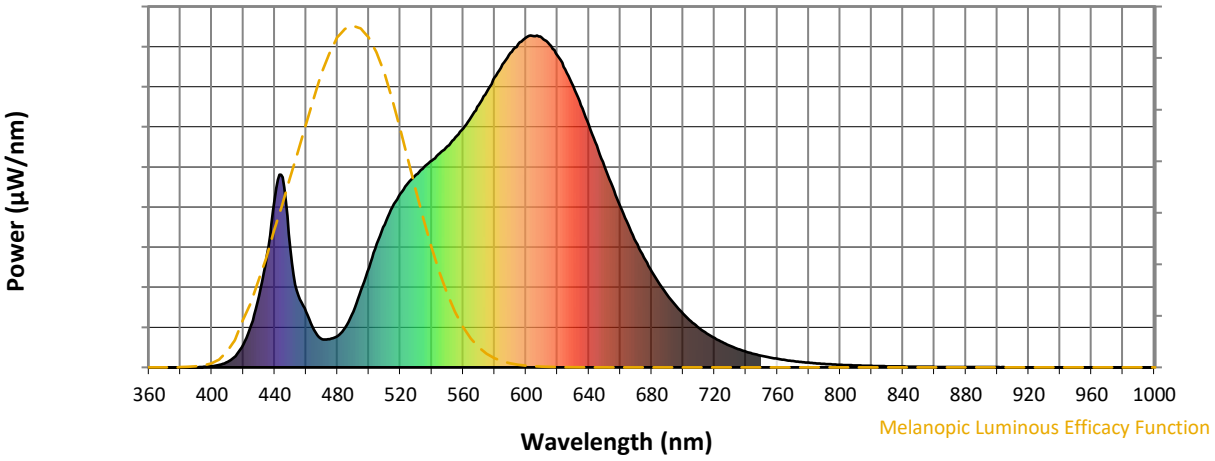
Melanopic Flux vs. Wavelength



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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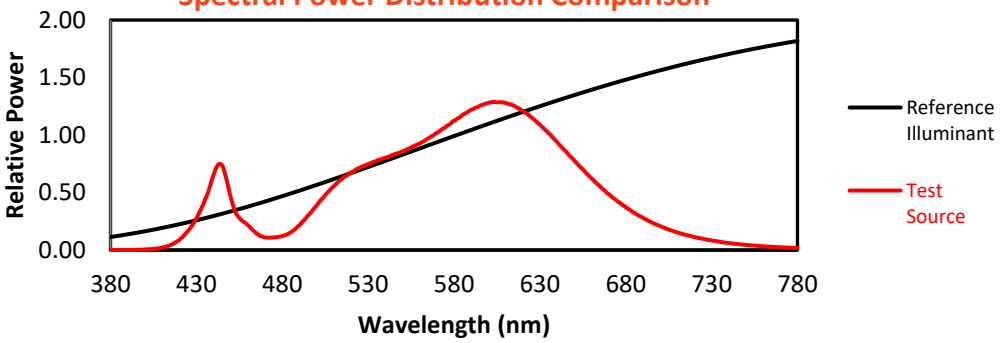
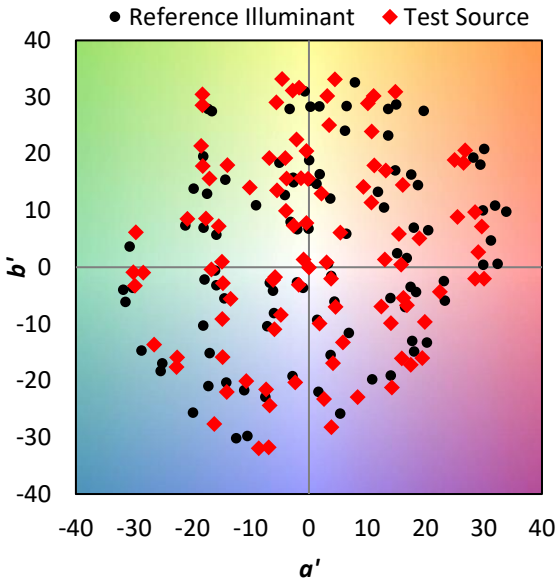
Summary

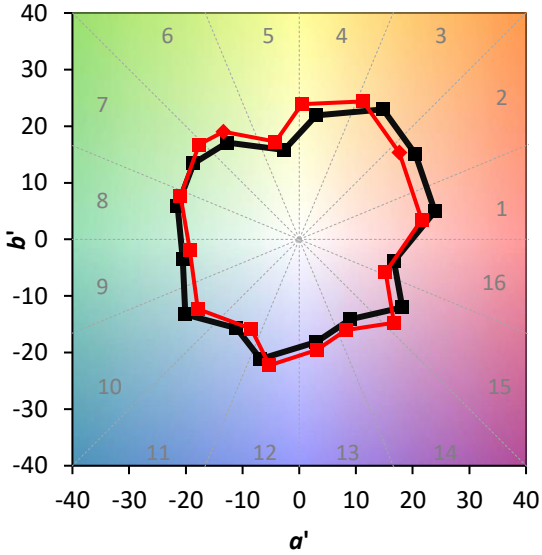
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

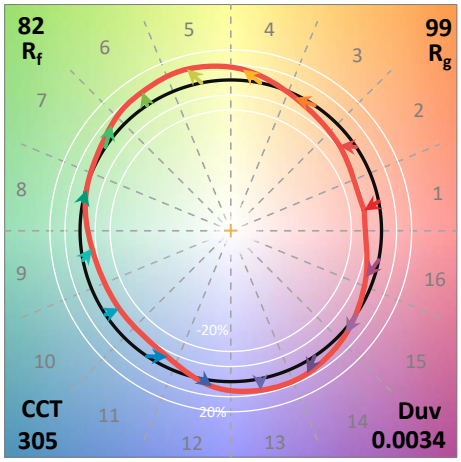
Spectral Power Distribution Comparison

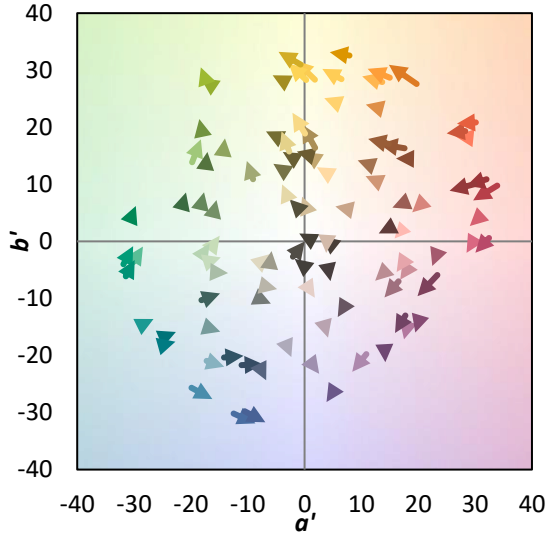


Color Vector Graphics









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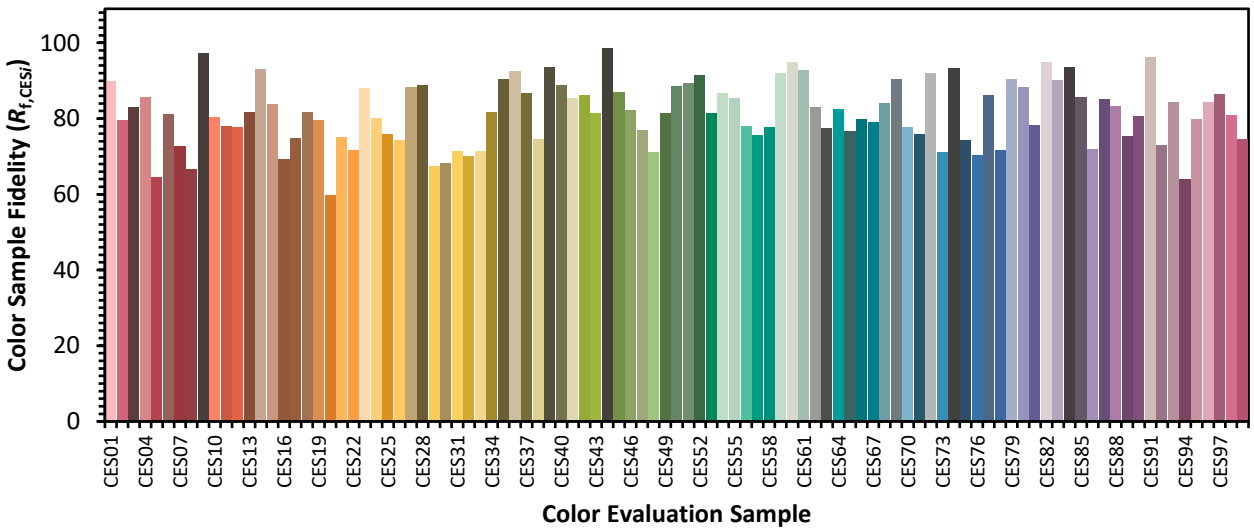
Individual Sample Fidelity Index ($R_{f,i}$)

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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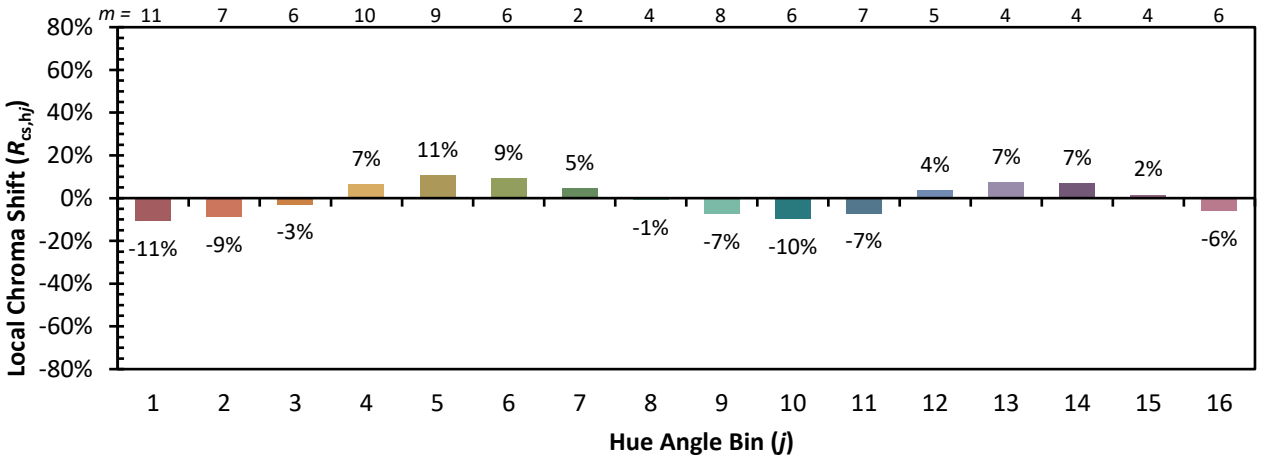
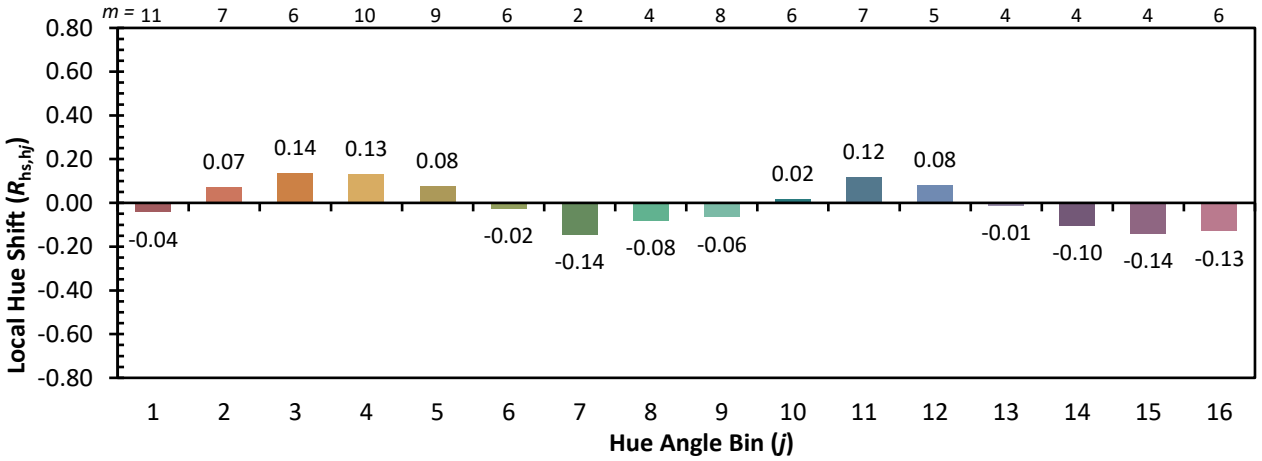
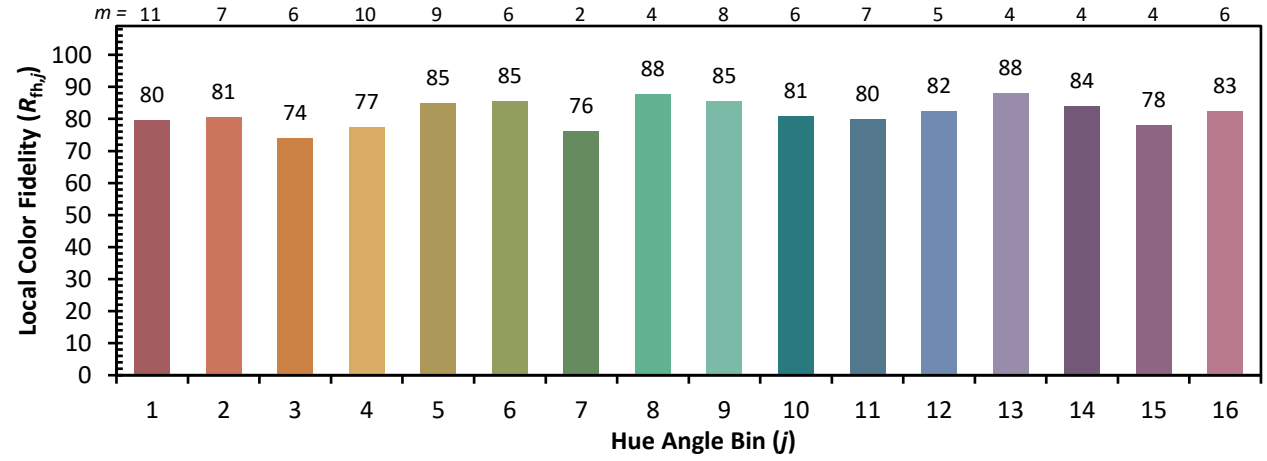
Color Rendition by Hue-Angle Bin







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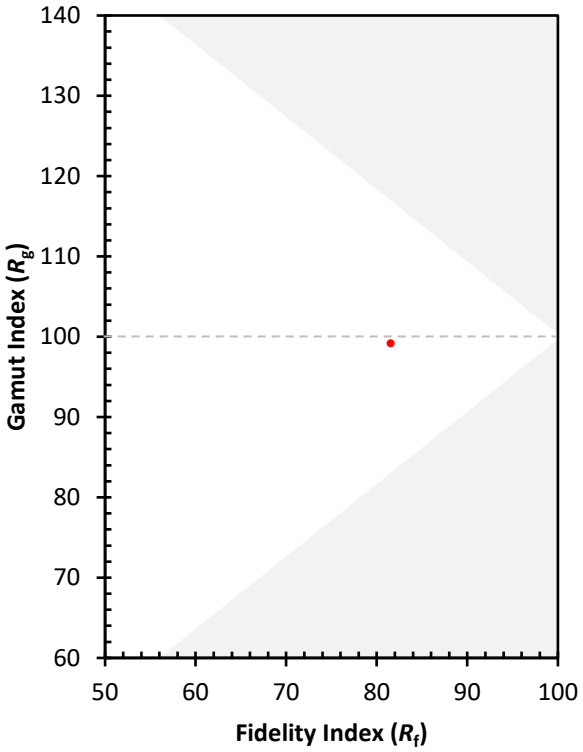
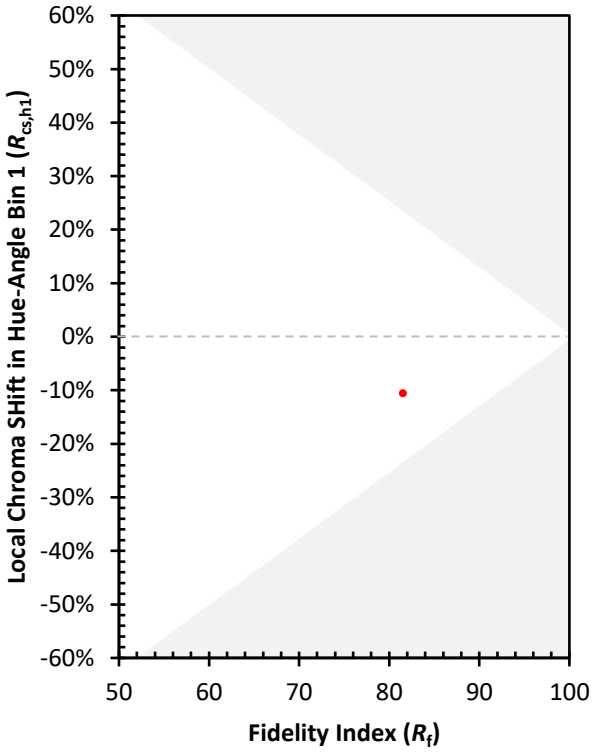
Measure Comparisons





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