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: P634511

Luminaire Tested: GWS-SA3B-830-U-SL2-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:	P634511
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-30)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3B-830-U-SL2-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	6550.1 lumens
Efficiency:	N/A
Efficacy:	95.9 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G2

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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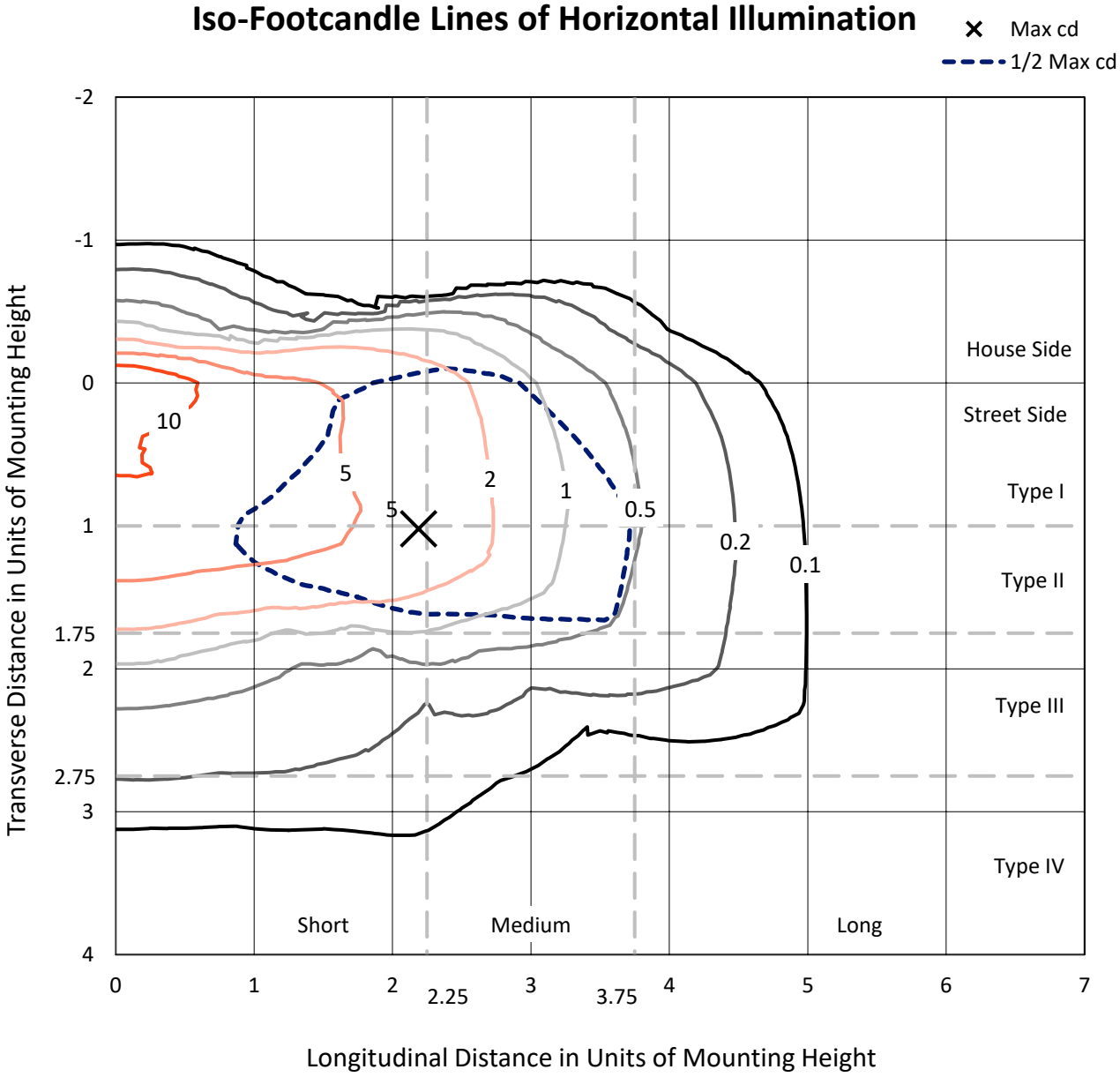
REPORT NUMBER: P634511
CATALOG NUMBER: GWS-SA3B-830-U-SL2-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 15.9 fc
Type II - Short - N/A

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REPORT NUMBER: P634511
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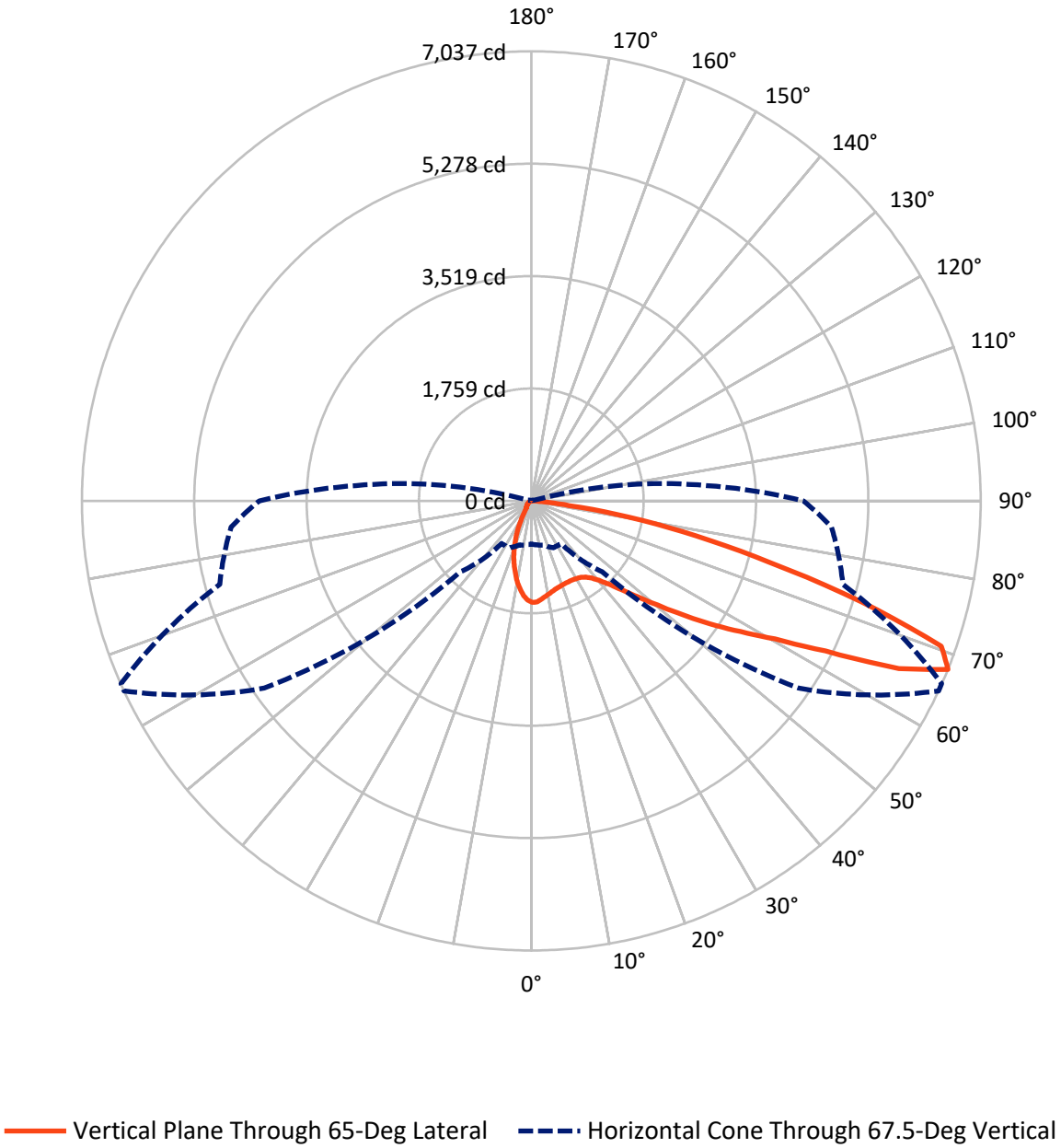
Luminous Intensity Polar Plot



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REPORT NUMBER: P634511
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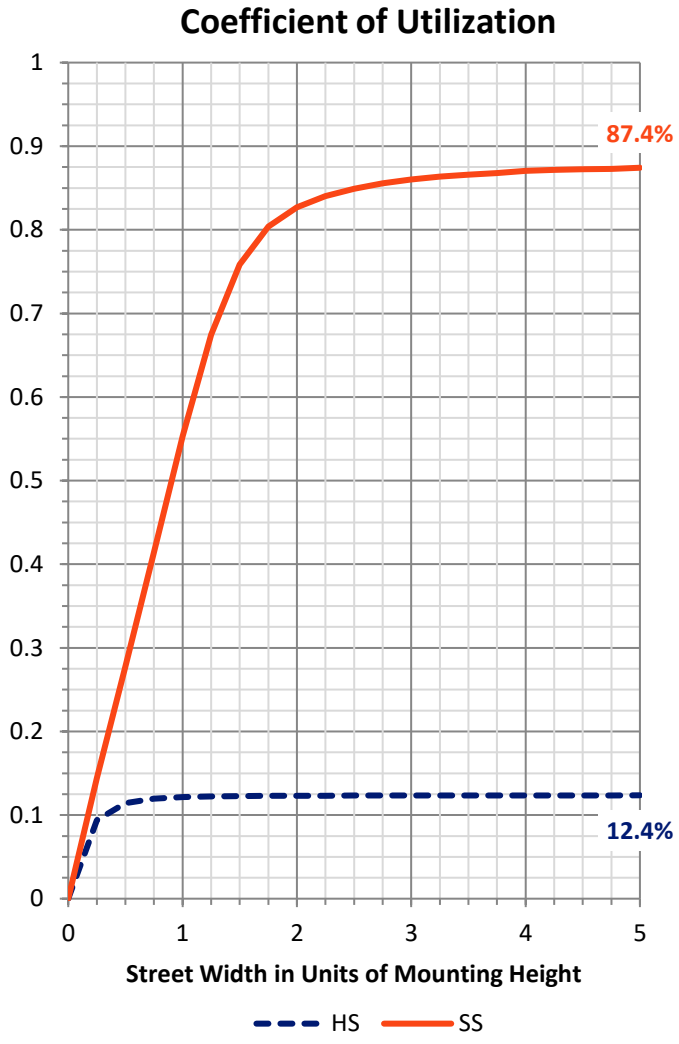
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	817.9	0.0	817.9
	% Fixture	12.5	0.0	12.5
Street Side	Lumens	5732.2	0.0	5732.2
	% Fixture	87.5	0.0	87.5
Total	Lumens	6550.1	0.0	6550.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	2.0
10°-20°	296.6	4.5
20°-30°	423.8	6.5
30°-40°	616.6	9.4
40°-50°	965.7	14.7
50°-60°	1506.5	23.0
60°-70°	1654.9	25.3
70°-80°	880.7	13.4
80°-90°	73.3	1.1
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°	6550.1	100.0
0°-180°	6550.1	100.0



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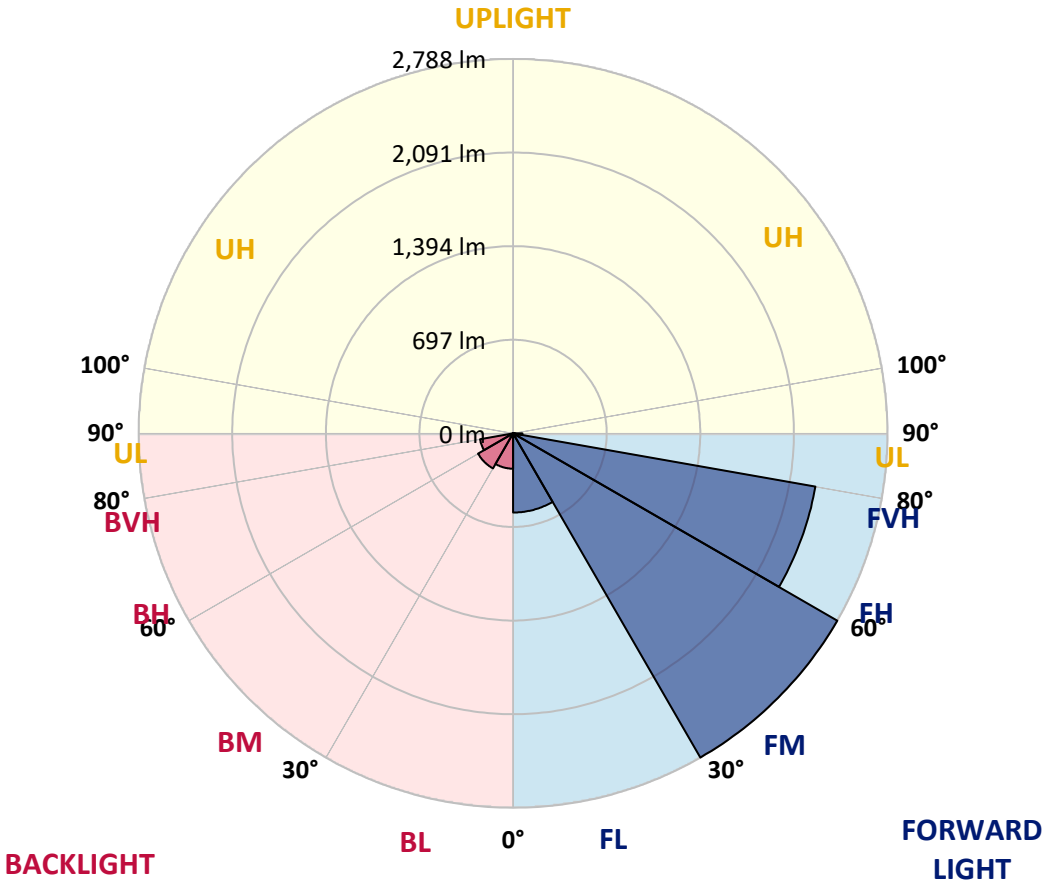
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	589.5	9.0			
FM	(30°-60°)	2787.6	42.6			
FH	(60°-80°)	2285.7	34.9			G2/5000
FVH	(80°-90°)	69.4	1.1			G1/100
BL	(0°-30°)	262.9	4.0	B1/500		
BM	(30°-60°)	301.3	4.6	B1/1000		
BH	(60°-80°)	249.8	3.8	B1/500		G1/500
BVH	(80°-90°)	3.9	0.1			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 II Short



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Scaled Data Report

REPORT NUMBER: P634511
CATALOG NUMBER: GWS-SA3B-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6
2.5°	1533.5	1538.3	1531.7	1547.7	1550.7	1568.5	1578.5	1585.6	1585.1	1593.9	1593.9
5°	1443.5	1448.2	1444.7	1461.8	1475.5	1503.3	1526.4	1553.1	1554.3	1581.5	1591.6
7.5°	1367.1	1367.7	1367.7	1389.0	1406.8	1441.1	1475.5	1516.3	1521.1	1563.1	1589.8
10°	1304.3	1306.1	1306.7	1330.9	1350.5	1392.0	1435.8	1484.9	1490.3	1547.1	1588.6
12.5°	1261.1	1261.6	1264.0	1289.5	1310.8	1354.0	1398.5	1454.7	1461.8	1528.8	1583.3
15°	1240.3	1239.1	1240.3	1261.6	1283.0	1324.4	1370.0	1430.5	1438.2	1513.4	1583.9
17.5°	1239.1	1237.4	1236.2	1252.2	1265.8	1302.5	1348.7	1414.5	1422.8	1506.3	1590.4
20°	1256.3	1255.1	1249.2	1256.3	1259.3	1289.5	1335.1	1402.0	1410.3	1505.1	1604.6
22.5°	1301.3	1298.4	1289.5	1283.0	1267.0	1284.7	1325.6	1393.1	1402.6	1508.0	1623.0
25°	1368.3	1367.1	1355.8	1339.8	1299.0	1291.9	1326.2	1393.1	1402.0	1511.6	1642.5
27.5°	1469.0	1461.8	1447.6	1419.8	1361.2	1319.7	1338.1	1396.7	1405.6	1516.3	1658.5
30°	1571.4	1570.8	1566.1	1537.7	1450.6	1373.0	1362.9	1406.2	1414.5	1520.5	1673.3
32.5°	1677.5	1679.2	1691.1	1669.2	1573.8	1452.4	1407.9	1425.7	1431.6	1528.8	1686.3
35°	1778.1	1781.7	1813.1	1820.8	1723.7	1572.6	1481.4	1464.8	1465.4	1547.1	1703.5
37.5°	1874.7	1886.5	1936.9	1974.2	1910.2	1718.3	1587.4	1531.2	1526.4	1583.9	1729.6
40°	1984.3	2006.8	2070.2	2133.5	2113.4	1910.8	1731.9	1633.0	1623.0	1651.4	1776.4
42.5°	2105.7	2130.0	2214.1	2302.9	2312.4	2143.6	1912.6	1781.7	1764.5	1765.1	1864.0
45°	2236.0	2268.6	2366.3	2494.3	2551.7	2403.0	2135.3	1982.5	1965.3	1939.9	2005.0
47.5°	2407.2	2435.6	2529.8	2677.3	2787.5	2681.4	2427.3	2240.8	2209.4	2172.0	2224.2
50°	2554.7	2579.6	2660.7	2845.5	3074.7	3040.4	2758.4	2563.6	2533.4	2470.0	2513.2
52.5°	2587.3	2606.8	2681.4	2889.3	3294.5	3493.5	3164.2	2953.9	2932.6	2815.3	2831.9
55°	2441.0	2470.6	2537.5	2768.5	3351.9	3936.6	3690.8	3394.0	3349.6	3162.4	3192.0
57.5°	2071.3	2124.1	2186.9	2487.2	3196.2	4172.3	4426.4	3860.2	3819.9	3496.5	3497.1
60°	1518.1	1560.8	1602.8	1877.7	2826.6	4156.3	5094.0	4383.8	4310.3	3769.5	3759.5
62.5°	1104.1	1126.0	1125.4	1223.1	1941.0	3882.7	5444.6	5172.7	5001.6	4061.5	4004.1
65°	868.3	867.8	893.2	925.2	1083.9	2997.1	5487.9	6324.8	6140.0	4453.1	4333.4
67.5°	675.8	688.9	714.3	808.5	814.4	1568.5	5107.6	7037.4	7033.8	5050.7	4719.0
70°	521.2	539.0	575.1	712.6	752.2	877.8	3821.7	6811.7	6869.1	5317.9	4446.0
72.5°	334.7	333.5	386.8	575.7	722.6	731.5	2113.4	5410.9	5476.0	4816.8	3594.8
75°	187.2	188.4	218.6	352.4	673.5	688.3	1046.6	3858.4	3909.9	3755.3	2762.0
77.5°	73.4	75.8	102.5	185.4	444.2	614.8	621.9	2631.1	2638.8	2327.2	1694.0
80°	29.6	31.4	52.1	114.9	270.7	414.0	444.2	1550.1	1518.7	900.9	492.8
82.5°	8.9	9.5	20.7	65.2	141.6	294.4	299.7	594.7	561.5	193.7	125.6
85°	0.6	0.6	4.7	20.1	50.3	74.0	199.6	193.7	171.8	48.6	55.7
87.5°	0.0	0.0	0.6	0.6	1.2	2.4	21.3	35.5	36.1	8.9	24.9
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: P634511
CATALOG NUMBER: GWS-SA3B-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6
2.5°	1593.9	1572.6	1570.8	1554.3	1537.7	1516.9	1492.6	1474.9	1462.4	1440.5	1436.4
5°	1591.6	1563.1	1536.5	1489.1	1436.4	1379.5	1329.8	1283.6	1254.5	1235.0	1226.7
7.5°	1586.8	1550.7	1489.1	1399.7	1311.4	1211.9	1134.3	1063.2	1014.6	986.2	973.8
10°	1583.3	1534.7	1434.6	1299.0	1162.1	1024.7	906.8	801.4	742.8	696.6	688.9
12.5°	1576.2	1511.6	1364.7	1181.1	1004.6	822.1	671.7	542.6	453.1	412.8	398.6
15°	1569.1	1487.3	1294.8	1056.7	832.8	607.7	425.3	300.9	239.3	220.3	219.2
17.5°	1567.9	1465.4	1219.0	938.8	652.7	398.0	242.3	194.9	181.8	177.1	177.1
20°	1571.4	1447.0	1144.4	803.2	475.6	242.3	180.7	168.8	161.1	157.0	157.0
22.5°	1575.0	1428.1	1072.7	666.4	315.7	177.1	159.3	149.3	140.4	135.6	133.3
25°	1577.4	1407.4	993.3	528.9	206.1	154.0	139.8	126.8	116.1	110.2	110.2
27.5°	1576.8	1382.5	913.4	394.5	159.9	136.8	119.6	106.0	95.4	88.8	89.4
30°	1572.0	1355.2	830.4	275.4	139.8	119.6	102.5	88.3	77.6	72.3	71.7
32.5°	1568.5	1326.2	734.5	193.7	125.6	104.8	87.1	73.4	64.6	60.4	59.8
35°	1564.3	1297.8	643.3	147.5	113.1	90.6	73.4	62.2	55.1	51.5	51.5
37.5°	1565.5	1268.2	544.3	126.8	100.7	78.8	62.8	53.3	47.4	43.8	43.2
40°	1583.9	1250.4	447.2	114.9	89.4	68.1	54.5	46.2	40.3	36.7	36.1
42.5°	1629.5	1251.0	354.2	106.0	79.4	58.0	47.4	39.7	34.4	30.2	29.6
45°	1720.7	1275.9	271.9	96.5	68.7	50.3	40.9	33.8	28.4	24.9	24.3
47.5°	1870.0	1349.9	206.1	88.3	59.8	43.8	34.9	28.4	23.7	20.7	20.1
50°	2107.5	1483.8	162.3	78.2	50.3	37.9	29.6	23.7	19.5	16.6	16.0
52.5°	2393.0	1684.6	139.2	69.3	43.2	33.2	25.5	19.5	16.0	13.6	13.0
55°	2721.1	1924.5	128.5	60.4	36.7	28.4	20.7	16.0	13.0	11.3	10.1
57.5°	3022.0	2140.6	127.9	51.5	31.4	24.3	17.2	13.6	11.3	8.9	8.3
60°	3315.2	2321.3	120.2	42.6	27.2	20.1	14.8	11.3	9.5	7.7	7.1
62.5°	3581.2	2468.2	100.7	34.4	23.1	16.6	12.4	10.1	8.3	6.5	6.5
65°	3915.2	2655.4	77.0	27.8	19.0	13.6	10.7	8.9	7.7	5.9	5.9
67.5°	*4260.6*	*2754.3*	*55.1*	*23.1*	*15.4*	*11.8*	*9.5*	*8.3*	*6.5*	*5.3*	*5.3*
70°	3859.0	2327.2	39.7	19.0	13.0	10.1	8.3	7.7	6.5	5.3	4.7
72.5°	3013.7	1678.0	29.6	14.8	11.3	9.5	7.7	7.1	5.9	4.7	4.7
75°	2234.8	978.5	22.5	11.8	8.9	7.7	7.7	7.1	5.9	4.7	4.1
77.5°	1214.9	341.2	17.2	9.5	7.1	5.9	6.5	6.5	5.3	4.1	3.6
80°	321.6	93.6	11.8	7.1	5.9	4.7	4.7	5.9	4.7	3.6	3.6
82.5°	93.6	27.2	8.3	5.9	4.7	4.1	4.1	4.1	3.6	3.0	2.4
85°	45.6	10.1	5.9	4.7	4.1	3.6	3.0	3.0	2.4	1.8	1.8
87.5°	20.1	4.1	4.7	4.1	4.1	3.0	2.4	1.8	1.8	1.2	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

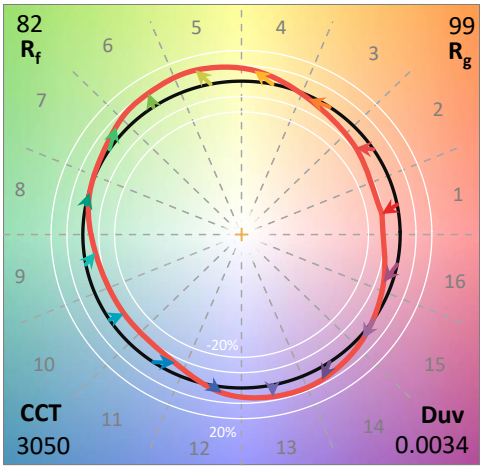
Test Information

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

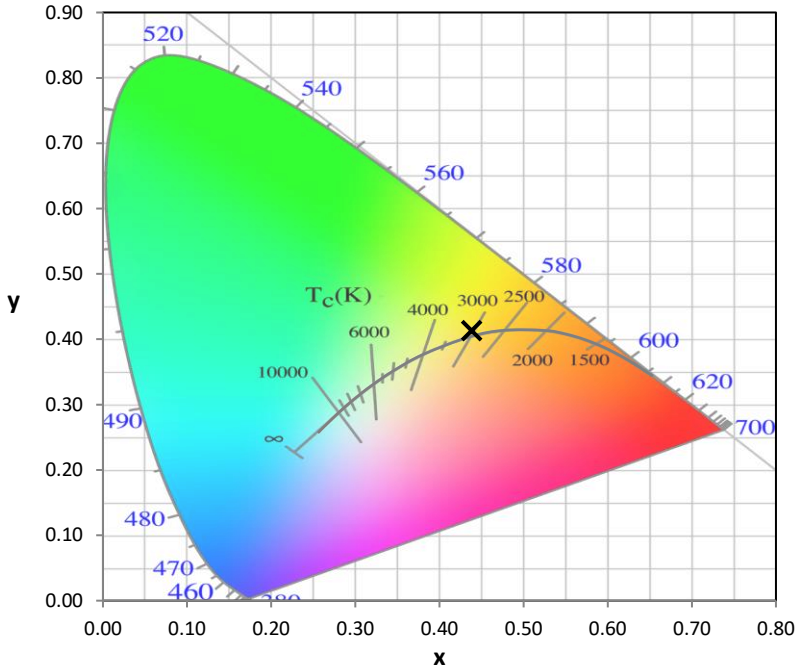
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

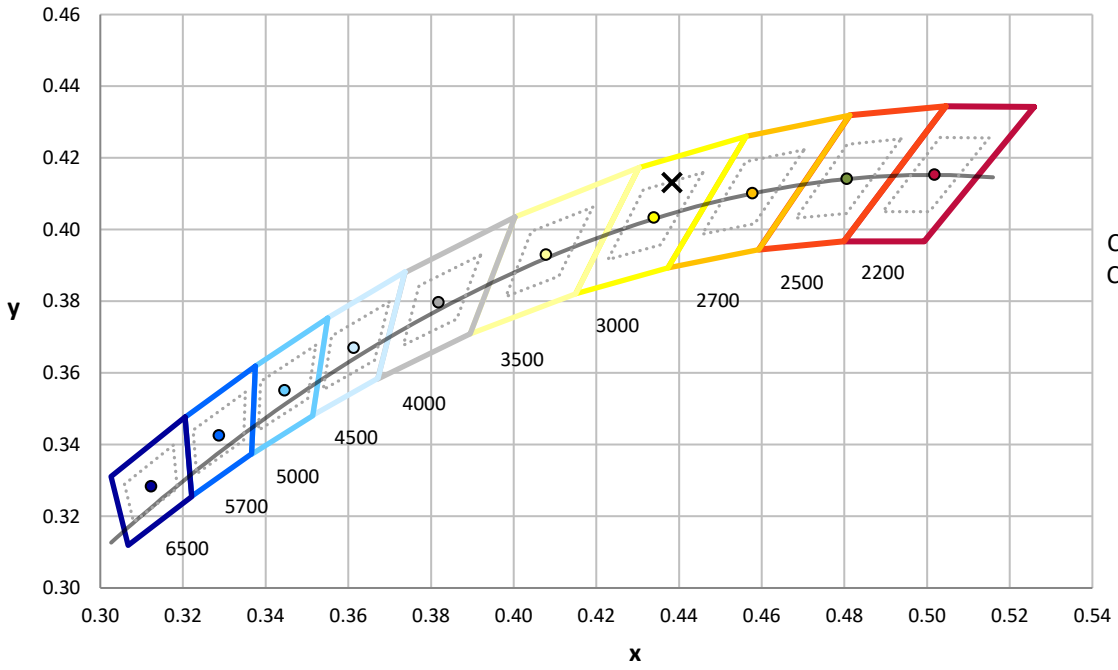
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

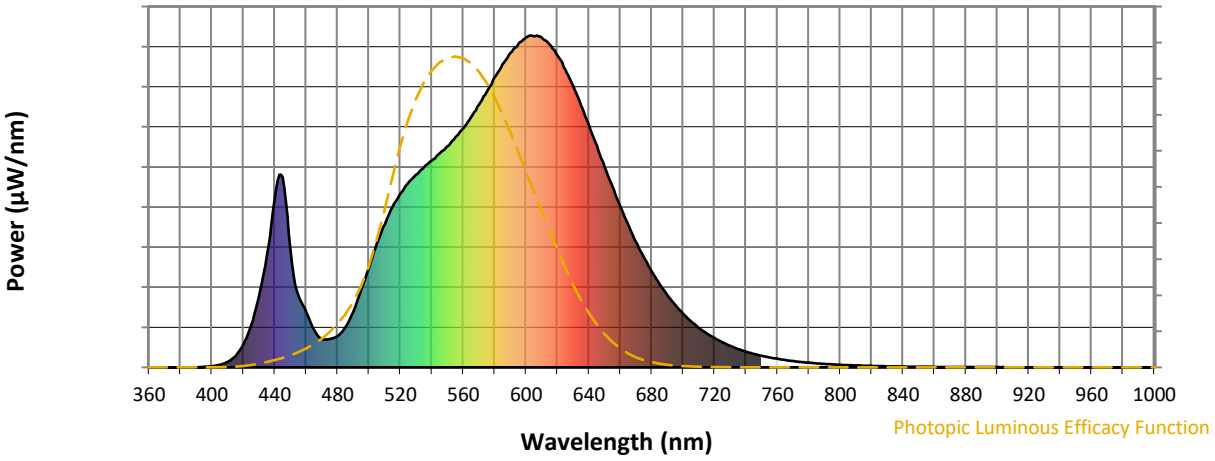


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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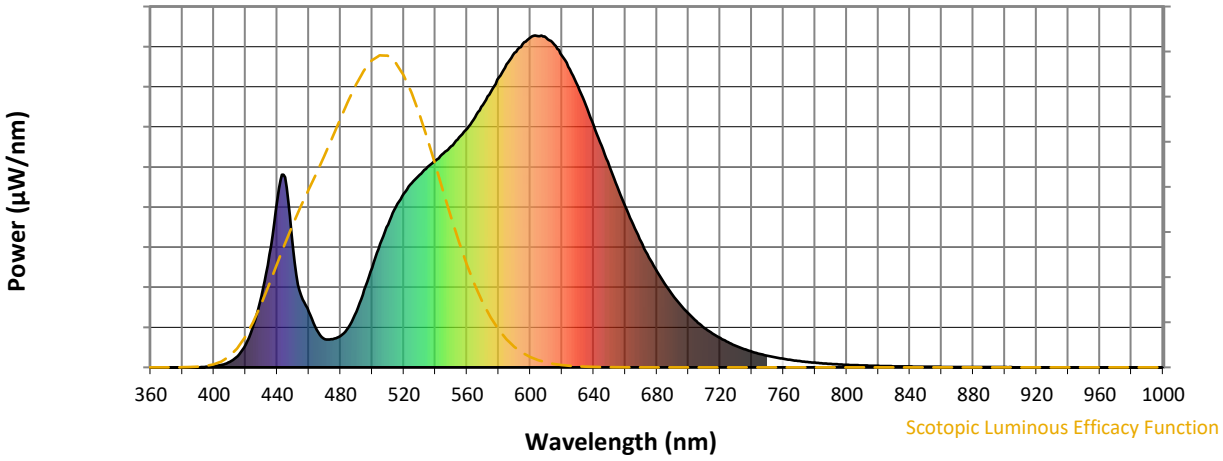
Scotopic Flux vs. Wavelength



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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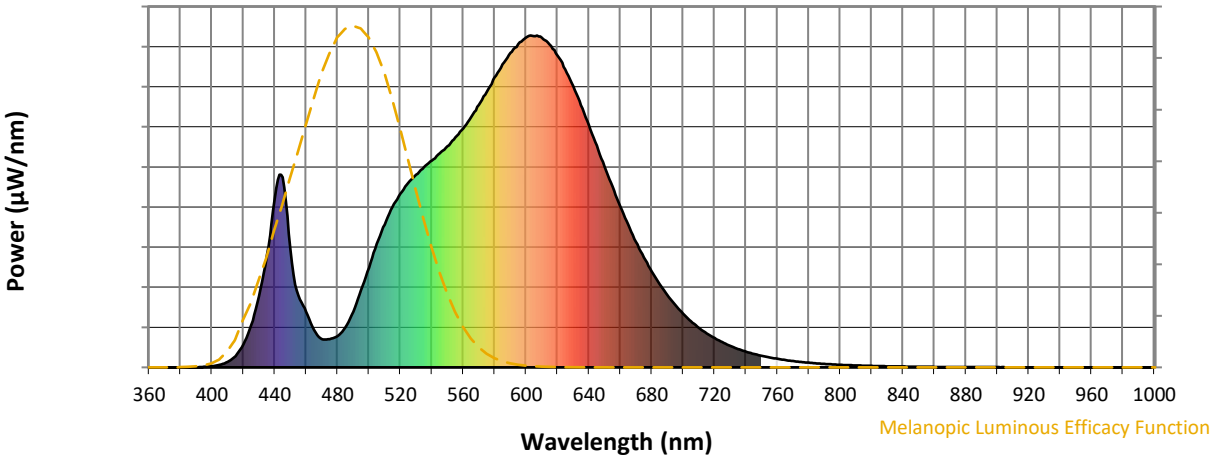
Melanopic Flux vs. Wavelength



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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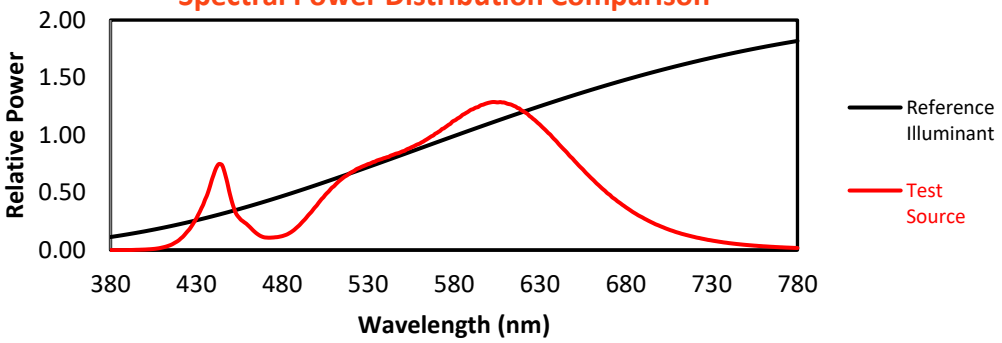
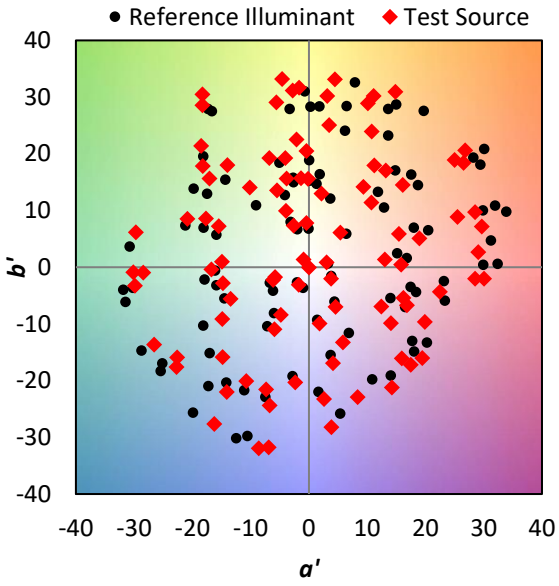
Summary

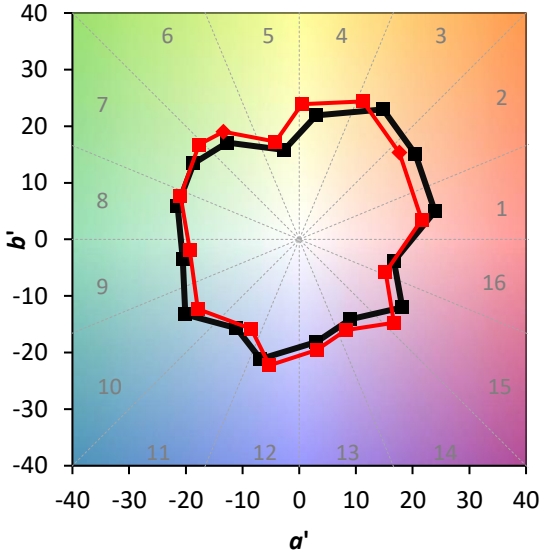
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

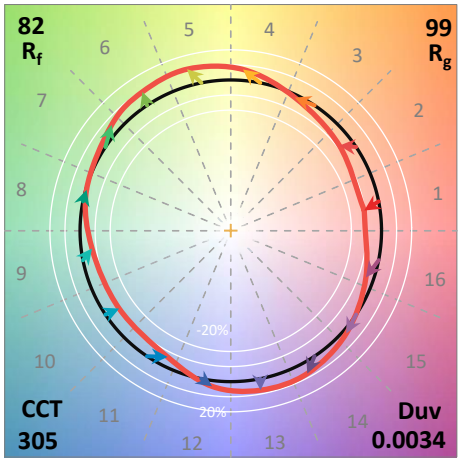
Spectral Power Distribution Comparison

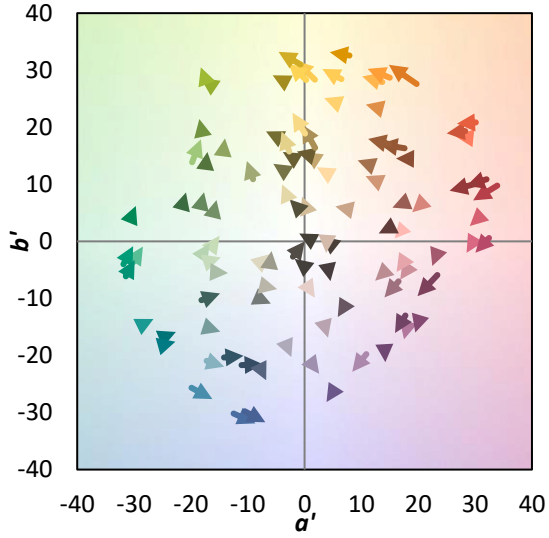


Color Vector Graphics









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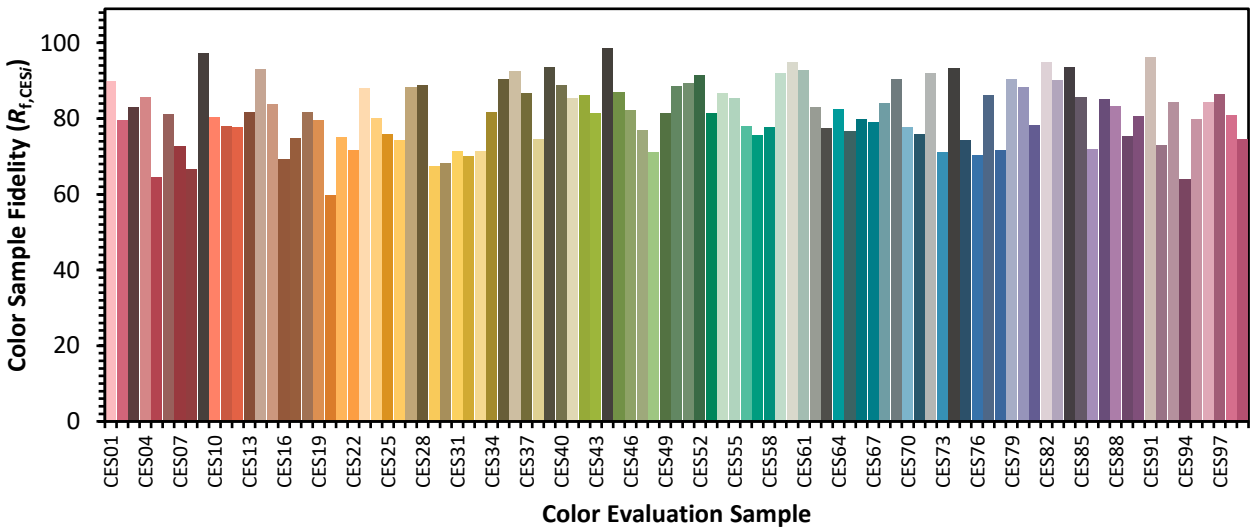
Individual Sample Fidelity Index ($R_{f,i}$)

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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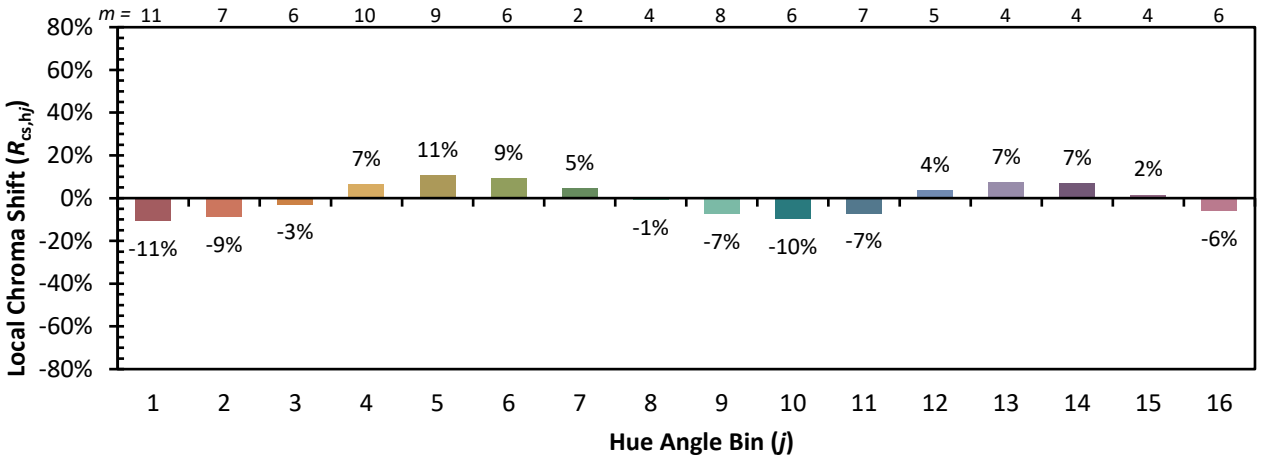
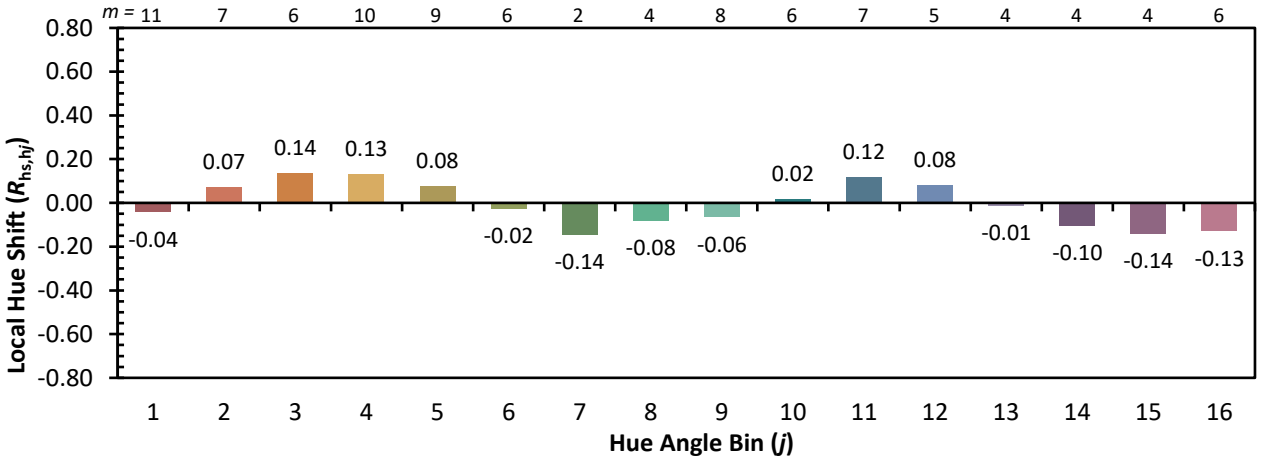
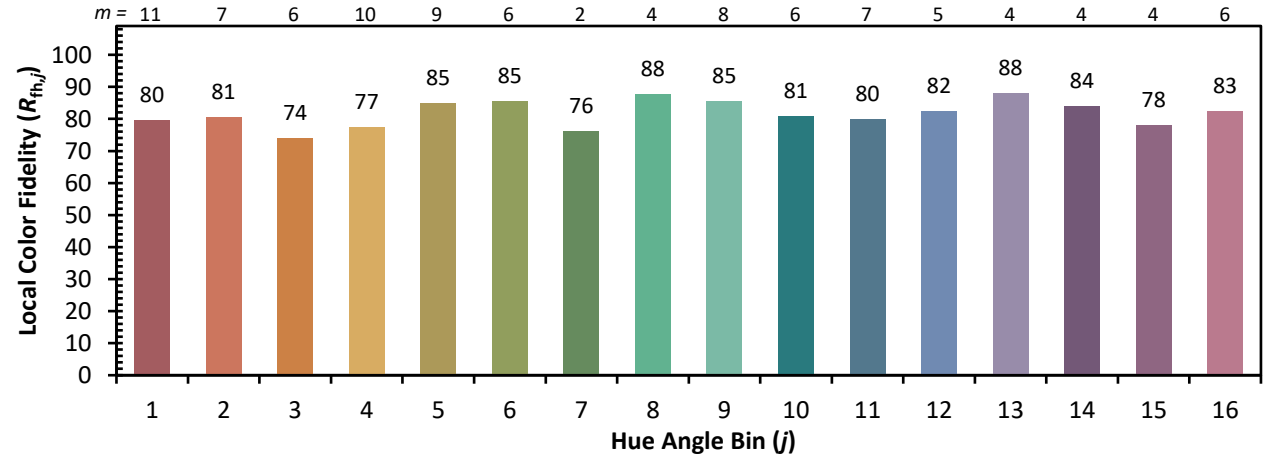
Color Rendition by Hue-Angle Bin







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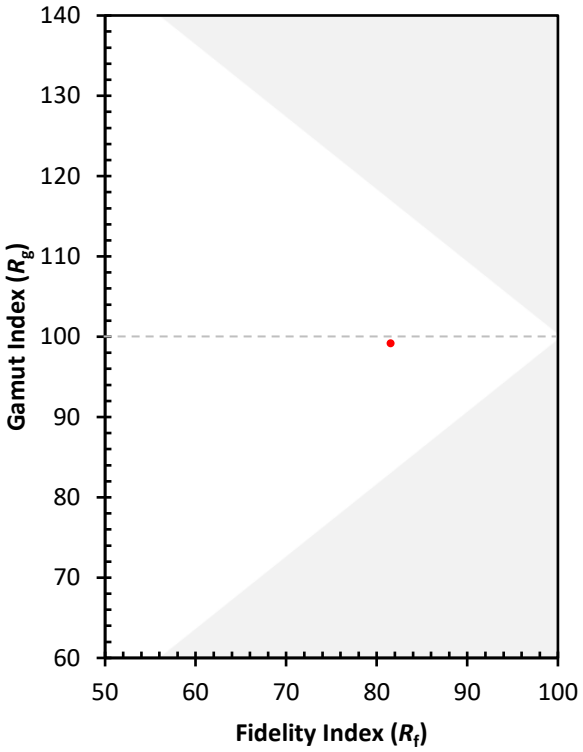
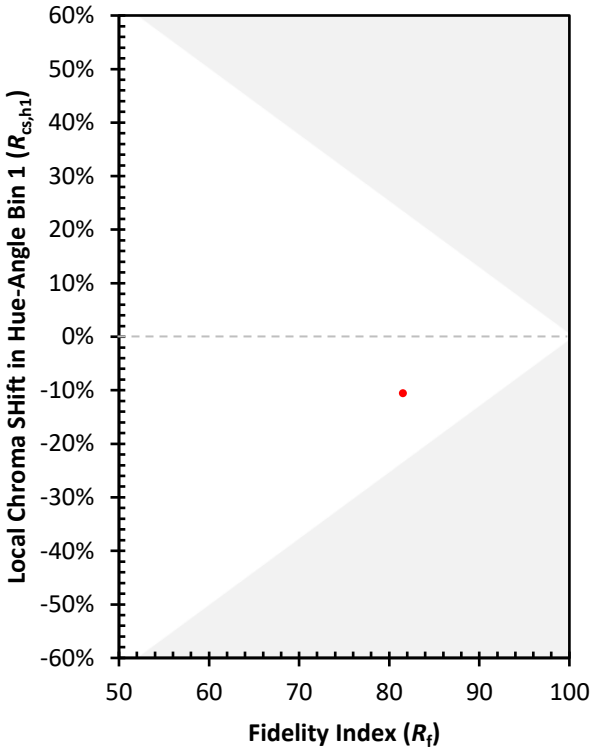
Measure Comparisons





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