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: P639456

Luminaire Tested: GWS-SA5B-830-U-RW-W-GRSBK

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:	P639456
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-50)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5B-830-U-RW-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	9141.8 lumens
Efficiency:	N/A
Efficacy:	79.0 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type V - Short
BUG Rating:	B3 - U0 - G0

Input Watts (W):	115.7
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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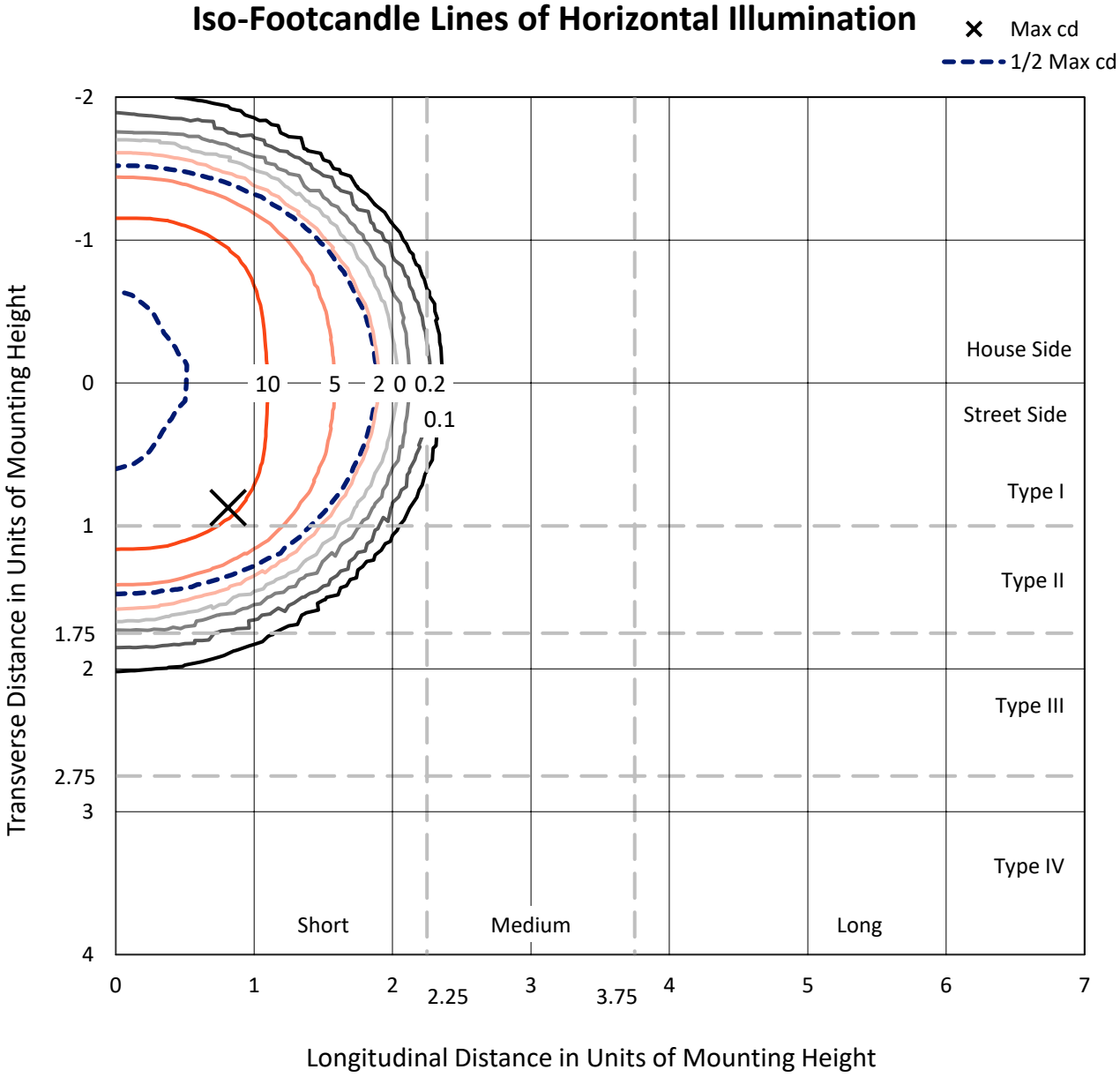
Scaled Data Report

REPORT NUMBER: P639456
CATALOG NUMBER: GWS-SA5B-830-U-RW-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 15.6 fc
Type V - Short - N/A

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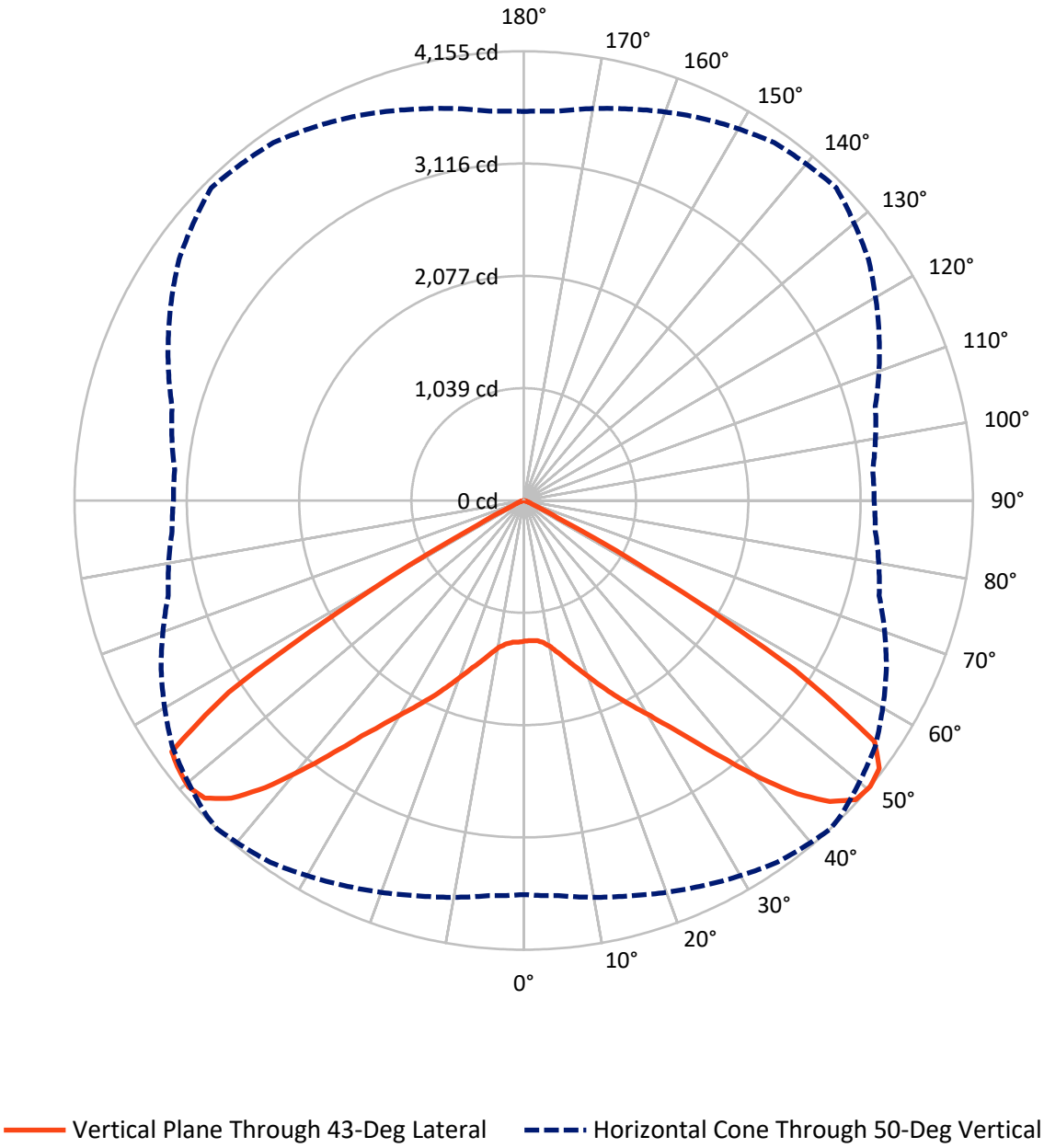
Luminous Intensity Polar Plot



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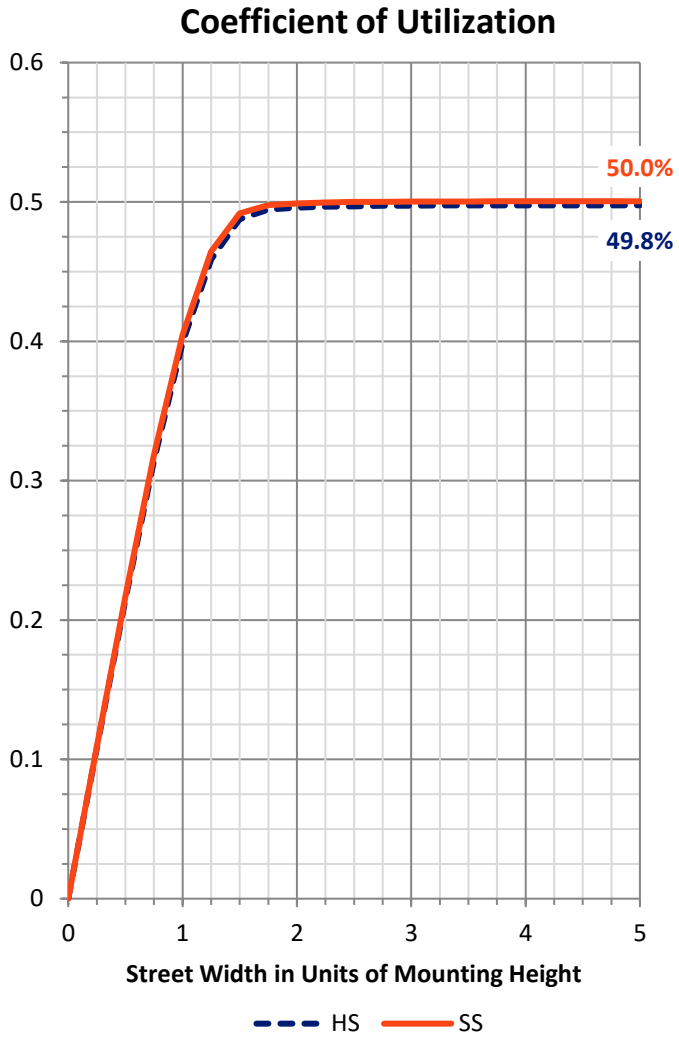
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4570.8	0.0	4570.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4571.0	0.0	4571.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	9141.8	0.0	9141.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.1	1.4
10°-20°	440.6	4.8
20°-30°	891.5	9.8
30°-40°	1654.0	18.1
40°-50°	2745.6	30.0
50°-60°	2802.0	30.7
60°-70°	459.5	5.0
70°-80°	20.1	0.2
80°-90°	0.3	0.0
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°	9141.8	100.0
0°-180°	9141.8	100.0



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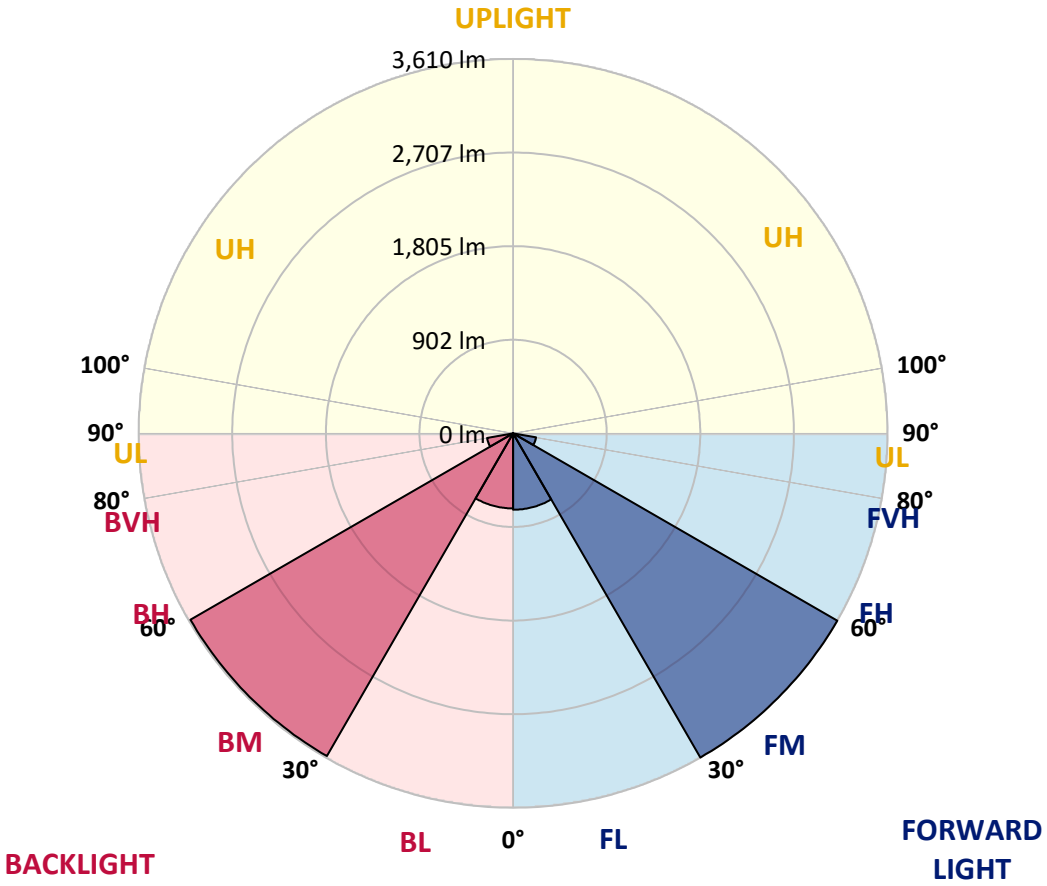
REPORT NUMBER: P639456
CATALOG NUMBER: GWS-SA5B-830-U-RW-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	736.5	8.1			
FM	(30°-60°)	3609.6	39.5			
FH	(60°-80°)	224.8	2.5			G0/660
FVH	(80°-90°)	0.1	0.0			G0/10
BL	(0°-30°)	723.7	7.9	B2/1000		
BM	(30°-60°)	3592.1	39.3	B3/5000		
BH	(60°-80°)	254.8	2.8	B1/500		G0/660
BVH	(80°-90°)	0.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G0
Type V Short



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REPORT NUMBER: P639456
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	43°	45°	55°	65°	75°	85°
0°	1300.3	1300.3	1300.3	1300.3	1300.3	*1300.3*	1300.3	1300.3	1300.3	1300.3	1300.3
2.5°	1276.0	1279.0	1283.1	1287.1	1292.2	*1297.2*	1300.3	1309.4	1307.4	1315.4	1315.4
5°	1261.9	1264.9	1269.9	1279.0	1290.2	*1301.3*	1309.4	1327.6	1337.7	1353.9	1359.9
7.5°	1268.9	1273.0	1279.0	1293.2	1310.4	*1327.6*	1336.7	1366.0	1386.2	1416.6	1433.7
10°	1292.2	1296.2	1306.3	1330.6	1352.9	*1377.1*	1388.2	1425.7	1458.0	1499.5	1523.7
12.5°	1318.5	1323.5	1343.8	1380.2	1418.6	*1450.9*	1466.1	1507.6	1540.9	1587.4	1625.9
15°	1345.8	1353.9	1385.2	1438.8	1493.4	*1536.9*	1553.1	1597.5	1630.9	1680.5	1723.9
17.5°	1409.5	1418.6	1454.0	1511.6	1586.4	*1637.0*	1651.1	1697.6	1722.9	1756.3	1801.8
20°	1489.4	1506.5	1550.0	1619.8	1701.7	*1750.2*	1760.3	1805.8	1803.8	1818.0	1857.4
22.5°	1588.4	1600.6	1648.1	1731.0	1823.0	*1876.6*	1899.9	1919.1	1893.8	1881.7	1906.9
25°	1691.6	1705.7	1757.3	1848.3	1951.4	*2013.1*	2032.3	2047.5	2007.0	1961.5	1964.6
27.5°	1825.0	1835.1	1885.7	1982.8	2085.9	*2155.7*	2172.9	2199.1	2145.6	2072.8	2052.5
30°	1983.8	1993.9	2047.5	2149.6	2251.7	*2311.4*	2337.7	2370.0	2311.4	2220.4	2197.1
32.5°	2169.8	2179.9	2248.7	2353.8	2437.8	*2502.5*	2527.8	2562.1	2515.6	2413.5	2387.2
35°	2392.3	2398.3	2479.2	2593.5	2682.5	*2745.1*	2762.3	2802.8	2751.2	2649.1	2634.9
37.5°	2650.1	2657.2	2745.1	2877.6	2968.6	*3038.4*	3065.7	3076.8	3014.1	2899.8	2888.7
40°	2933.2	2956.5	3042.4	3185.0	3287.1	*3375.1*	3399.3	3361.9	3273.9	3118.2	3098.0
42.5°	3228.4	3248.7	3344.7	3499.4	3617.7	*3707.7*	3708.7	3627.8	3478.2	3262.8	3232.5
45°	3474.1	3482.2	3606.6	3762.3	3907.9	*3971.6*	3977.7	3831.1	3605.6	3346.7	3282.0
47.5°	3643.0	3656.1	3764.3	3914.0	4074.7	*4132.4*	4120.2	3937.2	3666.3	3401.3	3294.2
50°	*3645.0*	*3667.3*	*3784.6*	*3929.1*	*4084.8*	*4154.6*	*4137.4*	*3967.6*	*3700.6*	*3403.4*	*3264.8*
52.5°	3322.5	3358.9	3550.0	3759.3	3997.9	*4117.2*	4121.2	4007.0	3687.5	3371.0	3238.6
55°	2506.5	2546.0	2786.6	3143.5	3604.6	*3937.2*	3994.9	3960.5	3672.3	3385.2	3285.1
57.5°	1326.6	1296.2	1429.7	1783.6	2362.9	*2951.4*	3120.3	3395.3	3503.5	3402.4	3371.0
60°	289.2	308.4	410.5	553.1	922.1	*1388.2*	1553.1	2024.2	2584.4	2833.1	3013.1
62.5°	124.4	122.3	127.4	144.6	211.3	*351.9*	429.7	701.7	1107.2	1520.7	1800.8
65°	102.1	103.1	107.2	107.2	100.1	*101.1*	106.2	160.8	258.8	363.0	487.4
67.5°	76.8	77.9	84.9	87.0	81.9	*72.8*	71.8	60.7	63.7	79.9	82.9
70°	48.5	48.5	52.6	54.6	54.6	*50.6*	49.5	43.5	42.5	48.5	54.6
72.5°	26.3	26.3	28.3	29.3	28.3	*27.3*	27.3	26.3	25.3	29.3	37.4
75°	11.1	11.1	12.1	12.1	11.1	*11.1*	11.1	11.1	11.1	13.1	20.2
77.5°	2.0	3.0	4.0	3.0	2.0	*2.0*	2.0	3.0	3.0	4.0	6.1
80°	1.0	1.0	2.0	1.0	0.0	*0.0*	0.0	0.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0	1.0
85°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0	0.0
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: P639456
CATALOG NUMBER: GWS-SA5B-830-U-RW-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1300.3	1300.3	1300.3	1300.3	1300.3	1300.3	1300.3	1300.3	1300.3	1300.3	1300.3
2.5°	1322.5	1311.4	1315.4	1317.5	1314.4	1312.4	1301.3	1298.3	1293.2	1285.1	1283.1
5°	1367.0	1357.9	1356.9	1350.8	1336.7	1319.5	1298.3	1289.2	1279.0	1268.9	1266.9
7.5°	1441.8	1430.7	1423.6	1403.4	1371.1	1343.8	1308.4	1289.2	1276.0	1262.9	1259.8
10°	1537.9	1524.7	1504.5	1467.1	1423.6	1384.2	1342.7	1317.5	1297.2	1279.0	1278.0
12.5°	1640.0	1625.9	1589.5	1541.9	1489.4	1453.0	1400.4	1365.0	1334.7	1307.4	1304.3
15°	1747.2	1730.0	1680.5	1623.8	1575.3	1537.9	1480.3	1423.6	1377.1	1337.7	1333.6
17.5°	1829.1	1807.8	1749.2	1706.7	1667.3	1628.9	1564.2	1489.4	1427.7	1380.2	1369.0
20°	1880.6	1860.4	1804.8	1781.6	1763.4	1736.1	1659.2	1581.4	1512.6	1454.0	1443.9
22.5°	1930.2	1905.9	1857.4	1857.4	1871.5	1860.4	1777.5	1688.5	1607.7	1539.9	1524.7
25°	1985.8	1966.6	1932.2	1960.5	1995.9	1994.9	1910.0	1798.7	1705.7	1629.9	1614.7
27.5°	2066.7	2047.5	2035.3	2088.9	2133.4	2130.4	2037.4	1917.0	1819.0	1744.1	1730.0
30°	2209.3	2191.1	2177.9	2242.6	2299.2	2278.0	2175.9	2059.6	1960.5	1875.6	1865.5
32.5°	2399.3	2380.1	2362.9	2427.7	2478.2	2450.9	2353.8	2244.6	2130.4	2047.5	2027.3
35°	2649.1	2608.6	2591.5	2668.3	2689.5	2659.2	2566.2	2470.1	2348.8	2253.7	2240.6
37.5°	2906.9	2859.4	2847.3	2914.0	2948.4	2937.2	2828.1	2728.0	2596.5	2491.4	2476.2
40°	3127.3	3083.9	3062.6	3166.8	3244.6	3251.7	3153.6	3031.3	2876.6	2767.4	2740.1
42.5°	3256.8	3219.3	3214.3	3376.1	3503.5	3594.5	3477.2	3350.8	3188.0	3064.6	3042.4
45°	3286.1	3261.8	3304.3	3516.6	3714.8	3880.6	3780.5	3647.0	3471.1	3340.7	3319.4
47.5°	3283.0	3275.0	3350.8	3589.4	3840.2	4044.4	3994.9	3844.2	3674.3	3537.8	3517.6
50°	*3239.6*	*3240.6*	*3367.0*	*3625.8*	*3890.7*	*4088.9*	*4039.4*	*3899.8*	*3748.2*	*3613.7*	*3597.5*
52.5°	3222.4	3216.3	3336.6	3614.7	3942.3	4068.7	3957.5	3800.7	3631.9	3466.1	3441.8
55°	3283.0	3267.9	3340.7	3605.6	3948.4	4057.6	3764.3	3424.6	3078.8	2882.7	2866.5
57.5°	3374.0	3357.9	3392.2	3538.9	3631.9	3374.0	2770.4	2222.4	1866.5	1715.8	1650.1
60°	3013.1	3002.0	2975.7	2798.7	2400.4	1810.9	1233.5	786.6	565.2	457.0	457.0
62.5°	1869.5	1854.4	1711.8	1272.0	924.1	534.9	294.2	184.0	139.5	130.4	129.4
65°	524.8	521.7	431.7	305.4	194.1	120.3	106.2	108.2	106.2	103.1	102.1
67.5°	78.9	87.0	87.0	70.8	67.7	75.8	89.0	95.0	90.0	84.9	82.9
70°	50.6	54.6	52.6	45.5	48.5	56.6	63.7	64.7	61.7	56.6	55.6
72.5°	35.4	39.4	32.4	29.3	30.3	33.4	36.4	36.4	35.4	33.4	31.3
75°	21.2	21.2	15.2	14.2	14.2	15.2	15.2	17.2	17.2	16.2	15.2
77.5°	7.1	8.1	5.1	4.0	4.0	4.0	5.1	6.1	6.1	5.1	4.0
80°	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	1.0
82.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

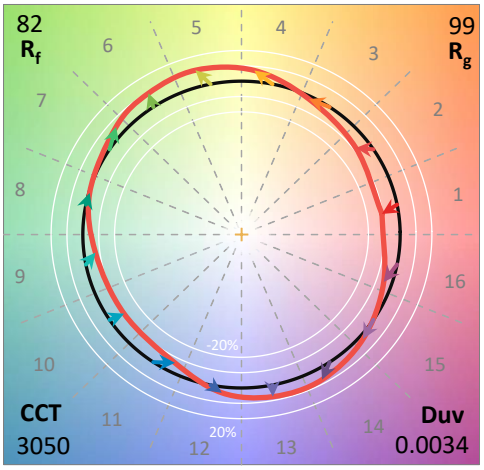
Test Information

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

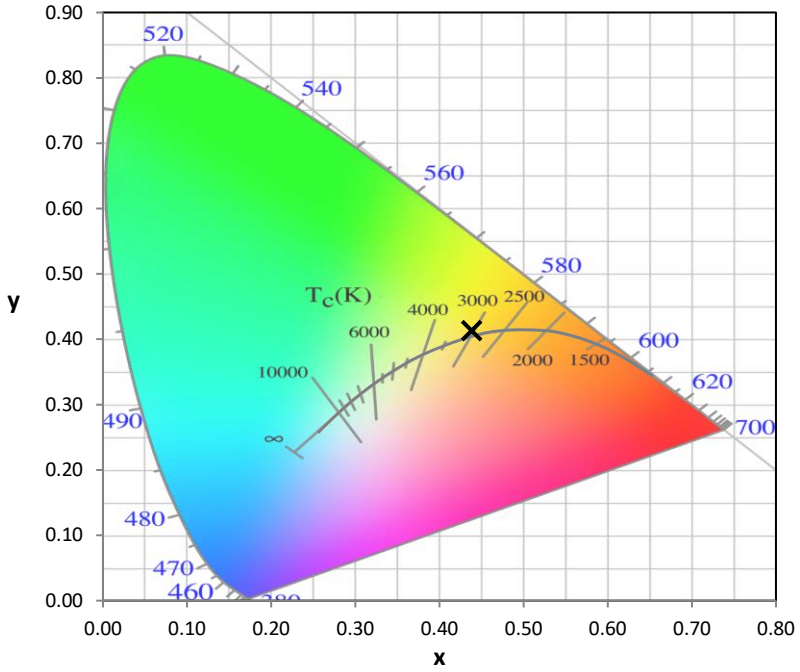
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

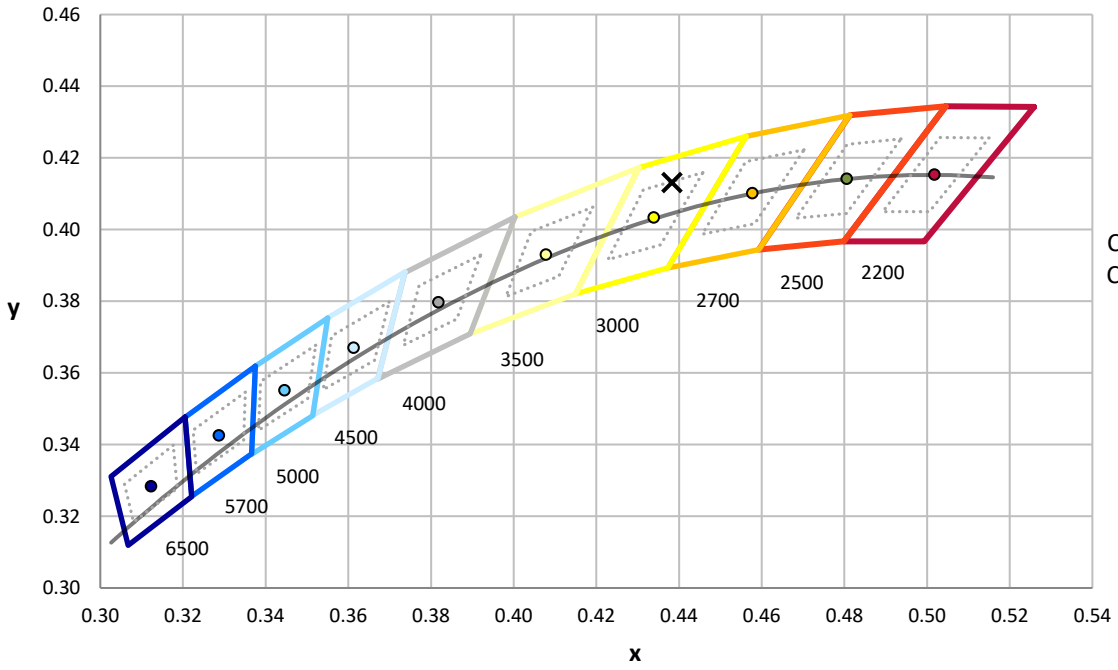
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

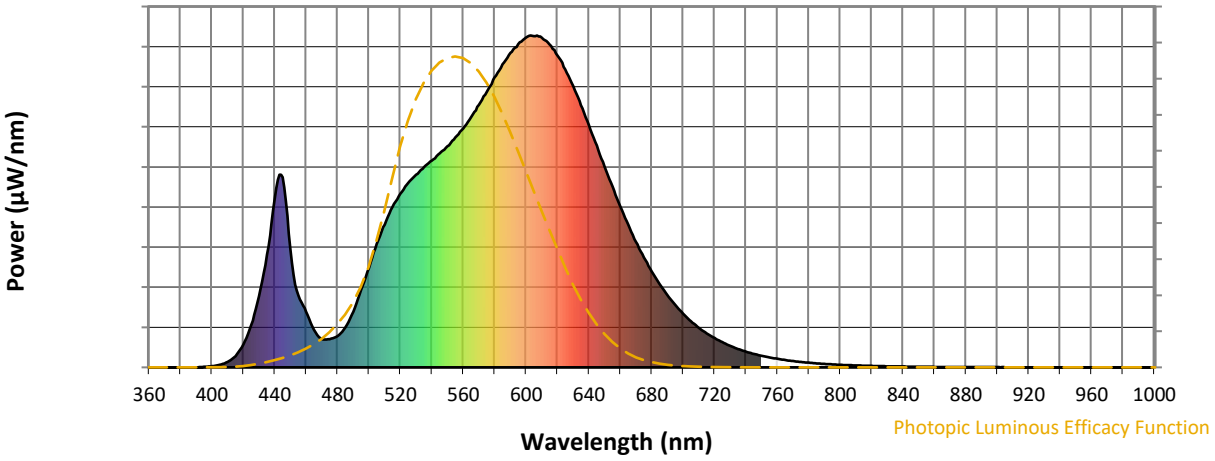


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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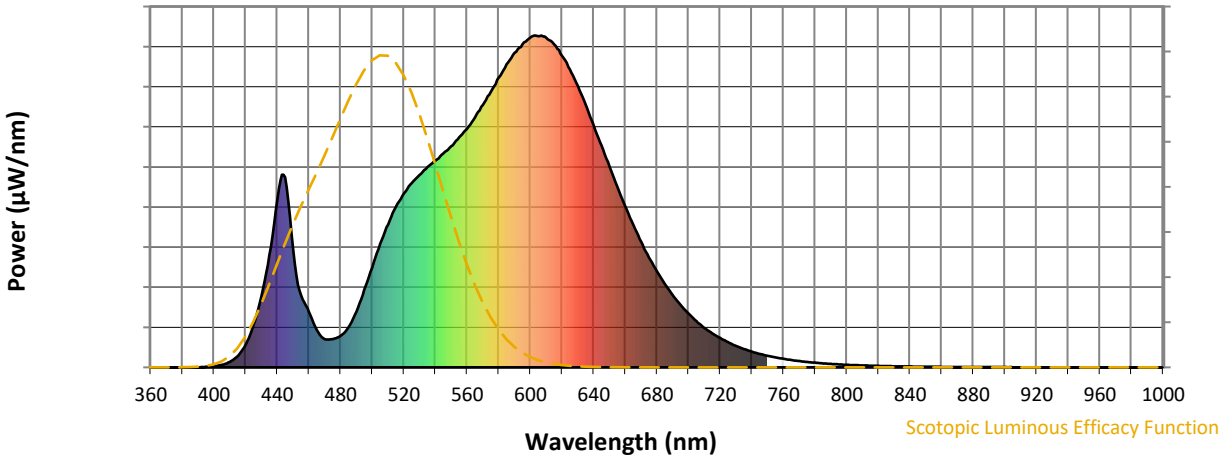
Scotopic Flux vs. Wavelength



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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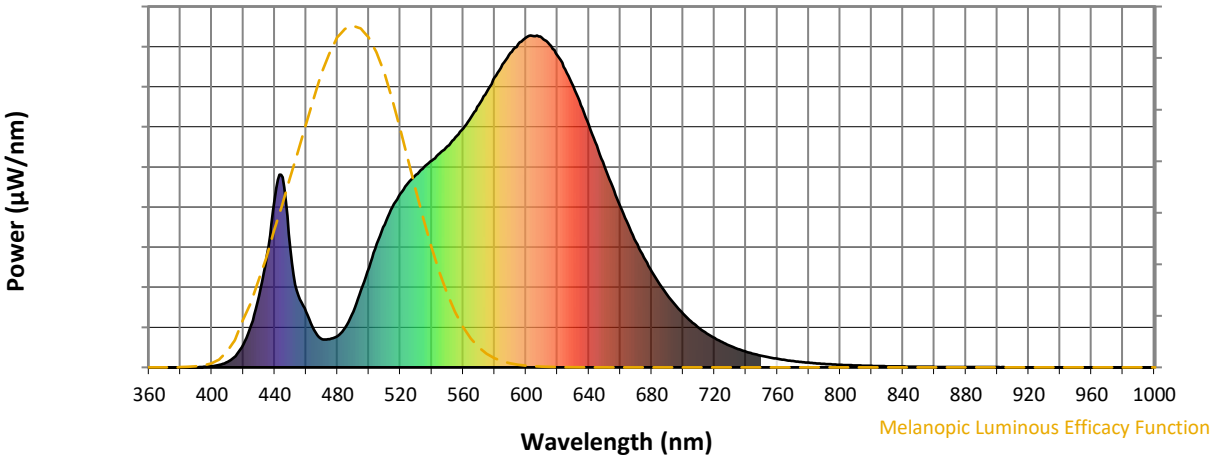
Melanopic Flux vs. Wavelength



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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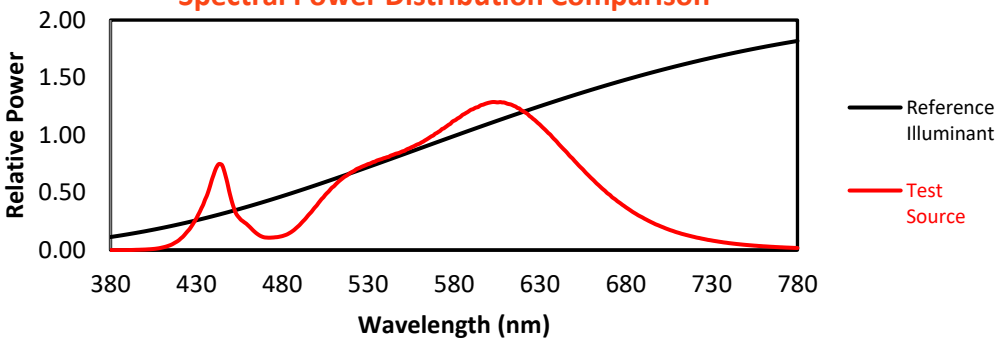
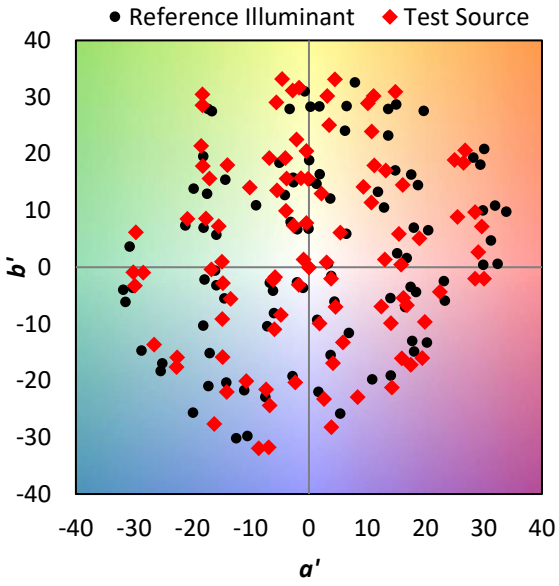
Summary

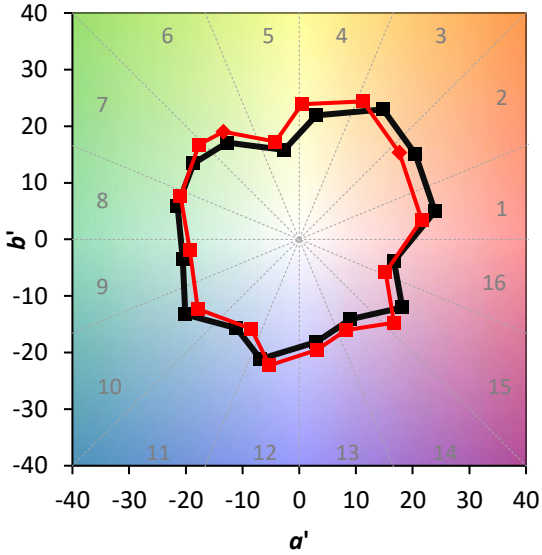
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

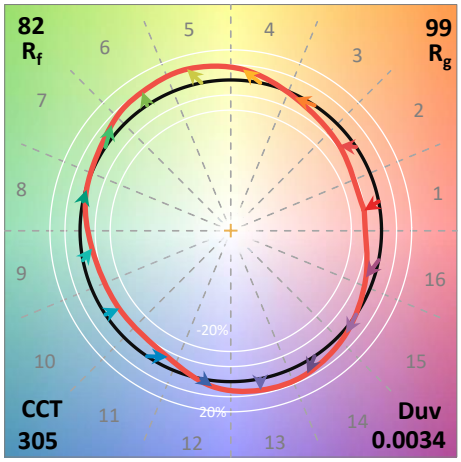
Spectral Power Distribution Comparison

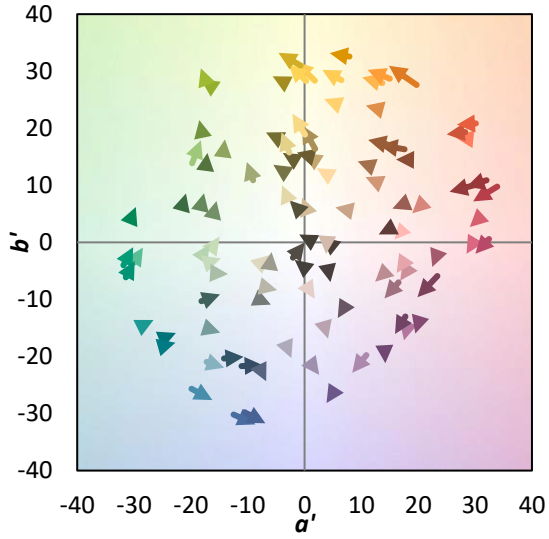


Color Vector Graphics









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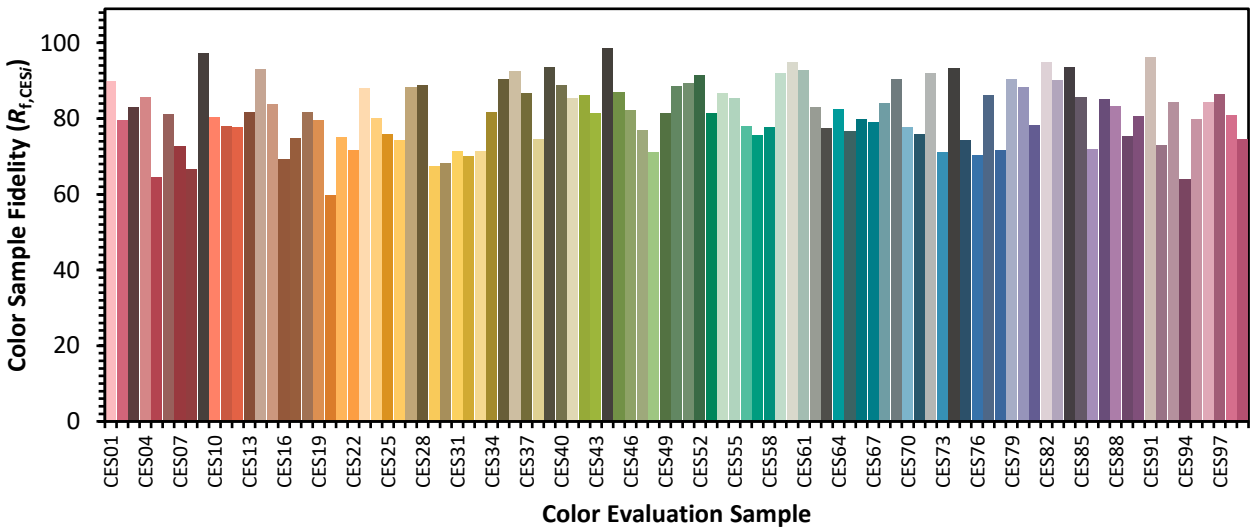
Individual Sample Fidelity Index ($R_{f,i}$)

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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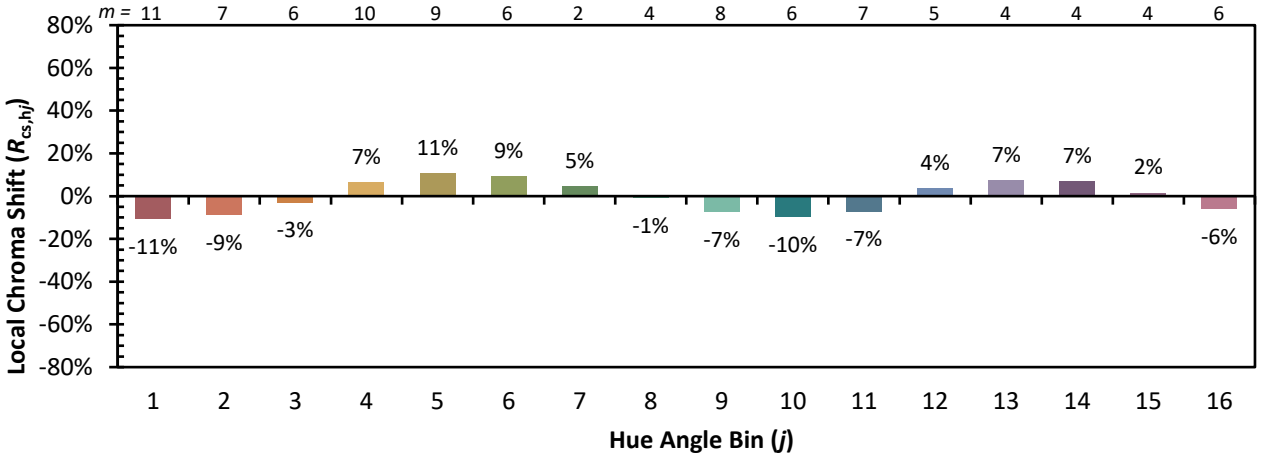
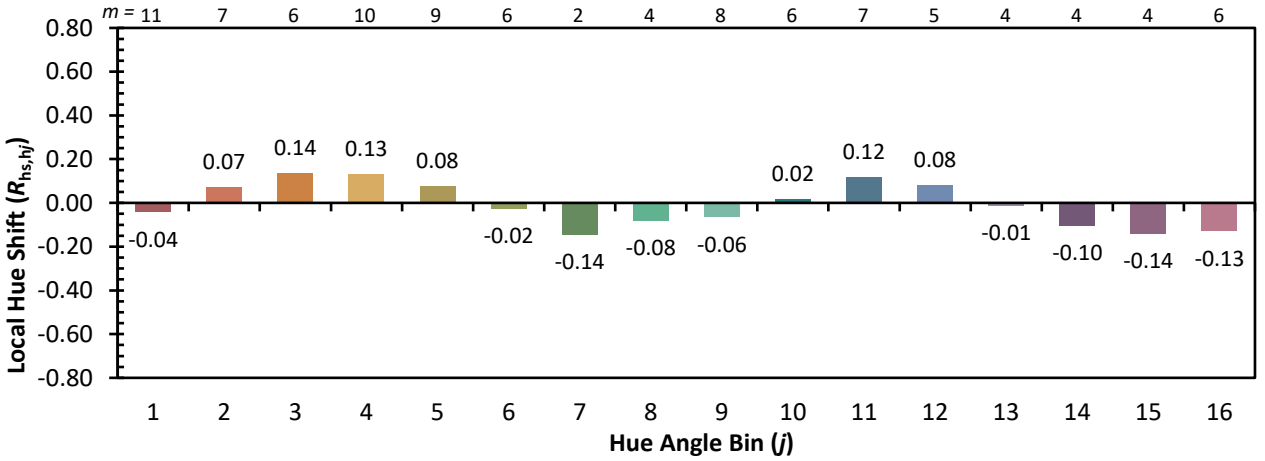
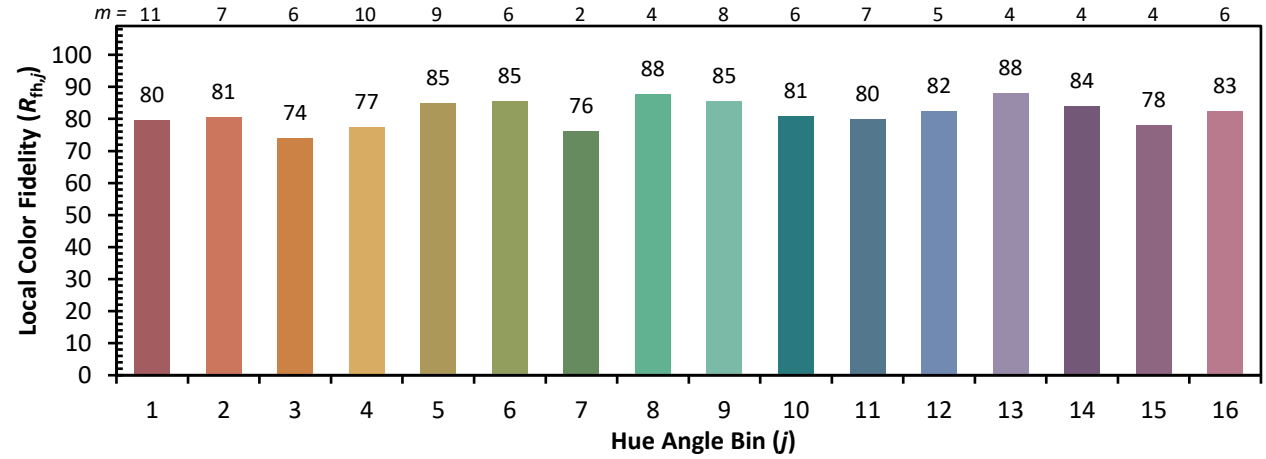
Color Rendition by Hue-Angle Bin







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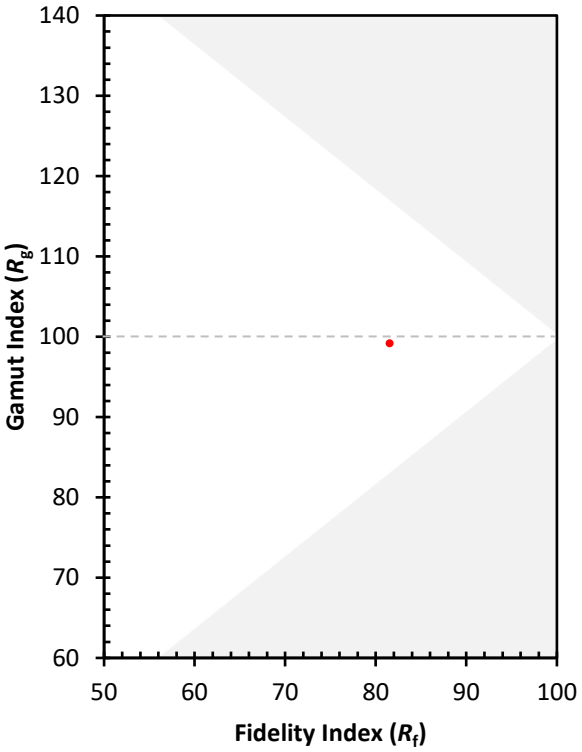
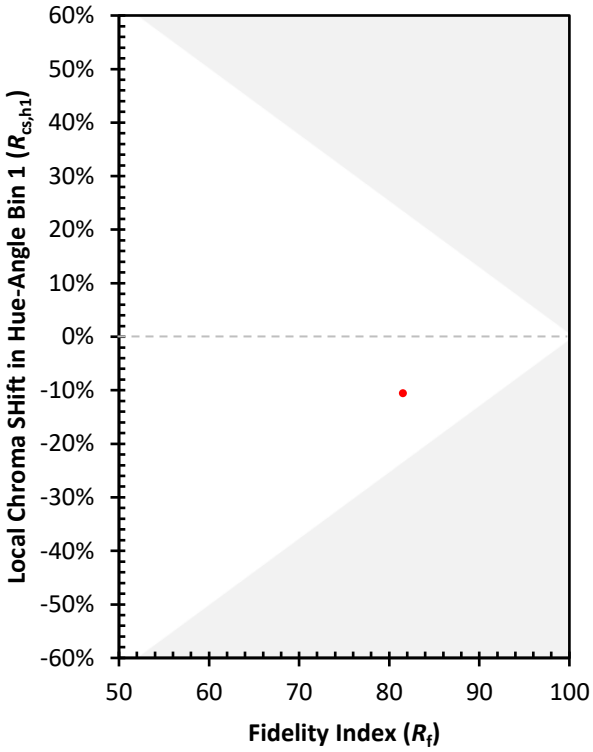
Measure Comparisons





(END OF REPORT)