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: P637996

Luminaire Tested: GWS-SA4D-830-U-T2-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:	P637996
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-19)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4D-830-U-T2-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	19301 lumens
Efficiency:	N/A
Efficacy:	119.1 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Medium
BUG Rating:	B3 - U0 - G3

Input Watts (W):	162.1
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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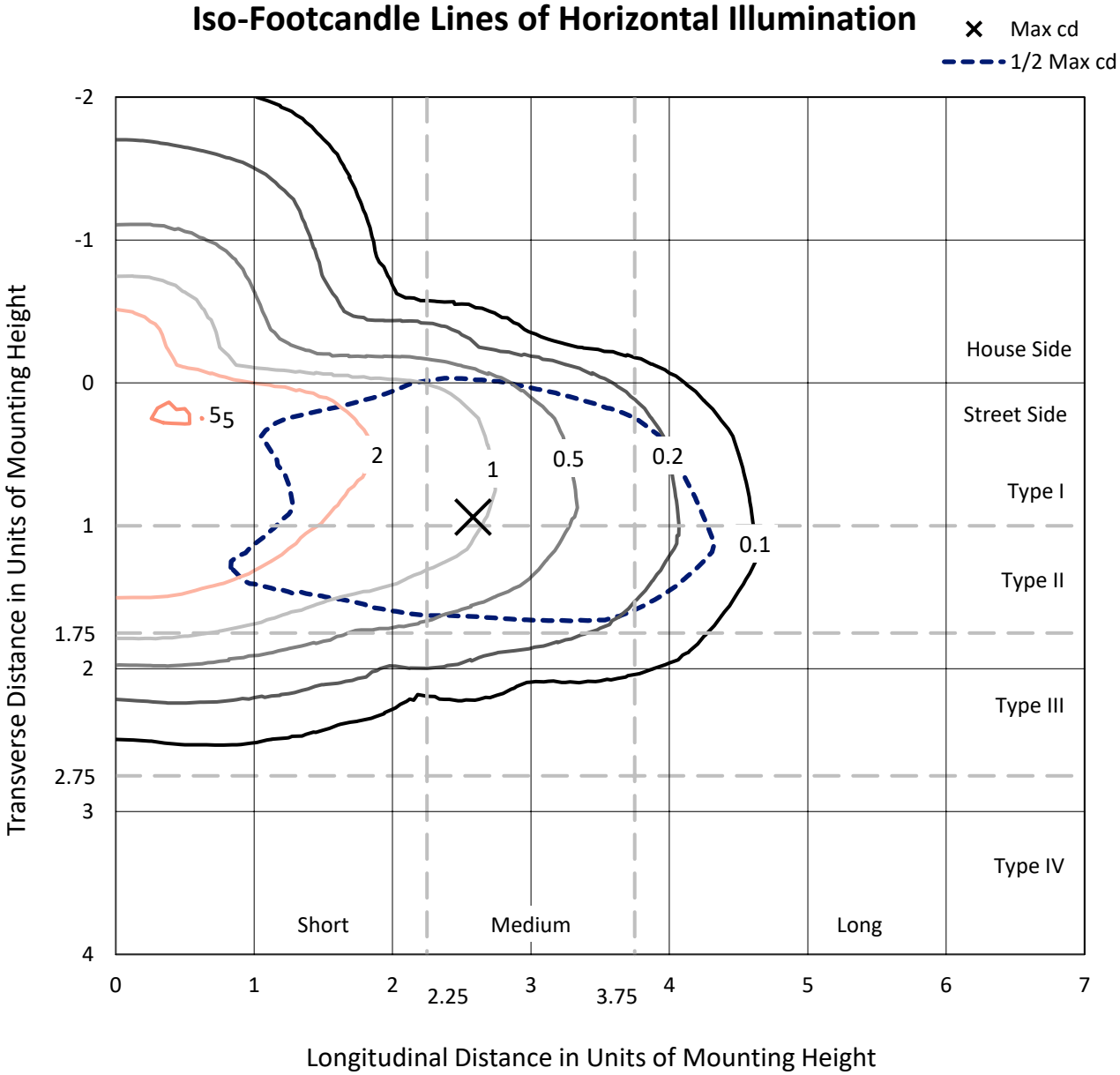
Scaled Data Report

REPORT NUMBER: P637996
CATALOG NUMBER: GWS-SA4D-830-U-T2-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc
Type II - Medium - N/A

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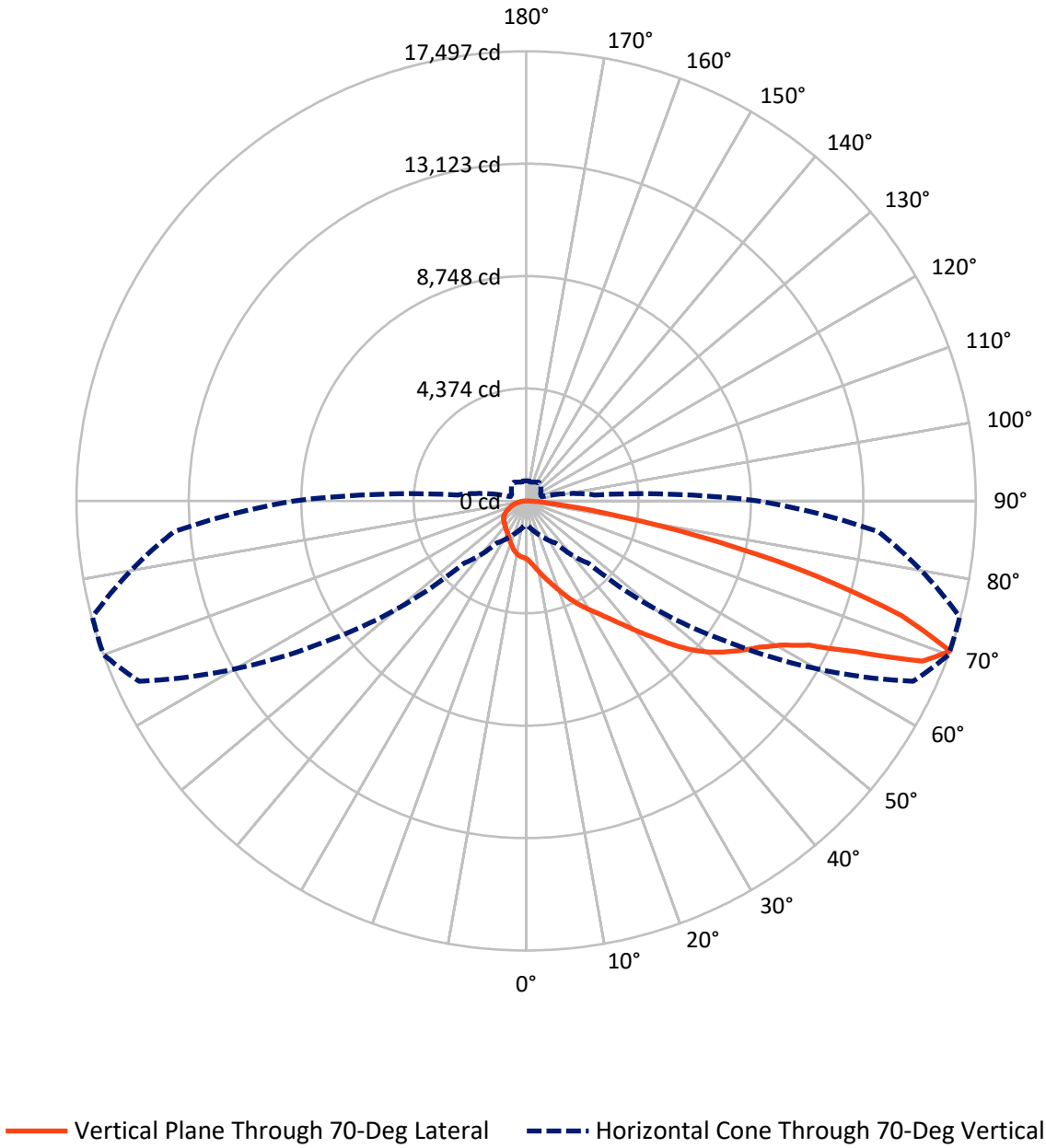
Luminous Intensity Polar Plot



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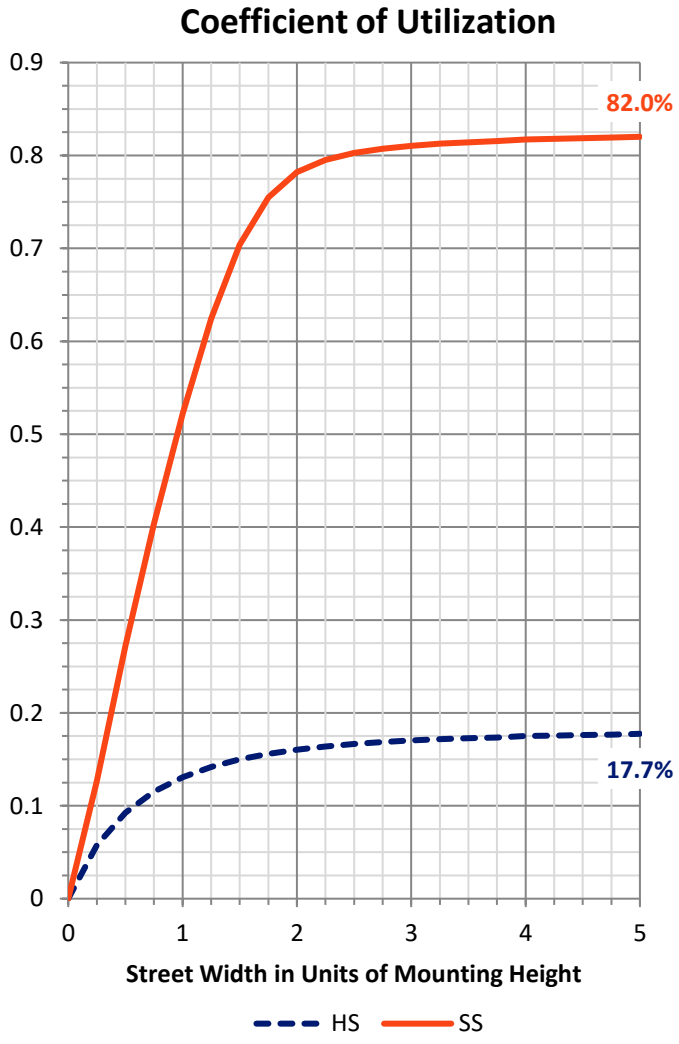
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3458.8	0.0	3458.8
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	15842.2	0.0	15842.2
	% Fixture	82.1	0.0	82.1
Total	Lumens	19301.0	0.0	19301.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.8	1.2
10°-20°	744.2	3.9
20°-30°	1318.4	6.8
30°-40°	1984.2	10.3
40°-50°	3001.9	15.6
50°-60°	4300.4	22.3
60°-70°	4753.6	24.6
70°-80°	2682.6	13.9
80°-90°	286.9	1.5
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°	19301.0	100.0
0°-180°	19301.0	100.0



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REPORT NUMBER: P637996
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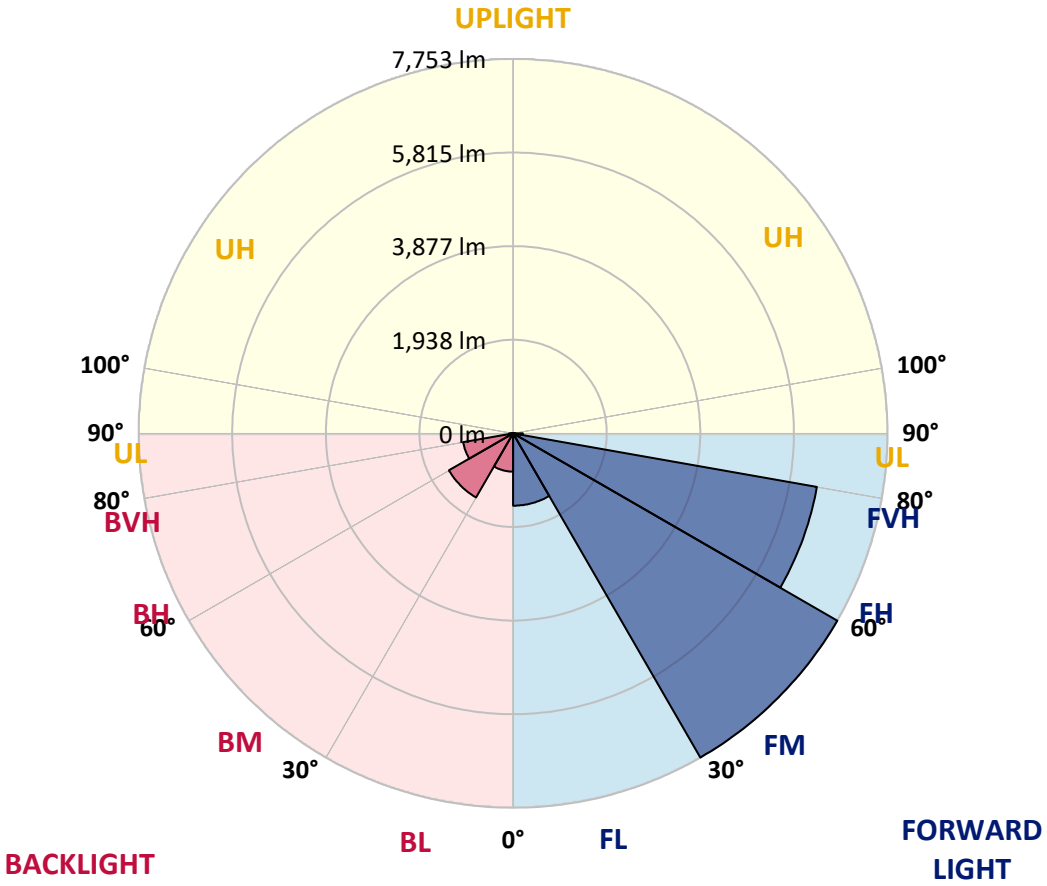
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1498.3	7.8			
FM	(30°-60°)	7753.2	40.2			
FH	(60°-80°)	6387.8	33.1			G3/7500
FVH	(80°-90°)	202.8	1.1			G2/225
BL	(0°-30°)	793.1	4.1	B2/1000		
BM	(30°-60°)	1533.3	7.9	B2/2500		
BH	(60°-80°)	1048.3	5.4	B3/2500		G3/2500
BVH	(80°-90°)	84.1	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type II Medium



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REPORT NUMBER: P637996
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	2250.9	2250.9	2250.9	2250.9	2250.9	2250.9	2250.9	2250.9	*2250.9*	2250.9	2250.9
2.5°	2493.6	2489.4	2492.2	2489.4	2474.0	2436.4	2405.7	2366.6	*2340.2*	2324.8	2288.6
5°	2786.4	2782.2	2772.5	2758.5	2730.6	2679.0	2602.3	2517.3	*2465.7*	2426.6	2349.9
7.5°	2997.0	2997.0	2995.6	2978.9	2959.4	2905.0	2814.3	2702.7	*2627.4*	2560.5	2435.0
10°	3104.4	3111.4	3121.1	3144.8	3140.7	3111.4	3026.3	2906.4	*2811.5*	2733.4	2546.6
12.5°	3163.0	3167.2	3183.9	3232.7	3282.9	3289.9	3239.7	3114.2	*3011.0*	2906.4	2670.7
15°	3238.3	3239.7	3262.0	3320.6	3394.5	3468.4	3455.8	3330.3	*3224.3*	3108.6	2808.7
17.5°	3296.9	3306.6	3347.1	3415.4	3507.4	3609.2	3670.6	3592.5	*3461.4*	3328.9	2959.4
20°	3317.8	3324.7	3377.7	3482.3	3607.8	3751.5	3888.2	3867.2	*3734.8*	3578.6	3129.5
22.5°	3393.1	3393.1	3432.1	3520.0	3667.8	3877.0	4098.8	4153.1	*4036.0*	3853.3	3312.2
25°	3559.0	3553.5	3571.6	3607.8	3719.4	3977.4	4306.5	4469.7	*4338.6*	4133.6	3494.9
27.5°	3786.4	3783.6	3782.2	3787.8	3825.4	4065.3	4482.3	4765.4	*4634.3*	4402.8	3658.1
30°	4033.2	4024.8	4043.0	4026.2	4017.9	4169.9	4631.5	5030.3	*4928.5*	4669.1	3793.3
32.5°	4369.3	4354.0	4349.8	4295.4	4261.9	4333.0	4751.4	5331.6	*5250.7*	4956.4	3945.3
35°	4812.8	4798.8	4727.7	4641.3	4542.2	4575.7	4900.7	5625.8	*5631.4*	5316.2	4144.8
37.5°	5260.5	5263.2	5207.5	5003.9	4902.0	4882.5	5128.0	5984.3	*6104.2*	5745.8	4402.8
40°	5632.8	5649.6	5649.6	5434.8	5282.8	5264.6	5447.3	6409.6	*6648.1*	6272.9	4729.1
42.5°	5915.9	5931.3	5980.1	5825.3	5664.9	5727.7	5835.0	6836.4	*7264.5*	6924.2	5141.9
45°	6226.9	6239.5	6266.0	6176.7	6083.3	6250.6	6274.3	7346.8	*7970.2*	7655.0	5621.7
47.5°	6639.7	6628.6	6631.4	6565.8	6493.3	6763.8	6758.3	7776.3	*8652.1*	8455.5	6141.9
50°	7152.9	7173.9	7154.3	7024.6	6939.6	7186.4	7218.5	8251.9	*9251.8*	9247.6	6666.2
52.5°	7646.6	7655.0	7758.2	7763.8	7589.5	7537.9	7621.5	8731.6	*9758.1*	9972.8	7169.7
55°	7671.7	7703.8	8013.4	8236.6	8518.3	8104.1	8028.8	9189.1	*10247.6*	10682.7	7692.7
57.5°	7137.6	7189.2	7715.0	8196.1	8979.9	9076.1	8726.1	9780.4	*10737.1*	11381.4	8297.9
60°	5996.8	6104.2	6818.2	7554.6	8772.1	9774.8	10152.7	10583.7	*11380.0*	12095.4	9032.9
62.5°	3829.6	3871.4	4872.8	6105.6	7836.3	9706.5	11706.3	11999.2	*12359.0*	13025.6	10165.3
65°	1917.6	2051.5	2638.6	3644.1	5650.9	8553.1	12491.5	14591.8	*14151.1*	14618.3	12000.6
67.5°	1301.2	1344.4	1641.5	2189.5	3313.6	6059.6	12004.8	16775.7	*16646.0*	16722.7	13957.2
70°	*959.5*	*987.4*	*1221.7*	*1550.8*	*2004.1*	*3440.5*	*9557.2*	*16611.2*	*17496.7*	*17468.9*	*13752.2*
72.5°	700.1	714.0	891.2	1184.0	1485.3	1779.5	5836.4	13418.9	*15273.7*	16078.4	12027.1
75°	509.0	525.8	619.2	885.6	1154.7	1110.1	2881.3	9692.5	*11647.8*	13195.8	9798.5
77.5°	379.3	400.3	443.5	555.1	808.9	794.9	1245.4	6293.9	*7533.7*	8618.7	5952.2
80°	273.3	277.5	302.6	355.6	513.2	465.8	592.7	3281.5	*3762.7*	4122.5	2333.2
82.5°	166.0	170.1	202.2	219.0	318.0	292.9	308.2	1062.7	*1522.9*	1616.3	871.6
85°	48.8	51.6	92.0	100.4	132.5	125.5	124.1	432.3	*516.0*	659.6	343.1
87.5°	0.0	0.0	0.0	0.0	1.4	8.4	15.3	76.7	*115.8*	160.4	83.7
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: P637996
CATALOG NUMBER: GWS-SA4D-830-U-T2-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2250.9	2250.9	2250.9	2250.9	2250.9	2250.9	2250.9	2250.9	2250.9	2250.9	2250.9
2.5°	2274.6	2242.5	2225.8	2196.5	2175.6	2154.7	2133.7	2114.2	2105.9	2093.3	2096.1
5°	2315.0	2264.8	2214.6	2157.5	2108.6	2068.2	2031.9	1999.9	1985.9	1973.4	1978.9
7.5°	2376.4	2301.1	2204.9	2100.3	2023.6	1967.8	1930.1	1907.8	1900.8	1891.1	1891.1
10°	2454.5	2341.5	2172.8	2023.6	1931.5	1886.9	1870.2	1868.8	1875.7	1877.1	1874.4
12.5°	2541.0	2380.6	2125.4	1932.9	1854.8	1840.9	1853.4	1877.1	1900.8	1913.4	1910.6
15°	2630.2	2405.7	2044.5	1846.5	1799.0	1817.2	1857.6	1905.0	1951.1	1974.8	1973.4
17.5°	2713.9	2411.3	1939.9	1762.8	1750.2	1796.3	1866.0	1939.9	2002.7	2036.1	2037.5
20°	2807.3	2401.5	1832.5	1687.5	1701.4	1776.7	1868.8	1958.0	2031.9	2065.4	2073.8
22.5°	2892.4	2368.0	1727.9	1616.3	1659.6	1753.0	1846.5	1930.1	1995.7	2027.8	2038.9
25°	2969.1	2303.9	1613.6	1556.4	1627.5	1719.6	1790.7	1849.2	1895.3	1914.8	1930.1
27.5°	3011.0	2207.7	1527.1	1509.0	1596.8	1672.1	1711.2	1729.3	1744.7	1739.1	1750.2
30°	3019.3	2087.7	1451.8	1471.3	1550.8	1606.6	1615.0	1596.8	1570.3	1527.1	1536.9
32.5°	3011.0	1949.7	1389.0	1430.9	1499.2	1532.7	1521.5	1474.1	1409.9	1343.0	1347.2
35°	3013.7	1810.2	1337.4	1386.2	1439.2	1457.4	1429.5	1363.9	1295.6	1234.2	1231.4
37.5°	3044.4	1693.1	1294.2	1343.0	1380.7	1383.5	1352.8	1284.4	1249.6	1203.5	1198.0
40°	3129.5	1606.6	1255.1	1299.8	1323.5	1322.1	1287.2	1238.4	1262.1	1246.8	1242.6
42.5°	3269.0	1553.6	1223.1	1253.8	1270.5	1273.3	1245.4	1214.7	1266.3	1246.8	1239.8
45°	3493.5	1550.8	1200.8	1207.7	1234.2	1253.8	1234.2	1199.4	1218.9	1124.1	1105.9
47.5°	3759.9	1598.2	1184.0	1167.3	1213.3	1248.2	1217.5	1161.7	1121.3	1034.8	1022.2
50°	4080.6	1694.4	1168.7	1124.1	1182.6	1227.3	1196.6	1119.9	1058.5	1012.5	1005.5
52.5°	4461.3	1821.4	1149.2	1075.2	1136.6	1216.1	1196.6	1115.7	1034.8	993.0	986.0
55°	4860.2	1967.8	1126.8	1016.7	1085.0	1218.9	1206.3	1086.4	1016.7	994.4	988.8
57.5°	5355.3	2143.5	1086.4	948.3	1039.0	1193.8	1167.3	1069.7	1004.1	986.0	980.4
60°	5998.2	2404.3	1009.7	878.6	986.0	1149.2	1132.4	1041.8	970.6	955.3	951.1
62.5°	7016.3	2846.4	916.3	811.7	923.2	1055.7	1080.8	988.8	928.8	927.4	926.0
65°	8675.9	3377.7	806.1	751.7	857.7	979.0	1012.5	934.4	885.6	900.9	899.5
67.5°	9839.0	3423.8	715.4	688.9	781.0	895.3	944.1	878.6	825.6	854.9	853.5
70°	*9012.0*	*2670.7*	*637.3*	*623.4*	*698.7*	*804.7*	*870.2*	*808.9*	*755.9*	*783.8*	*778.2*
72.5°	7600.6	2047.3	563.4	555.1	615.0	709.9	775.4	739.1	683.4	683.4	670.8
75°	6108.4	1688.9	485.3	481.1	521.6	613.6	687.5	626.2	574.6	571.8	563.4
77.5°	3503.3	1107.3	407.2	404.4	417.0	513.2	534.1	521.6	482.5	464.4	458.8
80°	1396.0	576.0	320.8	302.6	315.2	376.5	421.2	400.3	366.8	344.5	331.9
82.5°	541.1	288.7	225.9	198.0	216.2	271.9	305.4	298.4	276.1	225.9	212.0
85°	220.3	140.9	135.3	114.4	125.5	146.4	175.7	152.0	125.5	89.3	85.1
87.5°	58.6	51.6	50.2	30.7	23.7	7.0	1.4	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

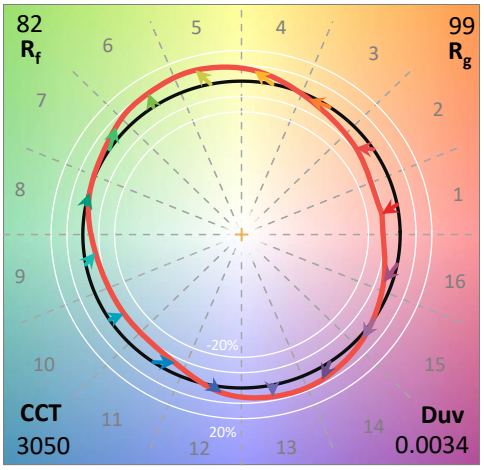
Test Information

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

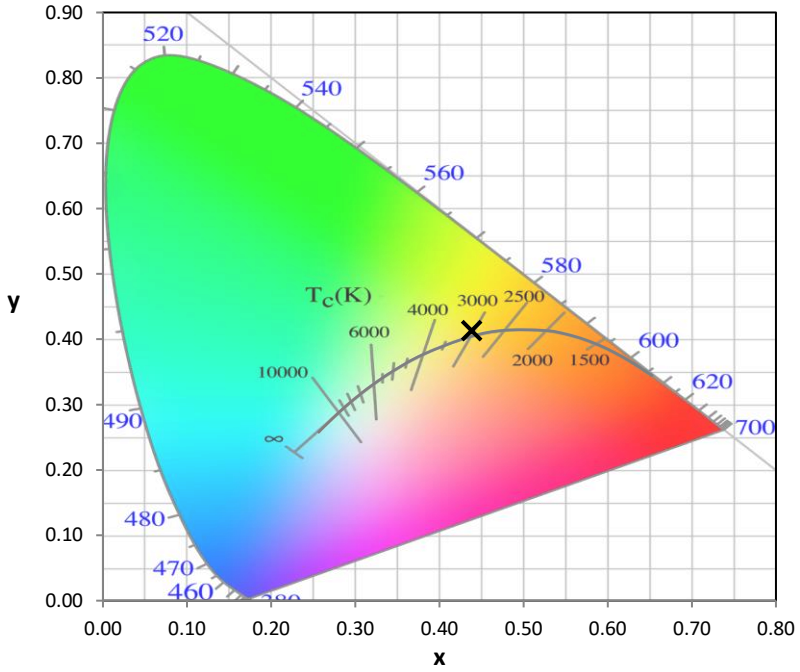
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

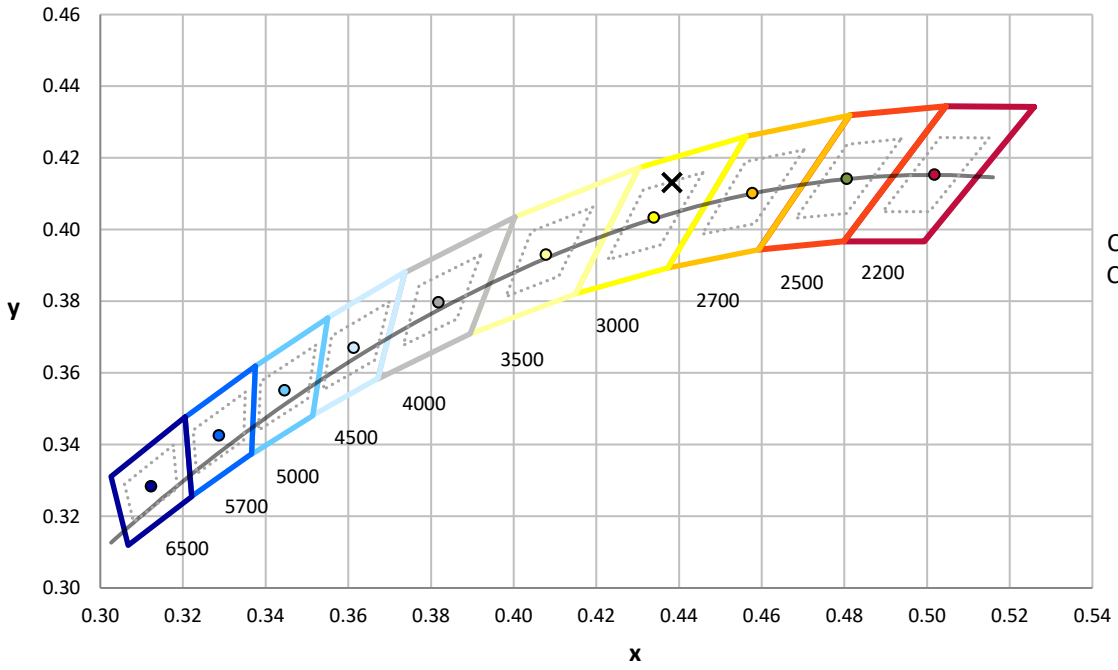
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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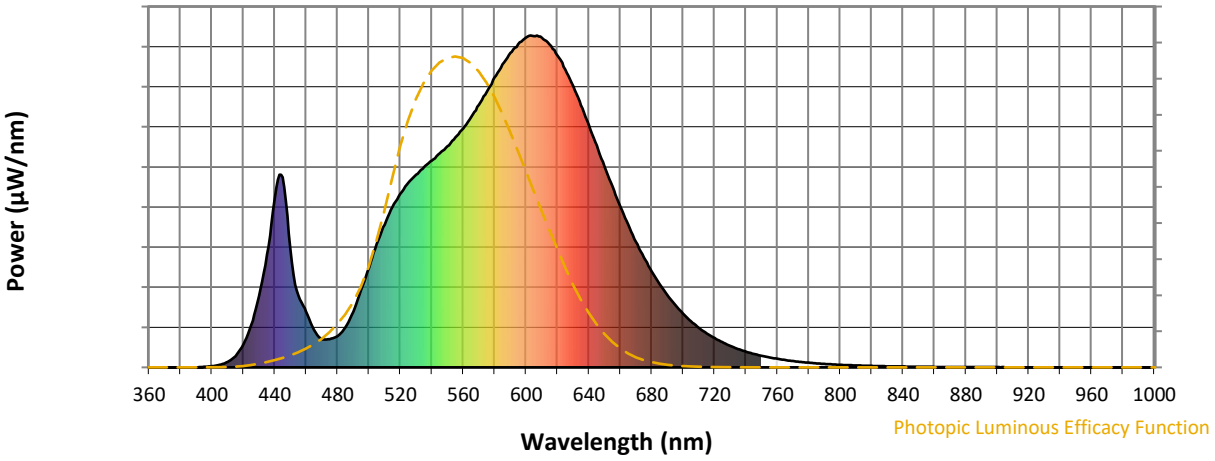
Photopic Flux vs. Wavelength



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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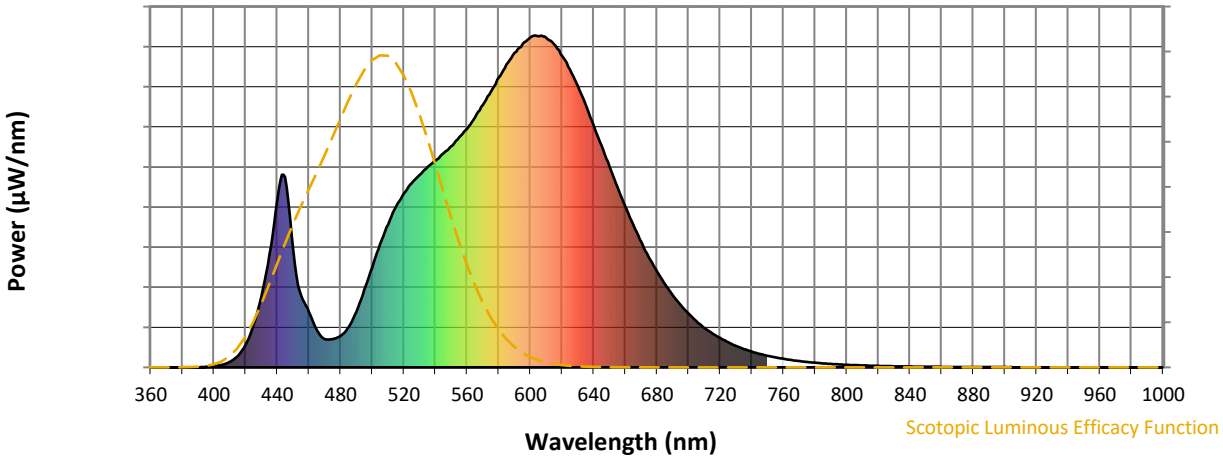
Scotopic Flux vs. Wavelength



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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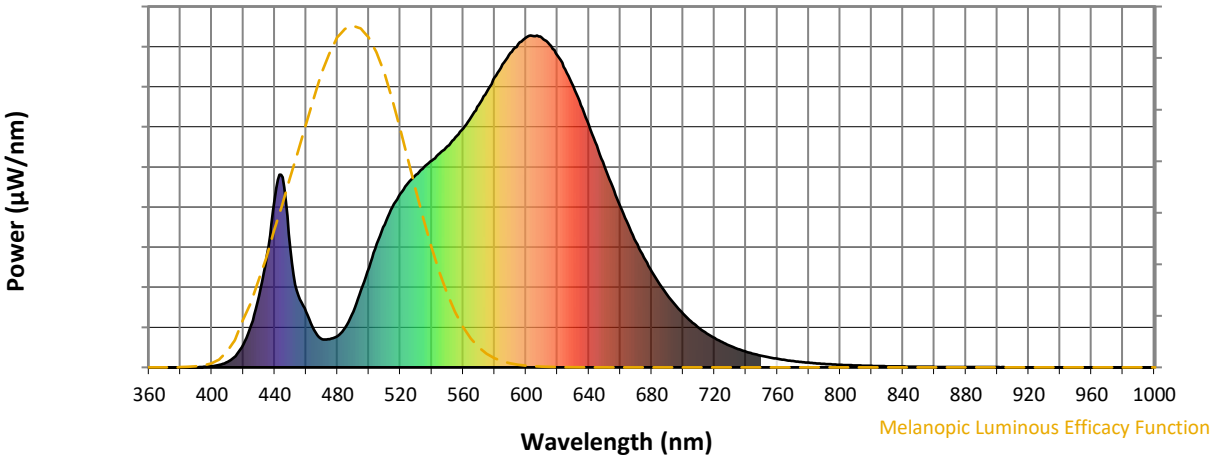
Melanopic Flux vs. Wavelength



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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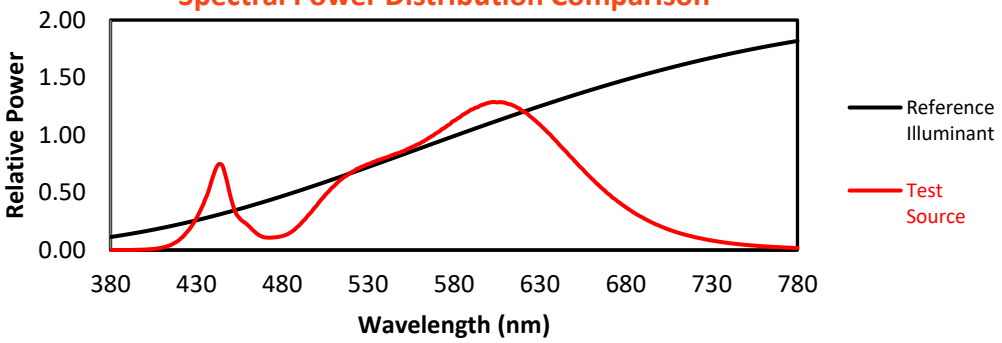
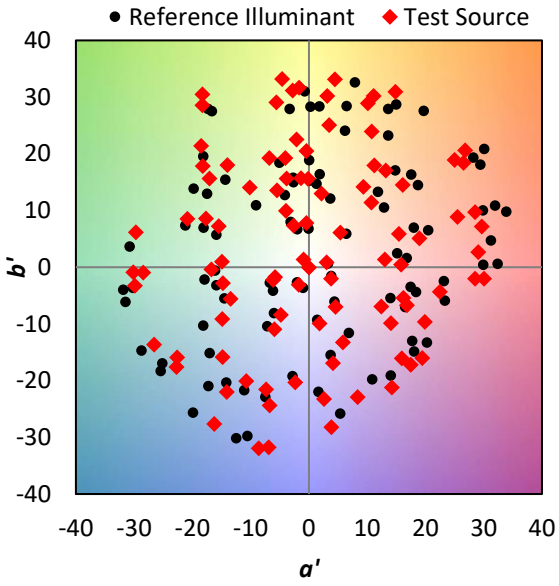
Summary

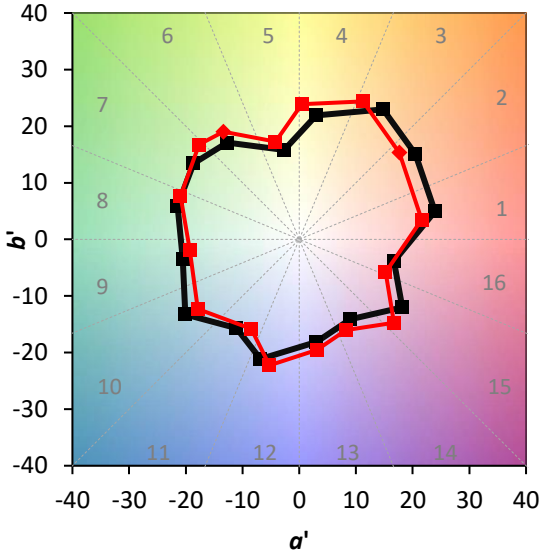
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

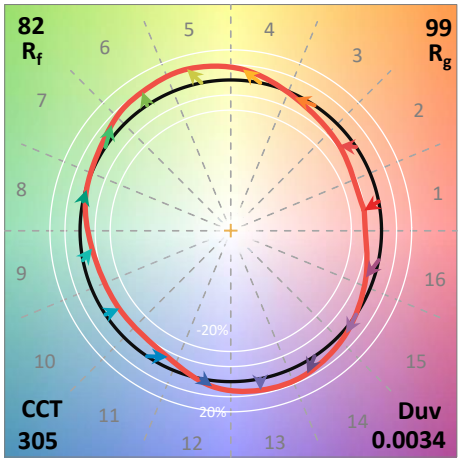
Spectral Power Distribution Comparison

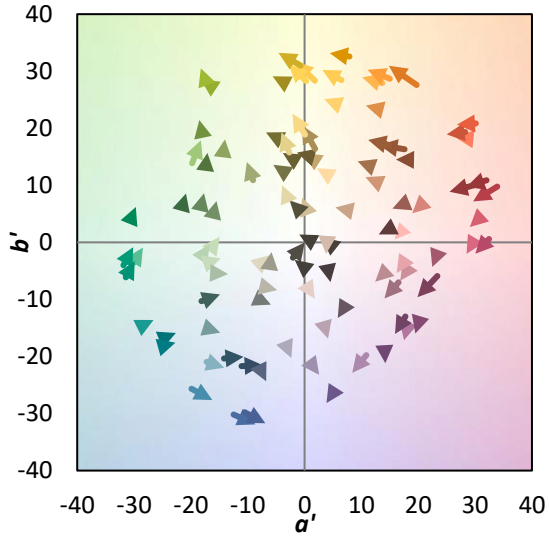


Color Vector Graphics









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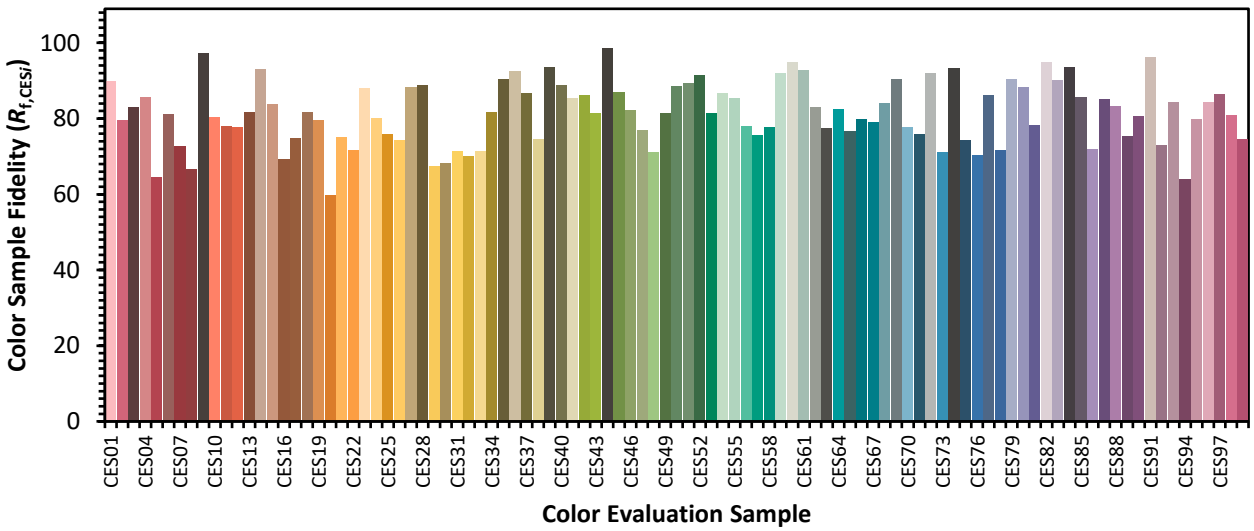
Individual Sample Fidelity Index ($R_{f,i}$)

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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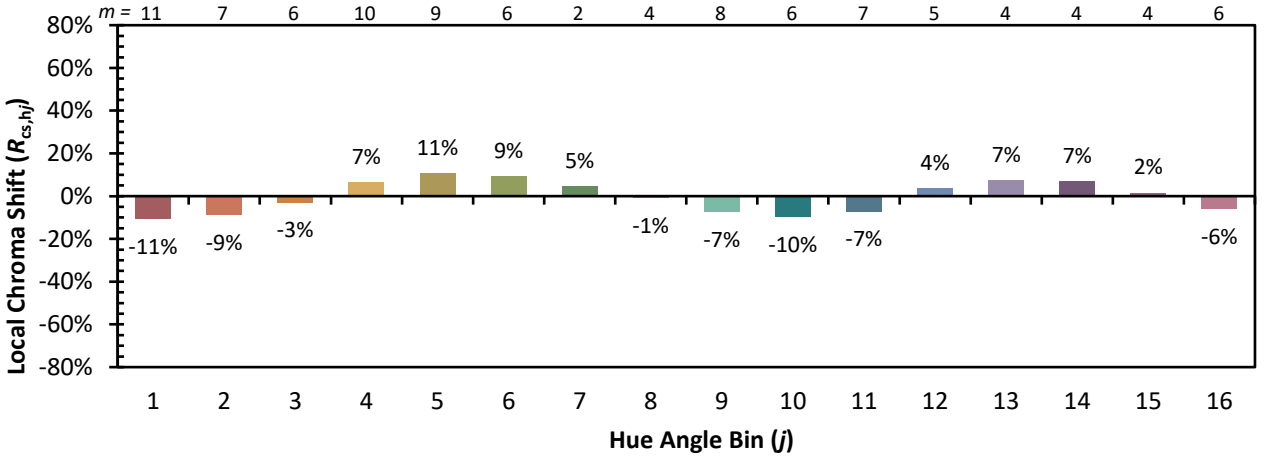
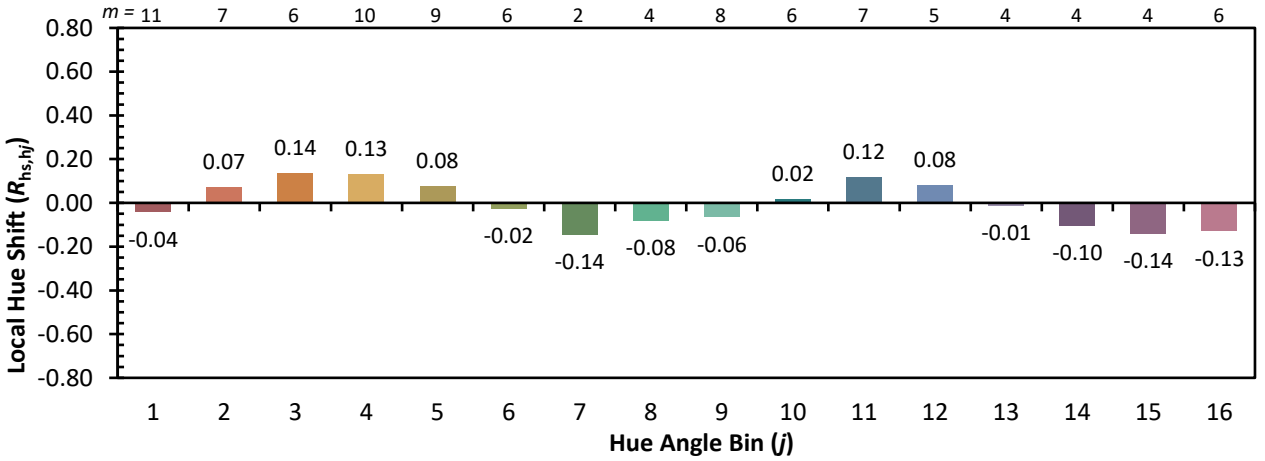
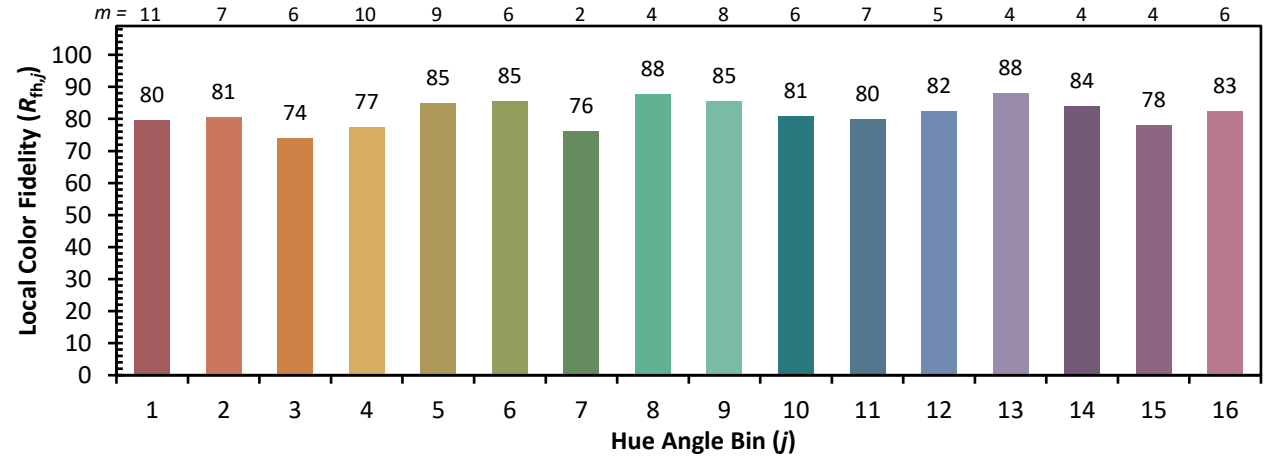
Color Rendition by Hue-Angle Bin







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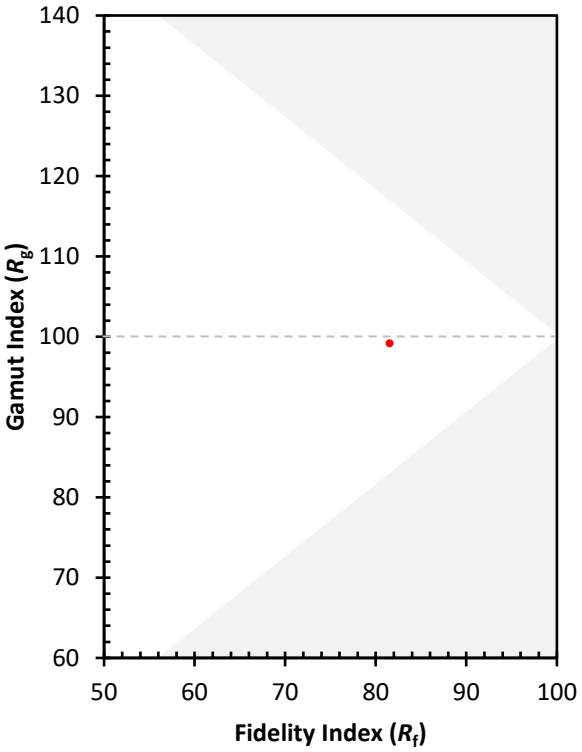
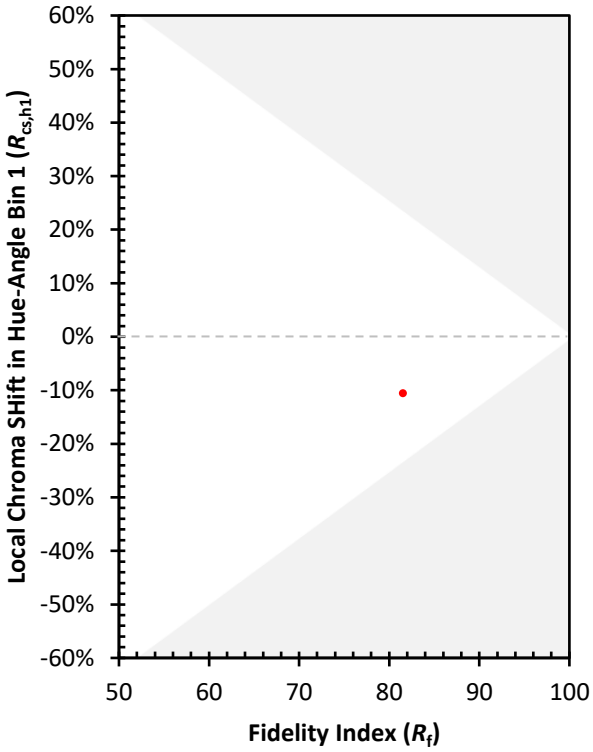
Measure Comparisons





(END OF REPORT)