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: P638495

Luminaire Tested: GWS-SA4E-830-U-T2R-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:	P638495
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-11)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4E-830-U-T2R-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	24788.7 lumens
Efficiency:	N/A
Efficacy:	122.4 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G3

Input Watts (W):	202.6
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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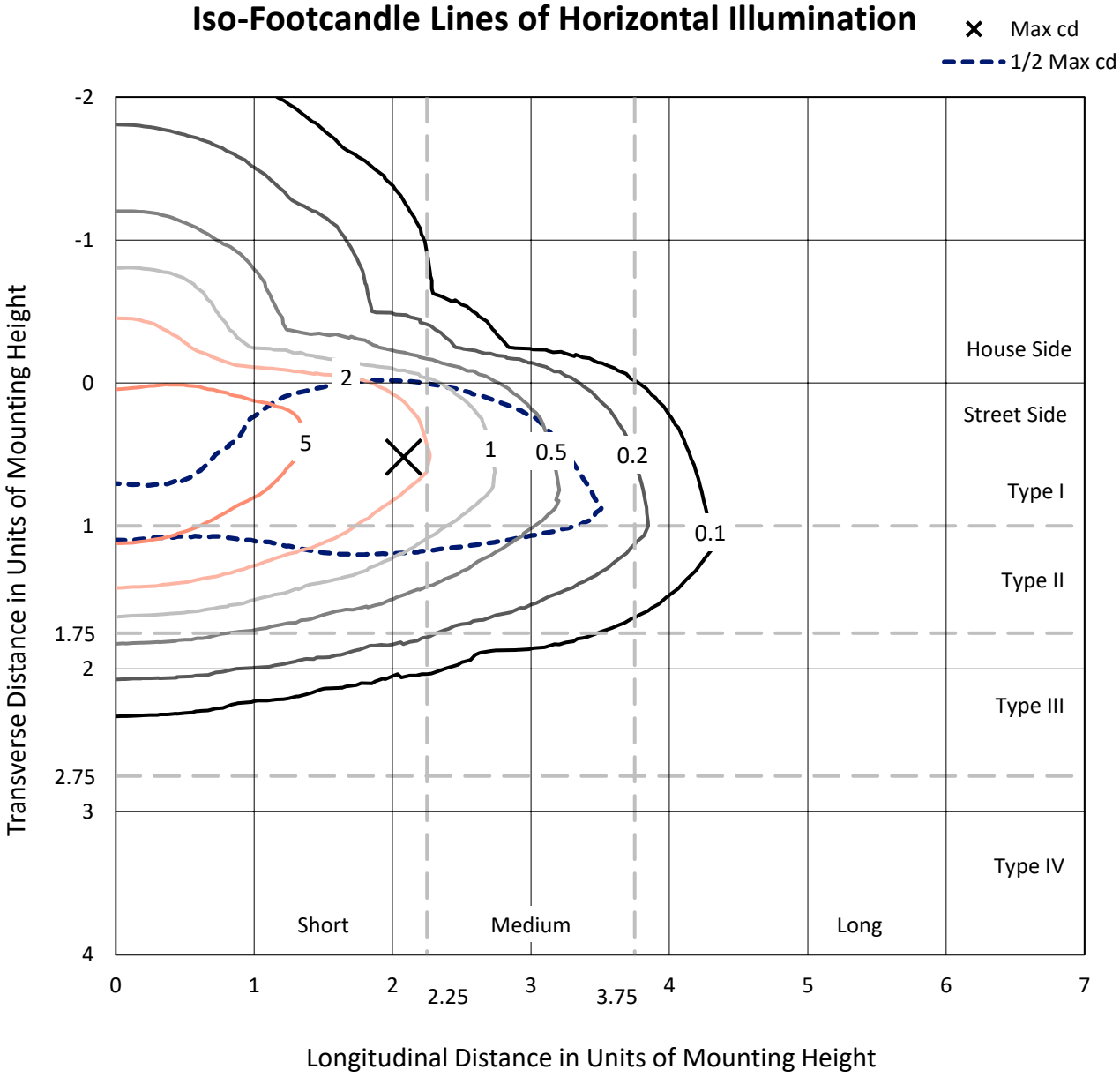
Scaled Data Report

REPORT NUMBER: P638495
CATALOG NUMBER: GWS-SA4E-830-U-T2R-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc
Type II - Short - N/A

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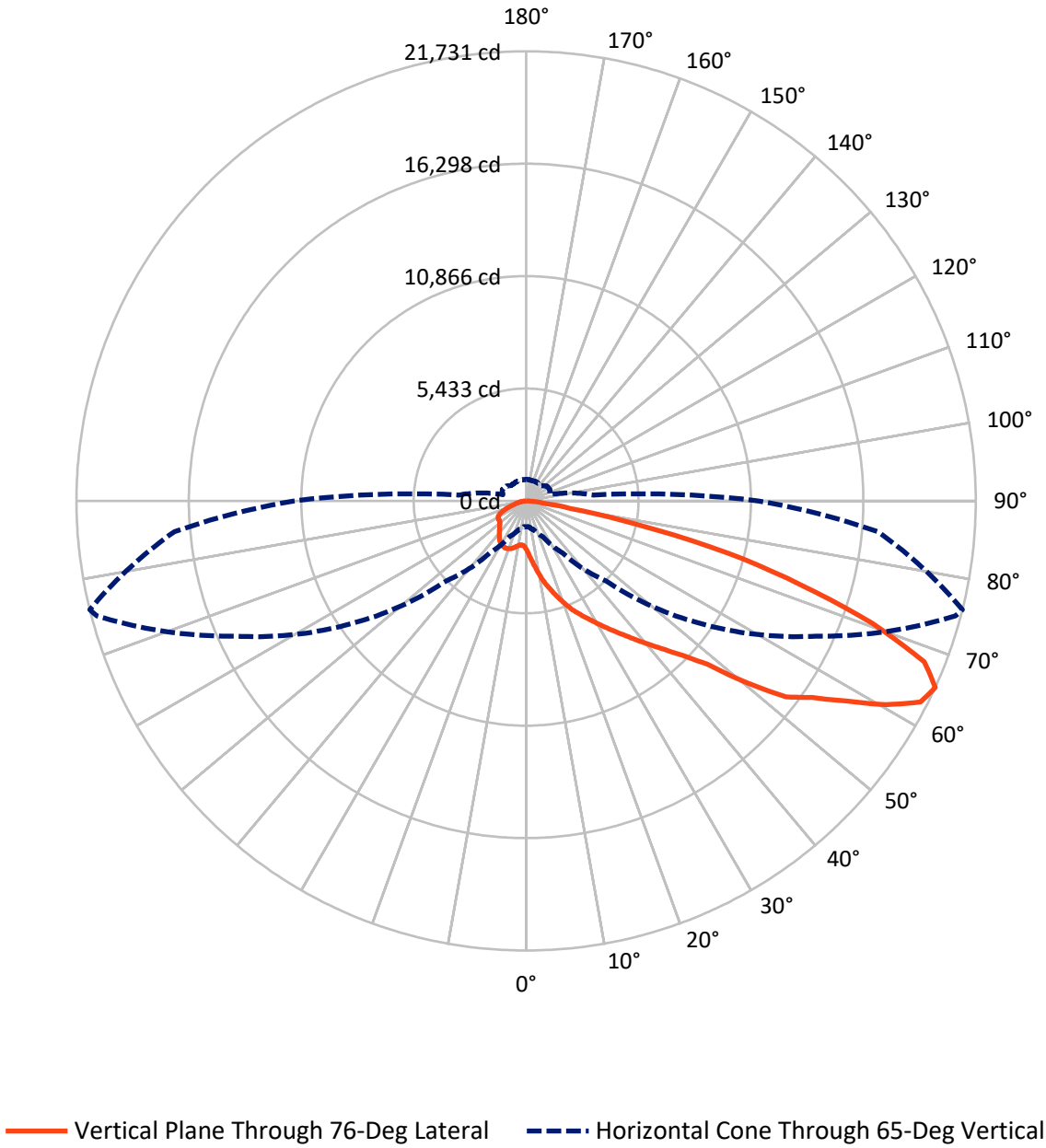
Luminous Intensity Polar Plot



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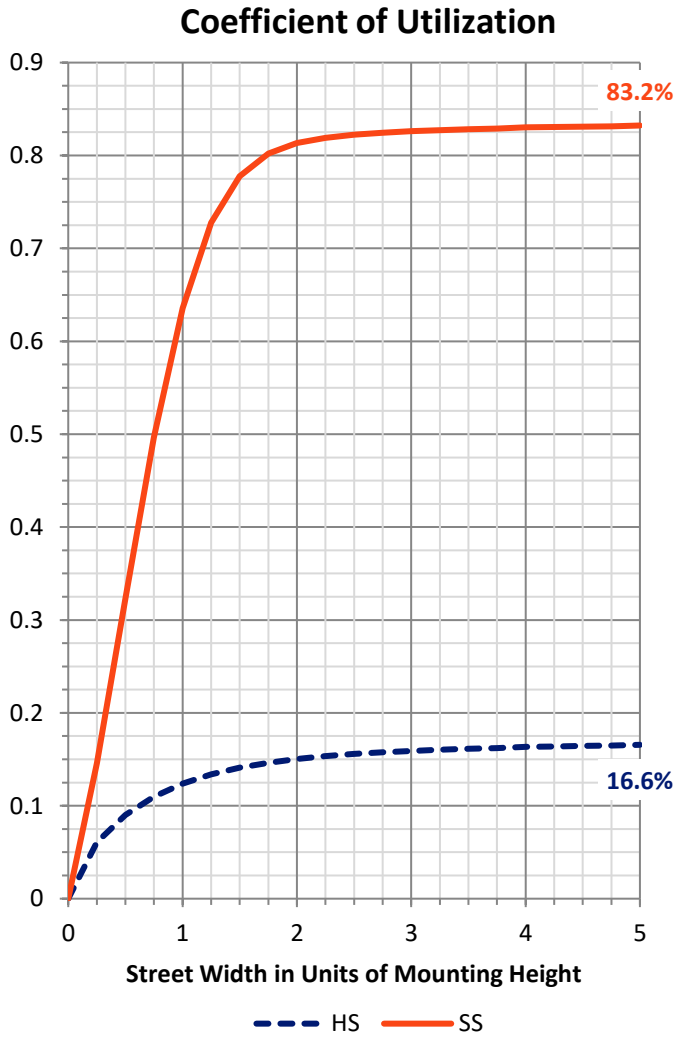
CATALOG NUMBER: GWS-SA4E-830-U-T2R-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4143.5	0.0	4143.5
	% Fixture	16.7	0.0	16.7
Street Side	Lumens	20645.2	0.0	20645.2
	% Fixture	83.3	0.0	83.3
Total	Lumens	24788.7	0.0	24788.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.9	1.1
10°-20°	1062.2	4.3
20°-30°	2070.2	8.4
30°-40°	3462.2	14.0
40°-50°	4957.2	20.0
50°-60°	5868.7	23.7
60°-70°	4879.8	19.7
70°-80°	1996.9	8.1
80°-90°	212.6	0.9
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°	24788.7	100.0
0°-180°	24788.7	100.0



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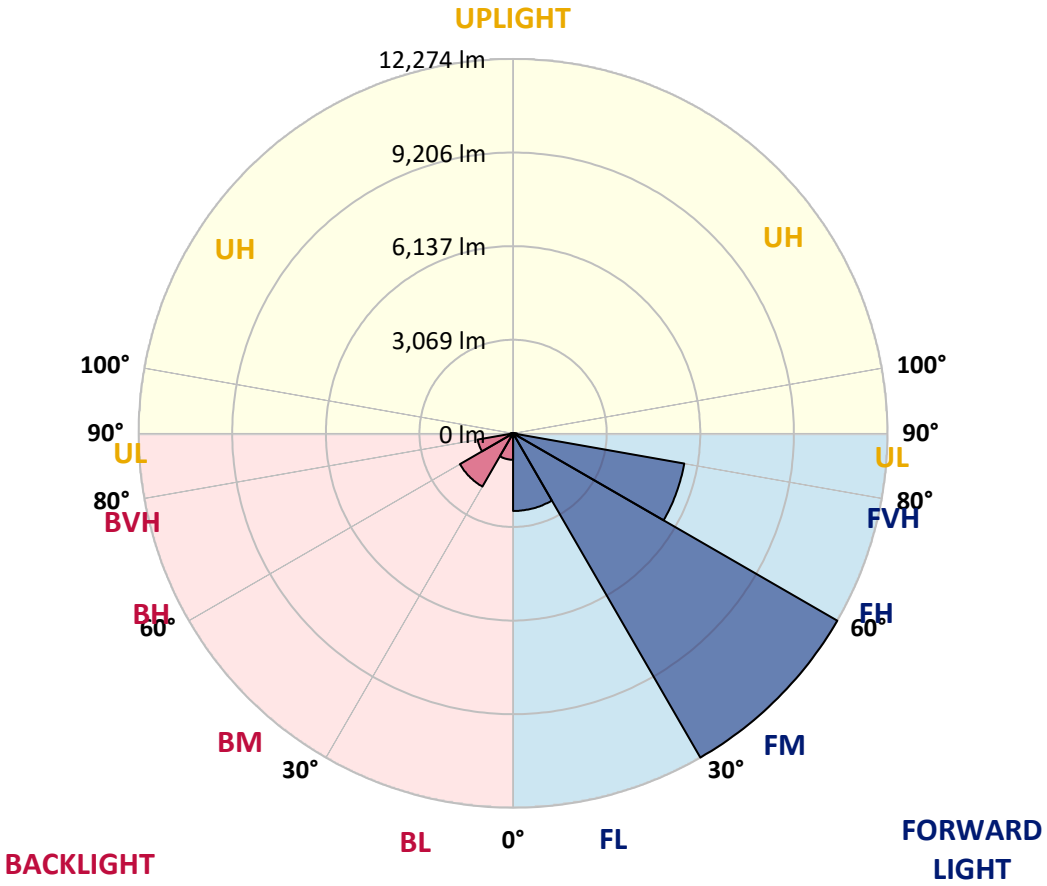
REPORT NUMBER: P638495
CATALOG NUMBER: GWS-SA4E-830-U-T2R-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2544.5	10.3			
FM	(30°-60°)	12274.4	49.5			
FH	(60°-80°)	5699.6	23.0			G3/7500
FVH	(80°-90°)	126.8	0.5			G2/225
BL	(0°-30°)	866.8	3.5	B2/1000		
BM	(30°-60°)	2013.6	8.1	B2/2500		
BH	(60°-80°)	1177.2	4.7	B3/2500		G3/2500
BVH	(80°-90°)	85.8	0.3			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 Short



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Scaled Data Report

REPORT NUMBER: P638495
CATALOG NUMBER: GWS-SA4E-830-U-T2R-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2347.4	2347.4	2347.4	2347.4	2347.4	2347.4	2347.4	2347.4	2347.4	*2347.4*	2347.4
2.5°	3290.2	3302.4	3262.3	3248.4	3154.3	3027.0	2920.7	2760.4	2612.3	*2589.6*	2457.2
5°	4179.0	4126.7	4081.4	4051.7	3921.0	3776.4	3551.6	3250.1	2934.7	*2896.3*	2610.5
7.5°	4707.0	4698.3	4642.5	4625.1	4524.0	4379.4	4147.6	3772.9	3314.6	*3251.9*	2817.9
10°	5130.5	5125.2	5097.4	5113.0	5020.7	4879.5	4654.7	4267.8	3731.1	*3668.4*	3049.7
12.5°	5499.9	5508.6	5503.4	5560.9	5513.9	5404.1	5170.5	4745.3	4147.6	*4079.6*	3332.0
15°	5770.0	5777.0	5803.1	5928.6	5954.8	5932.1	5695.1	5214.1	4558.9	*4461.3*	3623.0
17.5°	5846.7	5860.7	5923.4	6125.5	6266.7	6360.8	6184.8	5691.6	4963.2	*4856.9*	3919.3
20°	5949.5	5965.2	6028.0	6238.8	6446.2	6660.5	6629.2	6176.1	5371.0	*5283.8*	4219.0
22.5°	6425.3	6413.1	6385.2	6486.3	6634.4	6901.0	6979.5	6641.4	5792.7	*5709.0*	4550.2
25°	7341.9	7319.3	7141.5	7049.2	7000.4	7162.4	7301.9	7064.8	6204.0	*6078.5*	4858.6
27.5°	8352.7	8340.5	8113.9	7894.4	7594.6	7524.9	7606.8	7434.3	6603.0	*6475.8*	5127.0
30°	9309.4	9272.8	9035.8	8760.5	8359.7	8059.9	7939.7	7796.8	7040.5	*6908.0*	5440.7
32.5°	10165.1	10118.0	9839.2	9534.2	9114.2	8760.5	8401.5	8181.9	7535.4	*7382.0*	5761.3
35°	10867.4	10820.3	10534.5	10210.4	9748.6	9487.2	8995.7	8600.2	8039.0	*7883.9*	6139.5
37.5°	11411.1	11367.5	11069.5	10750.6	10348.1	10140.7	9713.7	9070.7	8619.3	*8457.3*	6540.3
40°	11716.1	11684.7	11446.0	11193.3	10855.2	10675.7	10484.0	9664.9	9269.3	*9107.3*	7012.6
42.5°	11808.4	11787.5	11620.2	11489.5	11261.2	11125.3	11235.1	10363.8	9962.9	*9821.8*	7544.1
45°	11576.7	11576.7	11527.9	11594.1	11604.5	11602.8	11987.9	11153.2	10815.1	*10660.0*	8293.4
47.5°	10984.2	11022.5	11093.9	11419.8	11763.1	12050.7	12868.0	12205.8	11911.3	*11784.0*	9354.7
50°	9900.2	10004.8	10248.7	10884.8	11615.0	12346.9	13701.0	13762.0	14042.6	*13817.8*	10916.2
52.5°	8312.6	8296.9	8919.1	9825.3	10938.8	12359.1	14159.3	15135.2	15889.8	*15734.7*	12076.8
55°	6606.5	6580.4	7160.7	8410.2	9901.9	11892.1	14434.7	15764.3	16914.5	*16775.1*	13120.7
57.5°	5059.0	5025.9	5541.7	6669.3	8438.1	10900.5	14382.4	16513.7	18324.3	*18252.9*	14539.2
60°	3481.9	3441.8	3924.5	4910.9	6705.9	9384.4	13803.8	16898.8	19974.7	*19999.1*	16057.1
62.5°	2091.2	2068.6	2418.8	3183.9	4823.8	7505.7	12449.7	16665.3	21288.7	*21398.4*	17033.0
65°	*1261.7*	*1246.0*	*1451.7*	*1899.5*	*3060.2*	*5477.3*	*10362.0*	*15471.6*	*21478.6*	*21731.3*	*17055.7*
67.5°	918.4	920.1	979.4	1157.1	1784.5	3537.7	7775.9	13331.5	20488.8	*20750.2*	15980.4
70°	798.2	801.6	833.0	873.1	1078.7	2025.0	5055.5	10524.1	17562.8	*17764.9*	13403.0
72.5°	709.3	709.3	730.2	751.1	843.5	1233.8	2708.1	7355.9	13861.3	*13915.3*	10229.6
75°	623.9	618.7	629.1	639.6	731.9	862.6	1317.5	5125.2	10238.3	*10112.8*	6611.8
77.5°	496.7	491.4	493.2	503.6	587.3	616.9	667.4	3201.3	5770.0	*5445.9*	2920.7
80°	353.8	350.3	369.4	395.6	433.9	378.2	418.2	1549.2	2288.1	*2129.6*	1132.7
82.5°	210.9	217.8	247.5	268.4	299.7	237.0	270.1	517.6	810.3	*789.4*	460.1
85°	29.6	31.4	88.9	102.8	129.0	92.4	142.9	233.5	324.1	*346.8*	162.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	12.2	41.8	92.4	*94.1*	40.1
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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Scaled Data Report

REPORT NUMBER: P638495
CATALOG NUMBER: GWS-SA4E-830-U-T2R-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2347.4	2347.4	2347.4	2347.4	2347.4	2347.4	2347.4	2347.4	2347.4	2347.4	2347.4
2.5°	2389.2	2307.3	2190.6	2093.0	2011.1	1944.8	1889.1	1847.2	1835.0	1817.6	1817.6
5°	2476.4	2328.2	2119.1	1971.0	1885.6	1835.0	1800.2	1782.8	1774.1	1763.6	1758.4
7.5°	2596.6	2389.2	2106.9	1957.0	1890.8	1859.4	1836.8	1826.3	1819.4	1808.9	1808.9
10°	2762.2	2479.8	2145.2	2005.8	1953.6	1922.2	1896.0	1878.6	1862.9	1847.2	1843.8
12.5°	2941.7	2598.3	2215.0	2072.1	2016.3	1977.9	1941.4	1915.2	1896.0	1876.9	1871.6
15°	3140.3	2720.3	2289.9	2136.5	2066.8	2014.5	1971.0	1930.9	1904.8	1876.9	1873.4
17.5°	3335.5	2844.1	2352.6	2180.1	2091.2	2026.7	1964.0	1911.7	1878.6	1847.2	1838.5
20°	3569.0	2967.8	2396.2	2192.3	2086.0	2000.6	1925.7	1859.4	1822.8	1786.3	1781.0
22.5°	3783.4	3082.8	2417.1	2174.9	2045.9	1944.8	1857.7	1786.3	1746.2	1709.6	1702.6
25°	3990.8	3183.9	2408.4	2133.0	1984.9	1868.2	1777.5	1706.1	1667.8	1629.4	1619.0
27.5°	4191.2	3251.9	2373.5	2068.6	1908.2	1782.8	1695.6	1631.2	1598.0	1564.9	1551.0
30°	4388.1	3314.6	2319.5	1984.9	1810.7	1693.9	1622.4	1577.1	1544.0	1509.2	1498.7
32.5°	4586.7	3359.9	2237.6	1887.3	1711.3	1615.5	1571.9	1538.8	1503.9	1469.1	1458.6
35°	4787.2	3379.1	2138.3	1775.8	1627.7	1564.9	1549.2	1510.9	1463.9	1422.0	1408.1
37.5°	5025.9	3396.5	2014.5	1666.0	1554.5	1540.5	1537.0	1479.5	1423.8	1366.3	1350.6
40°	5313.5	3419.2	1887.3	1566.7	1495.2	1531.8	1517.9	1439.5	1327.9	1272.2	1254.7
42.5°	5665.5	3461.0	1754.9	1476.1	1451.7	1498.7	1483.0	1341.9	1266.9	1235.6	1226.9
45°	6183.1	3614.3	1622.4	1404.6	1418.5	1451.7	1427.3	1284.4	1254.7	1233.8	1223.4
47.5°	7104.9	3849.6	1507.4	1350.6	1392.4	1409.8	1315.7	1268.7	1246.0	1218.1	1205.9
50°	8063.4	3952.4	1415.1	1317.5	1362.8	1371.5	1254.7	1247.8	1232.1	1202.5	1190.3
52.5°	8711.7	3938.5	1359.3	1305.3	1338.4	1305.3	1226.9	1225.1	1214.7	1179.8	1165.9
55°	9443.6	3962.9	1334.9	1308.8	1327.9	1193.7	1192.0	1197.2	1192.0	1153.7	1146.7
57.5°	10431.7	4037.8	1322.7	1321.0	1321.0	1139.7	1158.9	1165.9	1155.4	1138.0	1132.7
60°	11381.5	4043.0	1300.0	1334.9	1315.7	1106.6	1120.5	1127.5	1115.3	1111.8	1110.1
62.5°	11738.7	3792.1	1249.5	1324.4	1294.8	1070.0	1080.5	1084.0	1071.8	1080.5	1078.7
65°	*11207.2*	*3258.8*	*1165.9*	*1273.9*	*1230.3*	*1036.9*	*1029.9*	*1038.6*	*1017.7*	*1040.4*	*1042.1*
67.5°	9950.7	2589.6	1038.6	1178.1	1139.7	1000.3	986.4	986.4	951.5	986.4	984.6
70°	8023.3	1829.8	852.2	1024.7	1040.4	956.7	949.8	909.7	853.9	906.2	901.0
72.5°	6082.0	1314.0	670.9	810.3	895.7	895.7	897.5	829.5	765.0	789.4	768.5
75°	3853.1	925.4	536.7	620.4	702.3	786.0	826.0	700.6	643.1	632.6	622.1
77.5°	1735.7	608.2	418.2	475.8	498.4	620.4	754.6	603.0	524.5	501.9	494.9
80°	726.7	378.2	298.0	336.3	306.7	521.1	665.7	468.8	385.1	353.8	331.1
82.5°	318.9	224.8	190.0	181.2	191.7	386.9	496.7	311.9	240.5	325.9	329.4
85°	134.2	118.5	97.6	88.9	78.4	148.1	233.5	122.0	149.9	85.4	69.7
87.5°	31.4	34.9	26.1	17.4	10.5	1.7	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

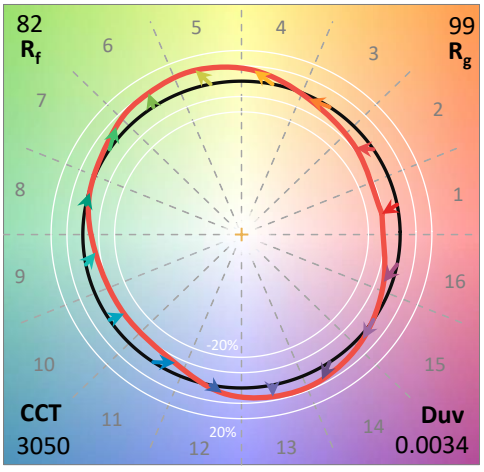
Test Information

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

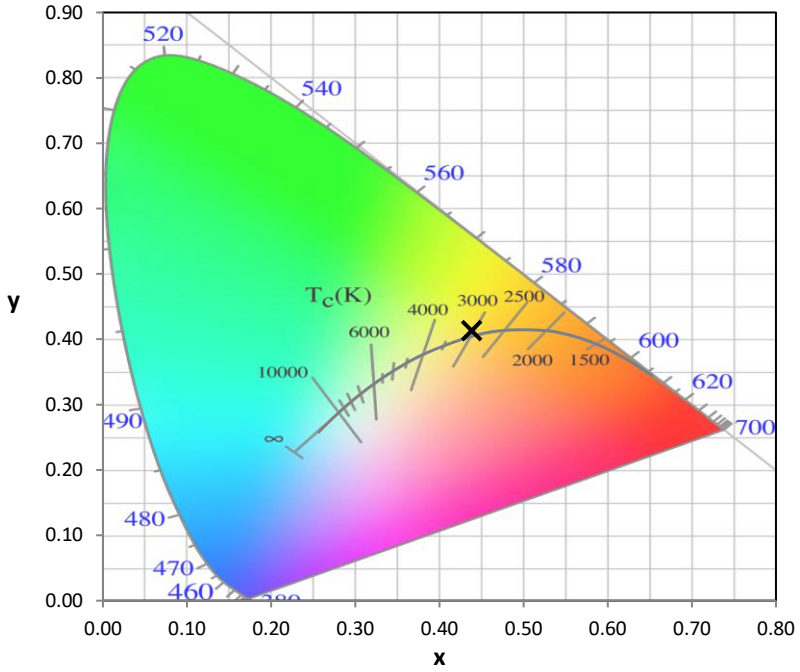
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

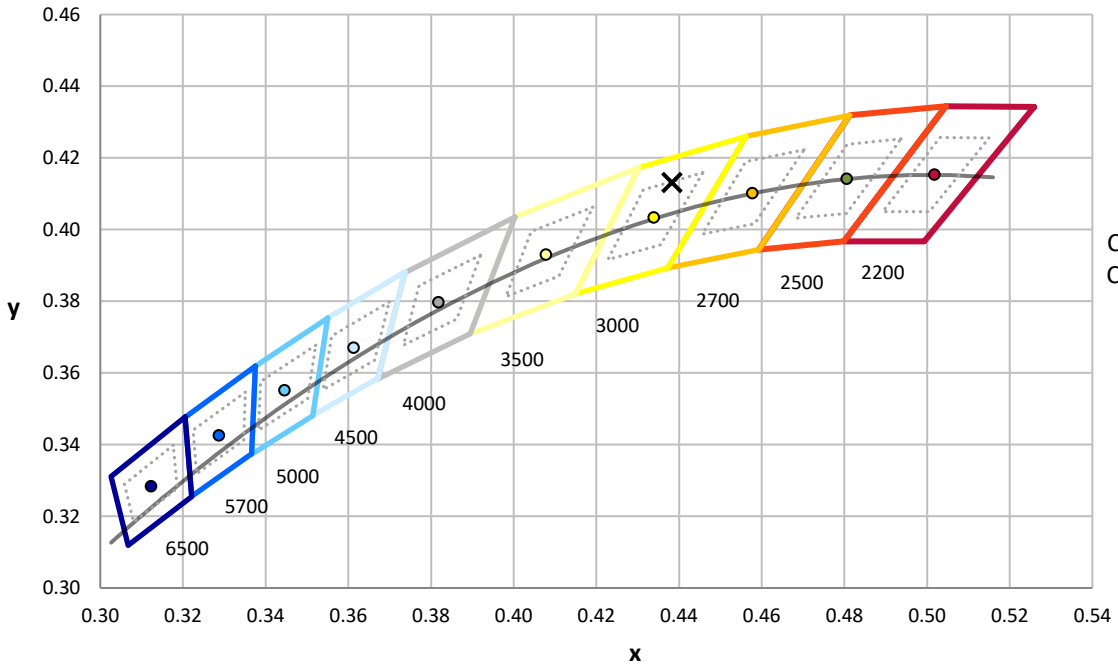
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

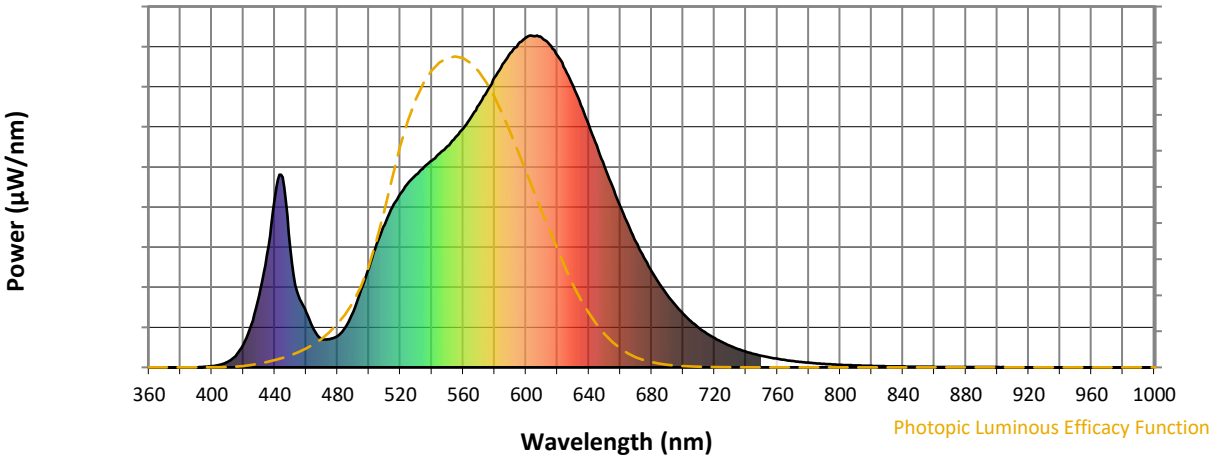


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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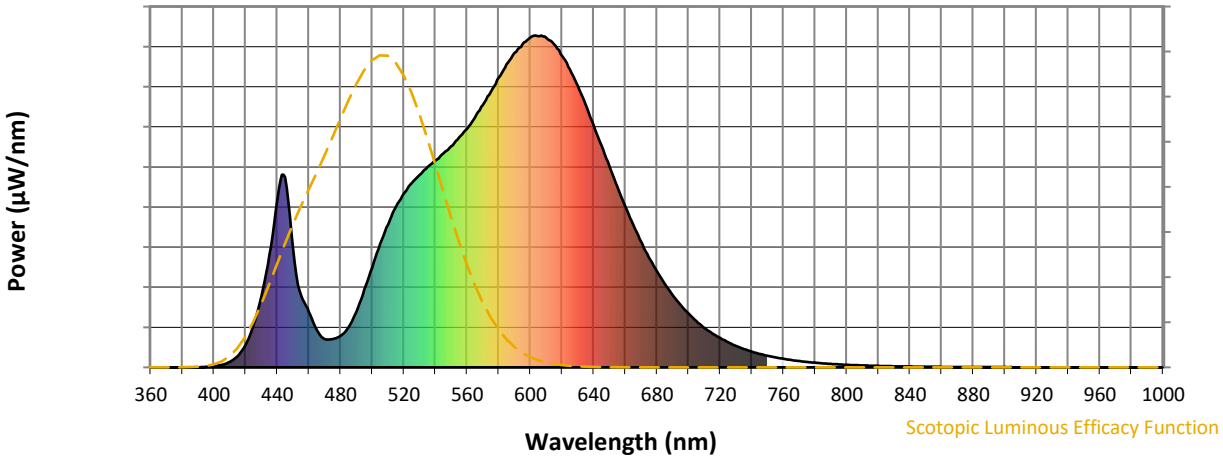
Scotopic Flux vs. Wavelength



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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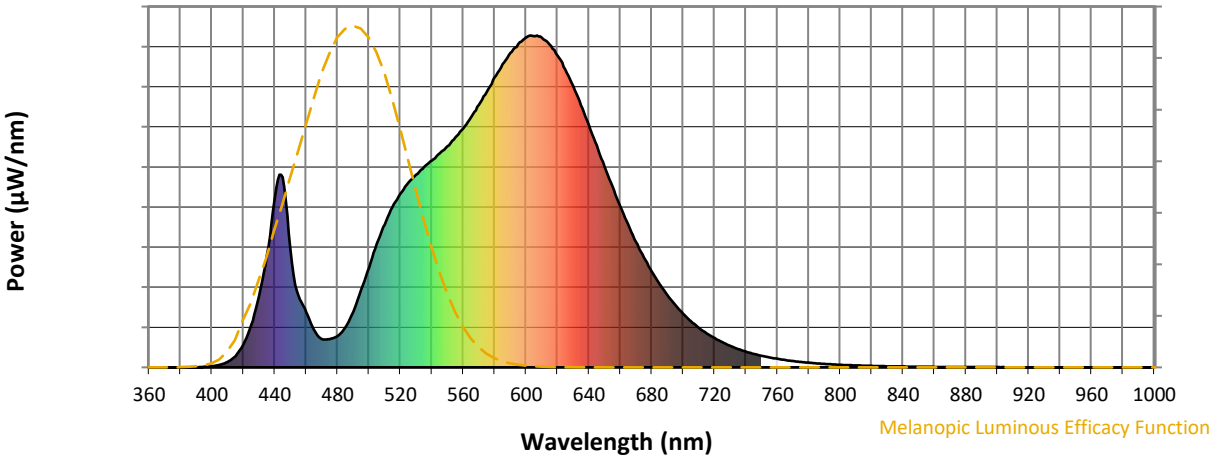
Melanopic Flux vs. Wavelength



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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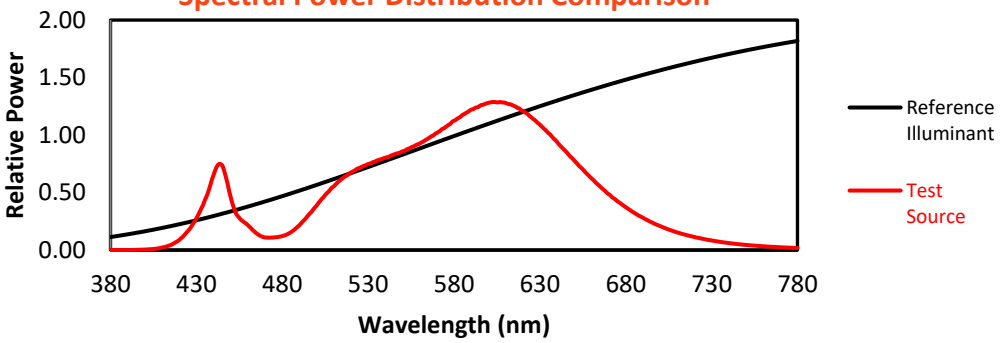
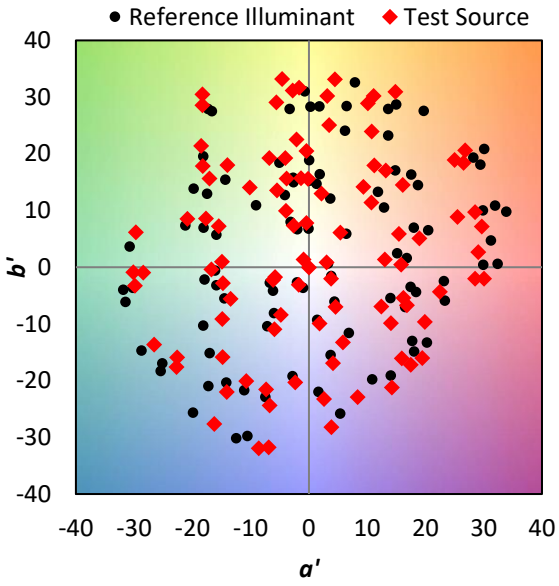
Summary

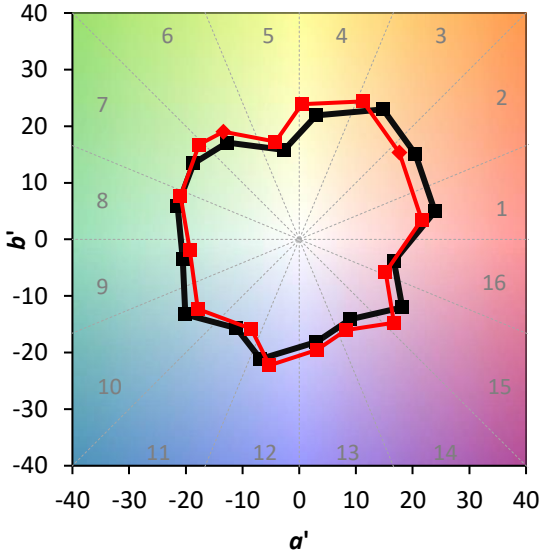
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

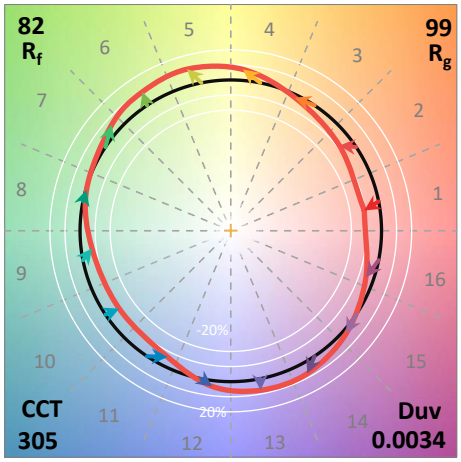
Spectral Power Distribution Comparison

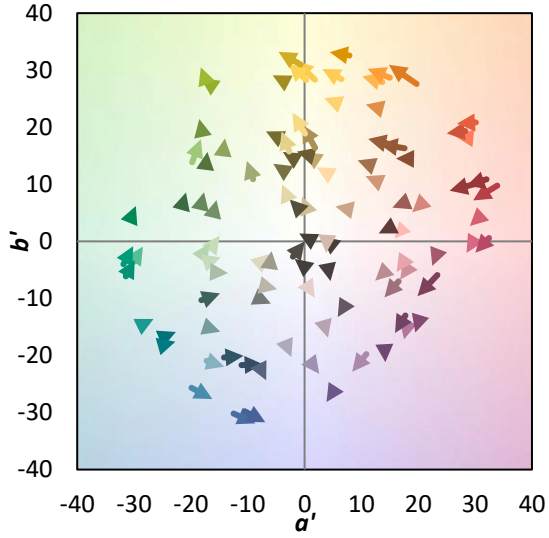


Color Vector Graphics









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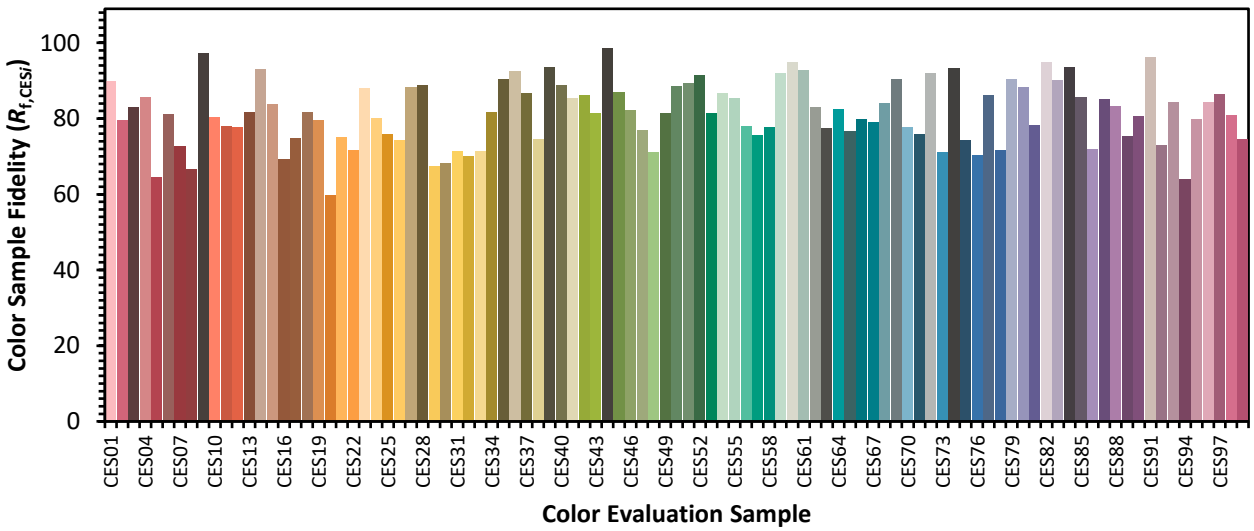
Individual Sample Fidelity Index ($R_{f,i}$)

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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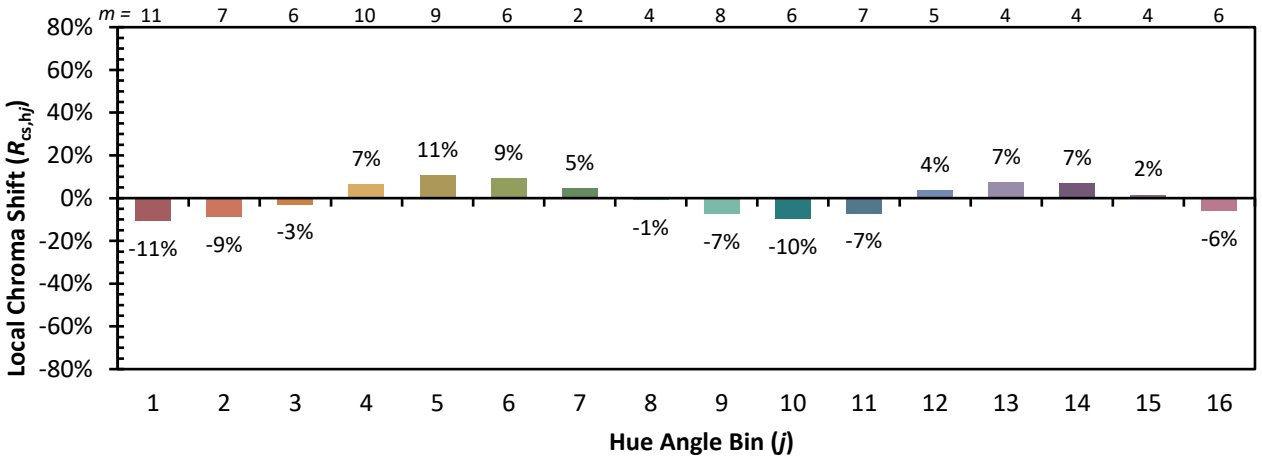
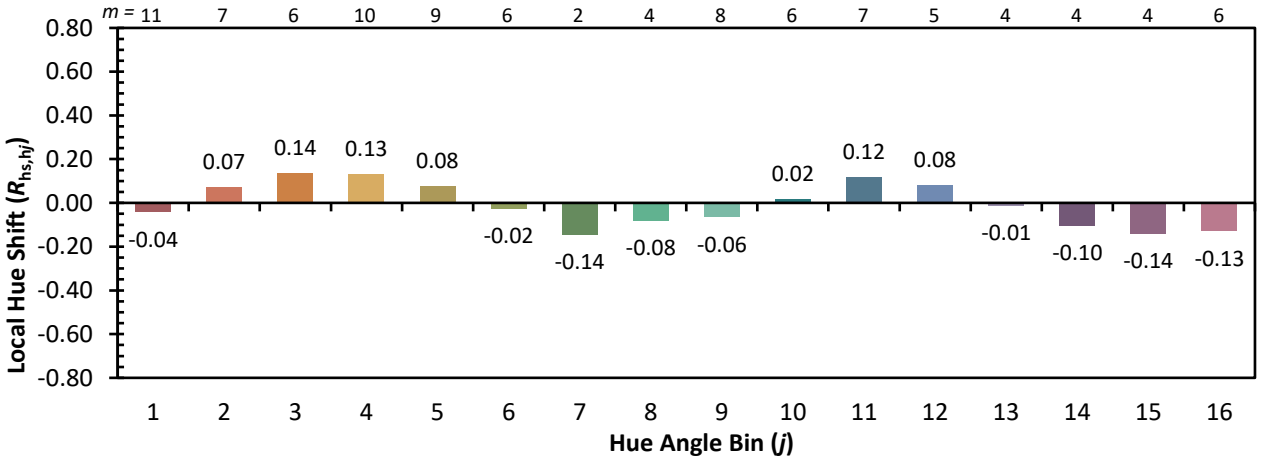
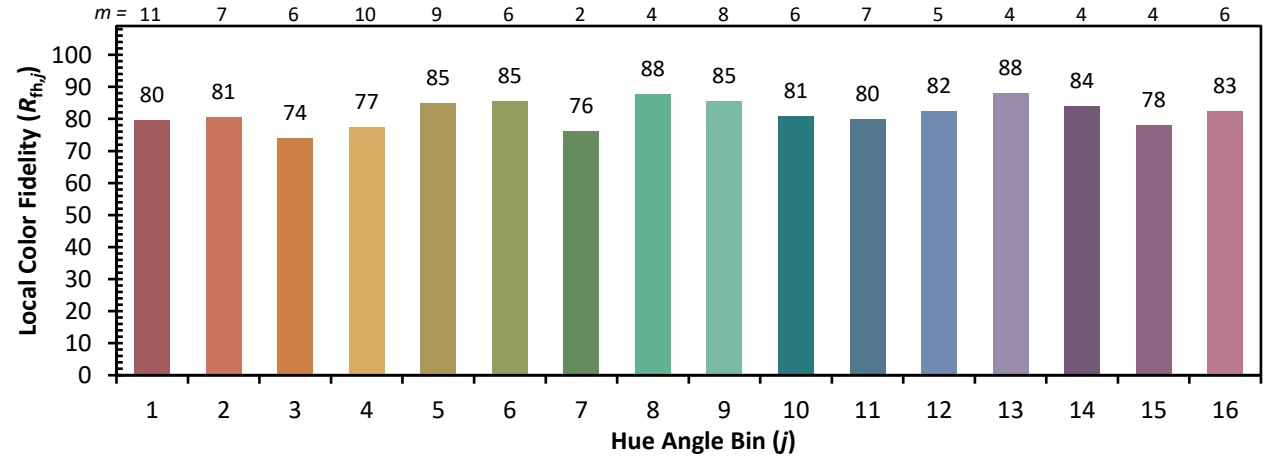
Color Rendition by Hue-Angle Bin







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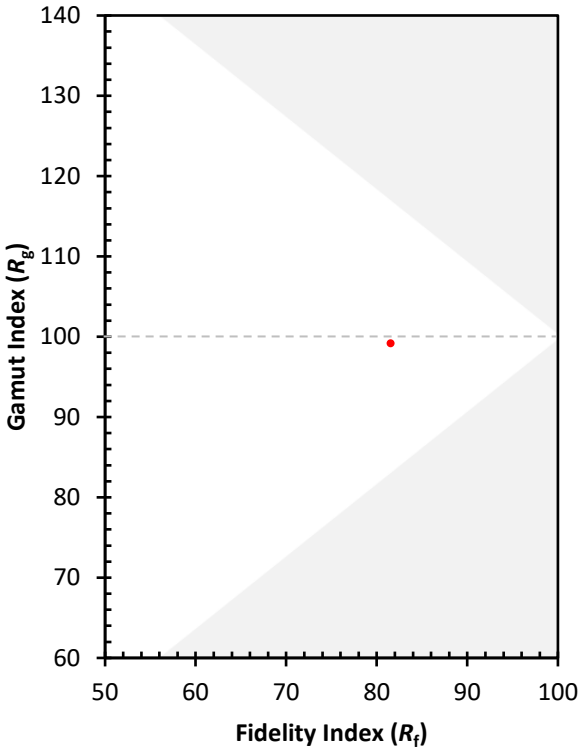
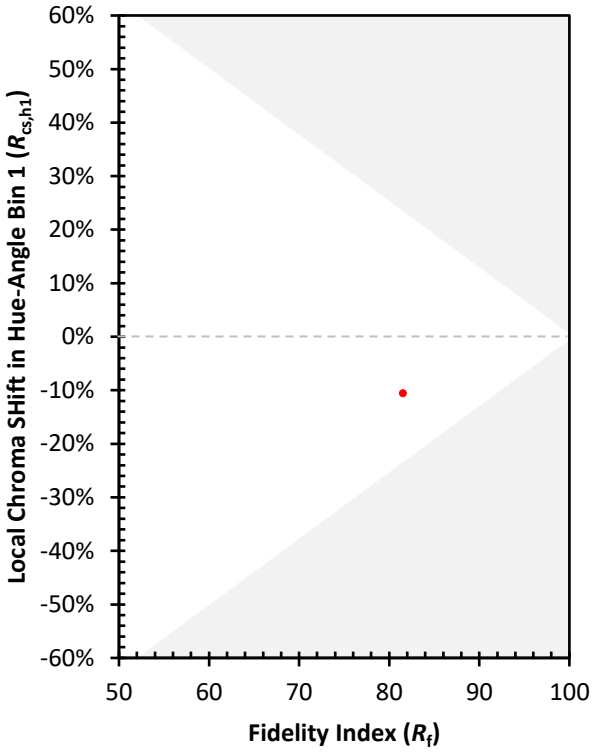
Measure Comparisons





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