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: P638465

Luminaire Tested: GWS-SA4E-830-U-AFL-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:	P638465
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-45)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4E-830-U-AFL-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	24755.6 lumens
Efficiency:	N/A
Efficacy:	122.2 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G2

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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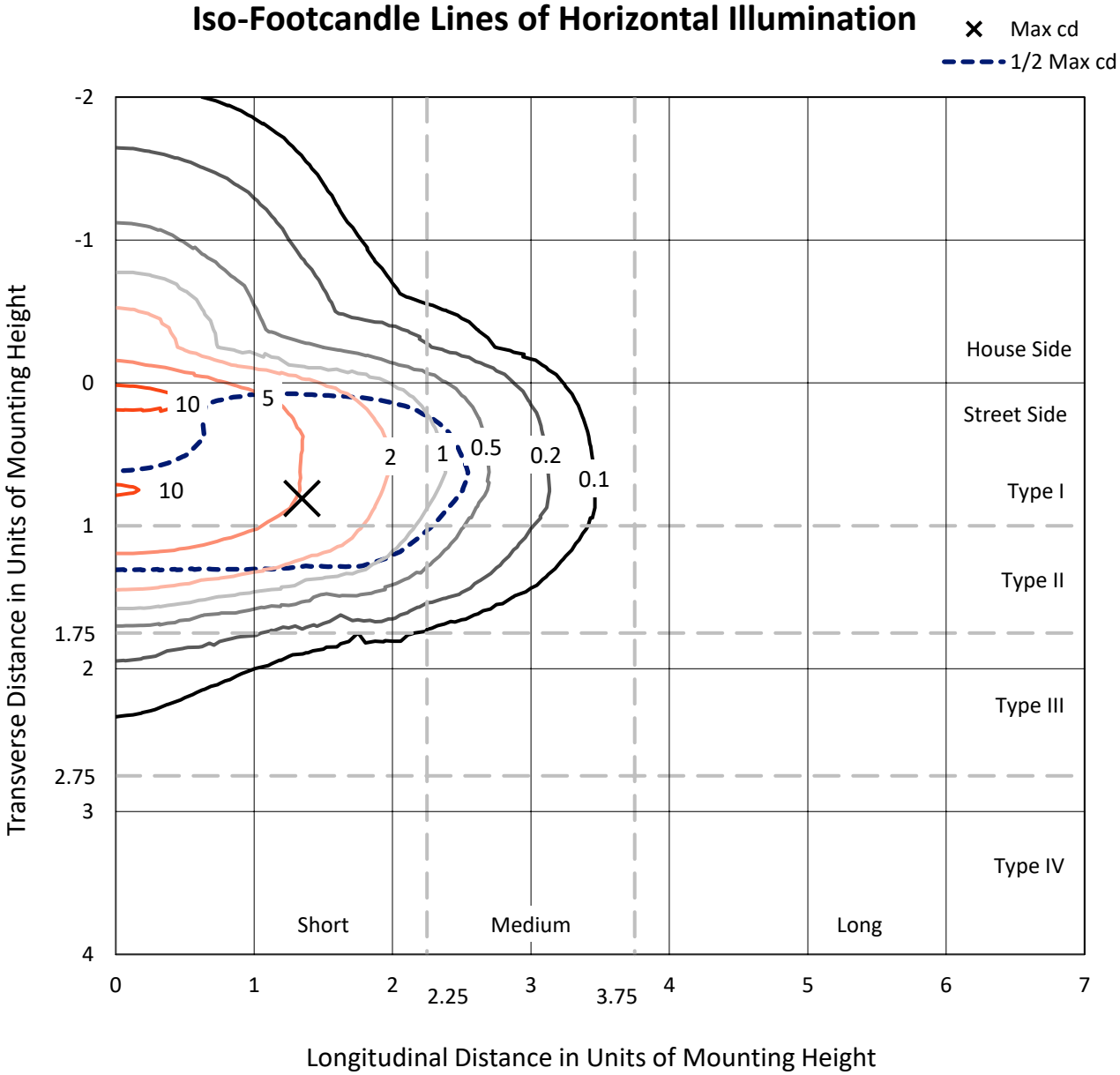
Scaled Data Report

REPORT NUMBER: P638465
CATALOG NUMBER: GWS-SA4E-830-U-AFL-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 11.9 fc
Type II - Short - N/A

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REPORT NUMBER: P638465
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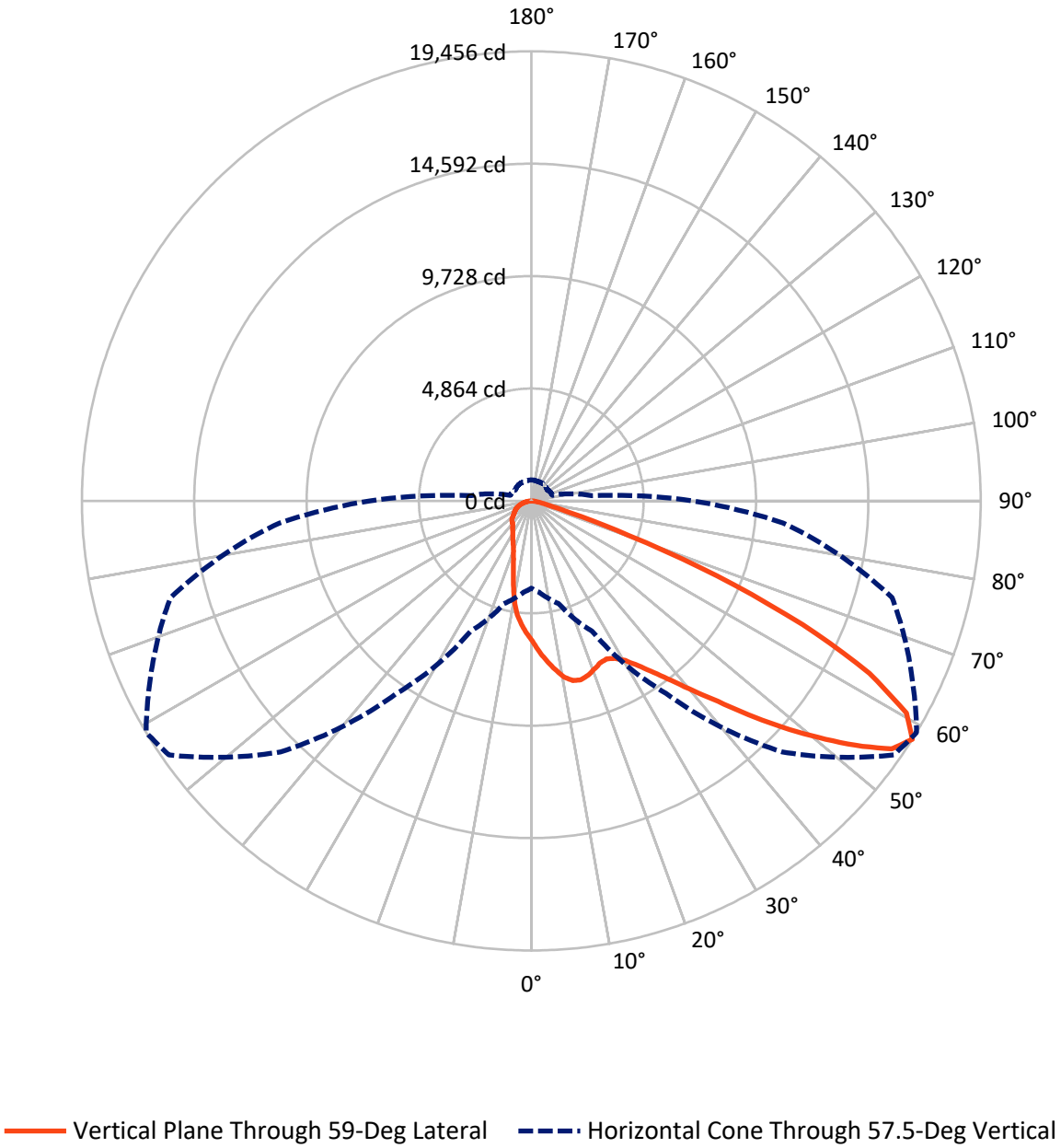
Luminous Intensity Polar Plot



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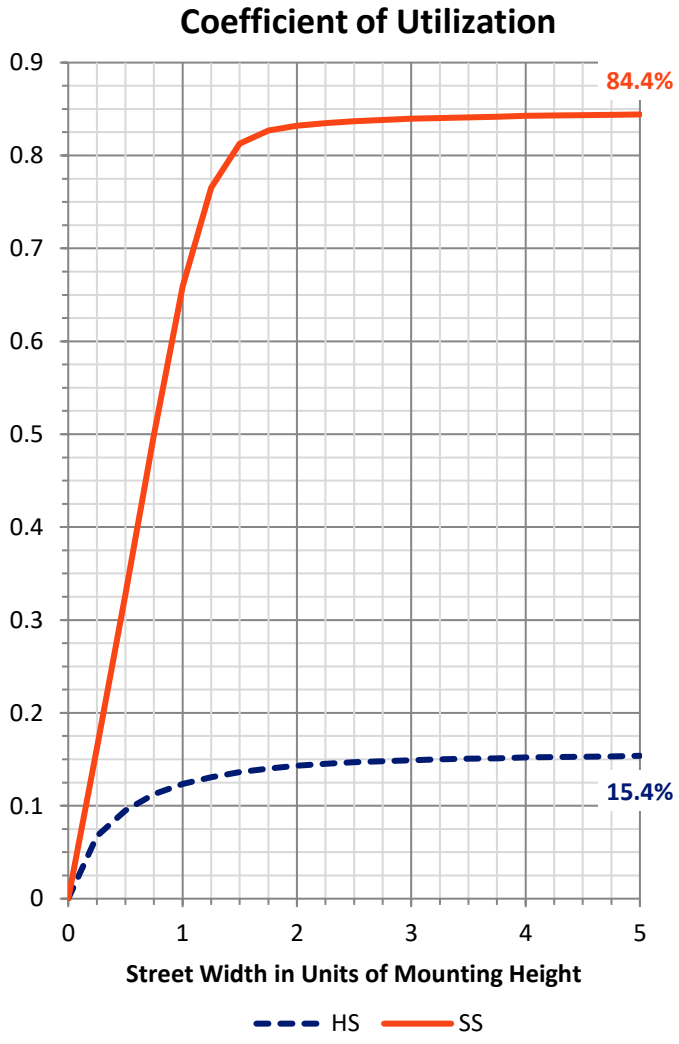
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3841.9	0.0	3841.9
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	20913.7	0.0	20913.7
	% Fixture	84.5	0.0	84.5
Total	Lumens	24755.6	0.0	24755.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	564.3	2.3
10°-20°	1429.8	5.8
20°-30°	2317.8	9.4
30°-40°	3728.5	15.1
40°-50°	5789.9	23.4
50°-60°	6236.5	25.2
60°-70°	3619.4	14.6
70°-80°	944.9	3.8
80°-90°	124.5	0.5
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°	24755.6	100.0
0°-180°	24755.6	100.0



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REPORT NUMBER: P638465
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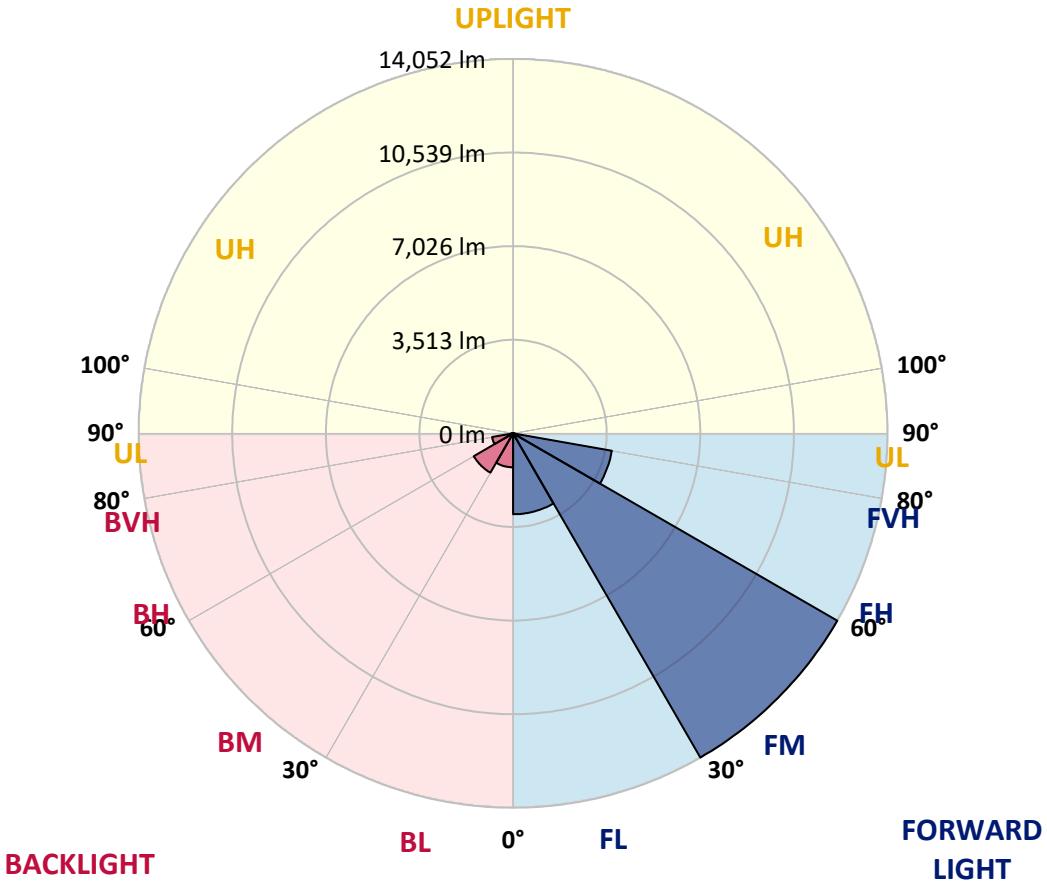
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	3037.3	12.3			
FM	(30°-60°)	14051.6	56.8			
FH	(60°-80°)	3765.2	15.2			G2/5000
FVH	(80°-90°)	59.6	0.2			G1/100
BL	(0°-30°)	1274.6	5.1	B3/2500		
BM	(30°-60°)	1703.4	6.9	B2/2500		
BH	(60°-80°)	799.1	3.2	B2/1000		G2/1000
BVH	(80°-90°)	64.9	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-G2
Type II Short



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Scaled Data Report

REPORT NUMBER: P638465
CATALOG NUMBER: GWS-SA4E-830-U-AFL-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	6077.0	6077.0	6077.0	6077.0	6077.0	6077.0	6077.0	6077.0	6077.0	6077.0	6077.0
2.5°	6892.6	6835.1	6875.2	6803.7	6774.1	6695.7	6594.6	6526.6	6422.1	6286.1	6167.6
5°	7577.5	7537.4	7546.2	7469.5	7401.5	7270.8	7063.4	6948.4	6770.6	6497.0	6242.6
7.5°	7556.6	7603.7	7629.8	7696.0	7715.2	7703.0	7516.5	7356.2	7161.0	6749.7	6366.3
10°	6774.1	6863.0	6943.2	7169.7	7445.1	7793.6	7837.2	7741.3	7544.4	7072.1	6514.4
12.5°	5921.9	5989.9	6061.3	6333.2	6754.9	7452.0	7924.3	7983.6	7905.2	7391.0	6681.7
15°	5503.6	5535.0	5603.0	5782.5	6118.8	6892.6	7772.7	8032.4	8173.5	7729.1	6870.0
17.5°	5486.2	5500.2	5533.3	5629.1	5862.6	6460.4	7499.1	7934.8	8384.4	8086.4	7089.5
20°	5847.0	5810.4	5789.4	5787.7	5902.7	6315.8	7234.2	7777.9	8483.8	8452.4	7324.8
22.5°	6347.1	6359.3	6314.0	6202.5	6188.5	6418.6	7101.7	7619.3	8513.4	8776.5	7542.7
25°	7056.4	7117.4	6983.2	6770.6	6666.1	6716.6	7183.7	7570.6	8509.9	9046.7	7678.6
27.5°	7884.2	7931.3	7795.4	7516.5	7300.4	7178.4	7427.6	7715.2	8539.5	9280.2	7760.5
30°	8827.1	8842.8	8656.3	8363.5	8048.1	7786.7	7833.7	8013.2	8691.1	9586.9	7856.4
32.5°	9979.0	10045.3	9762.9	9299.4	8858.5	8523.8	8379.2	8494.2	9018.8	9949.4	8004.5
35°	11441.2	11463.9	11104.9	10440.9	9817.0	9353.4	9050.2	9111.2	9517.2	10456.6	8227.6
37.5°	12819.7	12842.4	12460.7	11843.8	10951.5	10317.1	9878.0	9850.1	10155.1	11172.8	8591.8
40°	13694.6	13759.1	13588.3	13201.4	12349.2	11493.5	10897.5	10801.6	10991.6	12049.4	9099.0
42.5°	14165.2	14193.0	14189.6	14240.1	13733.0	12882.5	12047.7	11856.0	11983.2	12995.8	9611.3
45°	14168.6	14238.4	14424.8	14911.1	14933.7	14403.9	13501.2	13201.4	13084.6	13949.1	10146.3
47.5°	13534.3	13609.2	14121.6	15078.4	15784.2	15904.4	15242.2	14640.9	14149.5	14769.9	10585.5
50°	11613.8	11802.0	12777.9	14470.1	15951.5	17106.9	16903.0	16087.4	15095.8	15404.3	10860.9
52.5°	9945.9	9939.0	10540.2	12751.8	15252.6	17636.7	18509.9	17575.7	16031.7	15806.8	10930.6
55°	7283.0	7323.1	7938.3	9752.5	13387.9	17124.4	19393.4	18945.5	17105.2	16021.2	10902.7
57.5°	3776.6	3975.2	4606.1	6223.4	10172.5	15360.7	19158.2	19456.2	18196.2	16172.8	10939.3
60°	1908.3	1870.0	2096.5	2971.4	5894.0	11997.2	17708.2	18658.0	18393.1	16291.3	10962.0
62.5°	1274.0	1263.5	1200.8	1376.8	2408.5	7105.2	15095.8	16427.3	17025.0	16012.5	10672.7
65°	1103.2	1082.3	967.2	960.3	1169.4	2947.0	11064.8	12913.9	14071.0	14773.4	9980.8
67.5°	993.4	962.0	845.2	787.7	840.0	1294.9	6235.6	8661.5	10390.3	12493.8	8464.6
70°	887.1	871.4	754.6	671.0	665.7	789.5	2297.0	4470.2	6357.6	8523.8	6188.5
72.5°	794.7	766.8	667.5	587.3	547.2	559.4	996.9	1721.8	3290.3	5317.2	3701.6
75°	688.4	667.5	580.3	500.2	451.4	409.5	608.2	796.4	1500.5	2527.0	1748.0
77.5°	531.5	517.6	458.3	397.3	369.5	305.0	369.5	501.9	693.6	1064.8	909.7
80°	308.5	317.2	341.6	310.2	271.9	217.8	240.5	289.3	416.5	576.9	515.9
82.5°	155.1	165.6	221.3	179.5	162.1	127.2	142.9	170.8	217.8	318.9	202.2
85°	12.2	12.2	40.1	45.3	55.8	45.3	57.5	69.7	99.3	127.2	68.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	5.2	8.7	15.7	29.6	19.2
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: P638465
CATALOG NUMBER: GWS-SA4E-830-U-AFL-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6077.0	6077.0	6077.0	6077.0	6077.0	6077.0	6077.0	6077.0	6077.0	6077.0	6077.0
2.5°	6087.5	5998.6	5892.3	5805.1	5670.9	5599.5	5508.9	5397.3	5352.0	5331.1	5318.9
5°	6099.7	5942.8	5716.3	5507.1	5275.3	5092.3	4888.4	4675.8	4553.8	4524.2	4503.3
7.5°	6145.0	5925.4	5564.6	5219.6	4789.1	4390.0	4001.4	3616.2	3419.3	3344.4	3337.4
10°	6207.7	5918.4	5411.3	4837.9	4111.2	3480.3	3025.4	2723.9	2596.7	2554.9	2540.9
12.5°	6286.1	5913.2	5209.1	4308.1	3328.7	2732.6	2473.0	2424.2	2441.6	2438.1	2438.1
15°	6385.5	5920.2	4965.1	3708.6	2692.6	2371.9	2377.1	2434.6	2488.7	2497.4	2497.4
17.5°	6493.5	5913.2	4611.3	3107.3	2310.9	2286.5	2366.7	2446.8	2495.6	2502.6	2502.6
20°	6610.3	5880.1	4165.2	2540.9	2143.6	2232.5	2319.6	2382.4	2412.0	2419.0	2419.0
22.5°	6680.0	5786.0	3680.7	2150.6	2037.3	2147.1	2204.6	2269.1	2272.6	2216.8	2215.0
25°	6669.5	5609.9	3128.3	1899.6	1924.0	2019.9	2093.1	2047.7	1992.0	1960.6	1955.4
27.5°	6603.3	5345.0	2565.3	1709.6	1789.8	1897.9	1875.2	1836.9	1822.9	1788.1	1784.6
30°	6519.7	5019.1	2059.9	1561.5	1650.4	1749.7	1714.9	1711.4	1697.4	1659.1	1659.1
32.5°	6439.5	4682.8	1678.3	1451.7	1561.5	1568.5	1617.3	1620.8	1613.8	1547.6	1540.6
35°	6416.8	4346.4	1420.3	1364.6	1474.4	1470.9	1540.6	1538.9	1418.6	1326.2	1324.5
37.5°	6484.8	4004.9	1267.0	1293.1	1354.1	1399.4	1455.2	1354.1	1314.0	1258.3	1254.8
40°	6629.5	3689.4	1188.6	1251.3	1277.4	1343.7	1256.5	1263.5	1253.0	1211.2	1206.0
42.5°	6821.2	3421.0	1145.0	1237.4	1233.9	1251.3	1155.5	1183.3	1199.0	1167.6	1162.4
45°	7005.9	3187.5	1122.3	1185.1	1202.5	1101.4	1082.3	1108.4	1132.8	1120.6	1115.4
47.5°	7141.8	2985.3	1110.1	1113.6	1162.4	1050.9	1019.5	1031.7	1061.3	1066.6	1064.8
50°	7183.7	2812.8	1096.2	1054.4	1043.9	1000.3	975.9	972.5	1007.3	1031.7	1035.2
52.5°	7103.5	2659.5	1059.6	1002.1	951.5	958.5	949.8	932.4	967.2	1000.3	1003.8
55°	6985.0	2572.3	1002.1	951.5	892.3	920.2	923.7	908.0	930.6	953.3	953.3
57.5°	*6993.7*	*2622.9*	*946.3*	*904.5*	*840.0*	*876.6*	*895.8*	*888.8*	*888.8*	*906.2*	*908.0*
60°	7051.2	2696.1	909.7	845.2	787.7	826.1	869.6	862.7	847.0	869.6	869.6
62.5°	6885.6	2598.5	885.3	787.7	732.0	777.3	829.6	826.1	808.6	845.2	848.7
65°	6397.7	2337.0	857.4	716.3	676.2	728.5	773.8	786.0	770.3	819.1	827.8
67.5°	5362.5	1965.8	803.4	648.3	620.4	669.2	712.8	730.2	718.0	775.5	782.5
70°	3997.9	1591.1	718.0	573.4	552.5	596.0	636.1	643.1	644.8	712.8	719.8
72.5°	2549.7	1237.4	604.7	489.7	474.0	507.1	536.8	564.7	576.9	641.3	639.6
75°	1422.1	920.2	486.2	414.8	386.9	413.0	447.9	481.0	515.9	610.0	620.4
77.5°	819.1	646.6	385.2	332.9	299.8	327.6	357.3	404.3	508.9	590.8	580.3
80°	461.8	420.0	291.0	244.0	223.1	244.0	266.6	355.5	400.8	435.7	440.9
82.5°	216.1	235.3	198.7	149.9	149.9	163.8	184.7	275.4	303.2	247.5	216.1
85°	78.4	106.3	97.6	76.7	68.0	66.2	115.0	156.8	97.6	87.1	74.9
87.5°	20.9	29.6	27.9	19.2	10.5	8.7	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

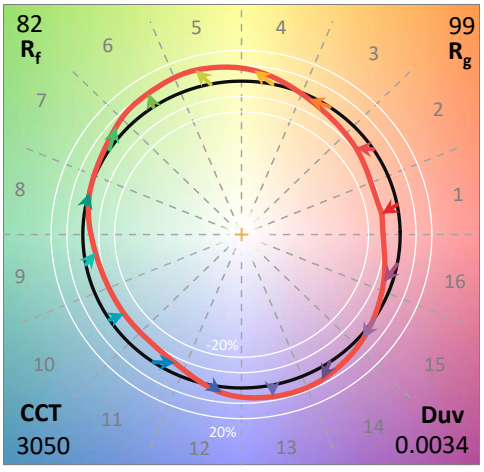
Test Information

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

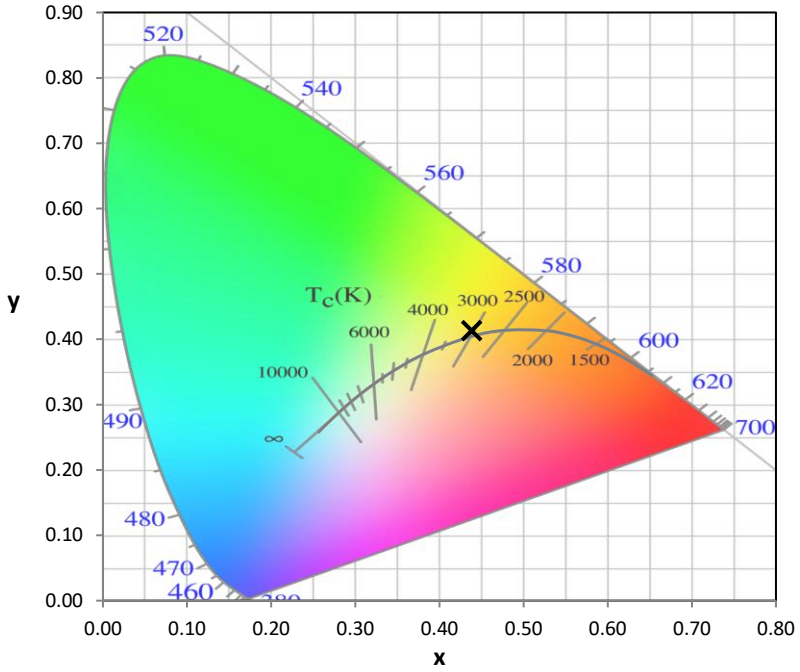
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

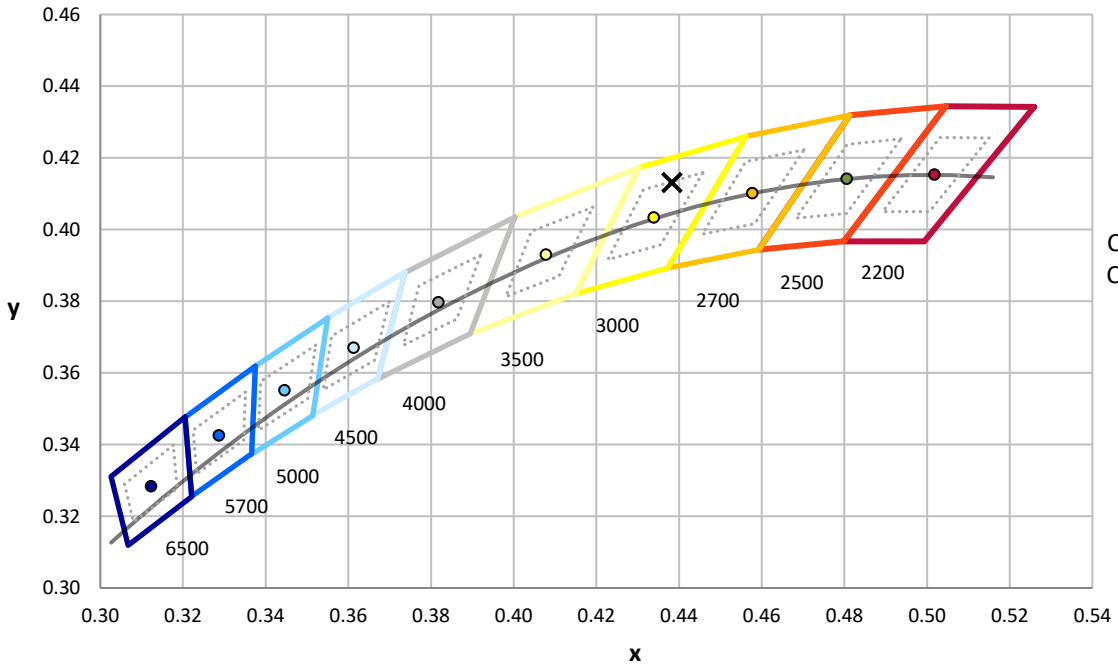
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

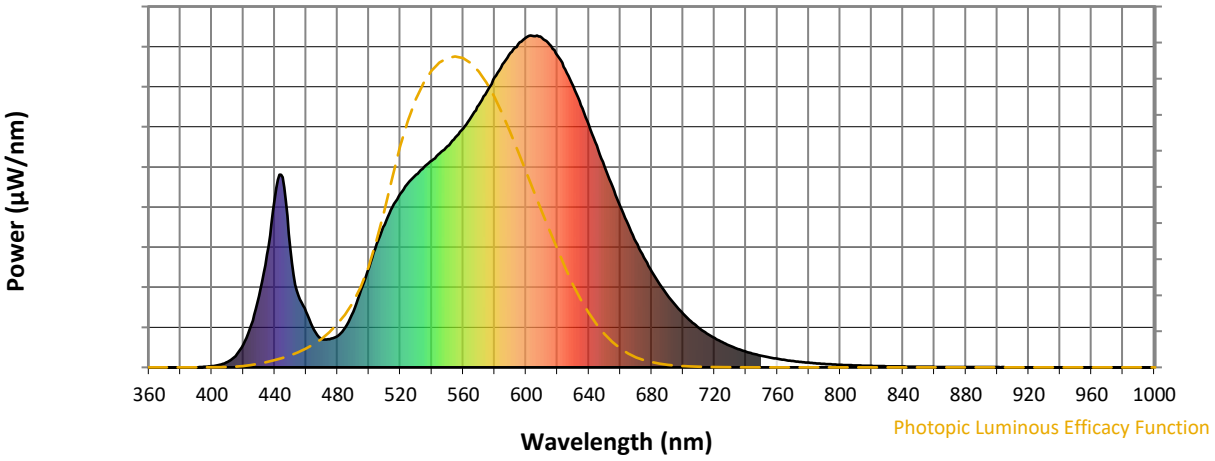


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

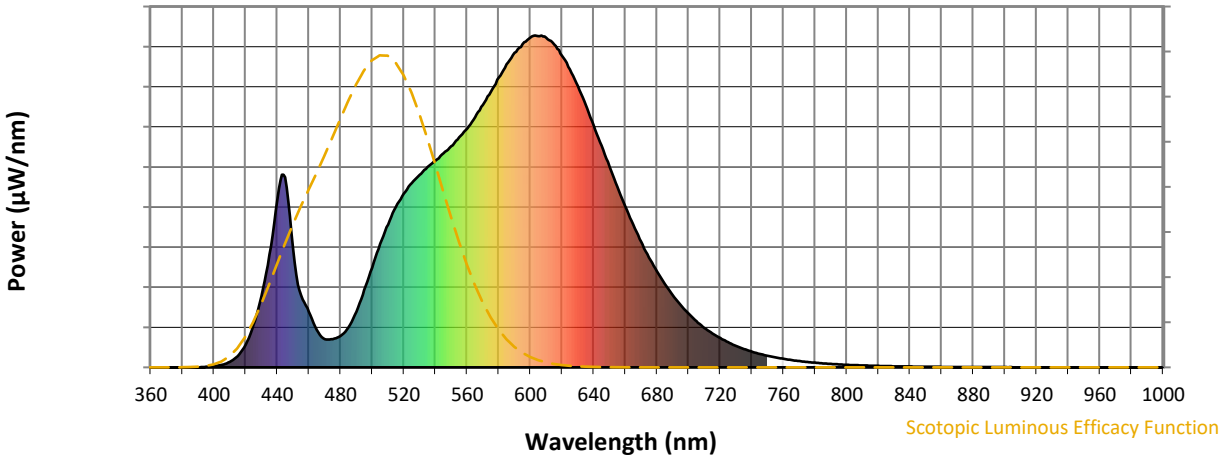


Photopic Lumens: NR

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			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength

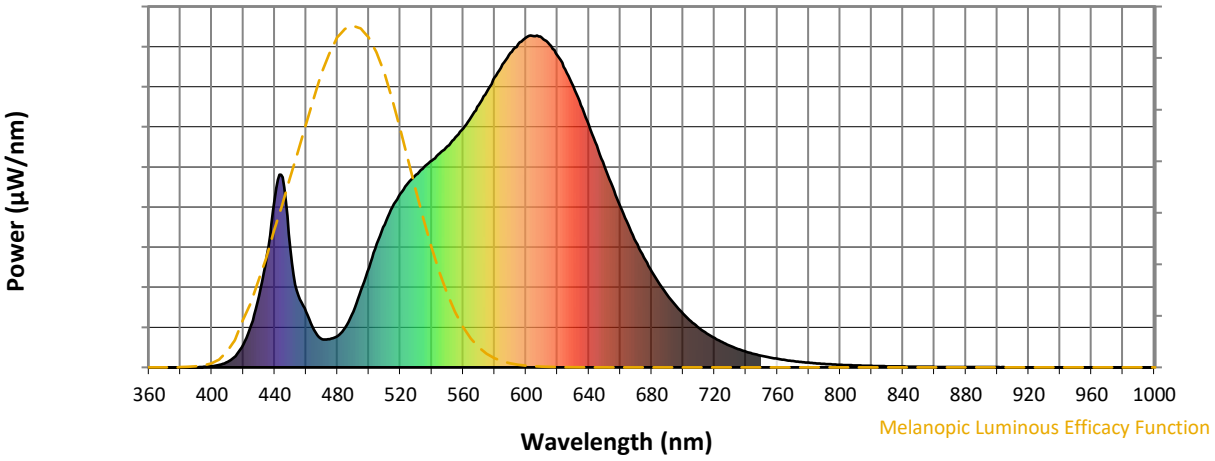


Scotopic Lumens: NR **S/P: 1.27**

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			

REPORT NUMBER: SP1-2408-195-9

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			

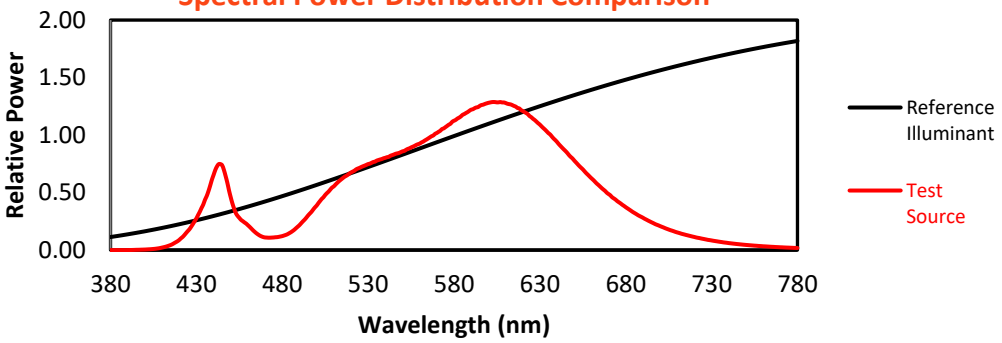
REPORT NUMBER: SP1-2408-195-9

TM-30-18

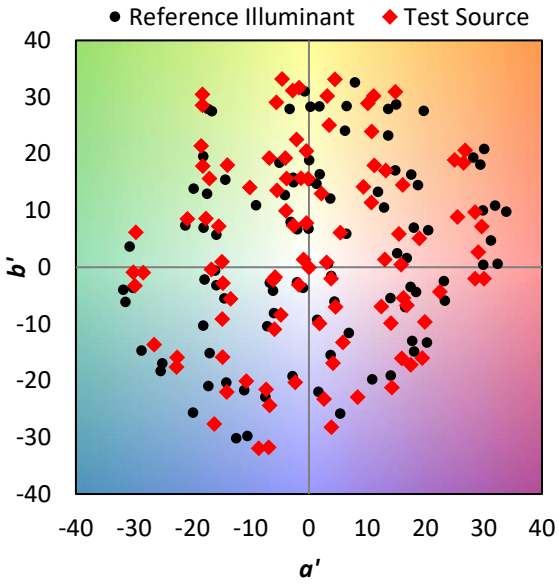
Summary

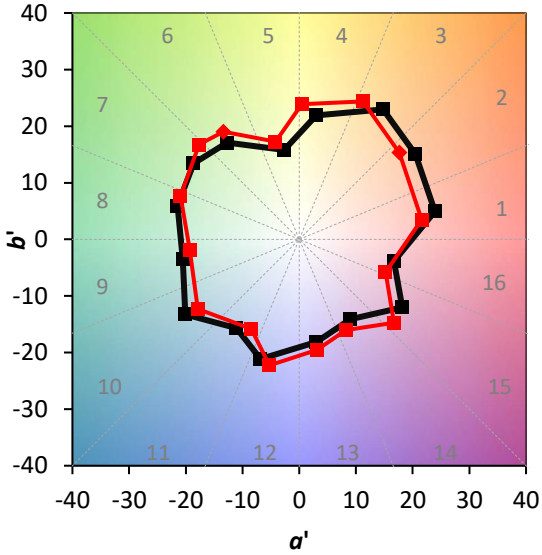
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

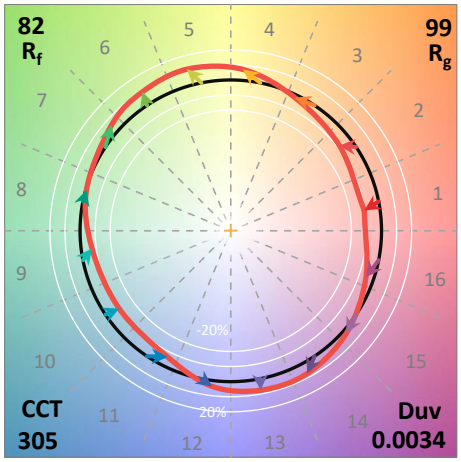
Spectral Power Distribution Comparison

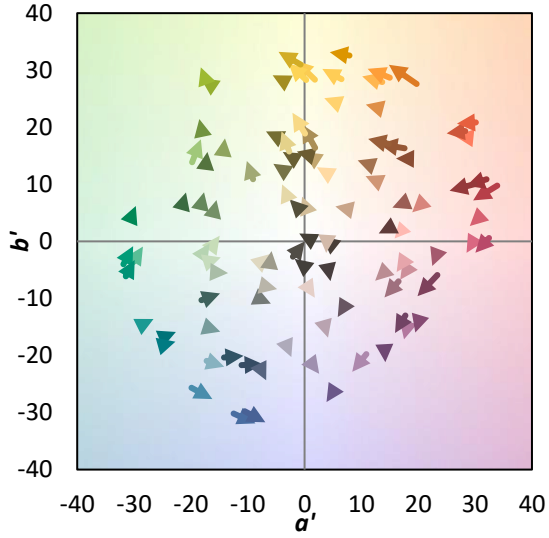


Color Vector Graphics







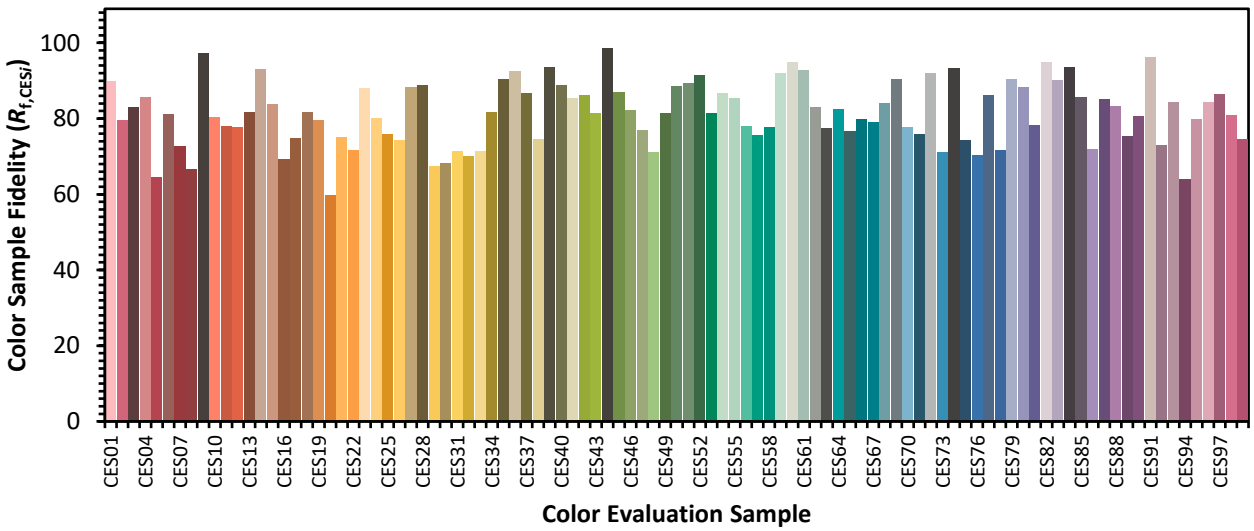


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

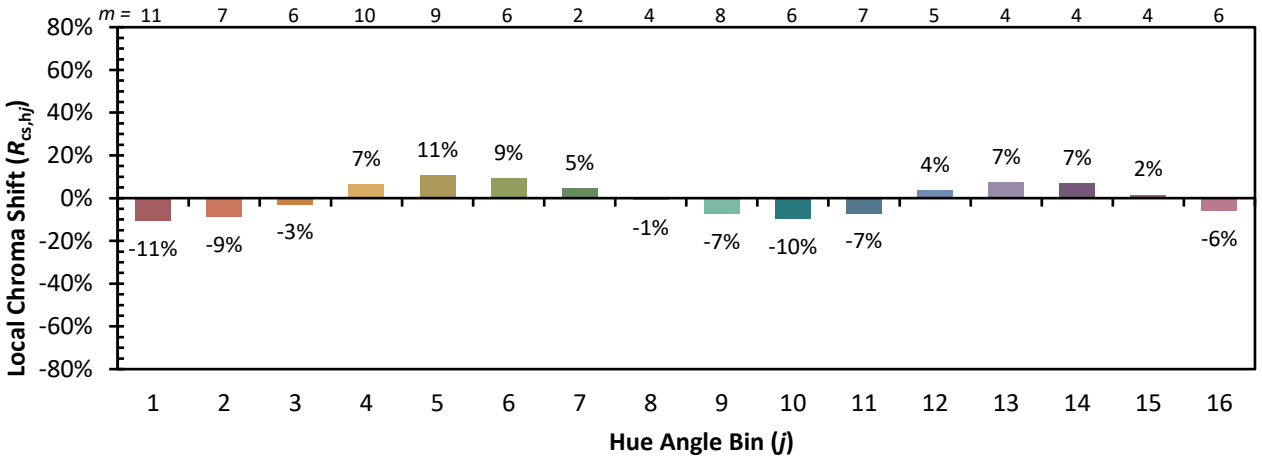
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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	

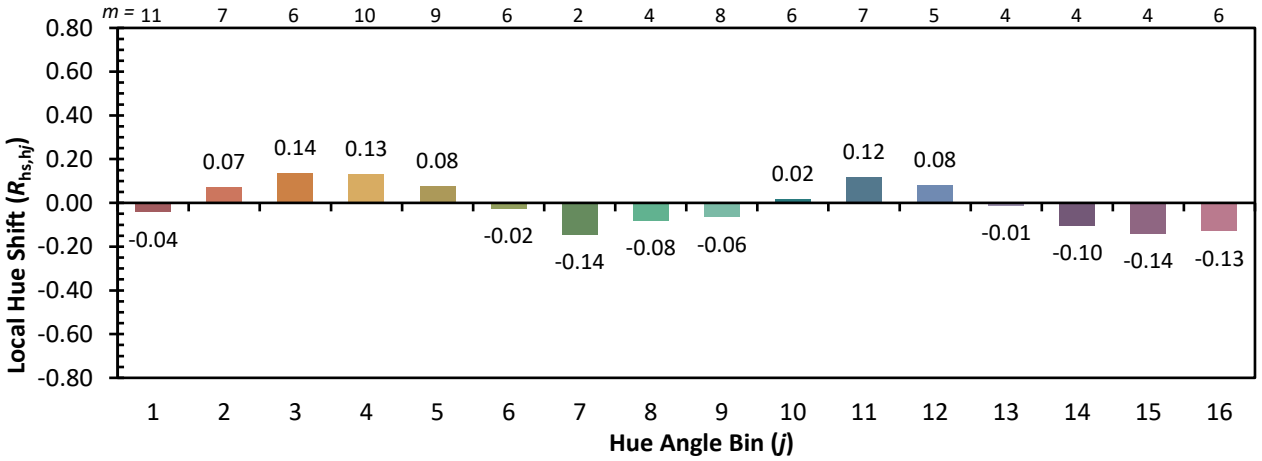


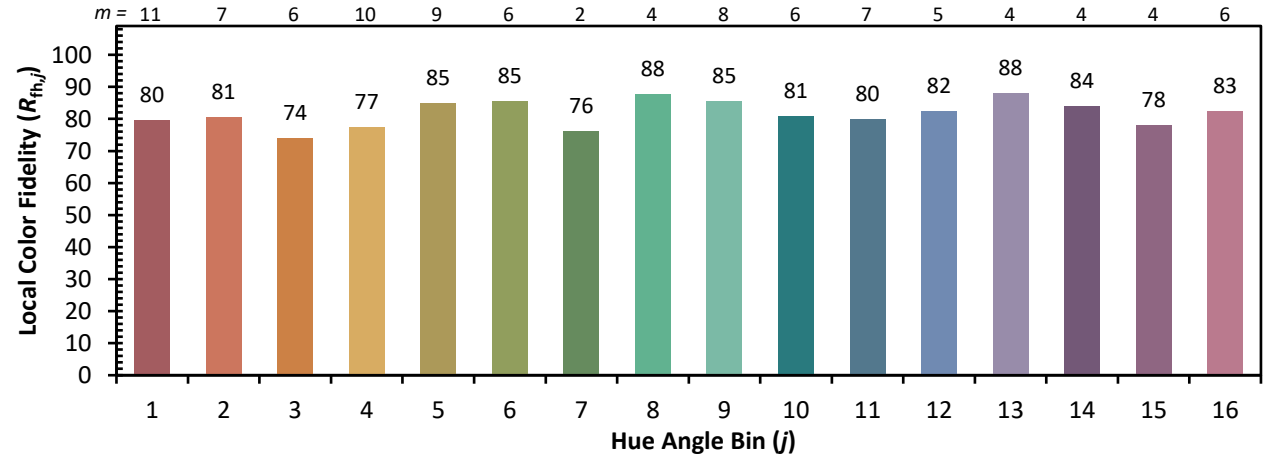
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



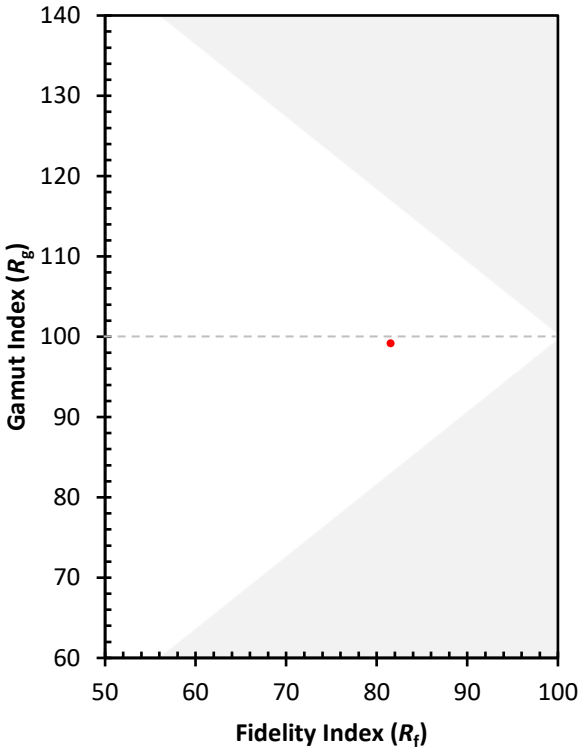


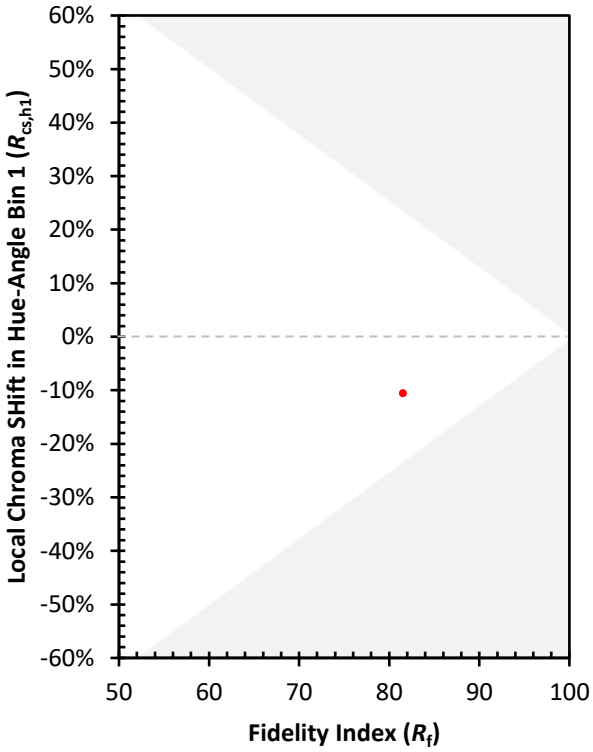


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





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