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: P638499

Luminaire Tested: GWS-SA4E-830-U-T3-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:	P638499
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-23)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4E-830-U-T3-W
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	24326.9 lumens
Efficiency:	N/A
Efficacy:	120.1 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G4

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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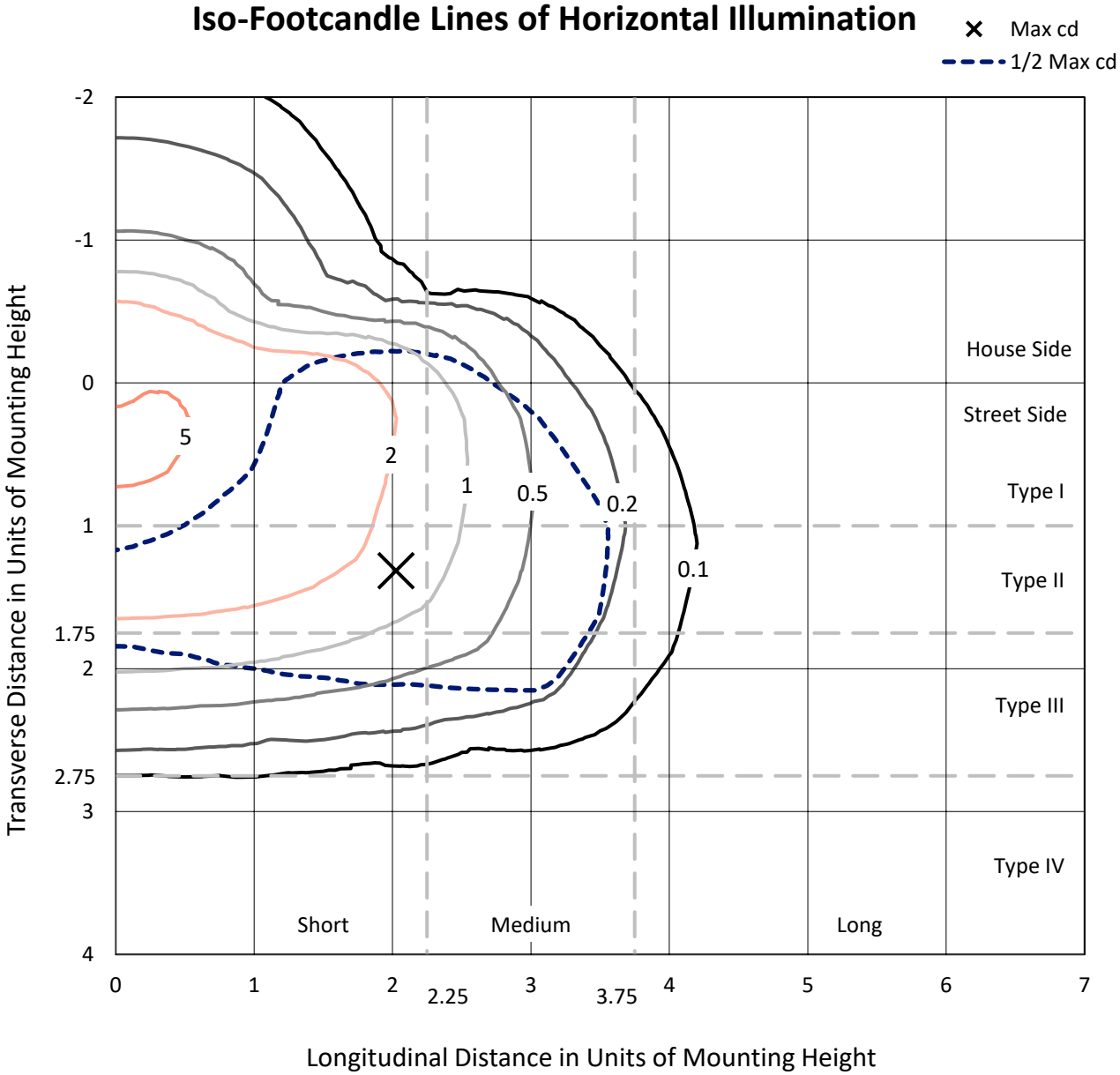
Scaled Data Report

REPORT NUMBER: P638499
CATALOG NUMBER: GWS-SA4E-830-U-T3-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
Type III - Short - N/A

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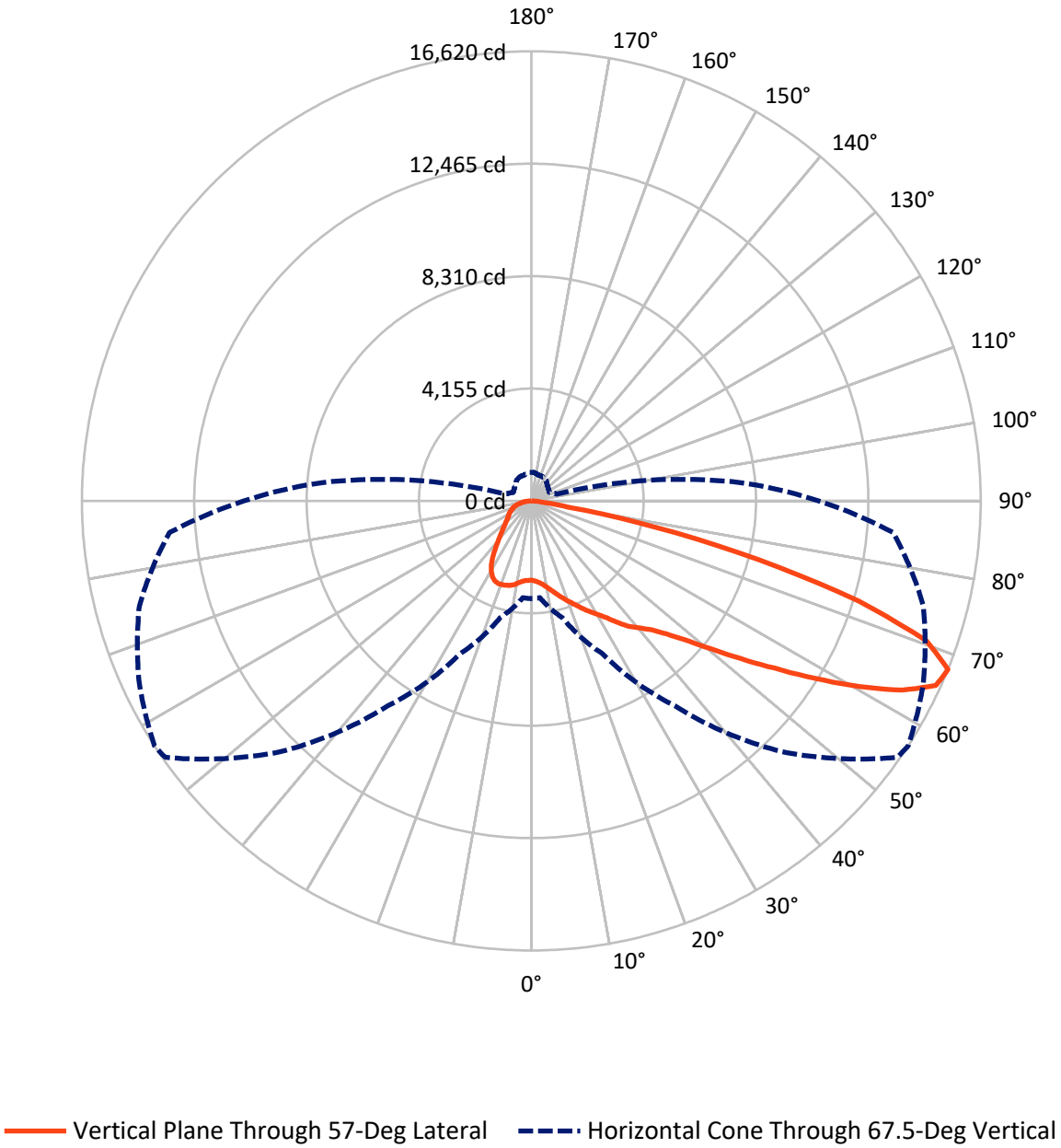
Luminous Intensity Polar Plot



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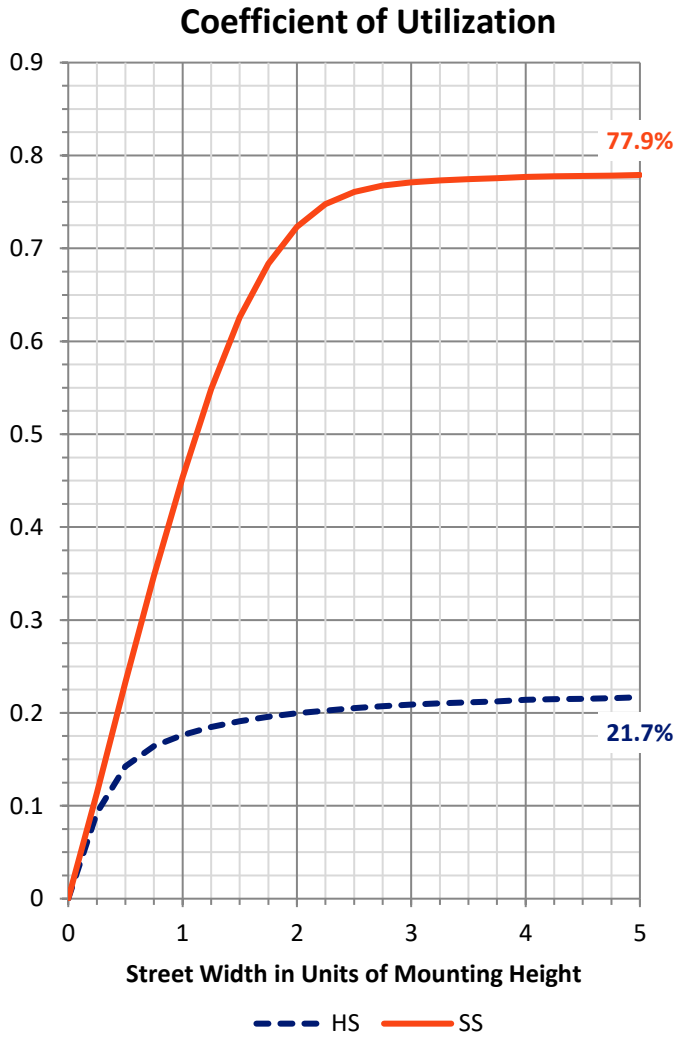
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5348.6	0.0	5348.6
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	18978.3	0.0	18978.3
	% Fixture	78.0	0.0	78.0
Total	Lumens	24326.9	0.0	24326.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.7	1.2
10°-20°	962.4	4.0
20°-30°	1715.8	7.1
30°-40°	2494.6	10.3
40°-50°	3610.5	14.8
50°-60°	5650.3	23.2
60°-70°	6591.4	27.1
70°-80°	2751.5	11.3
80°-90°	259.7	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°	24326.9	100.0
0°-180°	24326.9	100.0



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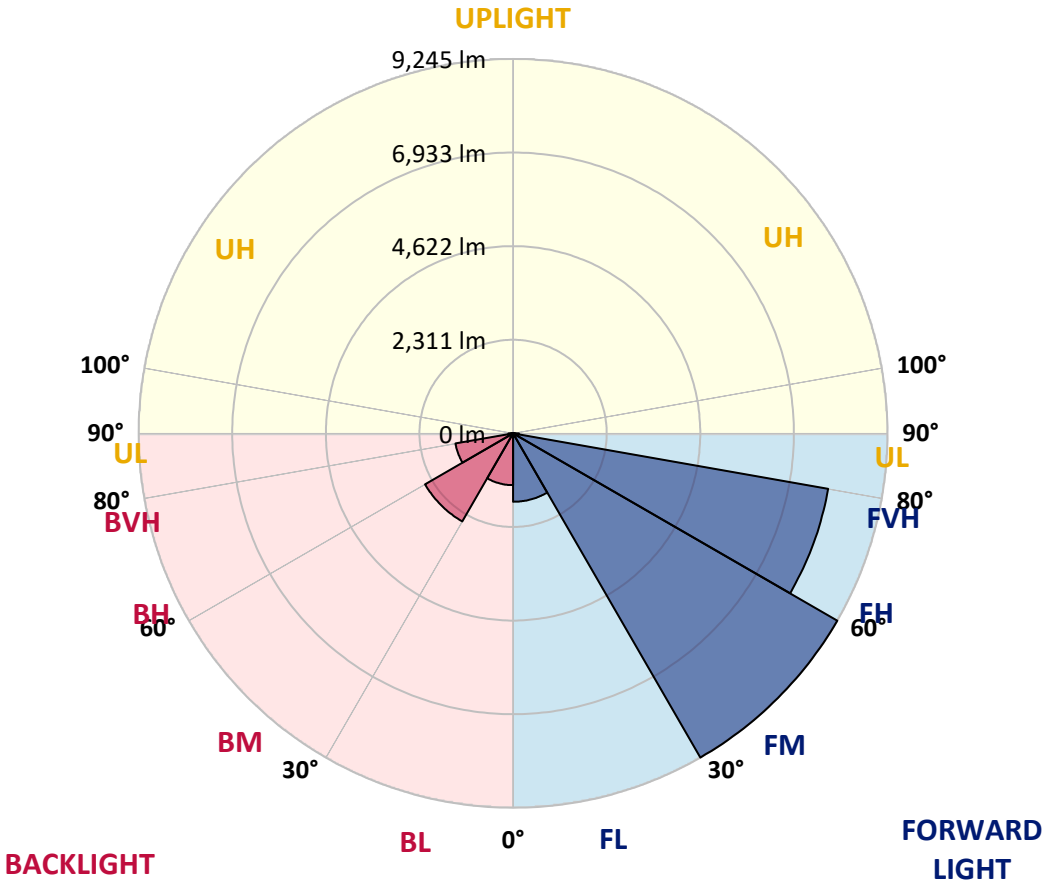
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1689.7	6.9			
FM	(30°-60°)	9244.6	38.0			
FH	(60°-80°)	7899.4	32.5			G4/12000
FVH	(80°-90°)	144.7	0.6			G2/225
BL	(0°-30°)	1279.2	5.3	B3/2500		
BM	(30°-60°)	2510.8	10.3	B3/5000		
BH	(60°-80°)	1443.6	5.9	B3/2500		G3/2500
BVH	(80°-90°)	115.0	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
Type III Short



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Scaled Data Report

REPORT NUMBER: P638499
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2931.2	2931.2	2931.2	2931.2	2931.2	2931.2	2931.2	2931.2	2931.2	2931.2	2931.2
2.5°	2973.1	2969.6	2967.8	2978.3	2974.8	2973.1	2973.1	2971.3	2967.8	2953.9	2934.7
5°	3055.0	3048.0	3041.0	3049.7	3042.8	3035.8	3034.0	3030.6	3018.4	2997.4	2967.8
7.5°	3140.4	3133.4	3135.1	3140.4	3135.1	3131.6	3126.4	3122.9	3103.8	3070.6	3030.6
10°	3260.6	3260.6	3264.1	3269.3	3271.1	3265.8	3255.4	3250.1	3227.5	3185.7	3129.9
12.5°	3434.9	3431.4	3431.4	3427.9	3433.1	3427.9	3417.4	3408.7	3380.8	3326.8	3246.7
15°	3664.9	3651.0	3638.8	3616.1	3609.1	3590.0	3593.5	3588.2	3562.1	3488.9	3387.8
17.5°	3910.6	3908.9	3889.7	3844.4	3799.1	3767.7	3774.7	3773.0	3759.0	3659.7	3530.7
20°	4126.7	4135.4	4118.0	4083.2	4022.2	3962.9	3959.4	3968.1	3950.7	3851.4	3671.9
22.5°	4369.0	4362.0	4344.6	4299.2	4253.9	4191.2	4170.3	4163.3	4156.3	4043.1	3816.5
25°	4599.0	4619.9	4597.2	4555.4	4485.7	4417.8	4400.3	4407.3	4388.1	4238.3	3971.6
27.5°	4890.0	4898.7	4884.8	4827.3	4768.0	4672.2	4639.1	4639.1	4632.1	4421.2	4093.6
30°	5200.2	5224.6	5200.2	5153.2	5092.2	4954.5	4883.1	4876.1	4855.2	4609.4	4236.5
32.5°	5512.2	5529.6	5512.2	5466.9	5397.2	5276.9	5174.1	5158.4	5130.5	4815.1	4382.9
35°	5789.3	5804.9	5801.5	5811.9	5754.4	5602.8	5540.1	5533.1	5459.9	5083.5	4581.6
37.5°	6092.5	6111.7	6085.5	6106.4	6083.8	5940.9	5921.7	5886.8	5782.3	5336.2	4790.7
40°	6437.5	6455.0	6413.1	6421.9	6395.7	6315.6	6218.0	6170.9	6015.8	5609.8	5120.1
42.5°	6807.0	6847.1	6866.2	6850.6	6789.6	6744.3	6573.5	6514.2	6385.3	6102.9	5662.0
45°	7342.0	7401.3	7429.1	7389.1	7362.9	7298.4	7089.3	7017.9	6949.9	6798.3	6418.4
47.5°	7918.8	7972.9	8061.7	8079.2	8100.1	8051.3	7756.8	7687.1	7699.3	7681.8	7349.0
50°	8378.9	8424.2	8624.6	8839.0	9016.7	9030.7	8654.3	8579.3	8645.5	8701.3	8469.5
52.5°	8713.5	8753.6	9018.5	9461.1	9863.7	10161.7	9755.6	9670.3	9724.3	9849.8	9743.5
55°	8985.4	9041.1	9318.2	9997.9	10811.7	11282.3	11022.6	10914.5	10891.9	11047.0	11108.0
57.5°	9128.3	9145.7	9534.3	10417.9	11507.1	12381.9	12495.2	12373.2	12157.1	12242.5	12559.7
60°	8802.4	8832.0	9363.5	10525.9	12056.0	13472.8	14041.0	13939.9	13479.8	13526.9	13877.1
62.5°	7901.4	7943.2	8582.8	10011.8	12101.3	14201.3	15468.2	15403.7	14786.8	14532.4	14637.0
65°	6338.2	6352.2	7014.4	8739.7	11200.3	14291.9	16463.3	16447.6	15700.0	15104.0	14656.1
67.5°	3614.4	3590.0	4475.3	6233.6	9243.3	13113.8	16527.8	16620.2	15996.3	15009.9	13436.2
70°	1566.7	1570.2	1978.0	3075.9	5982.7	10599.1	15351.5	15510.1	15138.9	13443.2	10689.7
72.5°	725.0	735.4	911.4	1331.4	2554.8	6575.2	12517.8	12660.7	12341.8	10759.4	7777.7
75°	512.4	521.1	608.2	763.3	1174.6	2561.8	8373.7	8673.4	8828.5	8047.8	5125.3
77.5°	388.6	400.8	444.4	529.8	725.0	907.9	4006.5	4721.0	5623.7	5006.8	2640.2
80°	247.5	247.5	294.5	353.8	442.6	472.3	1157.2	1371.5	2751.7	2063.4	1036.9
82.5°	167.3	172.5	200.4	224.8	254.4	268.4	496.7	529.8	794.7	702.3	427.0
85°	88.9	92.4	104.6	102.8	122.0	106.3	209.1	207.4	291.0	318.9	162.1
87.5°	0.0	0.0	1.7	1.7	3.5	5.2	22.7	24.4	61.0	97.6	54.0
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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Scaled Data Report

REPORT NUMBER: P638499
CATALOG NUMBER: GWS-SA4E-830-U-T3-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2931.2	2931.2	2931.2	2931.2	2931.2	2931.2	2931.2	2931.2	2931.2	2931.2	2931.2
2.5°	2945.2	2924.3	2934.7	2931.2	2941.7	2941.7	2922.5	2917.3	2919.0	2898.1	2891.1
5°	2971.3	2946.9	2952.1	2945.2	2955.6	2964.3	2955.6	2955.6	2966.1	2950.4	2941.7
7.5°	3030.6	3002.7	3002.7	2994.0	3006.2	3013.1	3006.2	3016.6	3035.8	3020.1	3011.4
10°	3124.7	3091.6	3093.3	3082.8	3088.1	3084.6	3056.7	3048.0	3053.2	3039.3	3032.3
12.5°	3246.7	3201.3	3201.3	3180.4	3168.2	3131.6	3074.1	3053.2	3056.7	3044.5	3039.3
15°	3363.4	3321.6	3312.9	3271.1	3215.3	3147.3	3095.0	3081.1	3084.6	3072.4	3063.7
17.5°	3501.1	3447.1	3415.7	3339.0	3236.2	3166.5	3114.2	3081.1	3053.2	3025.3	3018.4
20°	3628.3	3560.3	3502.8	3384.3	3258.9	3163.0	3065.4	2983.5	2915.5	2878.9	2870.2
22.5°	3759.0	3671.9	3570.8	3415.7	3257.1	3100.3	2920.8	2797.0	2696.0	2641.9	2652.4
25°	3882.7	3773.0	3635.3	3445.3	3201.3	2960.9	2716.9	2532.1	2417.1	2375.3	2363.1
27.5°	3985.6	3849.6	3694.5	3431.4	3086.3	2760.4	2438.0	2232.4	2120.9	2073.8	2061.6
30°	4100.6	3947.2	3779.9	3366.9	2905.1	2479.9	2122.6	1955.3	1875.1	1829.8	1831.6
32.5°	4233.0	4072.7	3900.2	3243.2	2673.3	2176.6	1862.9	1747.9	1683.5	1638.1	1631.2
35°	4410.8	4252.2	3980.3	3056.7	2378.8	1897.8	1685.2	1591.1	1510.9	1451.7	1439.5
37.5°	4630.4	4522.3	3989.0	2807.5	2063.4	1706.1	1558.0	1456.9	1359.3	1280.9	1272.2
40°	5006.8	4883.1	3917.6	2495.6	1795.0	1582.4	1451.7	1334.9	1221.6	1134.5	1122.3
42.5°	5543.5	5289.1	3764.2	2143.5	1592.8	1484.8	1350.6	1202.5	1087.4	1026.5	1017.7
45°	6226.7	5742.2	3534.2	1812.4	1443.0	1388.9	1244.3	1089.2	1028.2	984.6	975.9
47.5°	7063.2	6270.2	3269.3	1554.5	1326.2	1301.8	1136.2	1050.8	996.8	960.2	951.5
50°	8063.5	6942.9	3051.5	1352.3	1221.6	1200.7	1101.4	1028.2	984.6	955.0	948.0
52.5°	9205.0	7690.5	2945.2	1207.7	1131.0	1110.1	1089.2	1023.0	986.4	963.7	955.0
55°	10390.0	8478.2	2845.8	1096.2	1054.3	1066.5	1090.9	1040.4	1012.5	982.9	974.2
57.5°	11534.9	9217.2	2601.9	1009.0	998.6	1045.6	1099.6	1057.8	1024.7	995.1	984.6
60°	12324.4	9621.5	2188.8	939.3	956.7	1019.5	1077.0	1031.7	989.9	977.7	972.4
62.5°	12537.0	9572.7	1699.1	867.9	906.2	962.0	1017.7	988.1	944.5	963.7	965.5
65°	12040.3	9049.9	1275.7	798.2	840.0	887.0	956.7	944.5	928.9	981.1	982.9
67.5°	*10634.0*	*7765.5*	*972.4*	*737.2*	*772.0*	*829.5*	*937.6*	*988.1*	*991.6*	*1057.8*	*1050.8*
70°	8046.1	5801.5	761.6	679.7	719.7	829.5	998.6	1021.2	979.4	1040.4	1026.5
72.5°	5562.7	3828.7	648.3	629.1	655.3	791.2	996.8	996.8	951.5	951.5	925.4
75°	3455.8	2251.6	564.6	564.6	564.6	691.9	968.9	918.4	838.2	801.6	780.7
77.5°	1706.1	1094.4	474.0	491.4	472.3	578.6	791.2	751.1	702.3	664.0	650.0
80°	728.4	547.2	383.4	402.6	379.9	435.7	627.4	618.7	571.6	521.1	505.4
82.5°	334.6	282.3	306.7	315.4	277.1	327.6	458.3	458.3	432.2	362.5	336.3
85°	142.9	149.9	212.6	212.6	174.3	184.7	245.7	233.5	209.1	170.8	156.8
87.5°	48.8	73.2	108.0	94.1	36.6	15.7	8.7	3.5	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

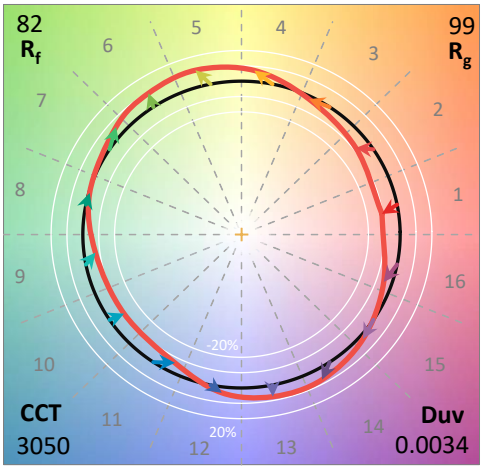
Test Information

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

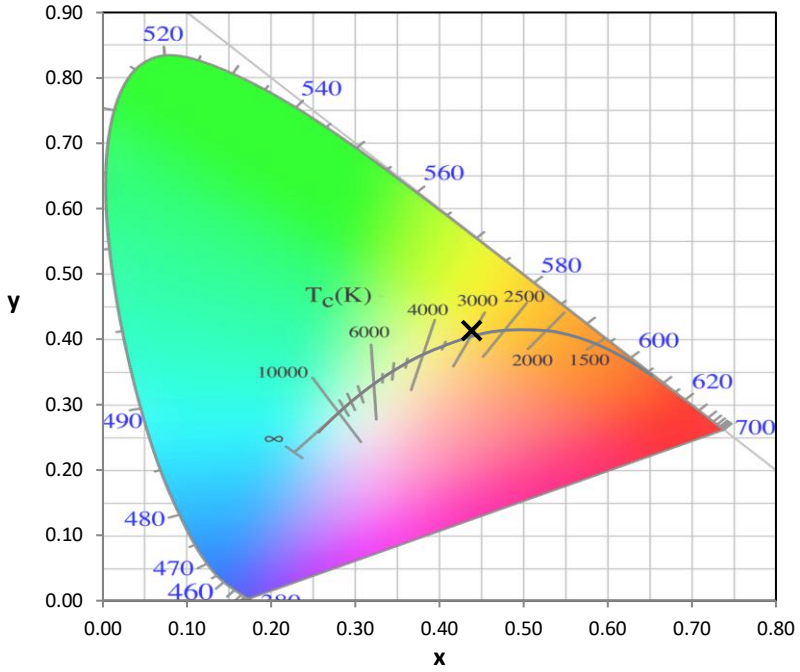
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

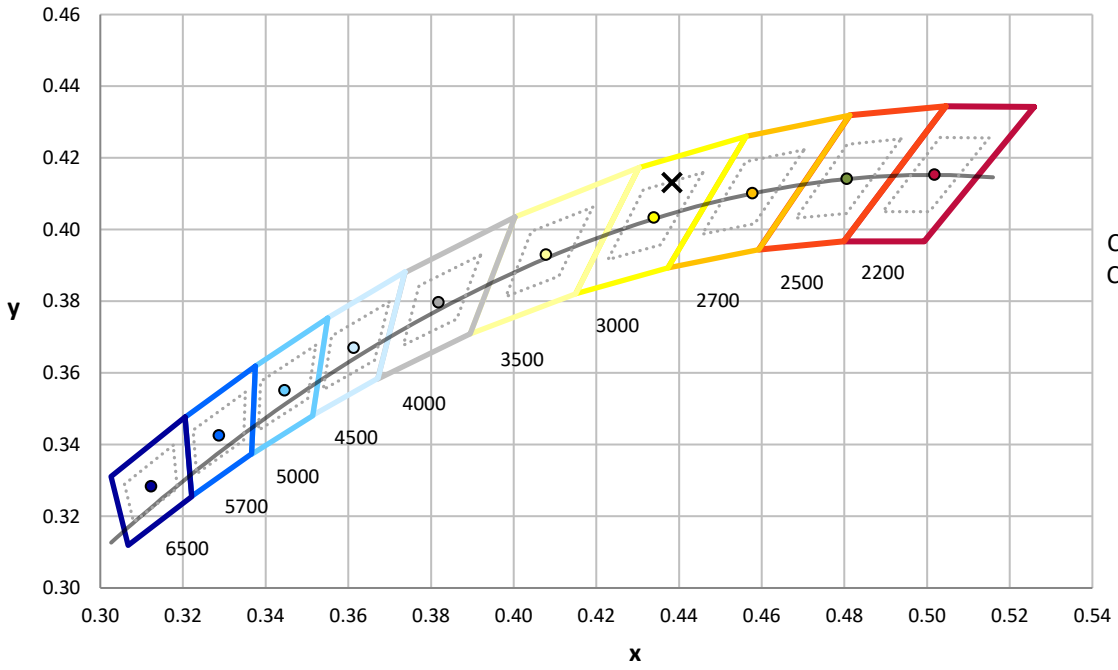
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

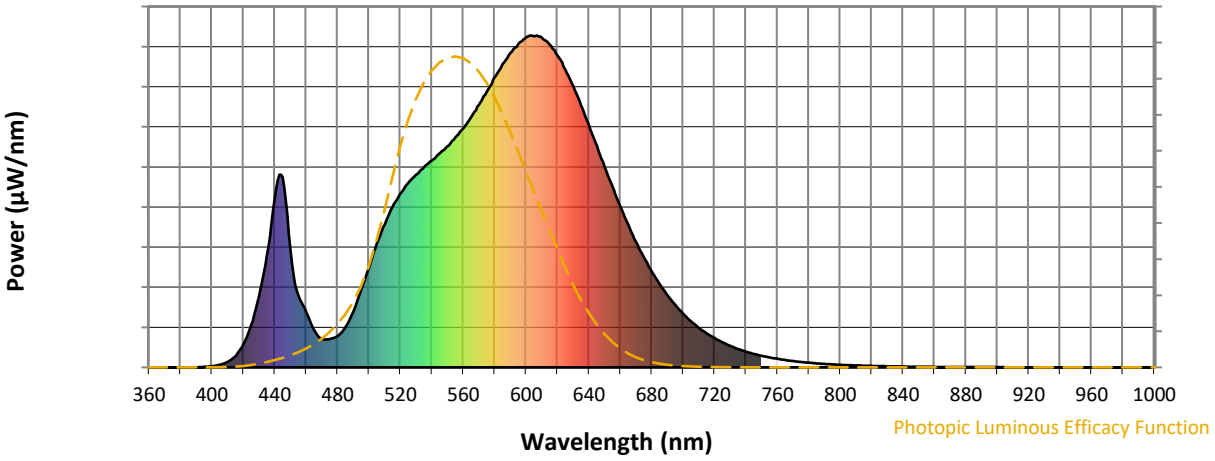


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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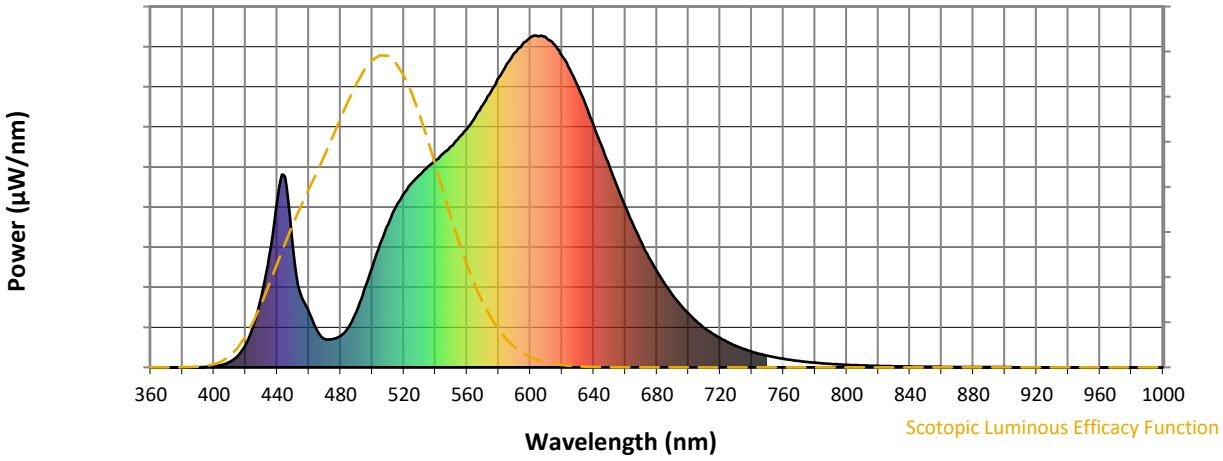
Scotopic Flux vs. Wavelength



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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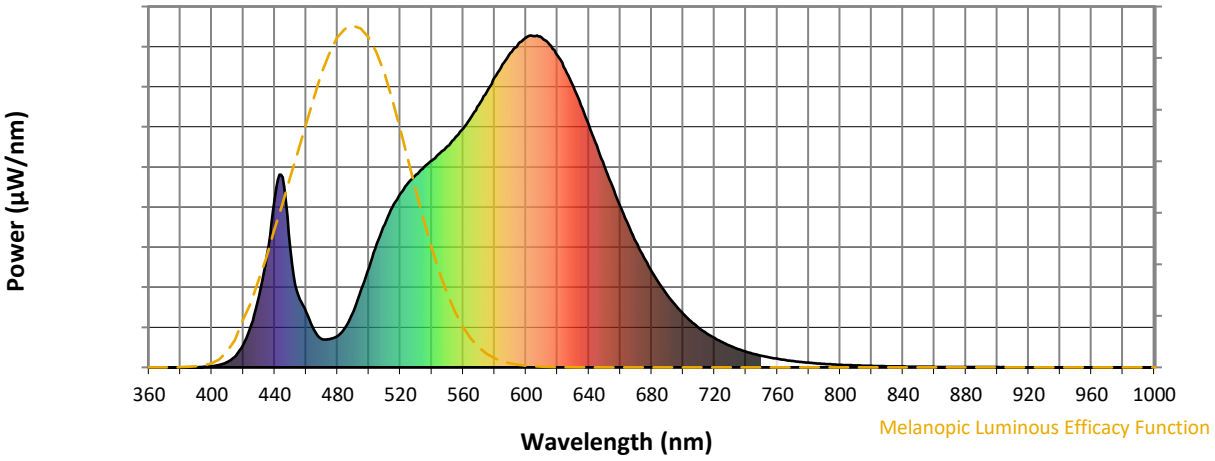
Melanopic Flux vs. Wavelength



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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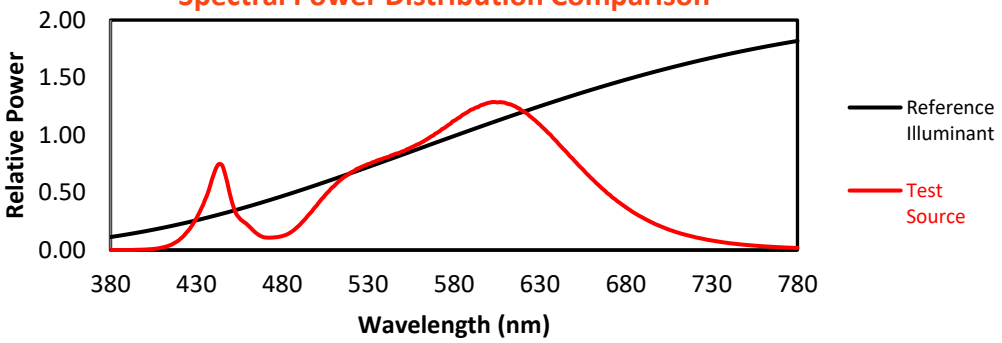
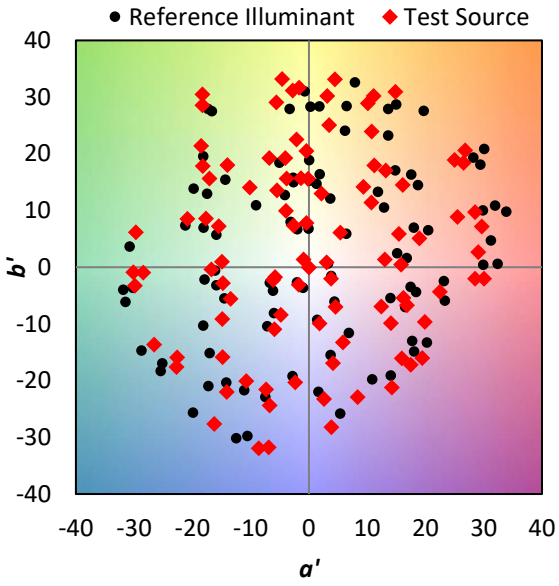
Summary

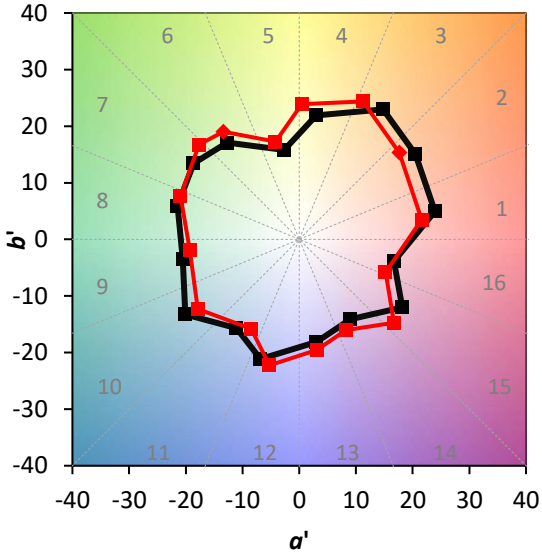
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

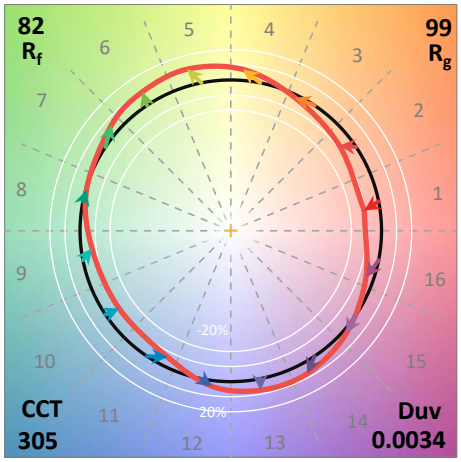
Spectral Power Distribution Comparison

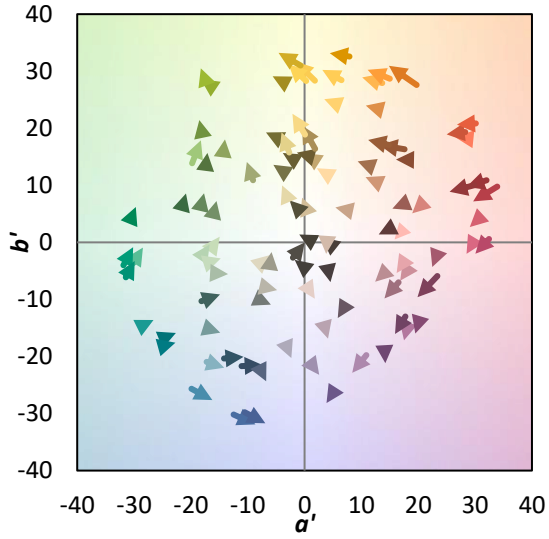


Color Vector Graphics









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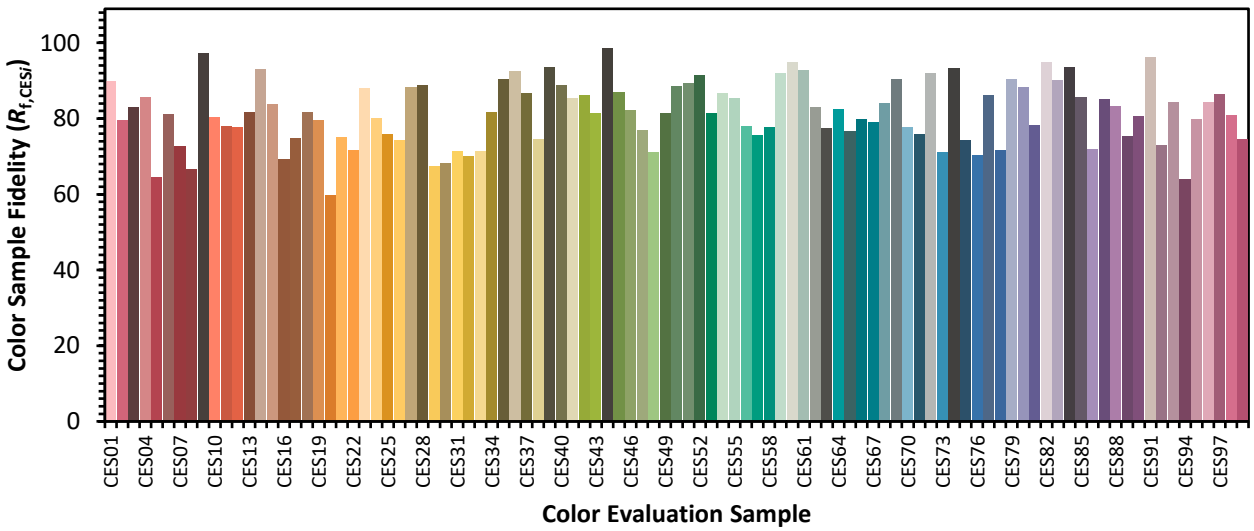
Individual Sample Fidelity Index ($R_{f,i}$)

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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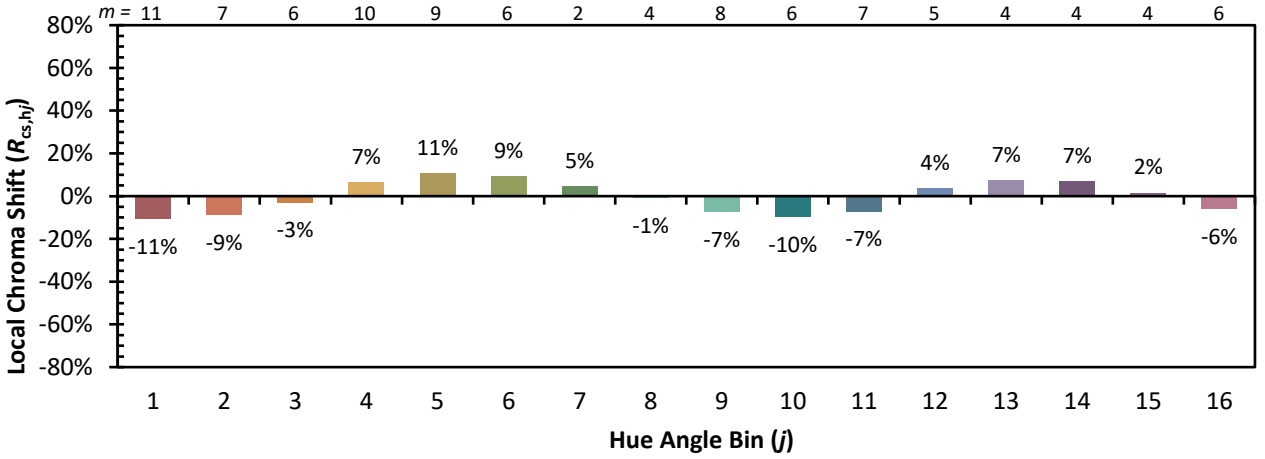
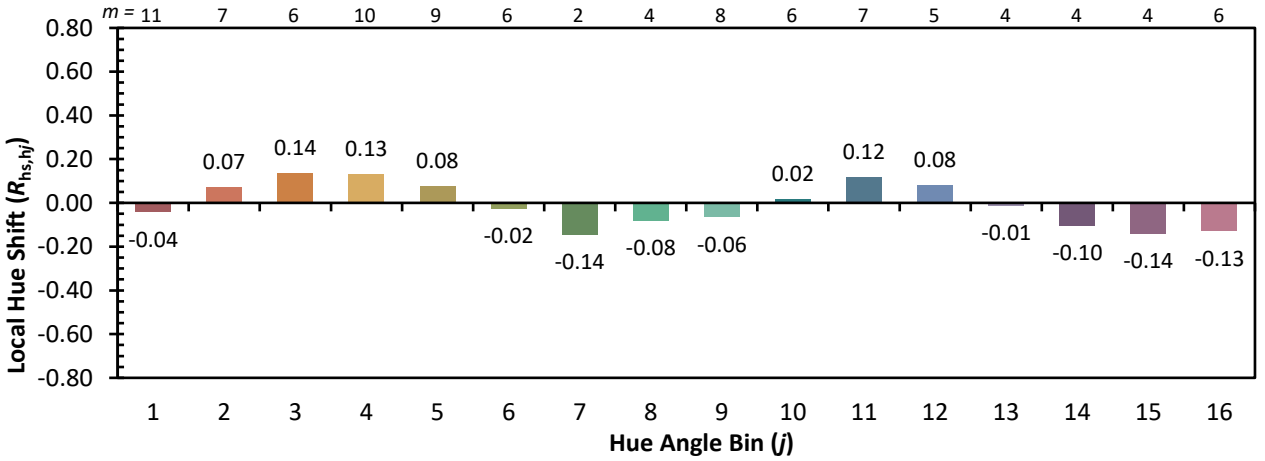
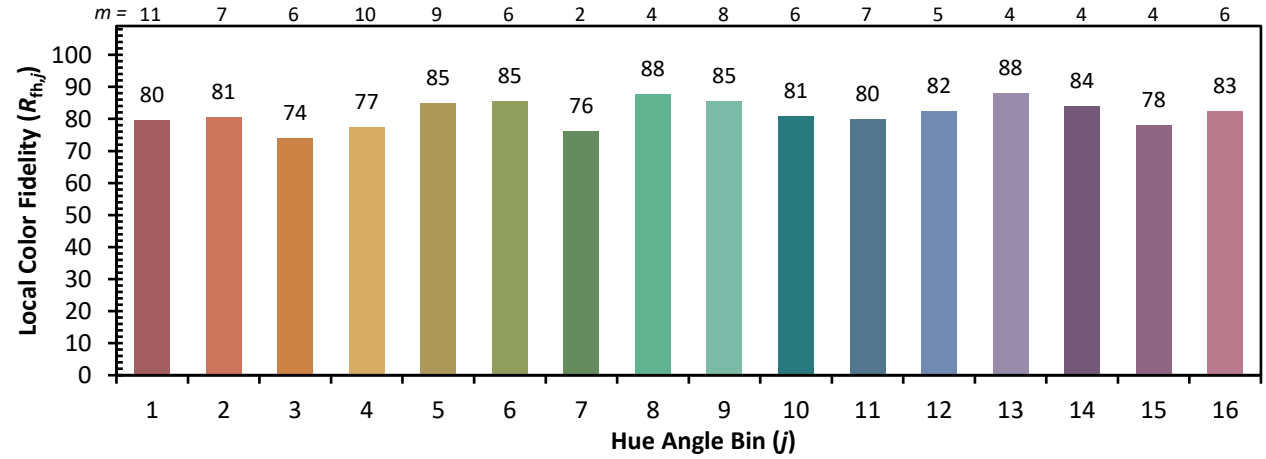
Color Rendition by Hue-Angle Bin







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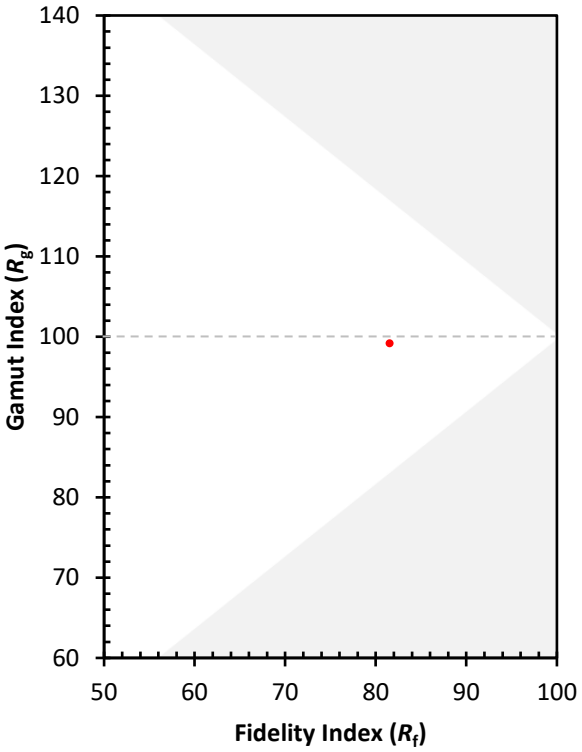
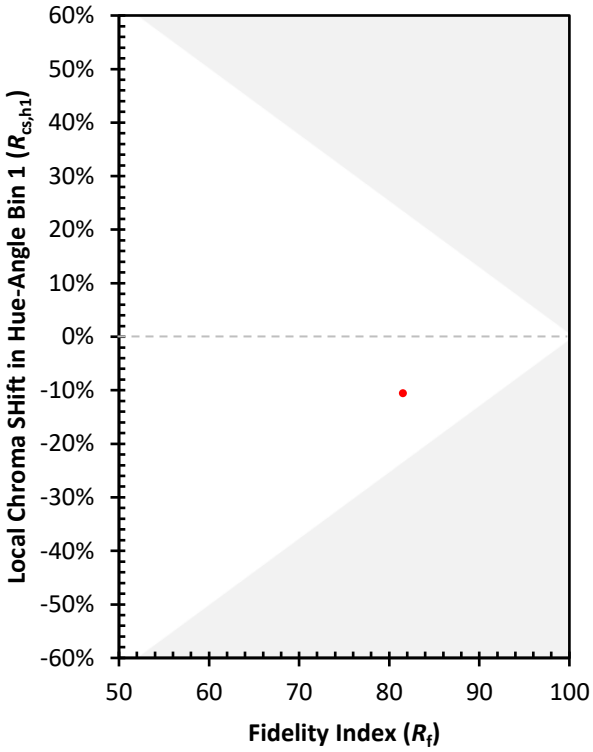
Measure Comparisons





(END OF REPORT)