

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P321116

Luminaire Tested: **GLEON-SA2B-830-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321116
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA2B-830-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9533 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

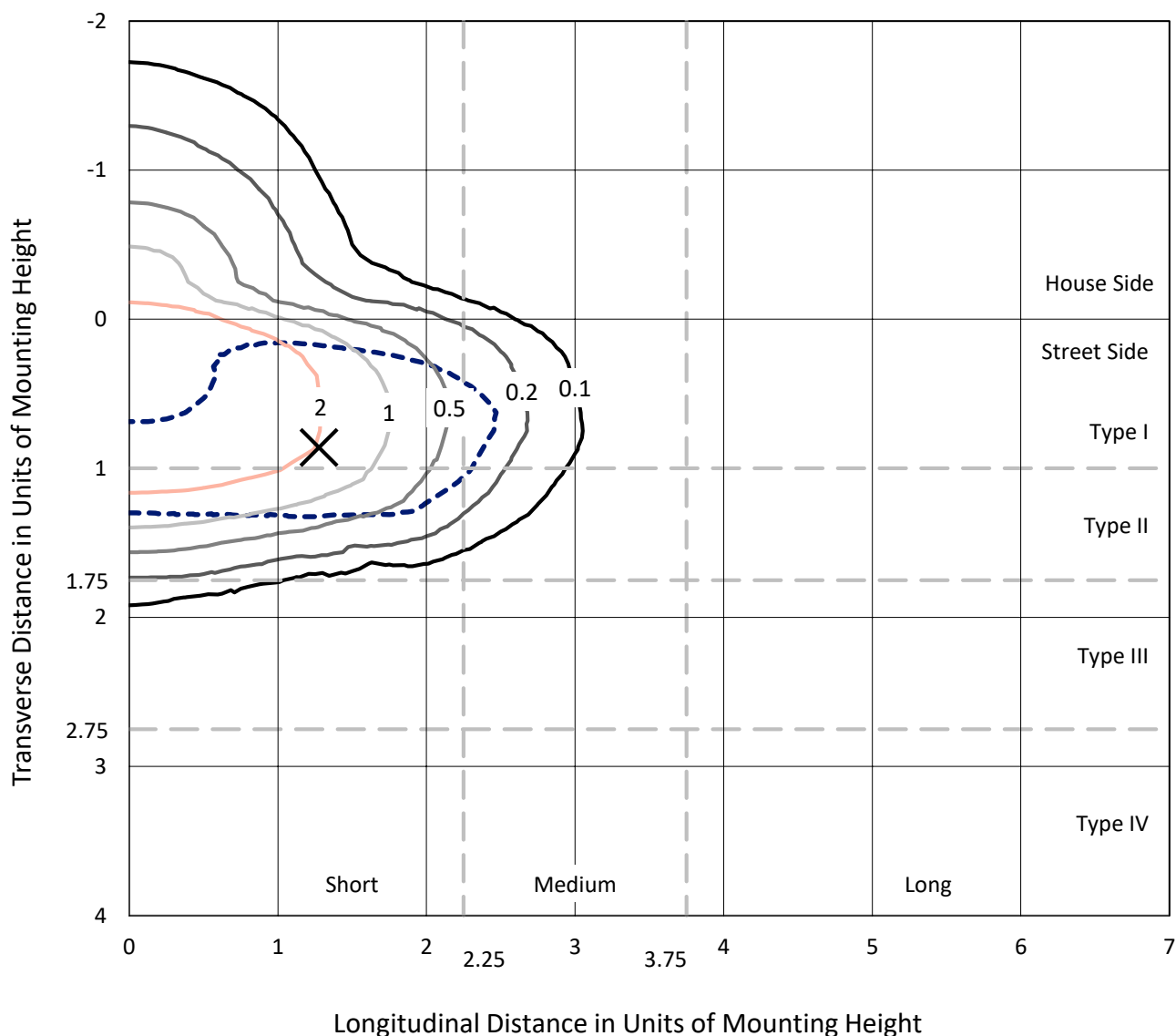
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

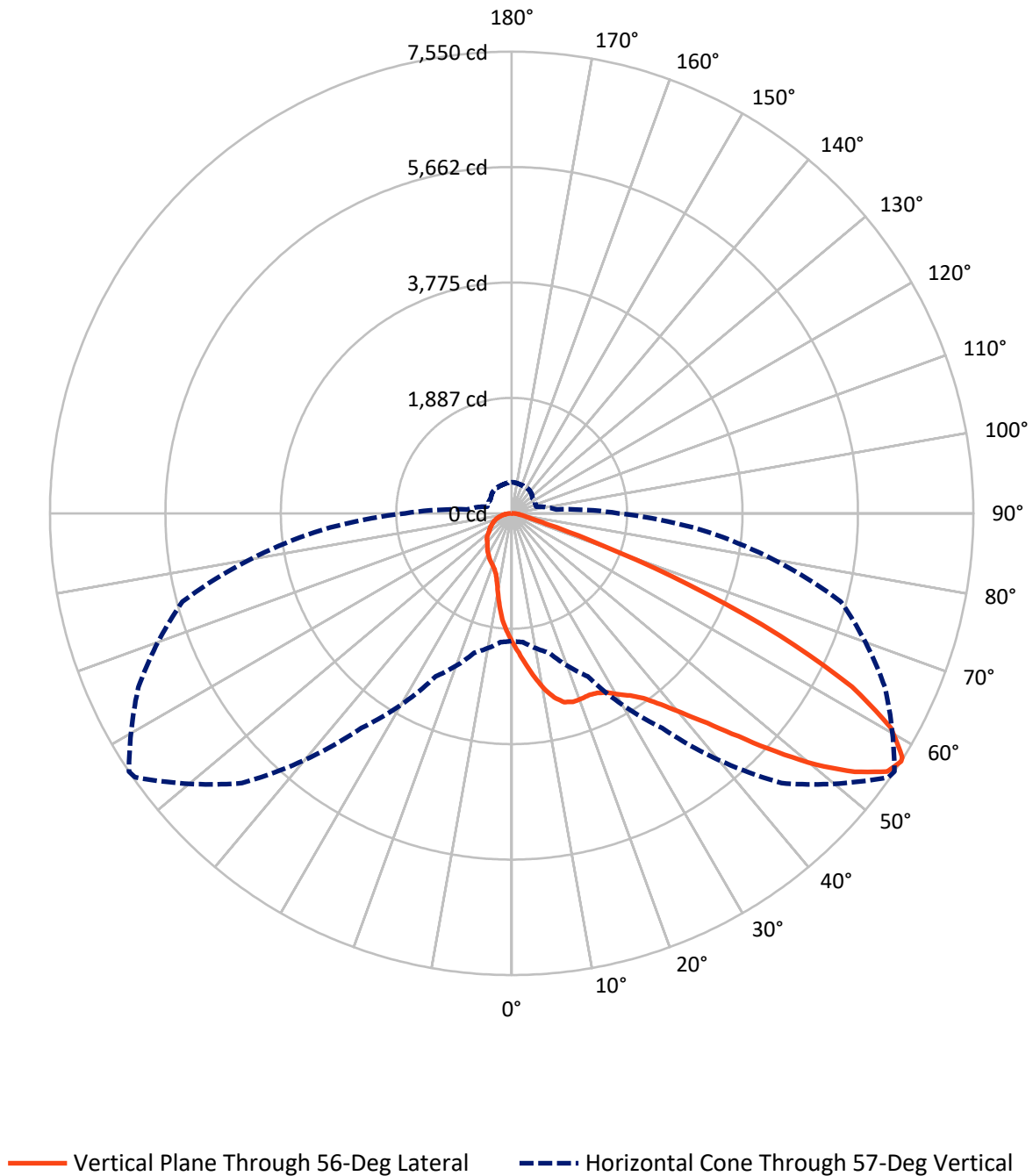
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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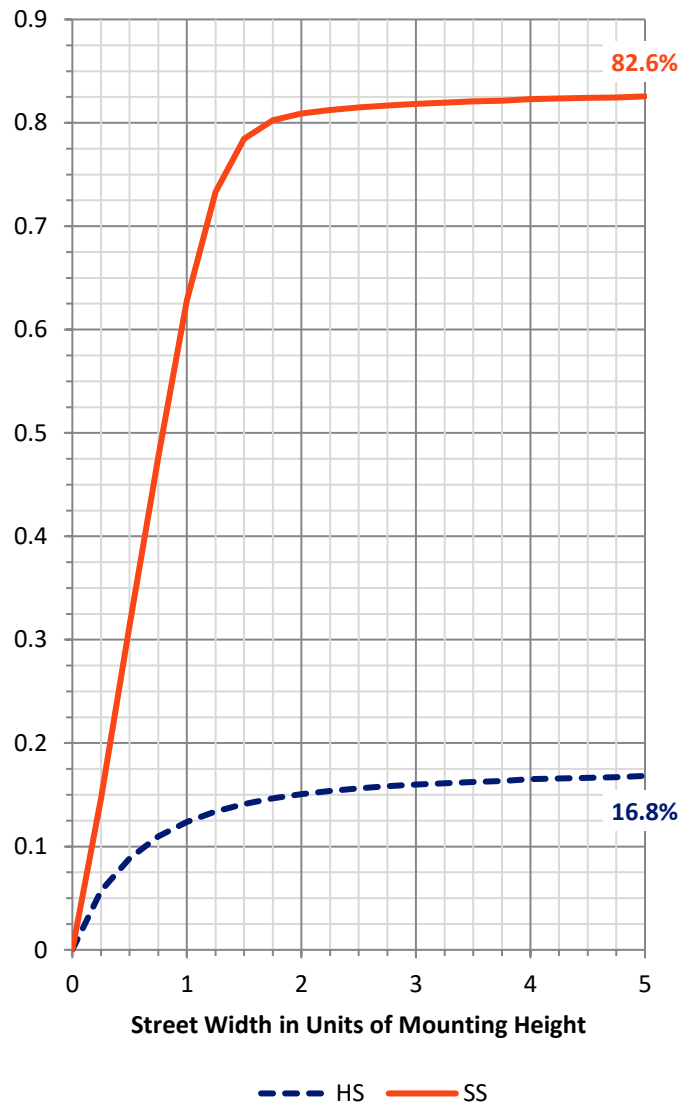
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1643.3	0.0	1643.3
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	7889.7	0.0	7889.7
	% Fixture	82.8	0.0	82.8
Total	Lumens	9533.0	0.0	9533.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.0	2.1
10°-20°	571.0	6.0
20°-30°	930.1	9.8
30°-40°	1390.4	14.6
40°-50°	2109.0	22.1
50°-60°	2363.8	24.8
60°-70°	1396.2	14.6
70°-80°	457.4	4.8
80°-90°	113.0	1.2
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°	9533.0	100.0
0°-180°	9533.0	100.0

Coefficient of Utilization



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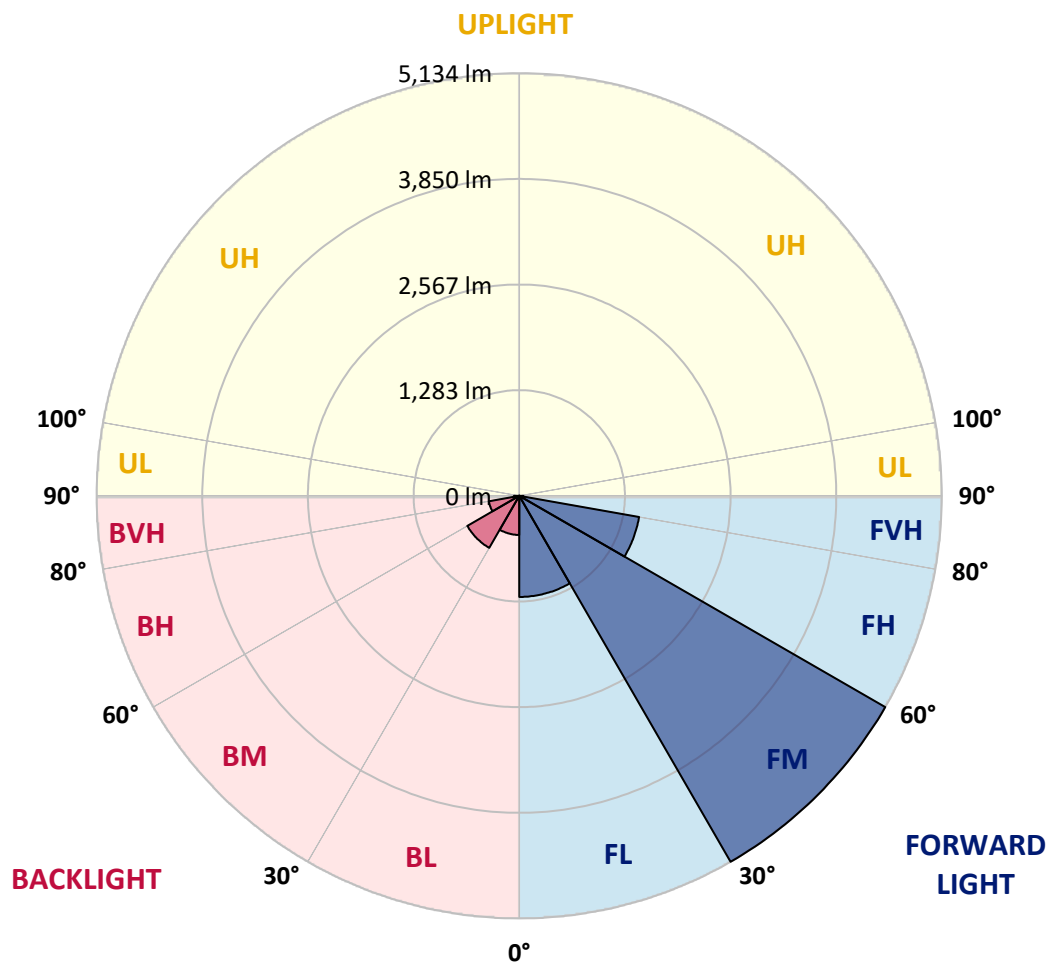
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1228.0	12.9			
FM	(30°-60°)	5133.8	53.9			
FH	(60°-80°)	1478.1	15.5			G1/1800
FVH	(80°-90°)	49.8	0.5			G1/100
BL	(0°-30°)	475.2	5.0	B1/500		
BM	(30°-60°)	729.4	7.7	B1/1000		
BH	(60°-80°)	375.5	3.9	B1/500		G1/500
BVH	(80°-90°)	63.3	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	2114.4	2114.4	2114.4	2114.4	2114.4	2114.4	2114.4	2114.4	2114.4	2114.4	2114.4
2.5°	2428.0	2450.2	2440.4	2406.3	2380.1	2343.1	2301.8	2289.4	2245.8	2197.0	2138.3
5°	2812.2	2801.1	2785.1	2732.0	2676.0	2610.8	2507.2	2490.9	2393.9	2283.5	2166.8
7.5°	3031.1	3030.1	3020.6	2989.5	2938.4	2853.2	2728.4	2709.0	2562.6	2385.0	2204.2
10°	2999.3	2997.0	3012.7	3045.2	3060.6	3042.9	2937.7	2918.4	2738.5	2497.4	2247.4
12.5°	2818.8	2820.1	2845.3	2913.5	3006.2	3117.6	3100.5	3091.0	2921.0	2624.5	2299.9
15°	2678.3	2681.2	2701.2	2760.5	2869.9	3072.0	3199.5	3202.8	3097.6	2764.7	2361.1
17.5°	2616.7	2622.9	2632.1	2673.7	2773.9	2981.3	3223.1	3240.8	3252.2	2910.2	2420.1
20°	2636.3	2642.2	2644.8	2671.4	2753.6	2926.3	3206.7	3238.5	3370.8	3047.1	2479.1
22.5°	2724.4	2728.1	2729.7	2736.6	2800.5	2942.0	3195.9	3229.3	3456.7	3170.0	2523.6
25°	2870.6	2867.9	2857.5	2848.6	2891.5	3004.2	3220.8	3252.6	3526.4	3281.4	2552.8
27.5°	3045.5	3042.2	3021.9	2997.7	3022.2	3101.2	3292.5	3317.8	3589.0	3385.6	2567.5
30°	3255.5	3247.0	3208.7	3179.8	3189.3	3246.7	3410.8	3433.7	3685.7	3503.8	2581.9
32.5°	3498.3	3489.1	3433.7	3385.9	3385.9	3433.7	3532.7	3551.7	3767.6	3637.5	2605.2
35°	3802.3	3790.8	3718.8	3638.5	3615.9	3640.1	3698.8	3712.2	3915.0	3805.9	2647.5
37.5°	4160.7	4145.3	4051.9	3944.5	3895.0	3893.7	3936.0	3963.5	4150.6	4027.0	2719.2
40°	4520.1	4509.3	4427.7	4343.2	4246.2	4215.1	4280.3	4288.8	4458.5	4301.6	2810.9
42.5°	4797.9	4796.0	4780.9	4792.0	4692.8	4629.9	4681.0	4687.8	4834.6	4598.7	2908.6
45°	4944.7	4948.0	5021.0	5182.9	5219.6	5173.7	5198.9	5200.9	5264.4	4898.5	2998.0
47.5°	4827.1	4844.1	5028.9	5390.9	5691.3	5843.7	5801.7	5826.0	5681.2	5156.0	3068.1
50°	4368.7	4389.7	4704.2	5298.2	5911.5	6492.0	6470.1	6464.5	6017.3	5344.7	3106.1
52.5°	3801.0	3817.4	4076.8	4816.3	5750.0	6850.4	7051.9	7023.1	6316.1	5485.9	3113.3
55°	2936.4	2962.0	3210.6	3854.4	5096.7	6713.5	7479.8	7453.9	6588.3	5560.0	3104.8
57°	2087.6	2114.4	2361.4	2941.7	4287.5	6239.4	7522.4	7549.9	6735.4	5572.4	3114.3
57.5°	1862.8	1890.3	2135.1	2698.6	4035.2	6068.1	7485.7	7531.5	6762.0	5570.4	3119.6
60°	938.0	948.4	1104.4	1506.4	2550.8	4905.7	7007.0	7125.3	6785.9	5474.1	3142.2
62.5°	583.2	575.6	570.7	693.9	1241.0	3253.2	6019.3	6247.0	6328.2	5240.9	3087.4
65°	512.7	498.6	444.6	434.7	548.1	1580.1	4532.9	4816.3	5350.3	4873.3	2957.1
67.5°	481.6	467.8	406.9	370.2	370.5	626.4	2814.2	3133.3	4167.9	4251.8	2649.4
70°	449.5	437.0	380.0	336.8	315.5	346.9	1294.7	1536.8	2716.9	3342.0	2214.4
72.5°	408.2	399.7	345.6	301.1	278.5	259.8	495.7	585.4	1572.9	2244.5	1537.8
75°	365.0	357.1	310.9	268.3	240.8	204.4	279.1	300.8	799.1	1148.3	757.1
77.5°	317.5	312.9	276.5	237.2	215.2	169.4	197.6	208.0	342.7	492.4	379.7
80°	252.6	261.4	241.8	211.3	191.0	135.6	139.9	146.8	199.5	240.5	215.6
82.5°	164.5	179.9	189.4	171.7	157.3	106.8	100.6	103.5	130.1	146.8	93.7
85°	68.5	77.0	124.5	112.4	104.5	78.0	67.5	68.8	80.6	83.5	38.3
87.5°	30.5	32.4	54.7	51.4	44.2	26.9	28.8	31.5	42.9	40.6	14.7
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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CATALOG NUMBER: GLEON-SA2B-830-U-AFL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2114.4	2114.4	2114.4	2114.4	2114.4	2114.4	2114.4	2114.4	2114.4	2114.4	2114.4
2.5°	2116.4	2088.9	2041.7	1989.6	1947.0	1912.9	1878.5	1855.0	1827.4	1812.7	1805.2
5°	2118.0	2064.0	1964.7	1862.8	1771.7	1688.5	1609.2	1548.3	1491.3	1460.5	1452.0
7.5°	2124.9	2043.7	1883.1	1715.4	1553.6	1405.8	1291.8	1220.4	1168.9	1146.0	1139.4
10°	2130.5	2019.7	1782.2	1533.9	1313.7	1164.0	1075.6	1035.6	1017.9	1015.0	1012.0
12.5°	2143.6	1995.2	1676.1	1344.5	1127.3	1023.8	993.0	990.4	995.3	1002.5	1002.5
15°	2164.2	1970.9	1554.9	1182.0	1008.7	972.4	978.6	993.0	1006.4	1017.6	1019.2
17.5°	2179.3	1941.1	1424.5	1052.0	945.5	955.3	977.6	997.9	1011.7	1022.5	1023.5
20°	2190.1	1894.9	1285.2	952.7	909.1	939.6	967.4	985.5	995.0	1005.8	1007.4
22.5°	2184.5	1833.0	1161.7	881.6	879.6	916.7	943.2	964.8	957.6	947.1	954.0
25°	2157.7	1747.8	1034.6	828.5	848.5	885.9	918.6	904.2	880.0	875.4	878.0
27.5°	2109.8	1639.1	917.0	779.4	812.5	857.4	855.4	841.0	832.5	826.6	830.2
30°	2058.4	1521.1	814.1	736.5	772.5	809.5	802.0	801.7	793.2	783.7	788.2
32.5°	2007.6	1402.5	732.5	701.1	742.4	747.3	763.7	768.6	751.9	731.9	730.6
35°	1963.4	1290.5	670.6	669.0	706.0	706.7	730.6	723.7	682.1	661.5	661.5
37.5°	1930.3	1178.8	623.5	640.2	658.2	675.2	687.3	658.8	652.0	640.5	640.2
40°	1915.9	1080.5	594.0	618.2	624.4	646.1	614.9	626.1	629.3	623.5	623.5
42.5°	1900.8	995.0	568.4	601.5	600.5	597.6	581.8	596.3	609.4	609.7	608.7
45°	1885.8	921.3	545.8	565.8	579.6	547.8	550.7	566.1	584.5	591.0	591.0
47.5°	1869.0	862.9	525.2	528.1	549.4	528.1	525.8	537.6	559.2	569.7	572.0
50°	1832.4	810.5	501.6	495.0	500.9	508.1	510.1	515.7	539.6	556.3	560.2
52.5°	1781.6	763.7	471.4	464.6	464.6	491.8	500.9	502.6	522.9	542.9	546.8
55°	1739.3	733.9	440.3	439.0	437.7	474.4	490.1	492.7	506.8	522.5	524.5
57°	1742.3	731.6	416.4	417.7	417.4	456.7	480.0	485.5	492.7	506.2	508.5
57.5°	1743.9	733.2	411.2	411.8	411.5	451.8	477.0	483.2	488.8	502.9	505.2
60°	1768.5	737.5	389.9	382.7	384.3	425.6	460.3	468.2	471.8	490.4	493.4
62.5°	1732.1	718.5	372.8	355.5	355.5	398.1	437.0	449.5	455.1	480.3	485.2
65°	1626.6	665.1	352.8	324.7	327.9	370.5	409.2	429.5	438.0	469.5	474.7
67.5°	1463.8	603.1	331.5	297.1	300.4	341.7	380.4	402.3	415.7	457.7	461.9
70°	1251.8	527.5	302.7	268.0	271.9	310.3	346.3	371.2	391.2	446.5	447.8
72.5°	922.9	432.5	262.4	235.9	240.1	273.6	311.9	340.7	367.6	418.7	418.0
75°	548.8	338.1	217.9	203.4	206.4	237.5	280.8	315.8	356.1	407.9	414.1
77.5°	332.9	254.6	177.6	170.4	174.0	205.7	258.5	295.8	351.2	384.6	382.7
80°	201.2	181.8	141.9	137.3	140.9	175.9	239.2	280.8	307.0	328.6	328.6
82.5°	105.2	111.1	104.2	100.6	105.5	142.8	217.5	245.1	271.3	232.9	217.5
85°	42.9	58.0	63.2	62.9	65.9	98.9	187.7	209.7	174.9	166.1	170.0
87.5°	14.4	24.6	30.8	26.5	27.8	62.2	130.1	101.2	120.2	83.9	79.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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.

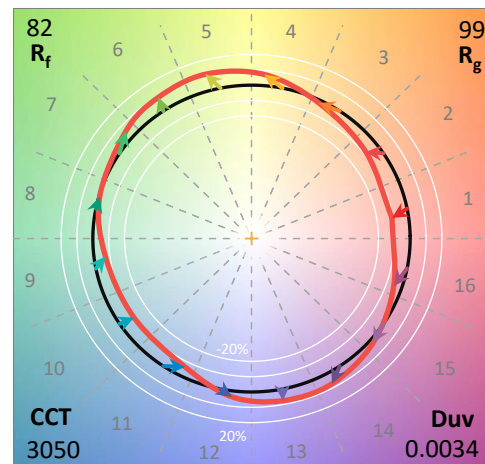
Test Information

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
 CIE u' : 0.2476
 CIE v' : 0.5251
 Duv: 0.0034
 CIE x: 0.4383
 CIE y: 0.4131
 CIE z: 0.1487
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 581
 Purity: 55.55201
 R_f: 81.5
 R_g: 99.2

CRI (Ra): 81.0
 R1: 79.6
 R2: 85.6
 R3: 92.0
 R4: 82.6
 R5: 78.9
 R6: 81.7
 R7: 85.2
 R8: 62.0
 R9: 7.1
 R10: 67.0
 R11: 82.7
 R12: 63.2
 R13: 80.3
 R14: 95.0
 R15: 71.7



Test Conditions

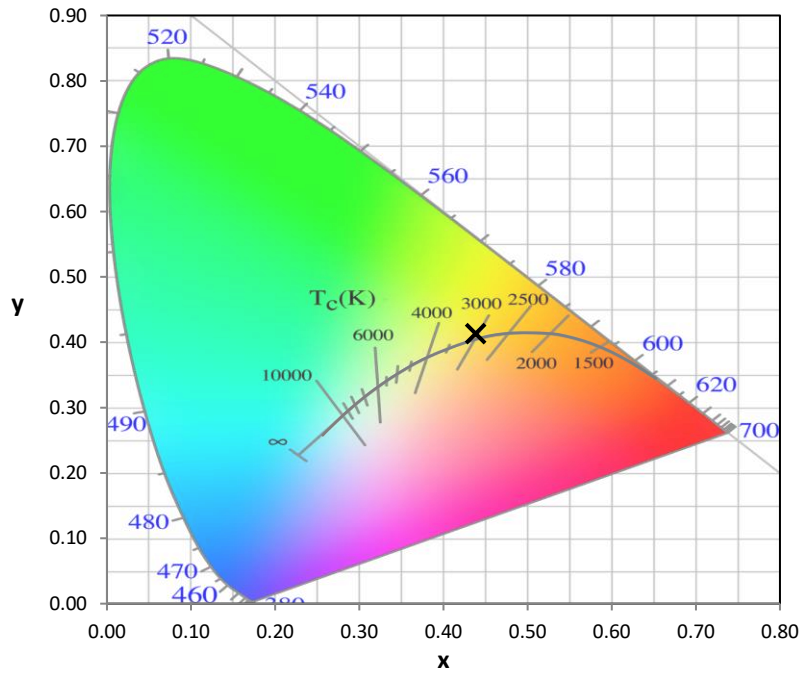
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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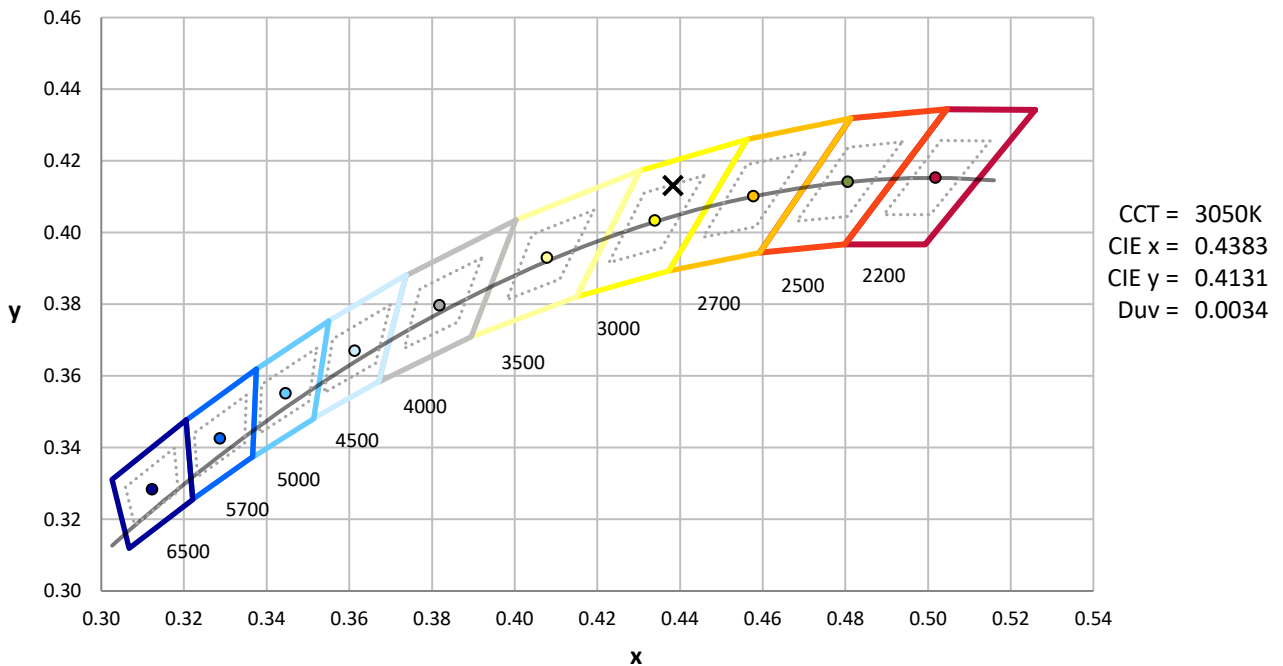
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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CIE 1931 Chromaticity Diagram



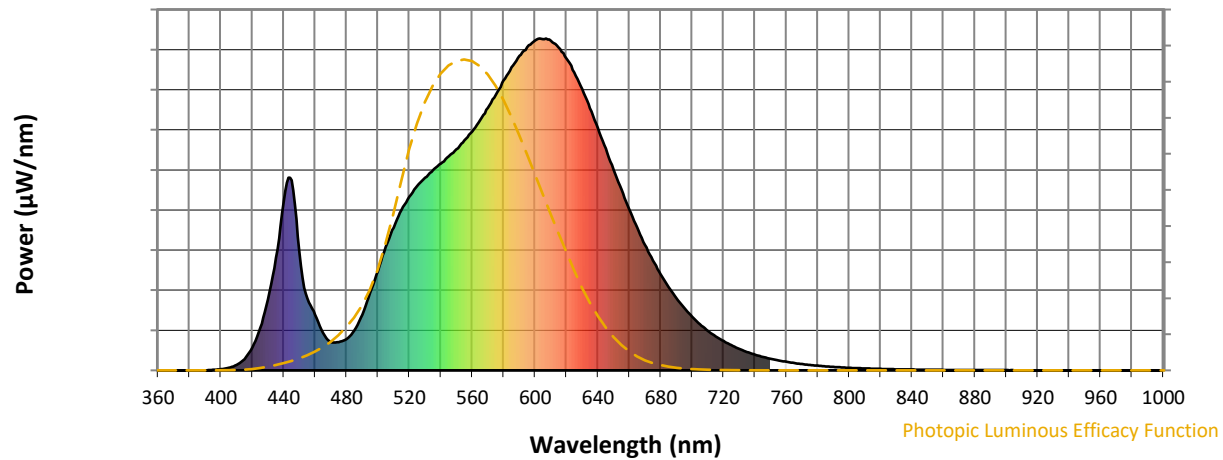
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

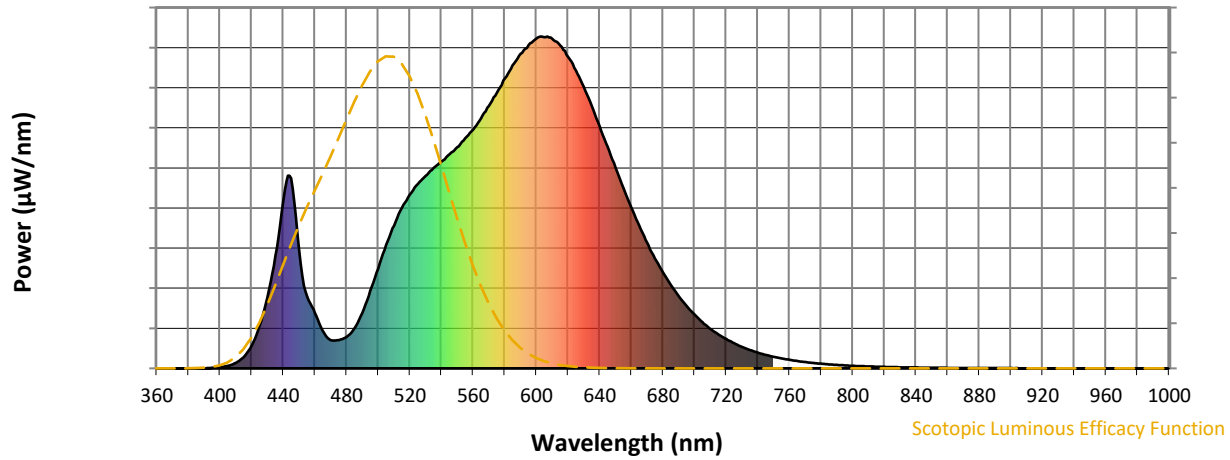


Photopic Lumens: NR

λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	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



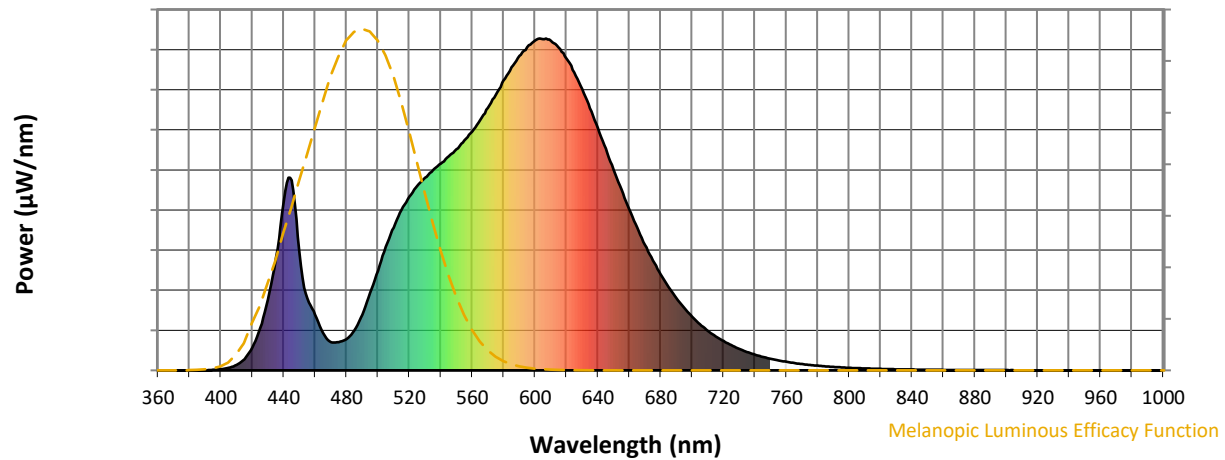
Scotopic Lumens: NR

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

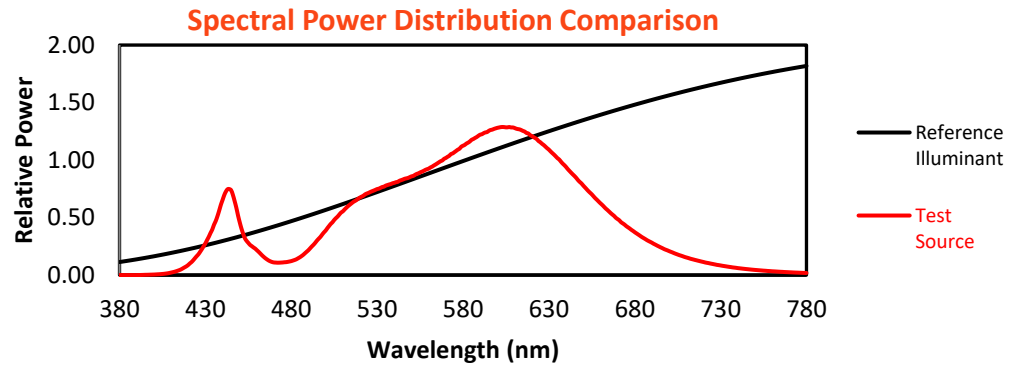
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	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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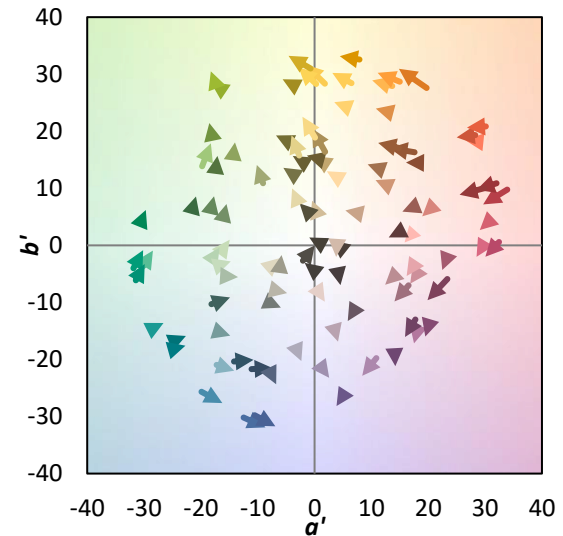
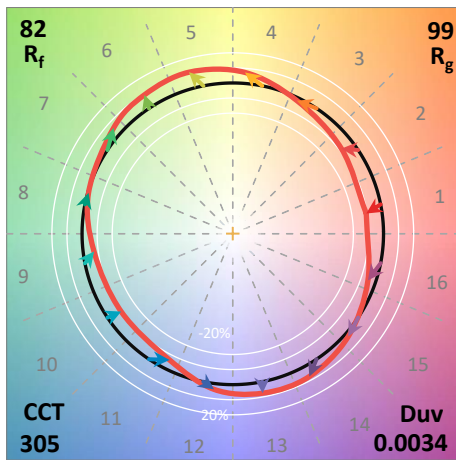
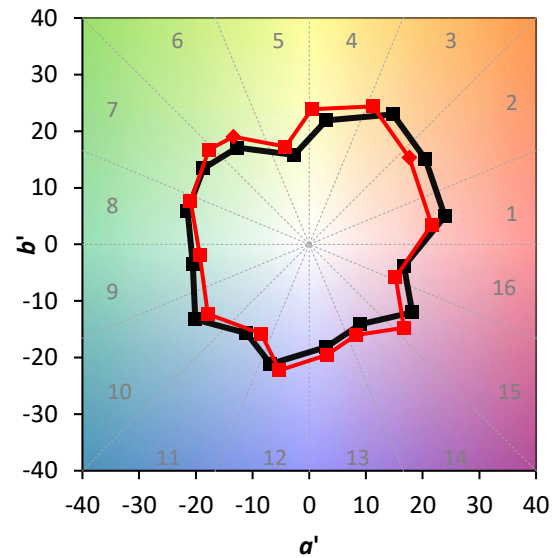
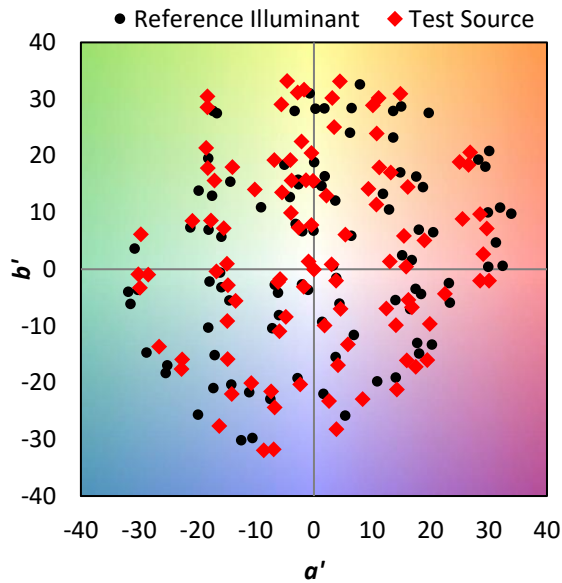
TM-30-18

Summary

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

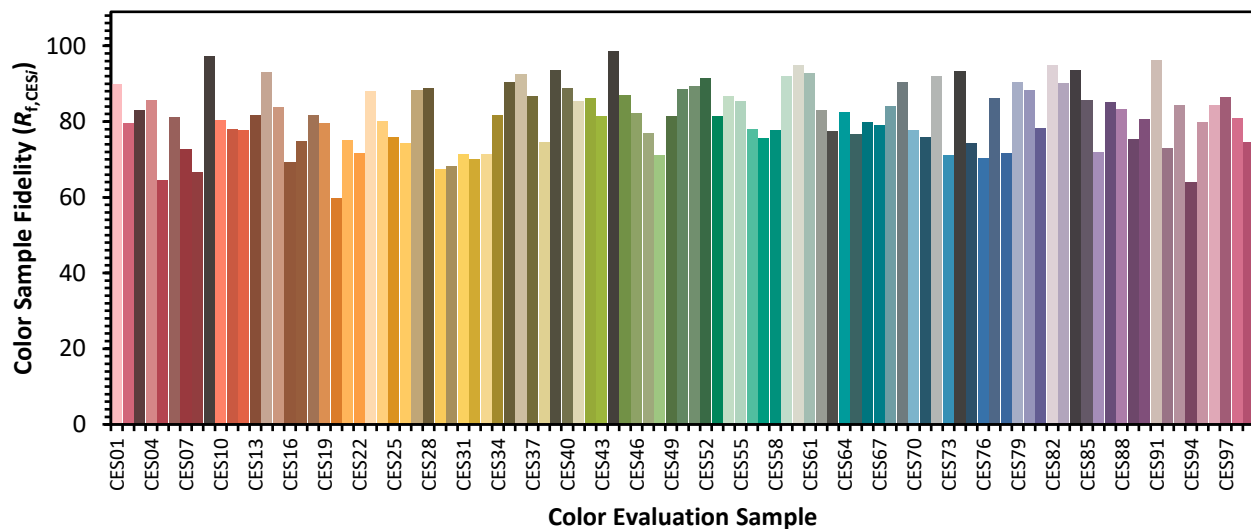


Color Vector Graphics

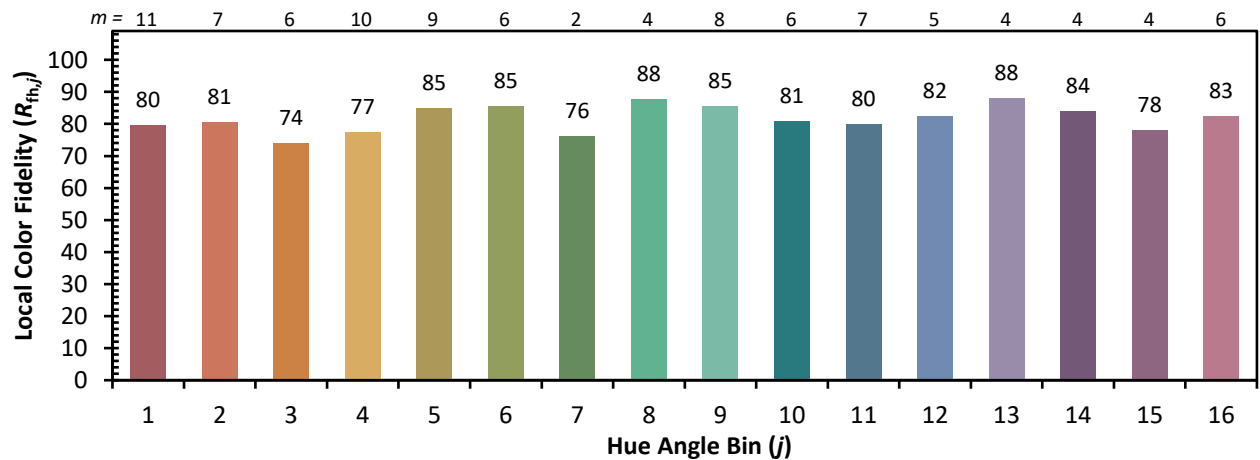
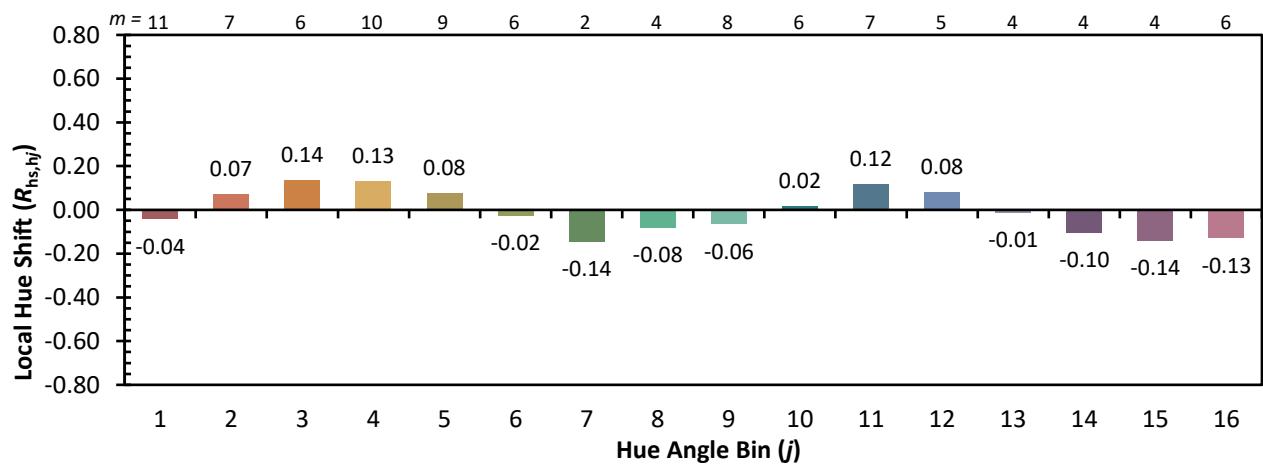
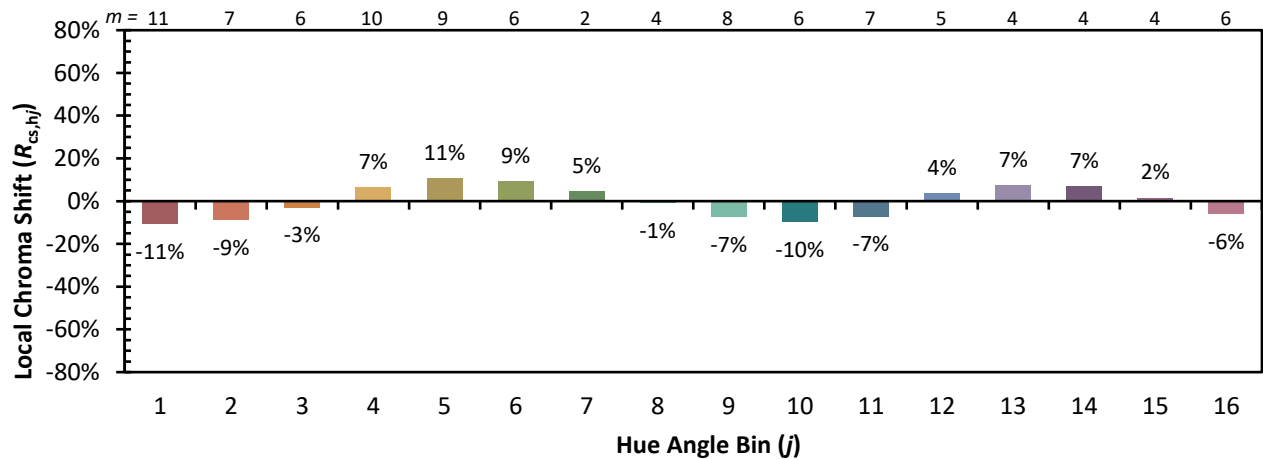


Individual Sample Fidelity Index ($R_{f,i}$)

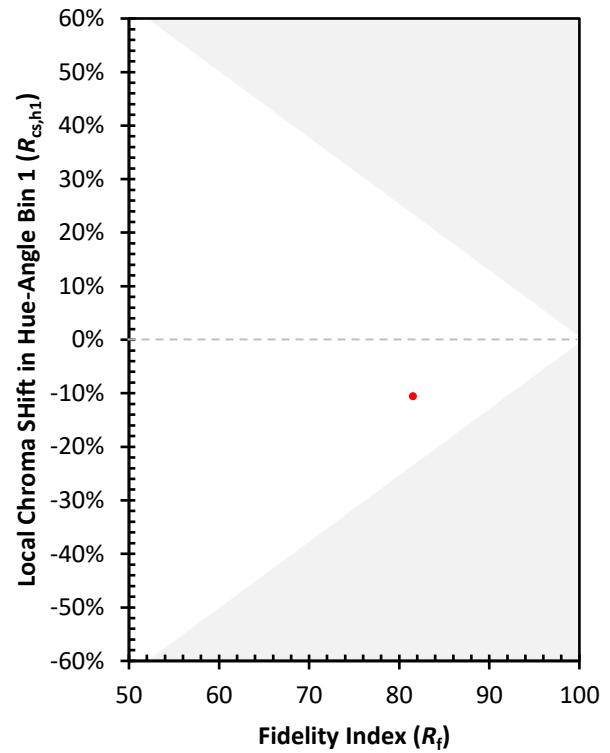
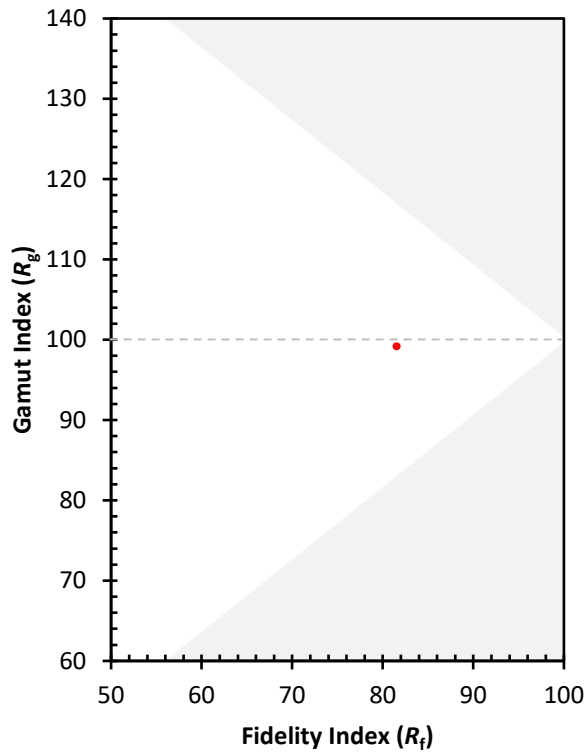
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)