

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P322415

Luminaire Tested: **GLEON-SA1D-830-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322415
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA1D-830-U-T3-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 80 CRI, 3000K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4704 lumens
Efficiency: N/A
Efficacy: 70.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

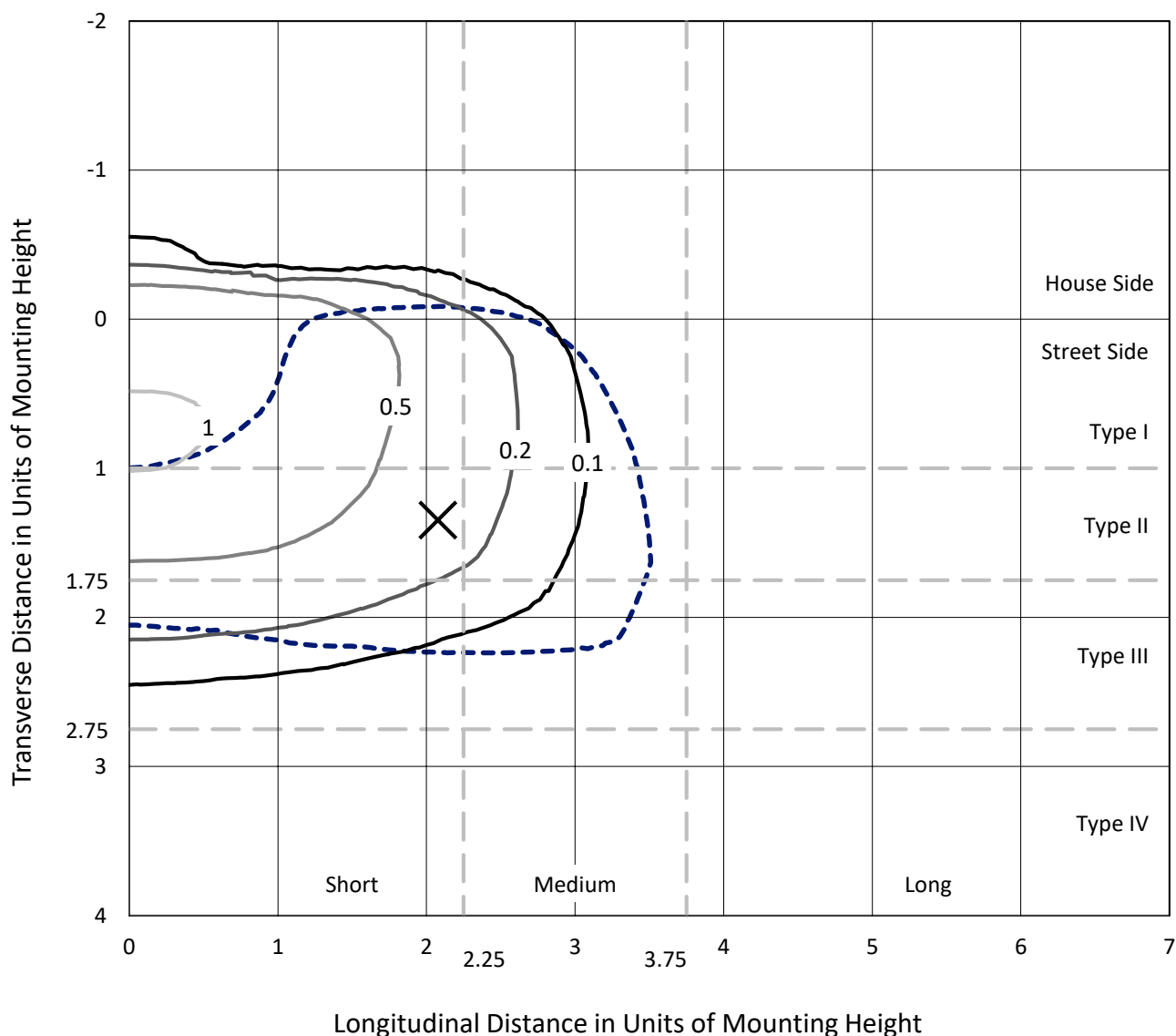
Input Watts (W): 67
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

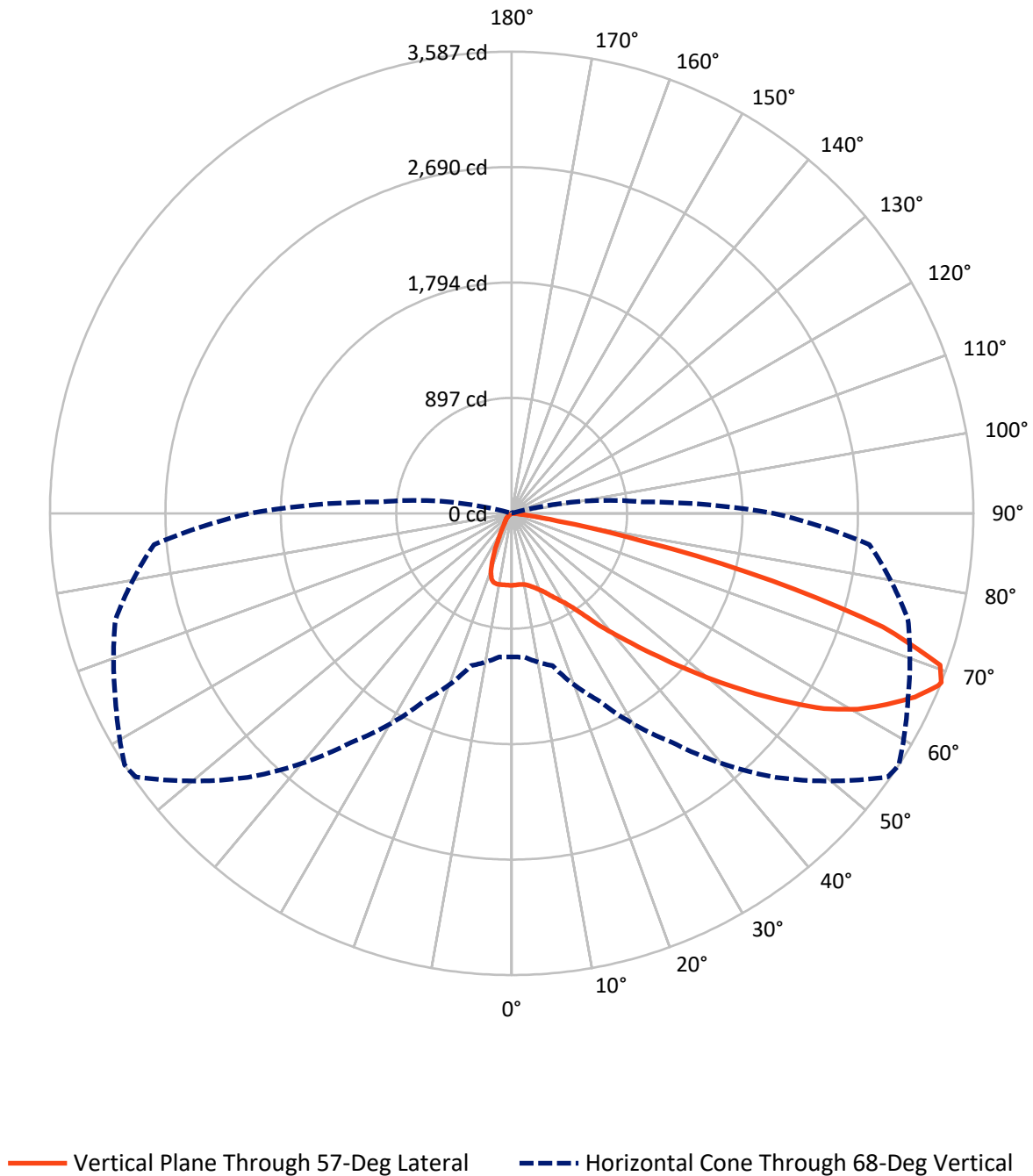
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type III - Short - N/A

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CATALOG NUMBER: GLEON-SA1D-830-U-T3-HSS

Luminous Intensity Polar Plot



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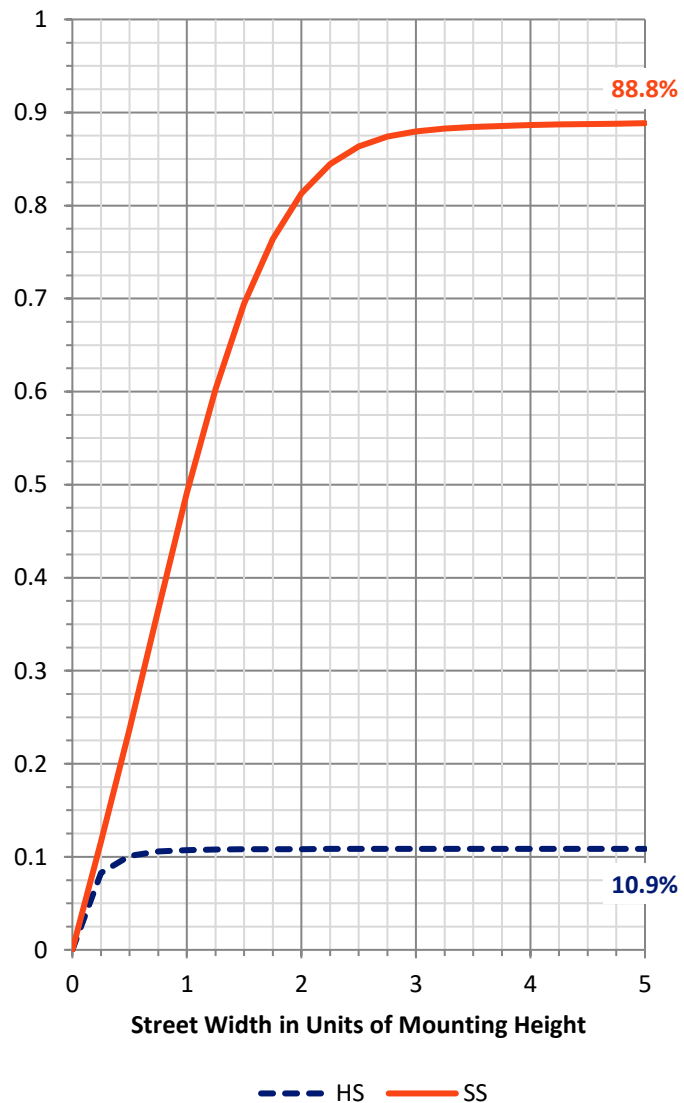
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	515.8	0.0	515.8
	% Fixture	11.0	0.0	11.0
Street Side	Lumens	4188.2	0.0	4188.2
	% Fixture	89.0	0.0	89.0
Total	Lumens	4704.0	0.0	4704.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	1.1
10°-20°	145.0	3.1
20°-30°	250.1	5.3
30°-40°	431.6	9.2
40°-50°	738.3	15.7
50°-60°	1181.1	25.1
60°-70°	1364.7	29.0
70°-80°	521.5	11.1
80°-90°	19.5	0.4
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°	4704.0	100.0
0°-180°	4704.0	100.0

Coefficient of Utilization



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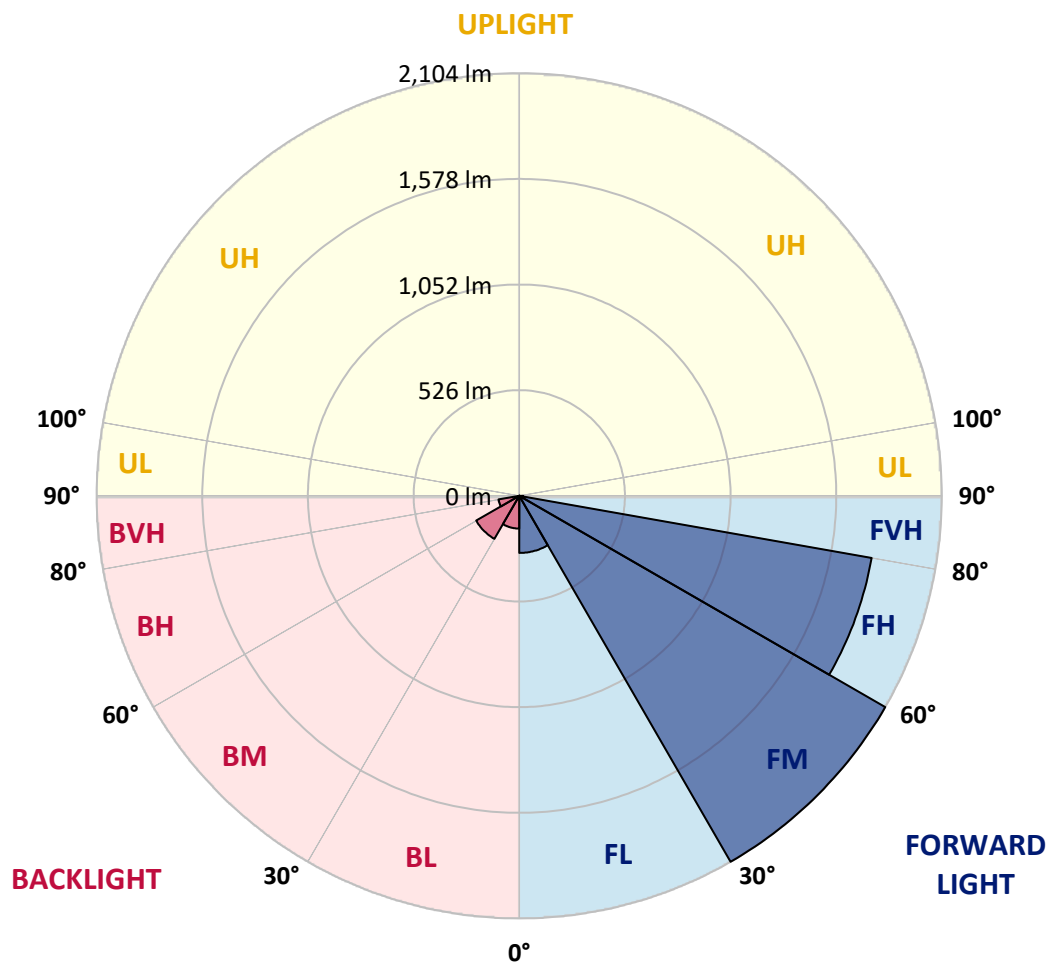
CATALOG NUMBER: GLEON-SA1D-830-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	284.3	6.0			
FM	(30°-60°)	2103.6	44.7			
FH	(60°-80°)	1781.1	37.9			G1/1800
FVH	(80°-90°)	19.2	0.4			G1/100
BL	(0°-30°)	163.0	3.5	B1/500		
BM	(30°-60°)	247.4	5.3	B1/1000		
BH	(60°-80°)	105.0	2.2	B0/110		G0/110
BVH	(80°-90°)	0.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	559.0	559.0	559.0	559.0	559.0	559.0	559.0	559.0	559.0	559.0	559.0
2.5°	545.8	548.3	550.1	551.2	552.5	555.4	556.3	557.6	558.3	558.3	559.8
5°	524.3	526.9	530.7	533.8	540.1	548.1	553.8	556.1	560.1	563.6	565.6
7.5°	504.2	507.4	511.8	519.1	529.8	542.7	554.7	557.8	565.6	573.2	577.0
10°	491.3	493.8	499.6	510.0	524.0	542.1	559.0	562.7	576.1	588.8	595.9
12.5°	486.9	489.1	495.1	506.9	524.3	545.4	568.7	574.3	593.9	612.3	622.4
15°	493.3	493.8	500.2	511.4	528.5	553.6	585.0	591.7	616.3	640.4	652.8
17.5°	518.3	516.3	519.6	524.5	538.1	564.5	602.1	612.1	645.0	673.3	685.1
20°	580.5	580.5	573.0	559.6	559.8	581.4	625.2	636.6	676.8	709.5	720.2
22.5°	687.1	685.1	670.0	637.3	607.2	610.6	653.5	668.2	715.1	750.0	753.6
25°	815.2	812.7	789.4	743.4	691.3	657.7	691.7	708.7	760.7	791.6	784.3
27.5°	950.9	948.9	925.7	868.6	794.5	732.9	737.3	753.4	807.2	837.7	814.3
30°	1082.3	1083.0	1060.1	1001.4	917.5	828.8	795.2	804.5	852.3	883.3	849.9
32.5°	1207.3	1208.2	1188.4	1122.8	1044.5	940.2	875.3	872.8	904.8	935.3	897.0
35°	1318.8	1321.0	1307.4	1256.5	1173.5	1064.3	979.1	973.3	979.3	1013.8	969.3
37.5°	1426.2	1427.5	1417.3	1374.4	1305.0	1200.7	1110.4	1102.1	1089.2	1115.7	1064.8
40°	1543.9	1540.5	1528.7	1489.8	1430.2	1351.2	1251.4	1237.1	1214.7	1238.3	1190.2
42.5°	1653.3	1649.5	1651.5	1607.5	1557.2	1506.1	1415.7	1391.3	1378.2	1405.3	1344.1
45°	1790.1	1788.1	1794.8	1756.5	1715.8	1678.7	1604.1	1577.5	1571.7	1603.5	1530.3
47.5°	1925.1	1930.0	1950.7	1934.4	1918.0	1885.3	1803.7	1791.7	1795.2	1833.7	1726.7
50°	2037.7	2043.4	2100.2	2118.8	2142.6	2123.5	2041.7	2034.3	2048.3	2083.0	1938.0
52.5°	2119.1	2130.9	2201.4	2287.4	2374.2	2387.1	2305.5	2298.8	2317.7	2323.0	2101.3
55°	2175.6	2186.0	2265.9	2423.3	2599.9	2655.6	2604.8	2579.0	2575.5	2522.8	2273.0
57.5°	2185.6	2184.5	2299.2	2511.2	2777.0	2920.5	2888.4	2863.1	2790.1	2707.4	2469.8
60°	2129.1	2135.5	2268.8	2541.7	2888.2	3120.9	3123.3	3090.4	2976.7	2886.9	2660.7
62.5°	1955.1	1981.4	2115.9	2461.8	2886.9	3201.6	3295.5	3270.3	3134.4	3033.9	2854.2
65°	1673.1	1682.4	1810.8	2188.2	2691.8	3167.8	3450.5	3441.2	3276.6	3176.7	2953.6
67.5°	1221.8	1201.6	1336.3	1723.1	2279.0	2970.7	3561.7	3573.5	3386.2	3206.1	2847.7
68°	1115.0	1121.0	1226.0	1608.1	2170.9	2901.1	3569.1	3587.1	3397.1	3186.9	2789.9
70°	664.6	676.2	769.8	1107.2	1651.5	2507.2	3489.9	3531.0	3332.2	2989.6	2413.1
72.5°	169.7	183.5	272.0	495.6	943.3	1766.5	2946.0	3015.7	2893.1	2425.3	1629.1
75°	69.8	73.4	97.2	163.3	351.4	795.8	1941.8	2090.8	2005.6	1452.0	736.2
77.5°	48.3	50.7	62.5	90.5	152.1	269.8	952.0	1059.6	954.7	495.6	160.6
80°	34.7	36.7	44.7	60.3	87.4	96.3	310.3	358.8	284.9	108.8	39.8
82.5°	20.7	22.2	33.4	42.9	53.2	46.0	77.2	87.6	82.5	54.0	17.8
85°	10.2	12.0	22.5	30.7	28.7	19.4	23.6	26.2	32.5	32.9	9.6
87.5°	0.7	1.3	13.1	18.5	8.0	4.4	6.9	8.5	11.6	16.2	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P322415

CATALOG NUMBER: GLEON-SA1D-830-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	559.0	559.0	559.0	559.0	559.0	559.0	559.0	559.0	559.0	559.0	559.0
2.5°	560.5	560.7	559.2	558.5	559.0	556.3	555.2	555.6	555.6	556.3	555.2
5°	566.1	566.1	563.4	559.8	557.8	552.7	549.4	548.5	547.8	547.4	546.5
7.5°	578.1	576.8	572.1	564.3	557.6	546.5	538.1	533.6	531.4	530.5	529.8
10°	597.4	595.0	587.2	572.7	557.4	537.6	519.1	506.0	495.1	490.7	488.0
12.5°	623.5	619.9	606.8	582.8	555.8	519.4	479.3	440.9	405.0	390.4	383.0
15°	653.5	648.4	627.7	591.2	546.7	478.2	391.2	323.9	274.3	255.6	247.6
17.5°	684.0	677.3	645.9	596.5	519.4	393.0	274.5	207.3	174.2	165.3	162.1
20°	714.7	704.9	661.7	592.5	457.5	283.4	181.1	151.5	141.9	139.2	138.3
22.5°	743.8	728.7	676.0	577.0	362.3	190.2	143.2	133.9	130.8	129.2	128.8
25°	769.2	748.0	688.4	528.9	256.5	143.7	129.0	125.9	121.9	119.0	119.2
27.5°	793.0	767.4	696.0	449.7	171.0	122.8	119.4	115.2	107.9	103.7	103.7
30°	821.6	793.2	701.5	346.1	125.9	108.5	105.9	99.4	89.4	83.9	83.9
32.5°	864.8	832.3	698.0	242.9	104.3	95.4	89.2	80.3	69.4	64.1	63.8
35°	930.9	892.8	672.6	159.3	92.1	83.0	73.0	62.1	52.5	48.0	47.8
37.5°	1019.8	973.8	615.7	113.9	82.5	71.4	59.4	47.4	40.3	37.4	37.1
40°	1135.3	1067.9	534.3	92.3	73.6	60.3	45.8	36.7	31.8	29.6	29.8
42.5°	1273.8	1168.6	436.6	79.6	64.9	49.6	35.8	28.9	25.8	24.2	23.8
45°	1427.8	1268.1	334.3	71.0	56.3	40.0	28.0	22.9	20.5	19.6	19.6
47.5°	1597.0	1364.8	244.7	63.4	46.9	30.9	22.5	18.7	16.7	16.0	15.8
50°	1750.7	1432.0	176.4	55.4	38.5	24.5	18.2	15.6	14.2	13.3	13.3
52.5°	1878.8	1453.1	129.9	46.7	31.1	19.6	15.1	13.3	12.0	11.3	11.3
55°	1991.6	1444.4	96.5	38.5	25.1	16.0	12.9	11.3	10.2	9.6	9.6
57.5°	2099.7	1416.4	72.1	31.4	20.2	12.9	10.9	9.6	8.5	8.0	8.0
60°	2188.0	1369.7	53.6	25.4	16.2	10.5	9.1	7.8	6.9	6.2	6.2
62.5°	2259.6	1318.1	39.4	20.9	12.9	8.2	7.1	6.5	5.1	4.4	4.4
65°	2260.1	1232.5	29.6	17.3	10.0	6.5	5.3	5.1	3.3	2.7	2.4
67.5°	2096.6	1062.5	22.7	14.9	7.8	4.9	4.0	4.2	1.8	1.1	0.9
68°	2037.2	1019.4	21.4	14.7	7.3	4.7	3.8	4.2	1.6	0.9	0.7
70°	1717.6	811.0	17.1	14.2	6.5	3.6	3.1	4.2	1.3	0.7	0.4
72.5°	1098.6	470.7	12.7	11.3	4.9	2.7	2.0	3.8	1.3	0.4	0.2
75°	467.5	145.9	8.7	8.0	2.9	2.0	1.3	2.4	0.9	0.2	0.0
77.5°	98.5	32.9	5.1	4.9	2.0	1.3	0.9	0.7	0.2	0.0	0.0
80°	25.4	9.6	2.7	2.4	1.1	0.7	0.4	0.0	0.0	0.0	0.0
82.5°	8.0	3.8	1.6	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.0	2.2	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	0.7	0.2	0.0	0.0	0.0	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

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.

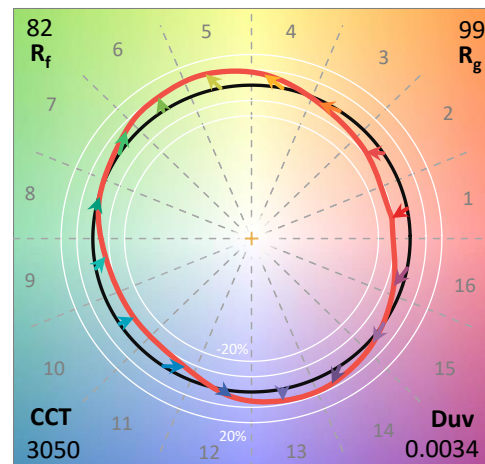
Test Information

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

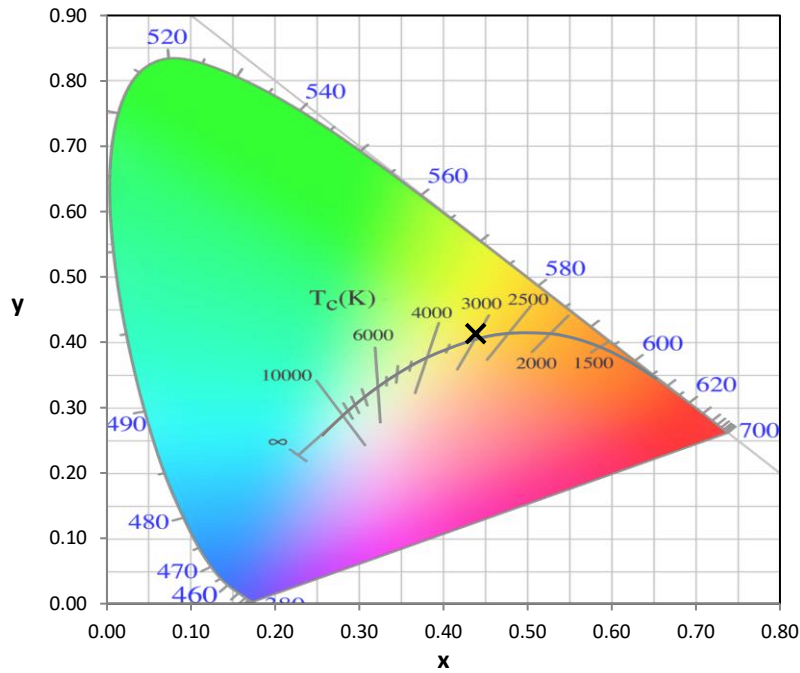
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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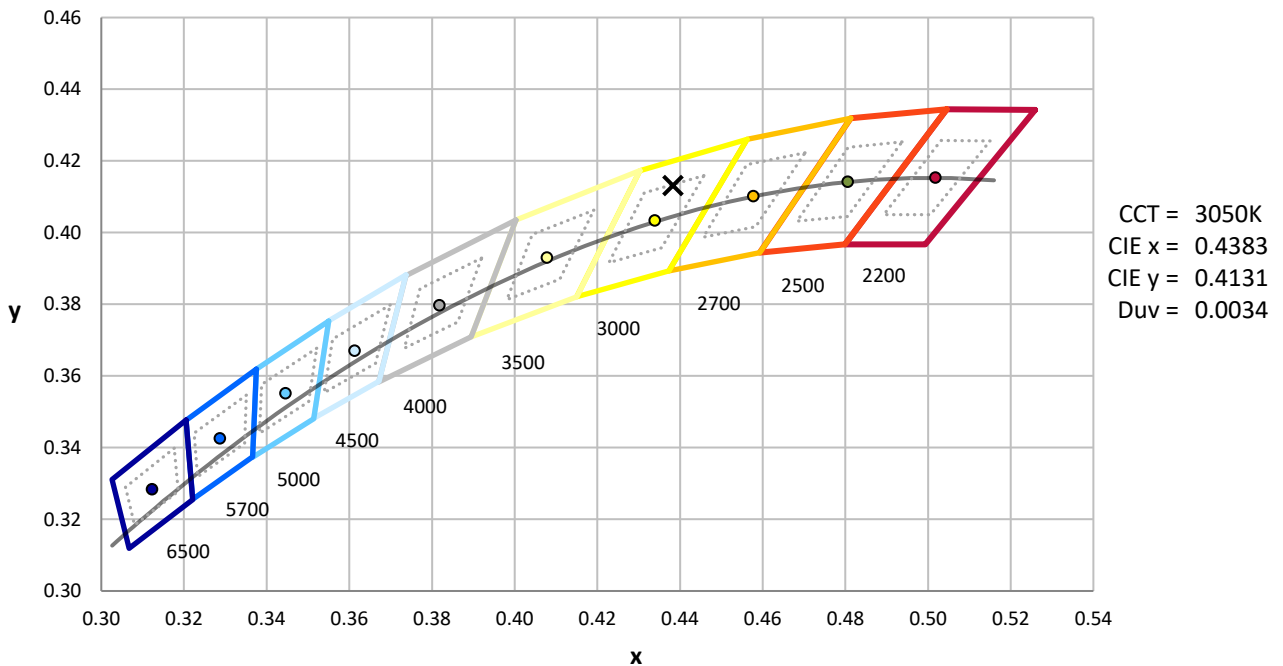
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



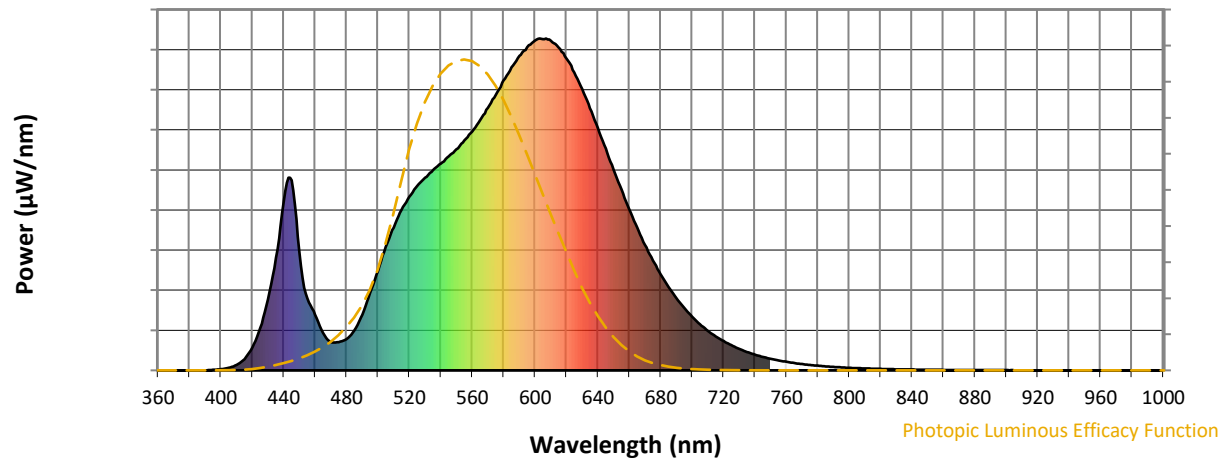
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

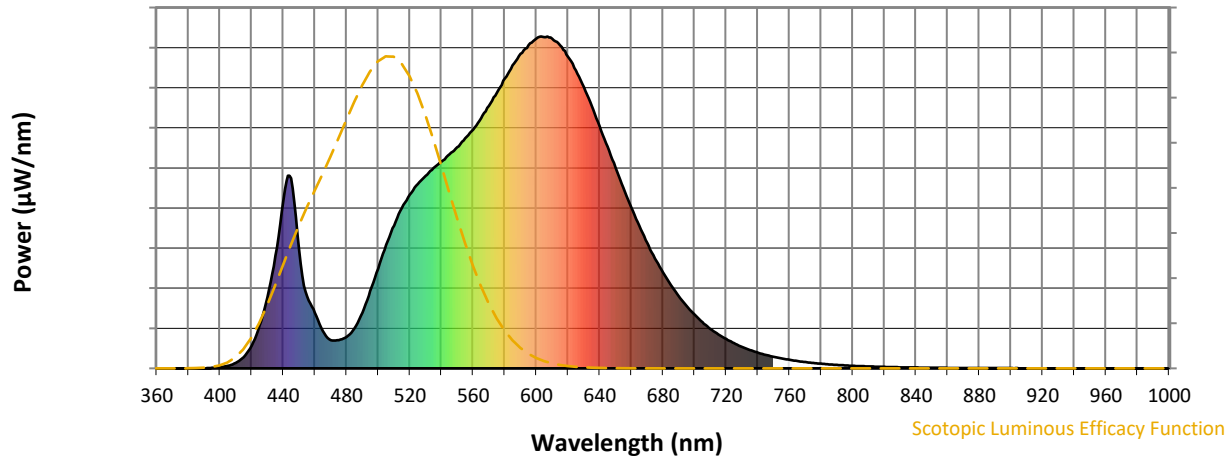


Photopic Lumens: NR

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



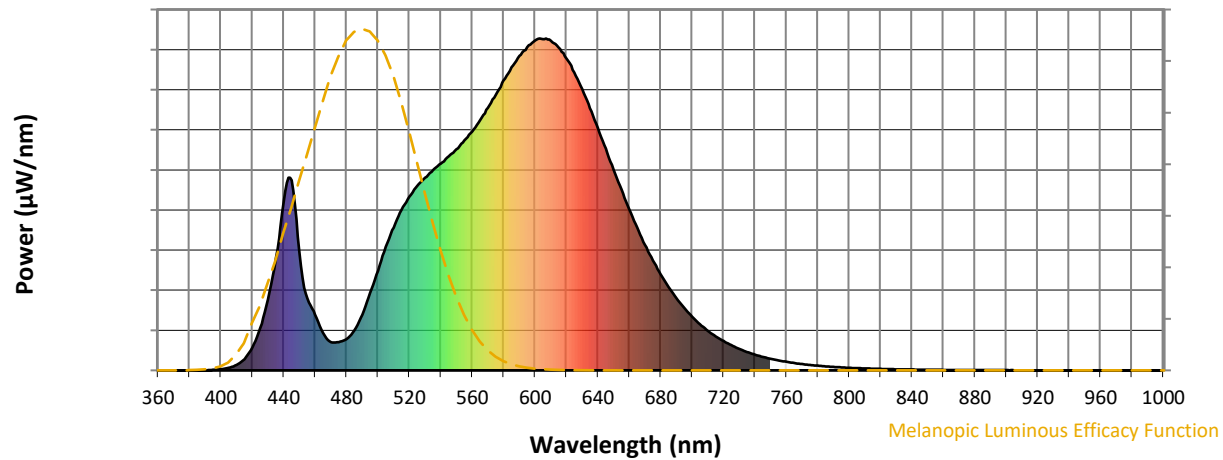
Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^λ /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

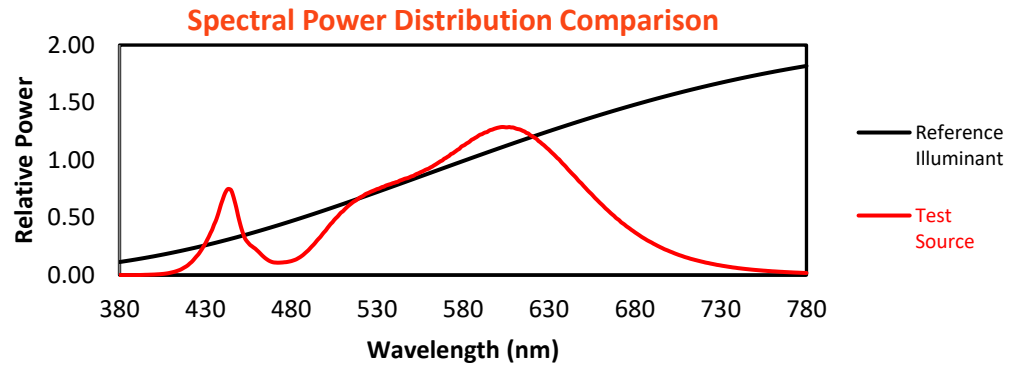
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168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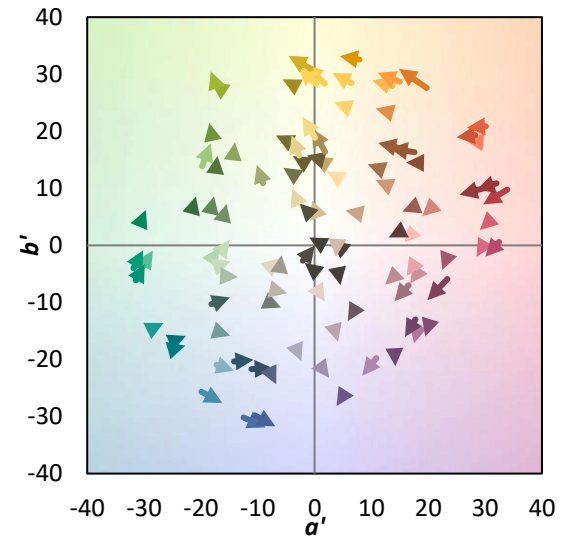
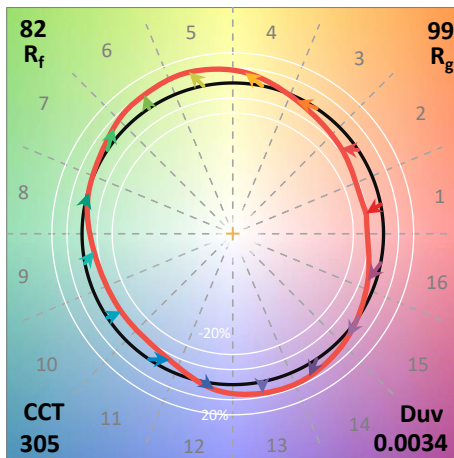
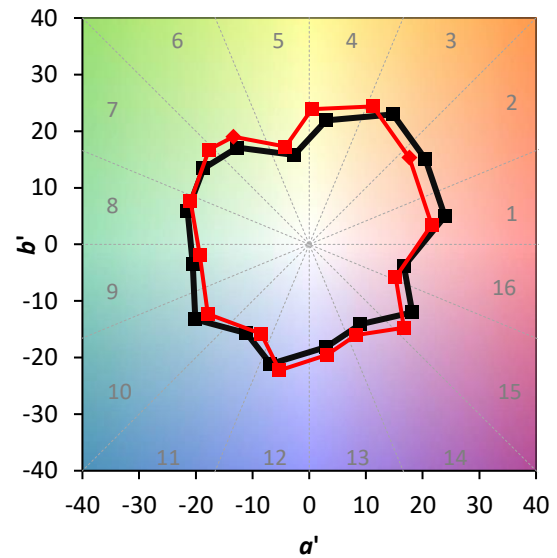
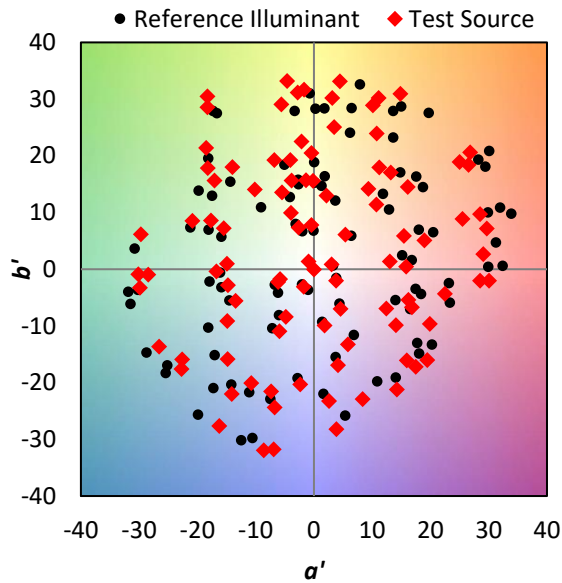
TM-30-18

Summary

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

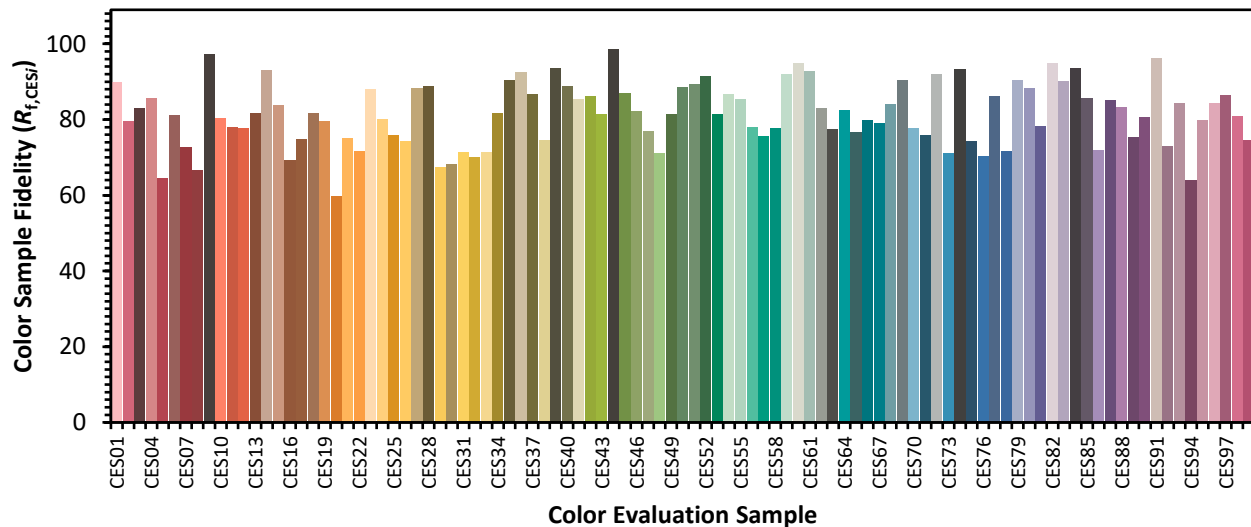


Color Vector Graphics

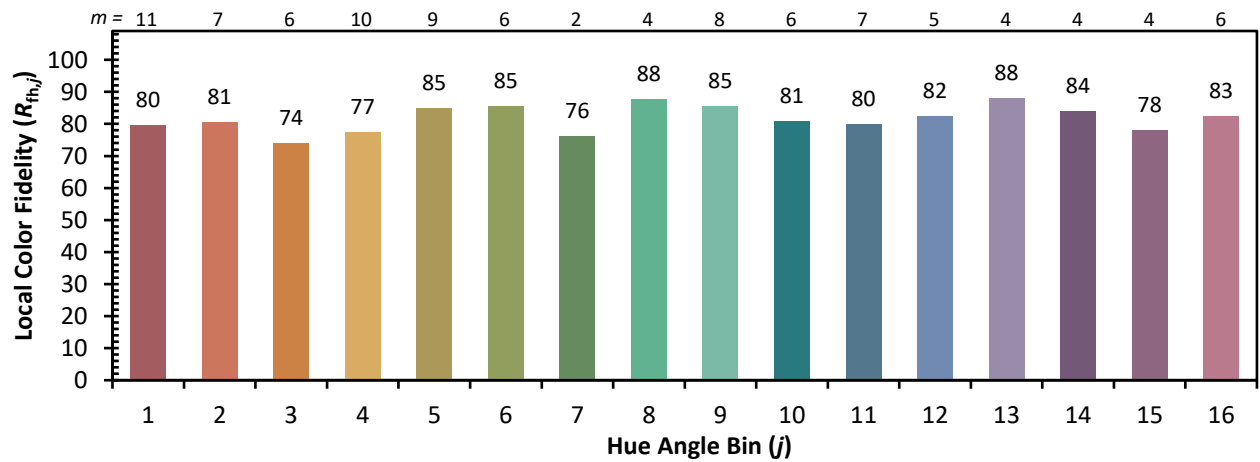
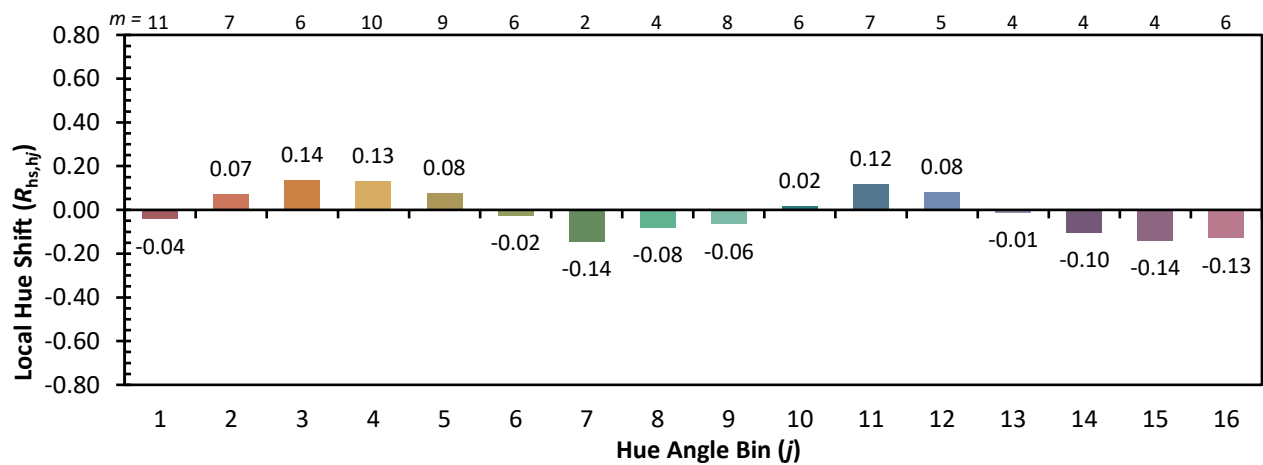
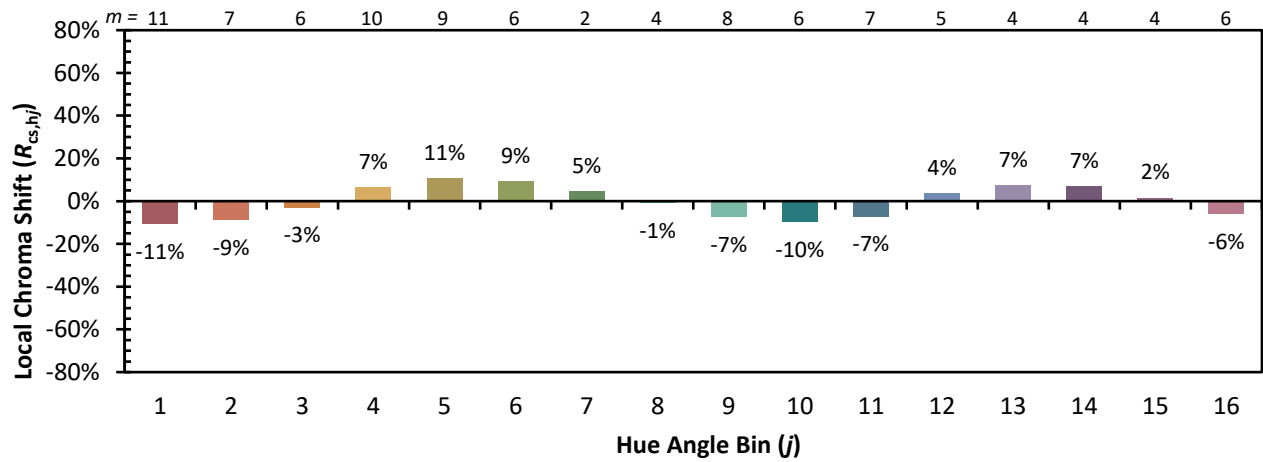


Individual Sample Fidelity Index ($R_{f,i}$)

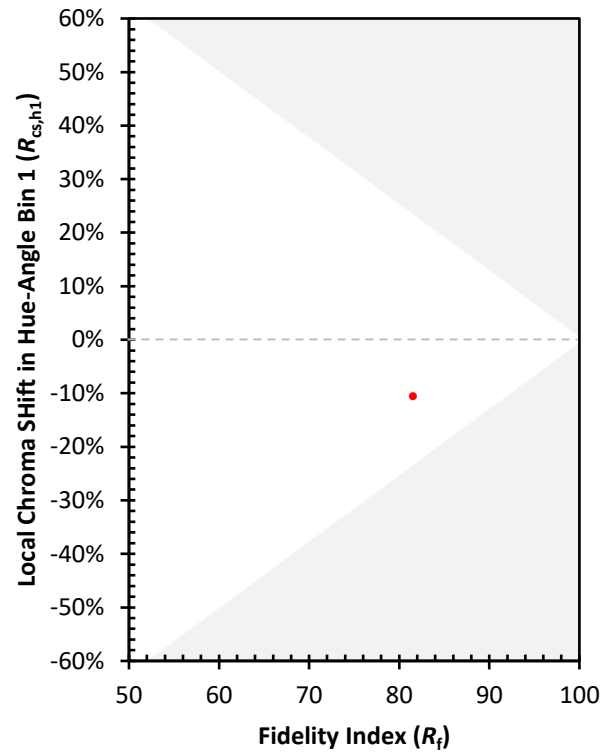
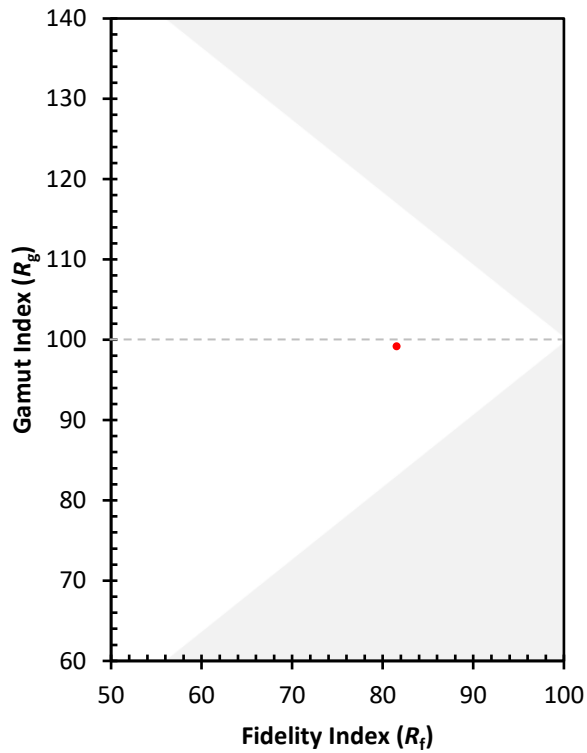
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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