

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: P321445

Luminaire Tested: **GLEON-SA1C-830-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321445
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA1C-830-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4750 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B0 - U0 - G1

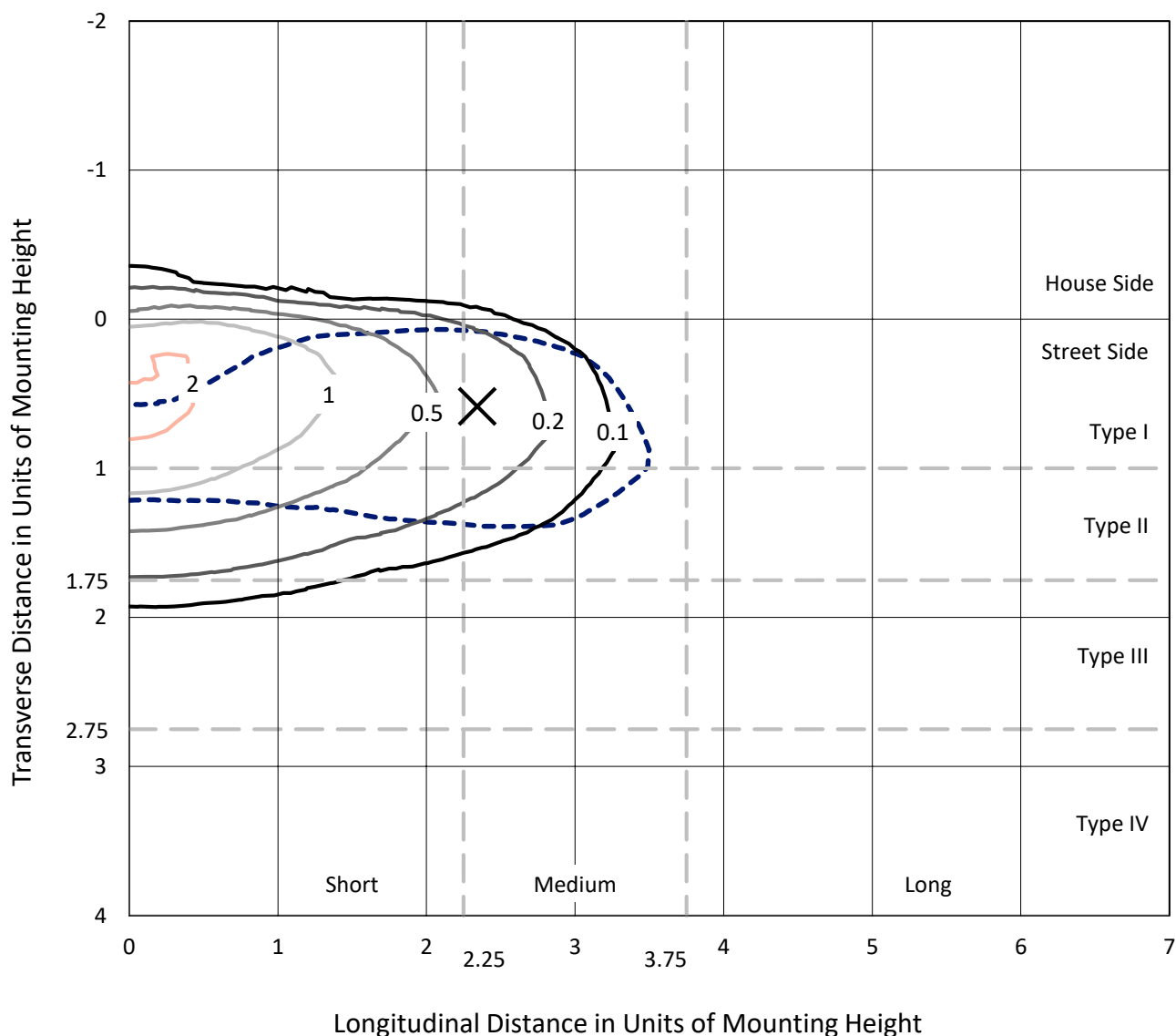
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

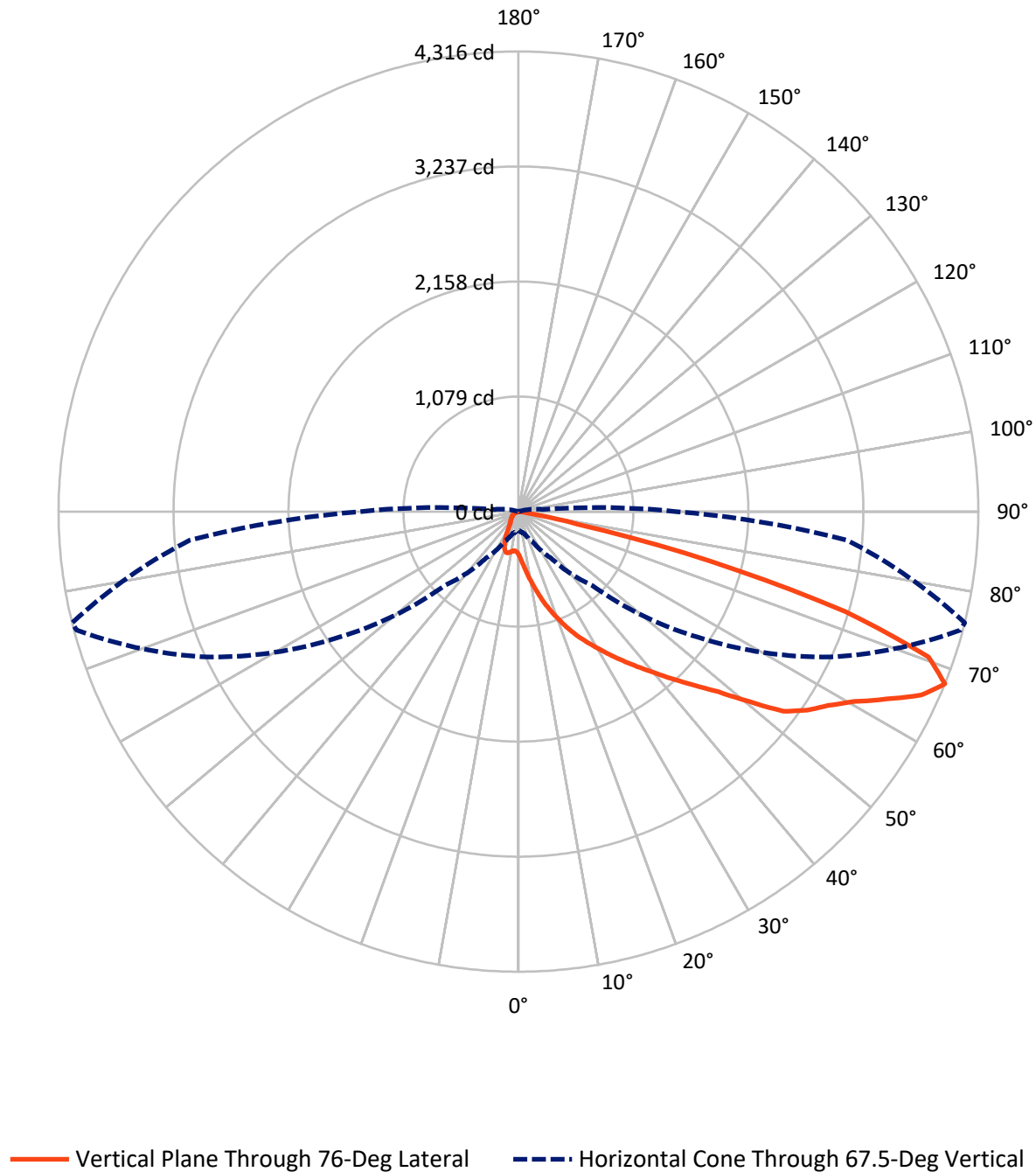
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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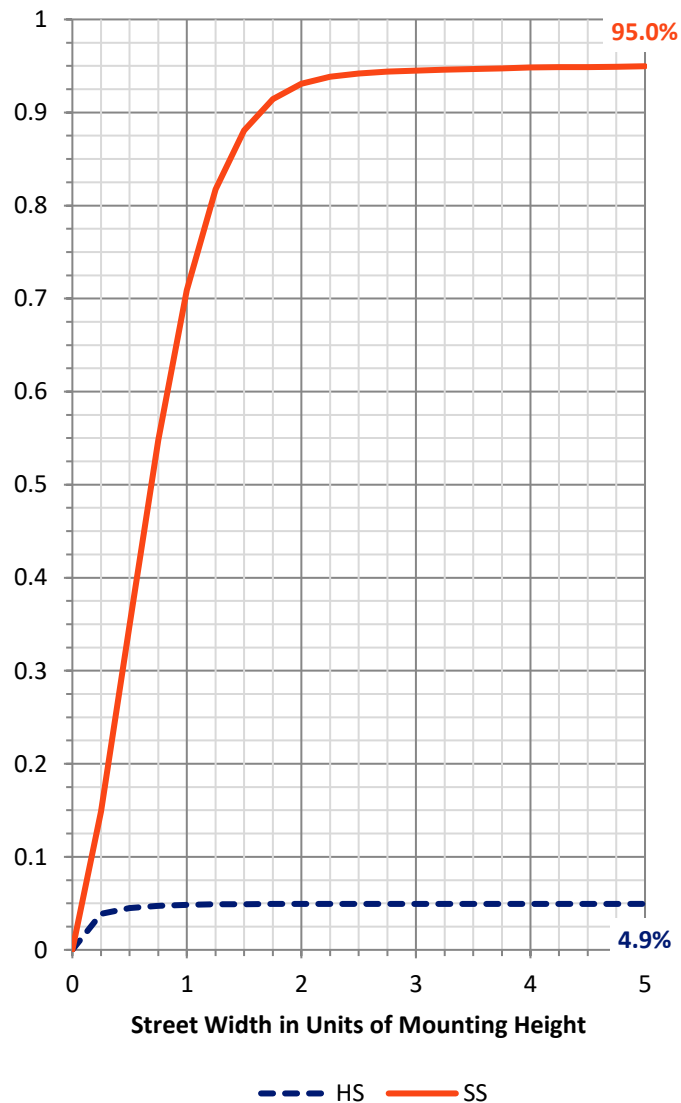
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	235.9	0.0	235.9
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	4514.1	0.0	4514.1
	% Fixture	95.0	0.0	95.0
Total	Lumens	4750.0	0.0	4750.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.1	1.1
10°-20°	198.6	4.2
20°-30°	404.1	8.5
30°-40°	701.4	14.8
40°-50°	991.0	20.9
50°-60°	1123.9	23.7
60°-70°	932.2	19.6
70°-80°	337.7	7.1
80°-90°	10.9	0.2
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°	4750.0	100.0
0°-180°	4750.0	100.0

Coefficient of Utilization



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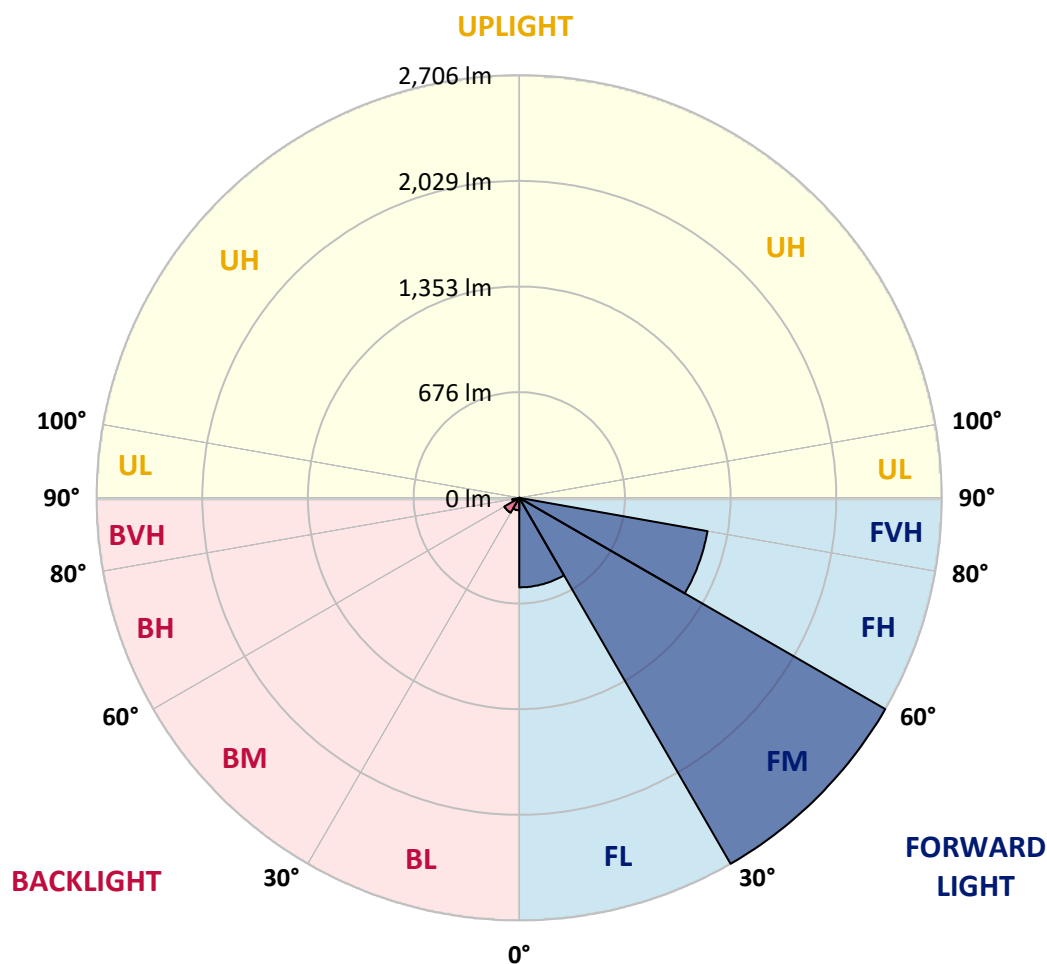
CATALOG NUMBER: GLEON-SA1C-830-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	573.3	12.1			
FM	(30°-60°)	2706.0	57.0			
FH	(60°-80°)	1224.2	25.8			G1/1800
FVH	(80°-90°)	10.6	0.2			G1/100
BL	(0°-30°)	79.5	1.7	B0/110		
BM	(30°-60°)	110.4	2.3	B0/220		
BH	(60°-80°)	45.6	1.0	B0/110		G0/110
BVH	(80°-90°)	0.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Medium





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CATALOG NUMBER: GLEON-SA1C-830-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	402.9	402.9	402.9	402.9	402.9	402.9	402.9	402.9	402.9	402.9	402.9
2.5°	601.5	588.0	591.1	582.3	566.5	534.1	506.4	480.2	449.6	448.5	423.3
5°	811.1	799.6	798.2	780.5	751.8	696.6	642.9	581.7	513.5	508.5	455.0
7.5°	1001.3	992.2	988.8	967.8	914.3	860.6	790.7	700.8	594.0	584.8	497.6
10°	1147.4	1143.0	1143.9	1128.9	1083.1	1033.2	941.4	826.7	685.4	671.2	548.8
12.5°	1258.1	1259.2	1266.7	1257.5	1231.9	1194.9	1096.8	960.9	786.5	767.2	607.3
15°	1339.5	1344.7	1358.5	1369.9	1368.0	1336.0	1246.1	1097.3	893.9	872.5	672.5
17.5°	1392.2	1398.0	1418.0	1443.4	1466.7	1459.2	1390.1	1228.8	1002.6	977.8	742.2
20°	1438.4	1445.2	1466.7	1500.2	1543.7	1553.1	1507.7	1356.4	1111.0	1080.8	814.2
22.5°	1538.5	1538.3	1551.4	1571.0	1612.4	1636.5	1607.8	1474.8	1218.2	1186.8	887.7
25°	1719.6	1712.7	1708.1	1692.7	1701.9	1716.9	1700.8	1585.5	1326.0	1294.1	962.2
27.5°	1934.8	1938.9	1901.9	1860.5	1828.4	1813.0	1786.8	1688.1	1429.6	1394.7	1035.0
30°	2161.8	2163.1	2119.4	2066.5	1996.0	1937.5	1892.1	1786.2	1536.2	1498.1	1105.8
32.5°	2366.6	2358.5	2315.2	2243.2	2154.1	2088.4	1994.1	1895.6	1649.0	1612.2	1184.5
35°	2529.0	2519.4	2466.7	2401.2	2308.8	2242.6	2129.2	2004.9	1767.6	1731.6	1263.3
37.5°	2647.6	2636.4	2582.3	2514.8	2435.1	2396.6	2285.9	2123.7	1897.1	1858.4	1346.4
40°	2688.8	2679.0	2645.1	2595.8	2531.7	2522.9	2452.2	2260.5	2038.0	1996.8	1440.5
42.5°	2664.3	2654.7	2642.6	2626.0	2599.3	2607.6	2609.1	2416.4	2194.5	2153.9	1544.3
45°	2566.9	2558.3	2570.8	2595.2	2628.3	2669.5	2752.3	2583.9	2369.3	2326.0	1664.4
47.5°	2423.5	2417.2	2451.8	2512.5	2609.3	2723.0	2883.2	2760.0	2565.6	2525.4	1814.3
50°	2219.5	2218.4	2287.5	2398.5	2547.3	2748.8	3018.5	2960.2	2838.3	2796.0	2022.6
52.5°	1901.9	1904.0	2039.9	2217.4	2438.4	2731.3	3105.5	3217.5	3155.4	3111.5	2203.0
55°	1599.5	1612.0	1708.3	1964.3	2271.5	2666.3	3135.5	3337.6	3330.5	3288.9	2303.4
57.5°	1303.3	1326.0	1418.8	1658.0	2027.8	2516.7	3119.0	3389.6	3460.8	3428.9	2435.7
60°	982.4	992.8	1099.8	1323.3	1715.0	2243.6	2999.8	3417.9	3638.9	3616.9	2627.8
62.5°	625.0	651.0	745.9	961.6	1335.4	1864.4	2798.7	3417.5	3861.8	3873.9	2875.7
65°	329.3	359.6	410.0	595.9	917.6	1440.9	2496.3	3385.4	4135.3	4152.2	3069.5
67.5°	177.5	186.3	212.9	309.3	532.2	976.1	2051.9	3227.2	4293.7	4316.0	3096.5
70°	129.9	134.7	144.6	171.1	267.9	566.9	1497.3	2868.6	4089.5	4081.2	2751.3
72.5°	99.7	107.2	114.7	125.3	154.0	302.6	932.2	2246.3	3263.0	3208.1	2056.5
75°	78.7	79.9	90.5	100.1	115.5	172.3	414.0	1308.3	1991.6	1861.5	1066.5
77.5°	62.9	63.7	69.9	78.3	92.8	113.2	128.2	514.7	635.8	567.4	231.4
80°	37.3	39.3	52.0	60.4	77.0	71.4	46.8	111.8	99.3	89.9	38.9
82.5°	20.8	22.5	29.3	47.7	53.7	34.1	23.3	30.2	23.3	22.7	11.0
85°	0.0	1.0	18.9	29.6	21.9	7.5	9.8	10.0	6.9	6.5	4.4
87.5°	0.0	0.0	5.8	5.6	0.8	1.2	2.3	3.3	2.7	2.7	2.3
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-SA1C-830-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	402.9	402.9	402.9	402.9	402.9	402.9	402.9	402.9	402.9	402.9	402.9
2.5°	410.8	399.6	378.4	357.6	340.1	325.7	312.8	307.6	303.5	302.8	299.5
5°	429.2	406.5	365.9	332.6	310.3	294.5	281.0	272.6	266.2	263.7	261.4
7.5°	456.8	422.5	364.2	325.9	299.3	272.6	247.7	220.6	203.8	197.3	193.6
10°	490.6	443.7	370.5	324.1	277.4	221.2	179.8	145.5	131.5	127.0	125.7
12.5°	529.9	470.2	381.3	312.4	230.8	157.1	124.0	112.4	109.3	107.8	107.8
15°	575.1	499.1	389.0	278.7	170.7	118.8	107.4	102.0	98.7	96.8	97.0
17.5°	621.3	527.4	385.2	229.8	125.9	105.7	97.2	91.4	86.8	84.9	84.5
20°	667.9	553.6	364.4	171.1	106.6	95.9	86.4	79.9	75.3	73.5	73.1
22.5°	716.2	575.9	327.8	125.5	95.7	85.1	75.8	69.3	64.9	63.3	62.4
25°	763.2	594.0	276.6	101.6	85.5	74.9	66.0	59.9	56.0	54.3	54.1
27.5°	807.1	605.4	217.3	89.7	76.6	65.8	57.7	52.2	48.9	47.7	47.5
30°	846.7	606.5	160.7	81.0	68.7	57.9	50.4	45.6	42.7	41.4	41.0
32.5°	886.6	597.7	117.0	73.1	61.4	51.0	43.7	40.0	37.9	36.8	36.8
35°	924.3	577.6	91.2	66.2	54.3	44.3	38.5	35.8	34.5	33.5	33.5
37.5°	961.1	548.6	77.4	60.1	47.7	38.7	33.9	32.3	31.2	30.2	30.2
40°	998.6	512.2	70.3	54.5	42.3	34.3	30.2	28.7	27.7	26.8	26.6
42.5°	1044.6	470.2	65.8	49.3	37.5	30.4	26.6	25.0	24.1	23.3	22.9
45°	1097.9	433.9	62.0	44.1	33.5	27.1	23.1	21.4	20.2	19.1	18.9
47.5°	1174.7	407.7	57.0	38.5	29.8	23.5	20.0	18.1	16.2	15.2	15.0
50°	1272.7	386.1	50.6	33.5	26.0	20.0	16.7	14.4	12.7	11.7	11.7
52.5°	1321.4	357.8	44.7	29.1	21.9	16.9	13.5	10.8	10.0	8.9	8.9
55°	1341.0	336.1	38.9	24.8	18.1	13.9	10.6	8.3	7.7	7.1	6.9
57.5°	1395.9	329.9	33.9	21.0	15.0	11.0	8.1	6.2	5.8	5.0	5.0
60°	1484.4	333.0	29.3	17.9	12.1	8.5	6.0	4.8	4.4	3.5	3.5
62.5°	1579.9	329.1	24.8	15.4	9.4	6.2	4.2	3.5	3.5	2.1	1.9
65°	1598.2	293.0	21.2	12.7	7.3	4.6	2.7	2.3	3.1	0.4	0.0
67.5°	1483.3	227.3	18.3	9.8	5.4	3.5	2.1	1.0	2.7	0.0	0.0
70°	1186.1	144.4	14.8	7.1	4.2	2.9	1.7	0.4	2.1	0.0	0.0
72.5°	838.8	83.9	11.7	5.0	3.5	2.3	1.2	0.0	1.2	0.0	0.0
75°	424.2	44.7	7.3	3.7	2.7	1.7	0.8	0.0	0.2	0.0	0.0
77.5°	91.8	20.8	4.6	2.7	1.9	1.0	0.4	0.0	0.0	0.0	0.0
80°	20.0	9.2	2.9	1.7	1.0	0.6	0.0	0.0	0.0	0.0	0.0
82.5°	7.3	4.8	1.5	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.0	2.5	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	0.8	0.2	0.2	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
 Rf: 81.5
 Rg: 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

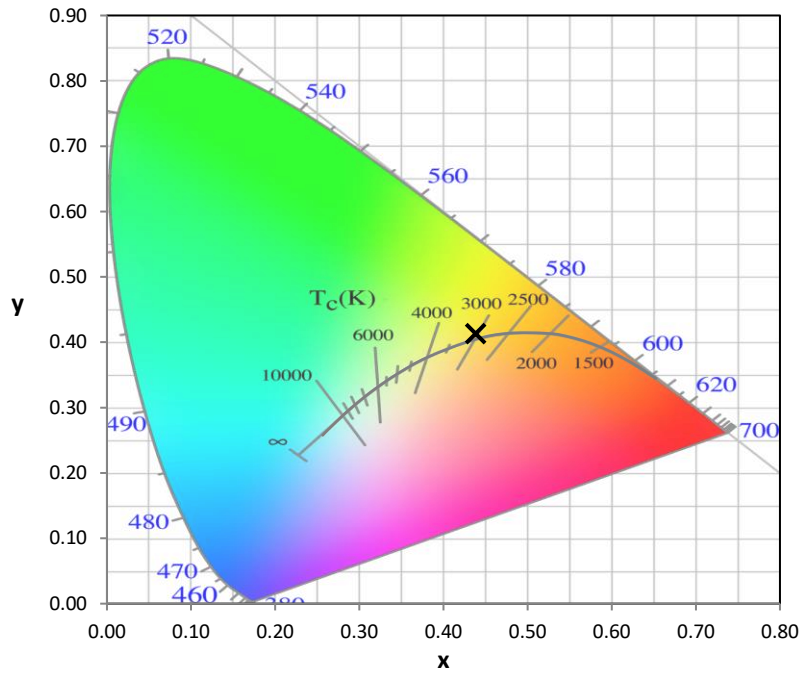
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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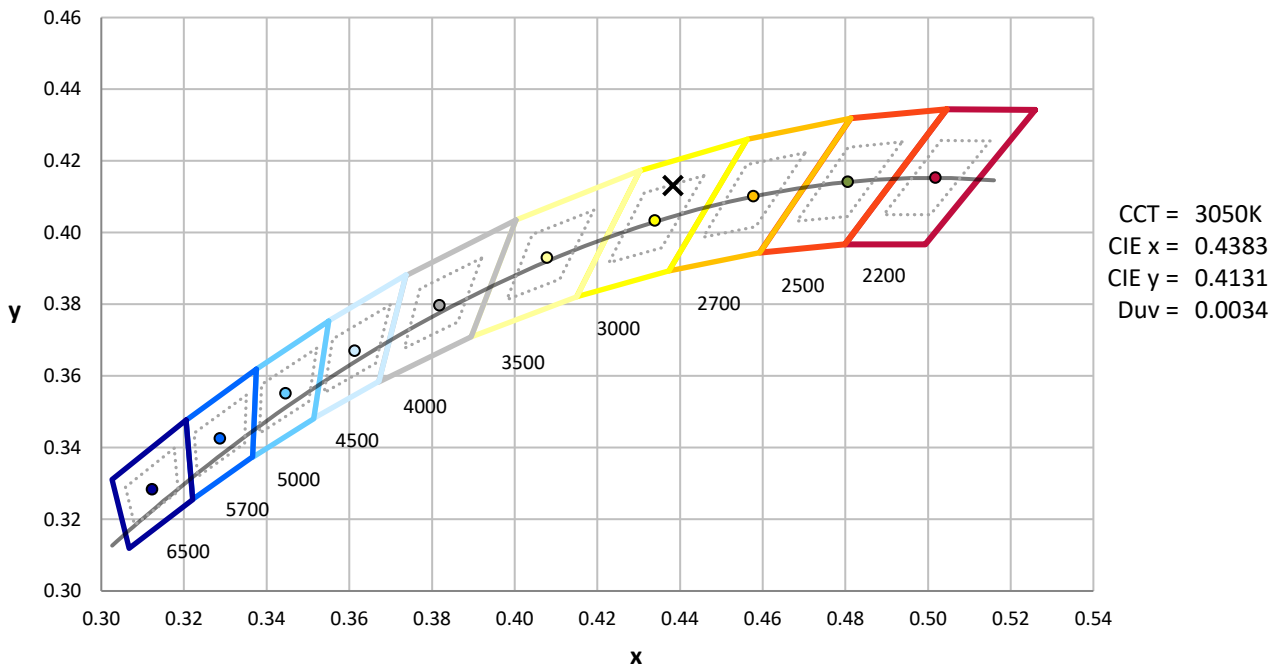
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

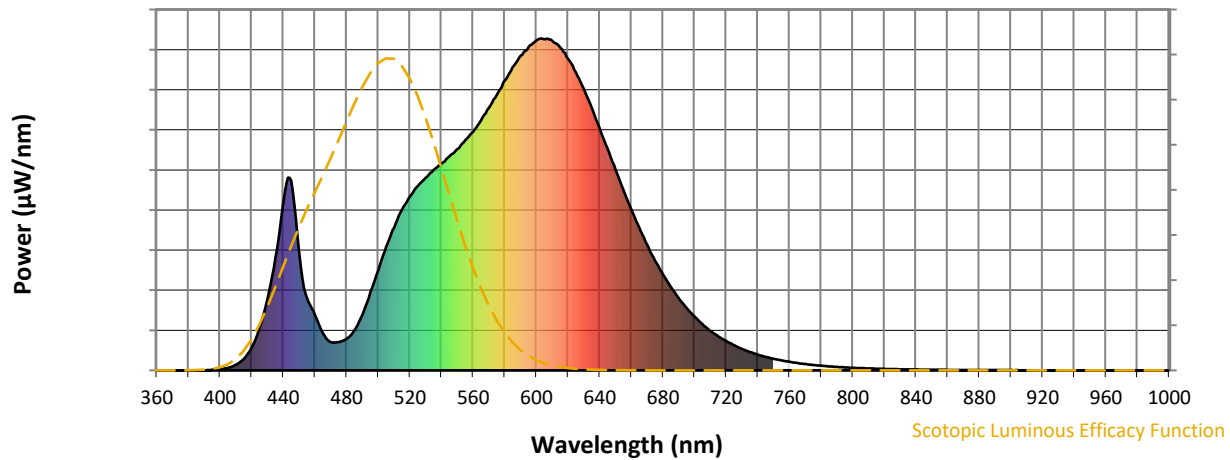


Photopic Lumens: NR

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



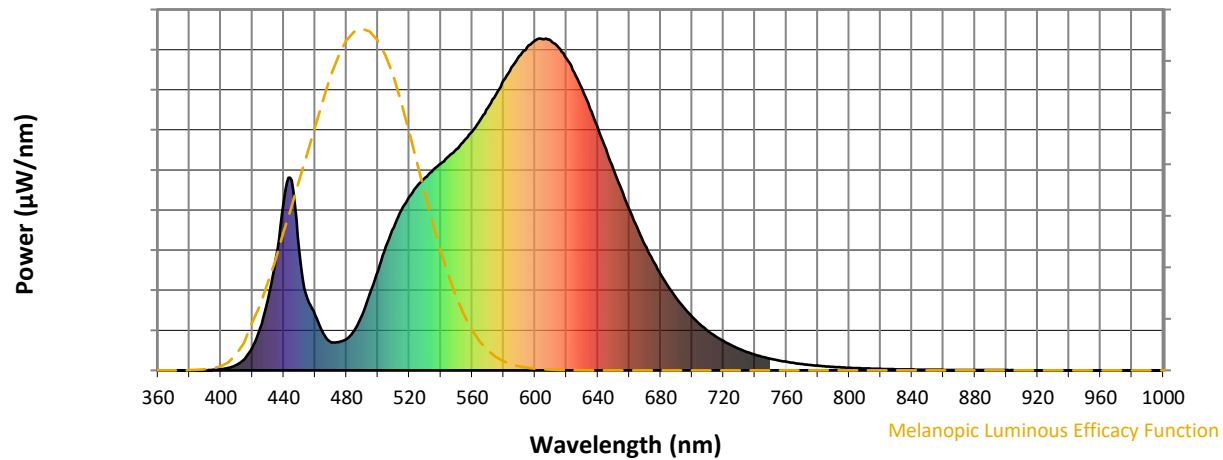
Scotopic Lumens: NR

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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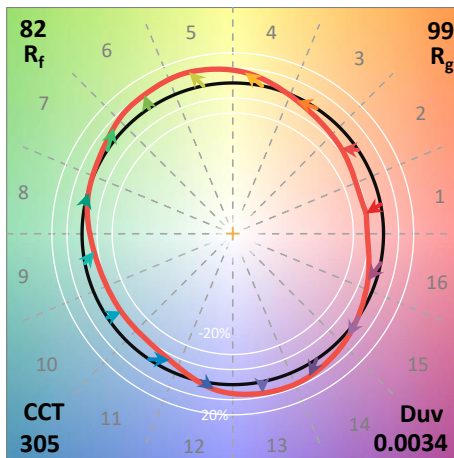
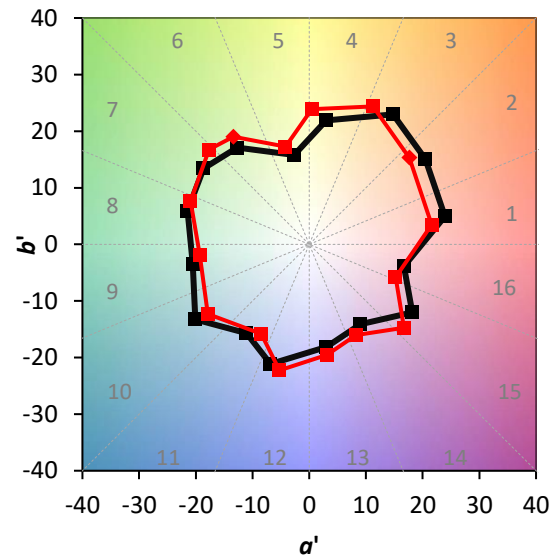
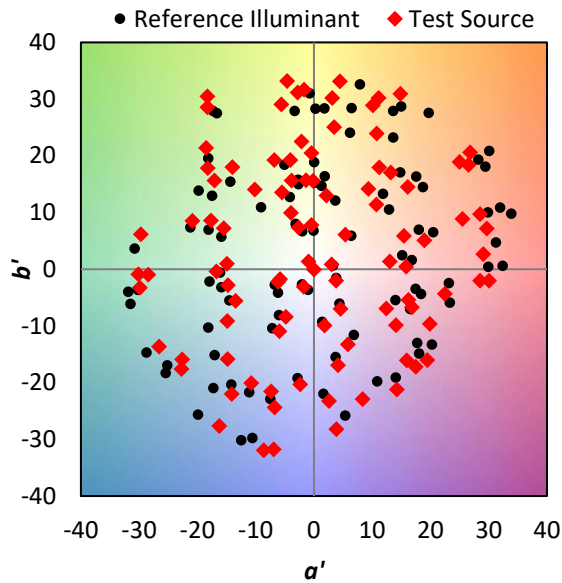
TM-30-18

Summary

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

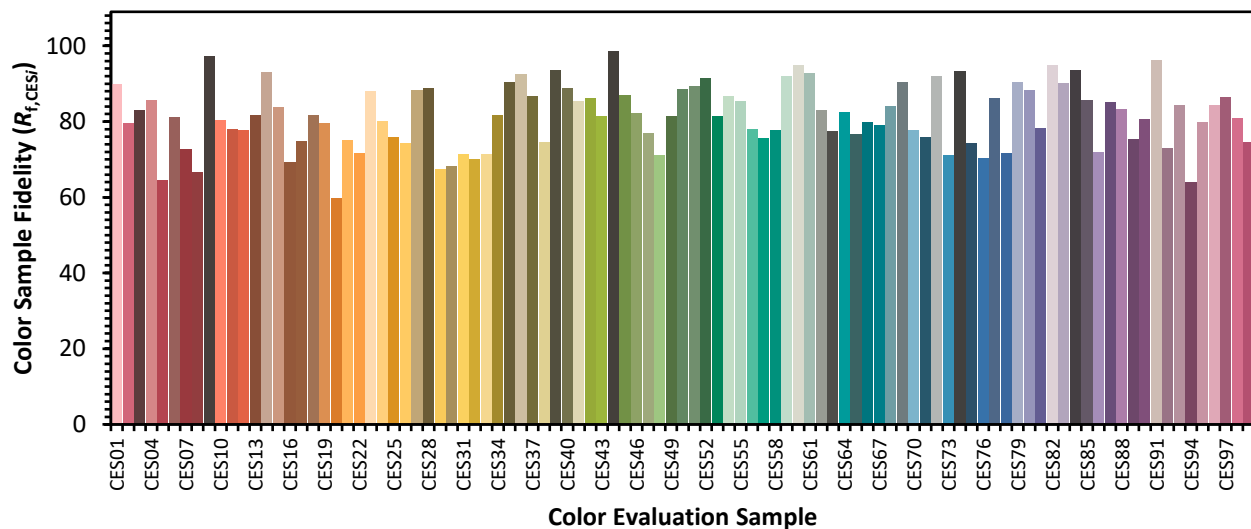


Color Vector Graphics

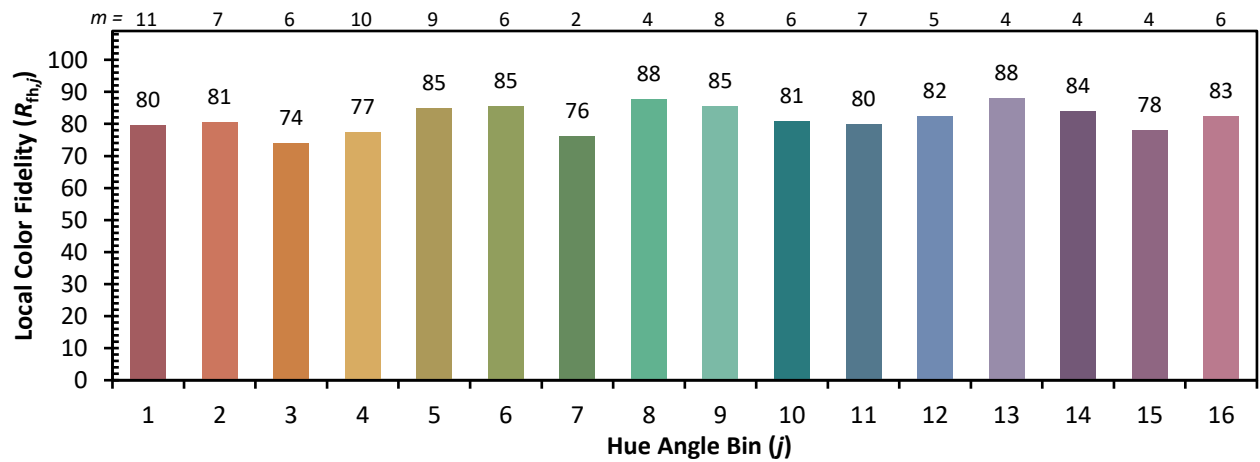
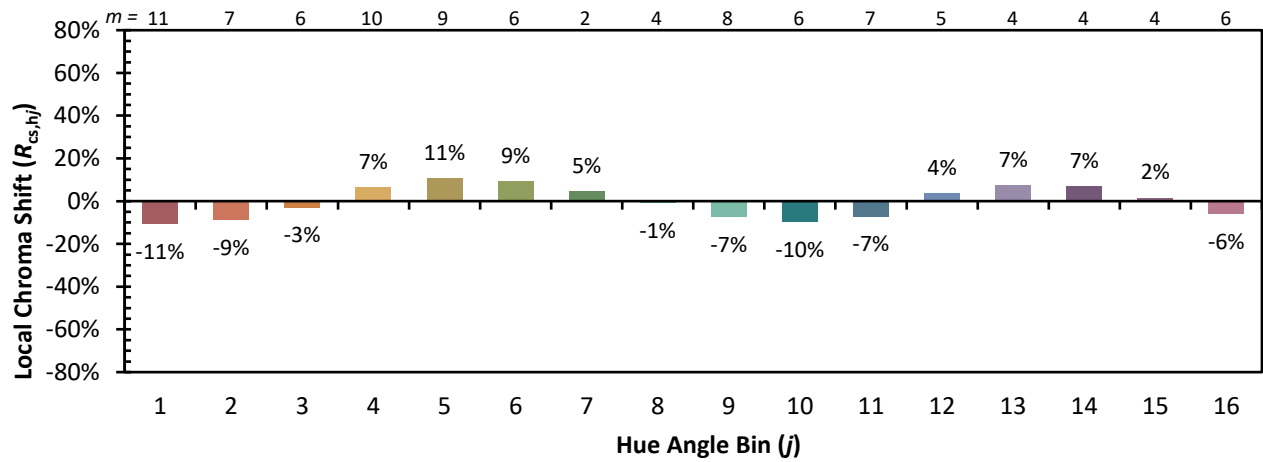


Individual Sample Fidelity Index ($R_{f,i}$)

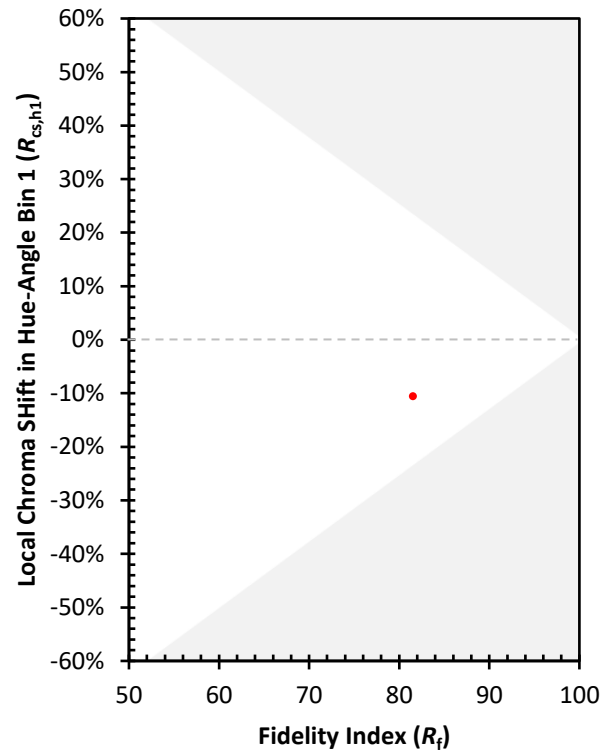
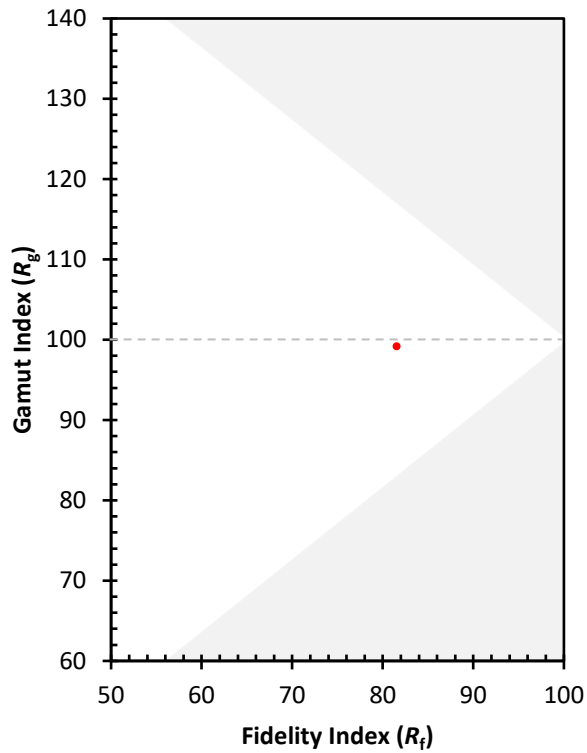
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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