

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: P317290

Luminaire Tested: **GLEON-SA6C-830-U-RW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P317290
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-7)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA6C-830-U-RW
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(6) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR
WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34363 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U0 - G5

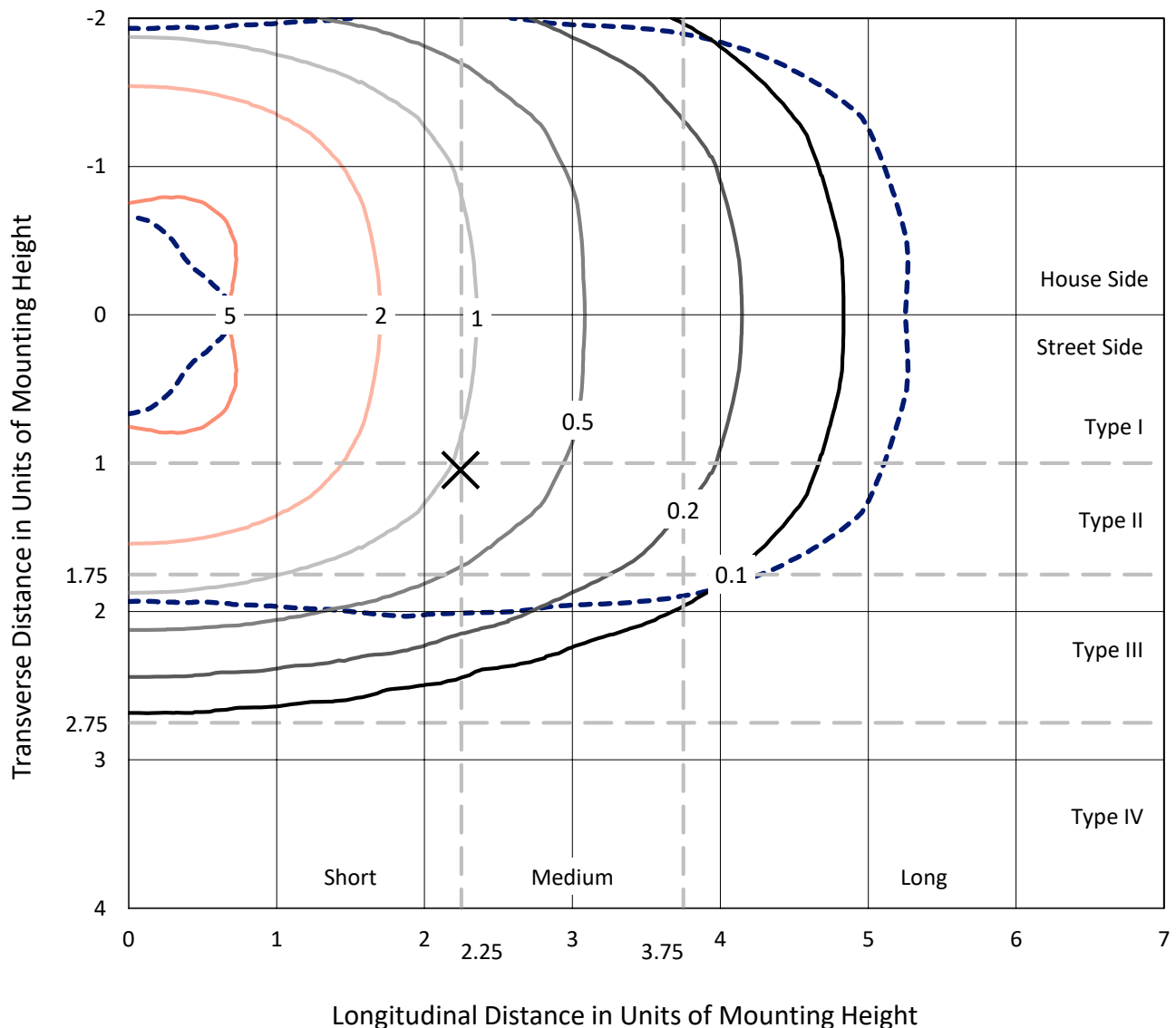
Input Watts (W): 333
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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 CATALOG NUMBER: GLEON-SA6C-830-U-RW

Iso-Footcandle Lines of Horizontal Illumination

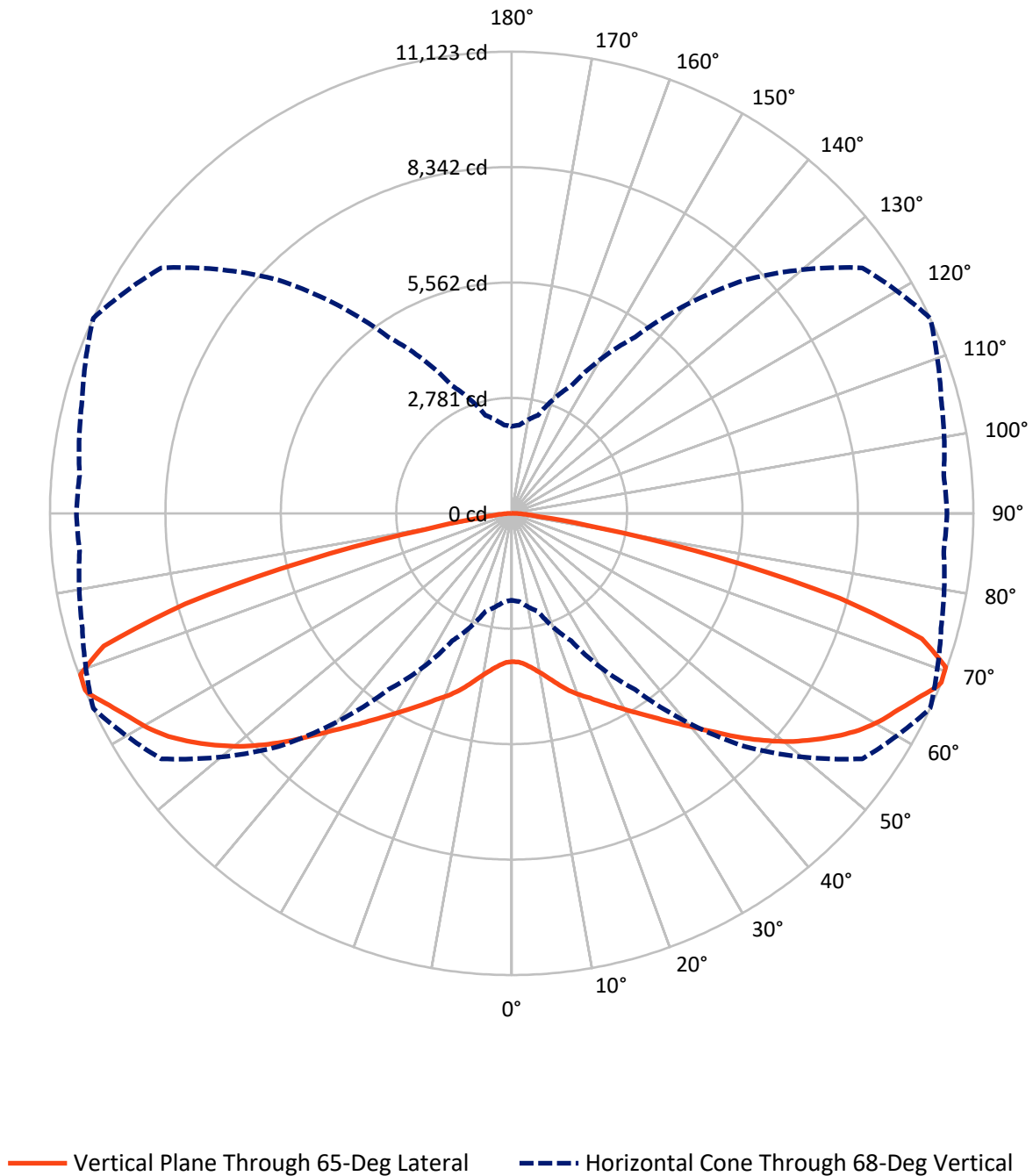
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
 Type III - Short - N/A

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CATALOG NUMBER: GLEON-SA6C-830-U-RW

Luminous Intensity Polar Plot



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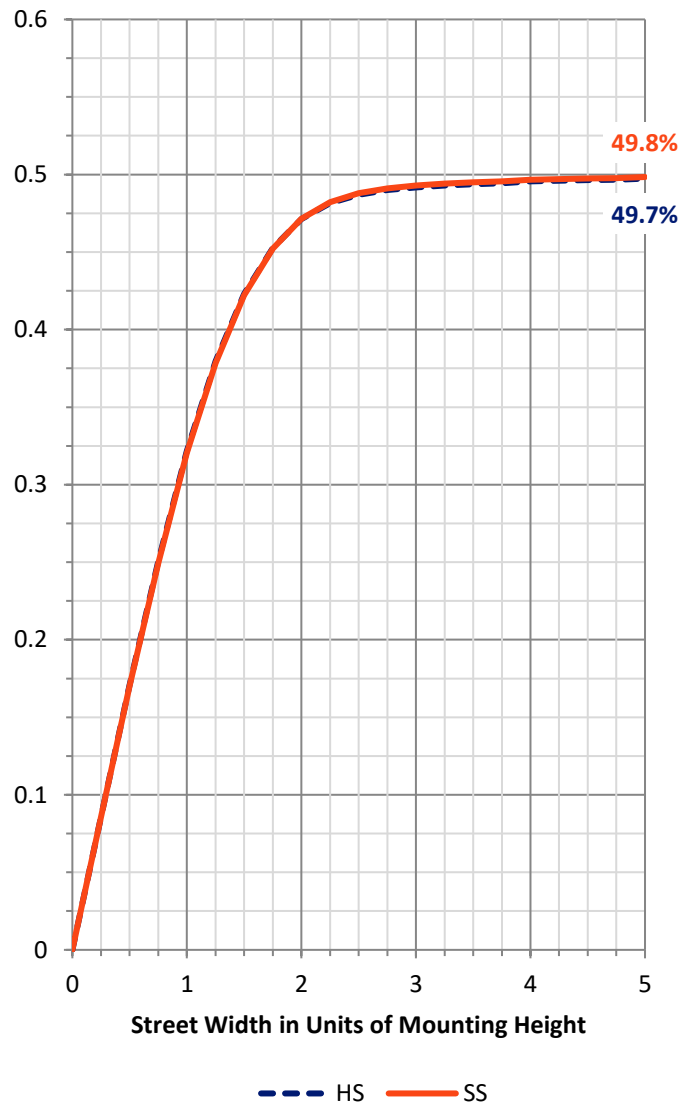
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17181.5	0.0	17181.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	17181.5	0.0	17181.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	34363.0	0.0	34363.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.8	1.0
10°-20°	1171.3	3.4
20°-30°	2283.8	6.6
30°-40°	3836.6	11.2
40°-50°	6045.1	17.6
50°-60°	8084.3	23.5
60°-70°	7859.0	22.9
70°-80°	4296.1	12.5
80°-90°	436.9	1.3
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°	34363.0	100.0
0°-180°	34363.0	100.0

Coefficient of Utilization



REPORT NUMBER: P317290

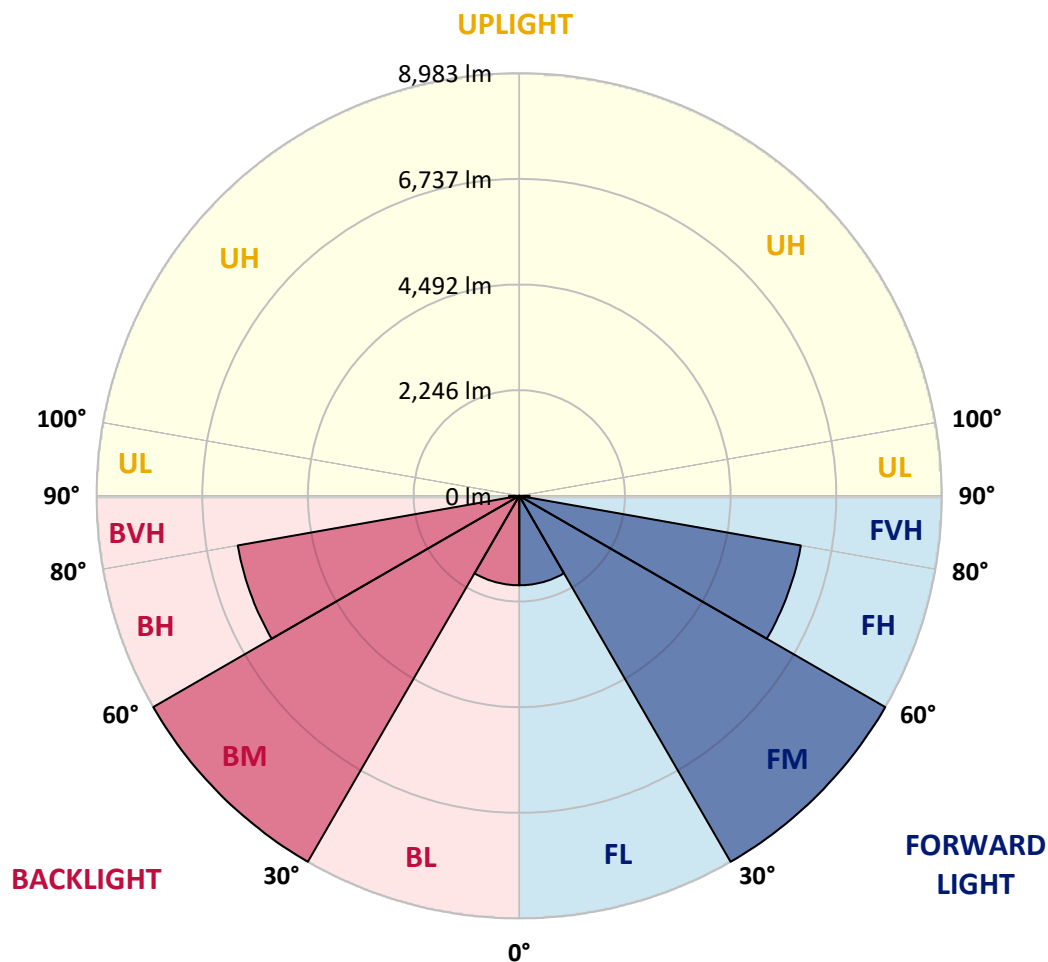
CATALOG NUMBER: GLEON-SA6C-830-U-RW

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1902.5	5.5			
FM	(30°-60°)	8983.0	26.1			
FH	(60°-80°)	6077.5	17.7			G3/7500
FVH	(80°-90°)	218.5	0.6			G2/225
BL	(0°-30°)	1902.5	5.5	B3/2500		
BM	(30°-60°)	8983.0	26.1	B5		
BH	(60°-80°)	6077.5	17.7	B5		G5
BVH	(80°-90°)	218.5	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type III Short





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CATALOG NUMBER: GLEON-SA6C-830-U-RW

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3572.9	3572.9	3572.9	3572.9	3572.9	3572.9	3572.9	3572.9	3572.9	3572.9	3572.9
2.5°	3547.6	3548.7	3554.5	3561.4	3567.2	3582.2	3585.6	3591.4	3593.7	3599.4	3599.4
5°	3516.5	3518.8	3532.6	3551.1	3571.8	3608.7	3635.2	3665.1	3680.1	3696.2	3695.1
7.5°	3513.0	3518.8	3538.4	3568.3	3602.9	3664.0	3719.3	3779.2	3819.5	3856.4	3854.1
10°	3548.7	3558.0	3585.6	3630.6	3682.4	3758.4	3840.3	3920.9	3991.2	4047.6	4050.0
12.5°	3602.9	3614.4	3658.2	3726.2	3804.5	3902.5	3999.3	4090.3	4187.1	4271.2	4278.1
15°	3674.3	3689.3	3755.0	3856.4	3976.2	4092.6	4196.3	4289.6	4401.4	4517.7	4529.3
17.5°	3780.3	3801.1	3887.5	4024.6	4182.5	4310.3	4418.7	4488.9	4582.3	4702.1	4724.0
20°	3941.6	3968.1	4077.6	4241.2	4433.6	4567.3	4650.2	4665.2	4711.3	4818.5	4843.8
22.5°	4151.3	4174.4	4296.5	4491.2	4706.7	4851.9	4895.7	4835.7	4831.1	4917.5	4941.7
25°	4385.2	4406.0	4547.7	4766.6	4998.2	5158.4	5157.2	5040.8	4960.2	5027.0	5052.4
27.5°	4647.9	4680.2	4816.2	5046.6	5294.3	5452.2	5442.9	5263.2	5110.0	5127.2	5149.1
30°	4949.8	4985.5	5118.0	5351.9	5599.6	5754.0	5742.5	5505.2	5274.7	5228.6	5244.8
32.5°	5324.3	5366.9	5492.5	5722.9	5941.8	6081.3	6047.8	5767.9	5472.9	5372.7	5387.6
35°	5774.8	5800.1	5932.6	6159.6	6337.0	6432.7	6362.4	6072.0	5724.1	5603.1	5603.1
37.5°	6231.0	6250.6	6399.3	6619.3	6791.0	6841.7	6704.6	6405.0	6052.5	5880.8	5884.2
40°	6668.9	6721.9	6888.9	7114.8	7284.1	7298.0	7115.9	6785.3	6417.7	6240.3	6261.0
42.5°	7126.3	7178.1	7377.5	7633.3	7783.0	7806.1	7592.9	7211.6	6830.2	6686.2	6709.2
45°	7534.2	7575.7	7806.1	8103.4	8290.0	8349.9	8097.6	7700.1	7276.1	7135.5	7141.3
47.5°	7818.8	7872.9	8126.4	8476.7	8748.6	8840.8	8593.0	8175.9	7715.1	7544.5	7559.5
50°	8076.9	8105.7	8362.6	8745.1	9090.8	9280.9	9068.9	8646.0	8158.7	7977.8	7993.9
52.5°	8220.9	8257.8	8506.6	8905.3	9314.3	9620.8	9491.7	9068.9	8587.3	8411.0	8430.6
55°	8120.6	8148.3	8446.7	8941.0	9452.6	9830.5	9850.1	9482.5	9007.8	8853.4	8908.7
57.5°	7664.4	7698.9	8063.0	8710.6	9469.9	9972.2	10119.7	9866.2	9400.7	9275.1	9307.4
60°	6951.2	6973.1	7361.3	8089.5	9133.4	10031.0	10291.4	10179.6	9785.6	9660.0	9703.8
62.5°	5680.3	5712.6	6176.9	7152.8	8422.5	9857.0	10457.3	10438.8	10143.9	10028.7	10067.8
65°	3882.9	3939.3	4453.2	5687.2	7326.8	9324.7	10608.2	10740.7	10460.7	10315.6	10367.4
67.5°	2344.7	2386.2	2758.3	3755.0	5606.6	8250.8	10452.7	11084.1	10684.3	10450.4	10493.0
68°	2095.8	2133.9	2444.9	3388.6	5186.0	7947.8	10311.0	11123.2	10708.5	10448.1	10486.1
70°	1266.3	1291.6	1500.2	2094.7	3457.7	6304.8	9344.3	11091.0	10862.9	10480.3	10502.2
72.5°	825.0	833.0	867.6	1075.0	1766.3	3525.7	7013.4	10335.2	11094.4	10668.1	10664.7
75°	685.6	680.9	684.4	708.6	871.1	1546.2	4098.3	8164.4	10576.0	10372.0	10299.4
77.5°	579.6	576.1	574.9	576.1	583.0	746.6	1779.0	5085.8	8093.0	9174.9	9239.4
80°	468.9	464.3	479.3	472.4	451.7	464.3	745.5	2115.4	3814.9	4104.1	3846.0
82.5°	341.0	323.8	388.3	369.9	352.6	327.2	411.3	683.2	910.2	624.5	439.0
85°	262.7	244.3	295.0	283.4	242.0	167.1	244.3	334.1	368.7	210.9	165.9
87.5°	107.2	112.9	213.2	168.2	141.7	80.7	100.2	133.7	179.7	89.9	69.1
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.

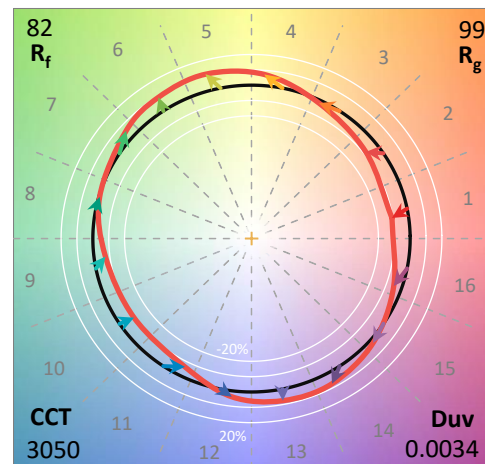
Test Information

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

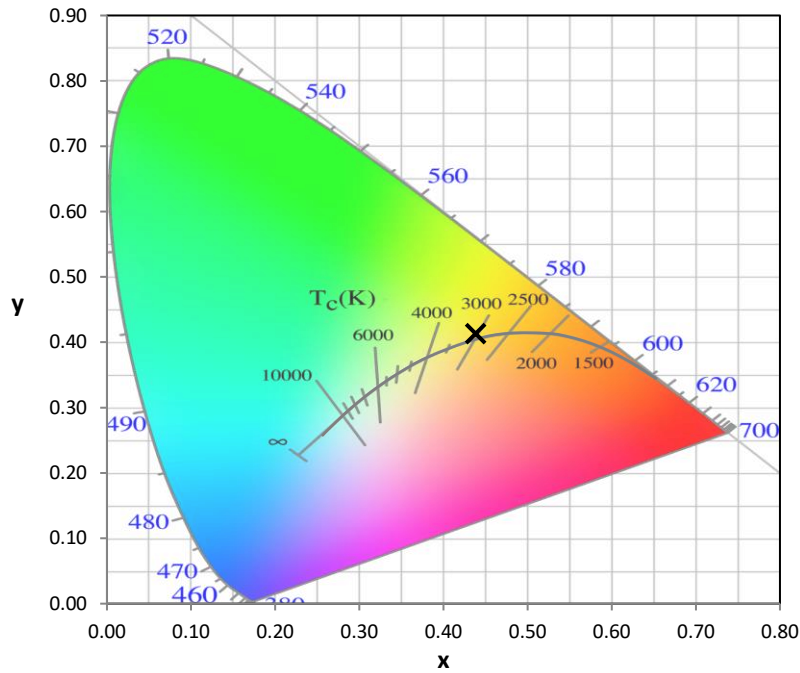
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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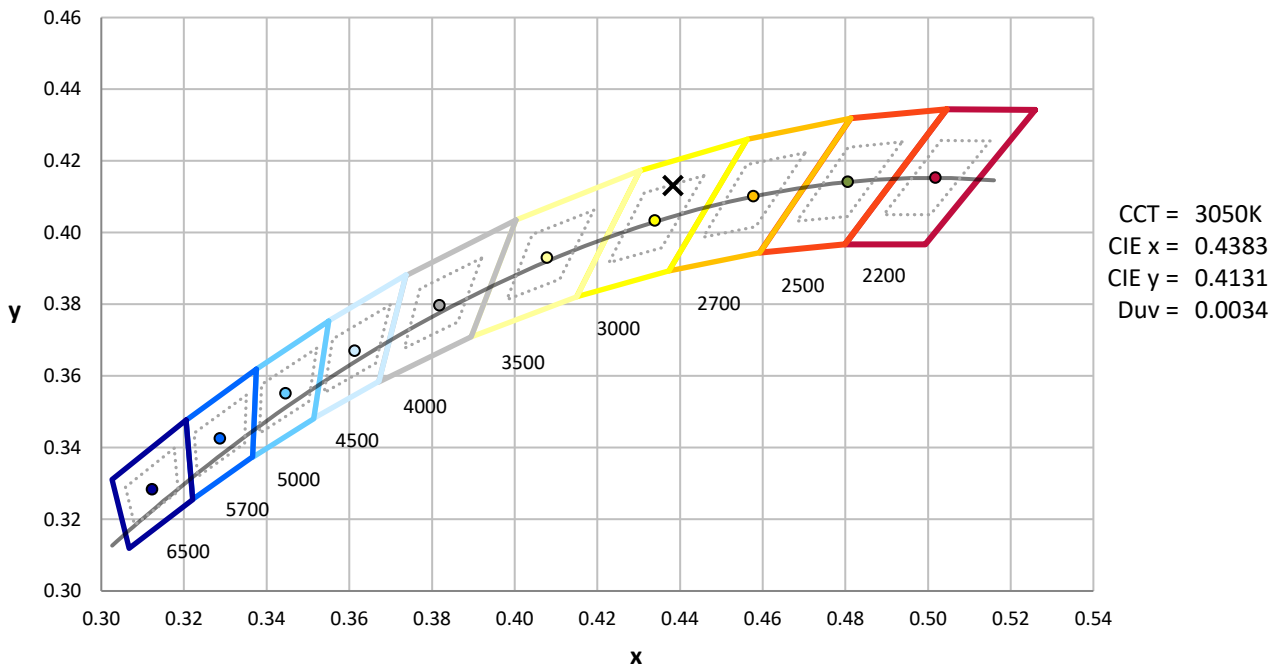
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



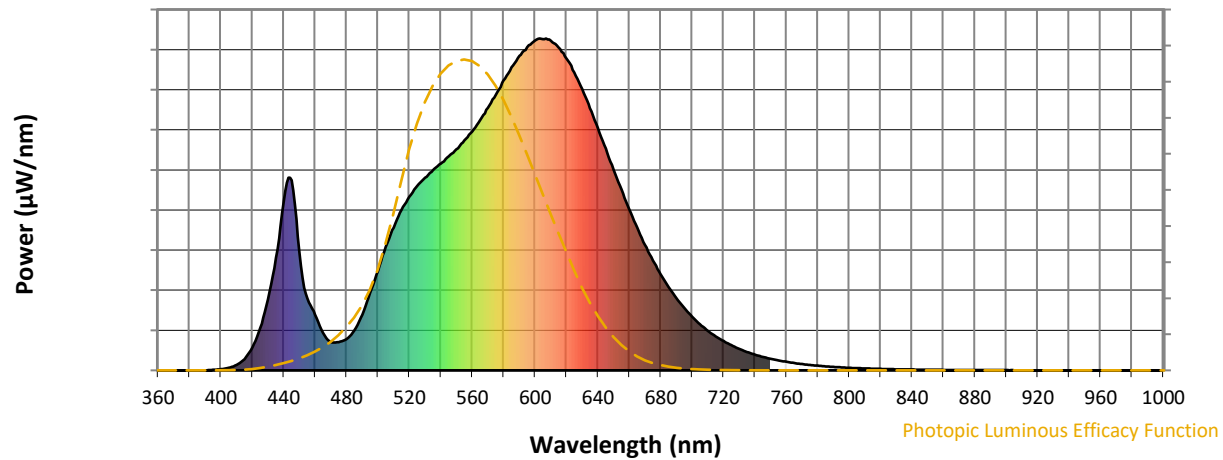
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

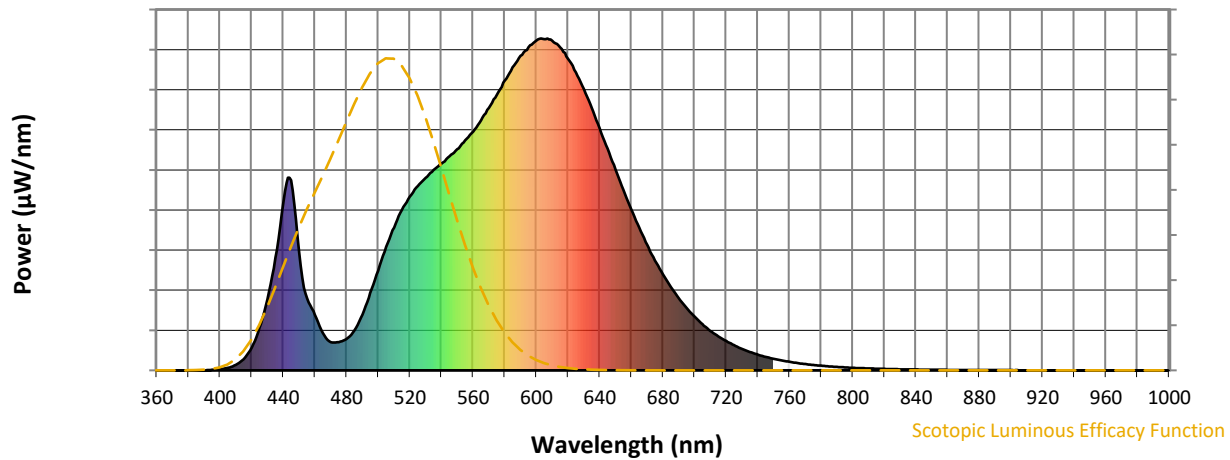


Photopic Lumens: NR

λ (nm)	Power 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

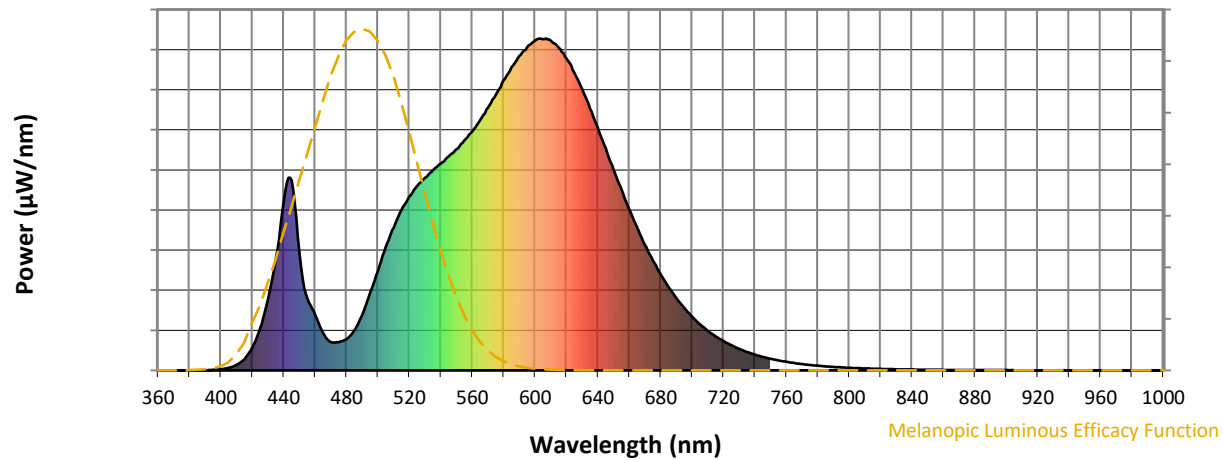


Scotopic Lumens: NR

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

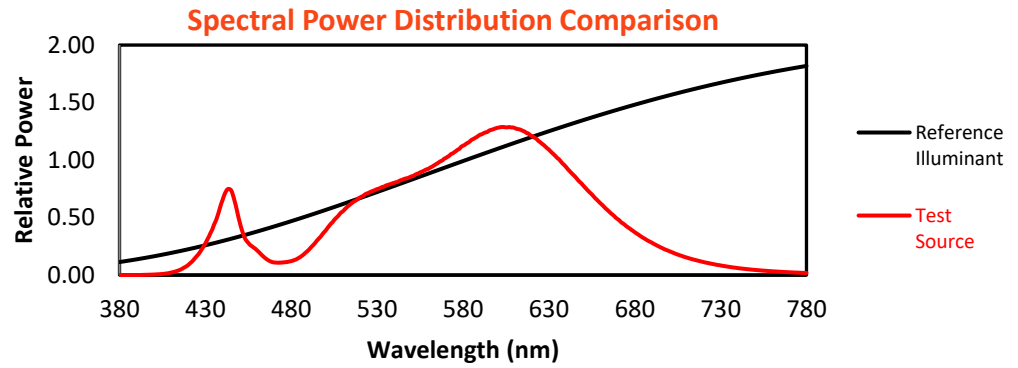
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	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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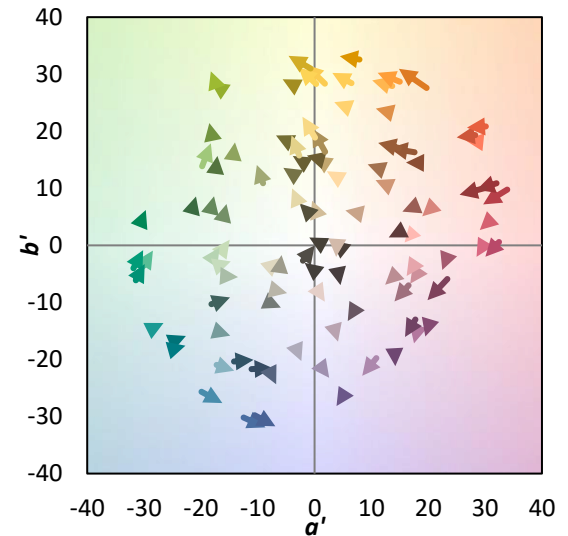
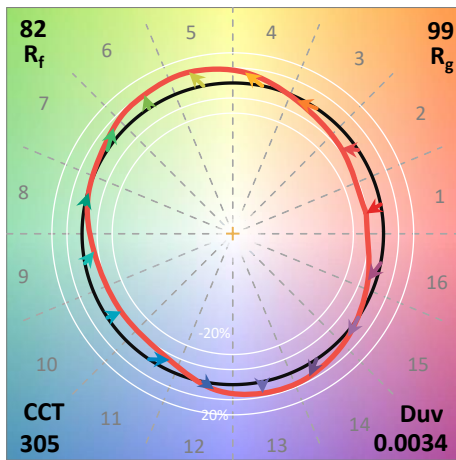
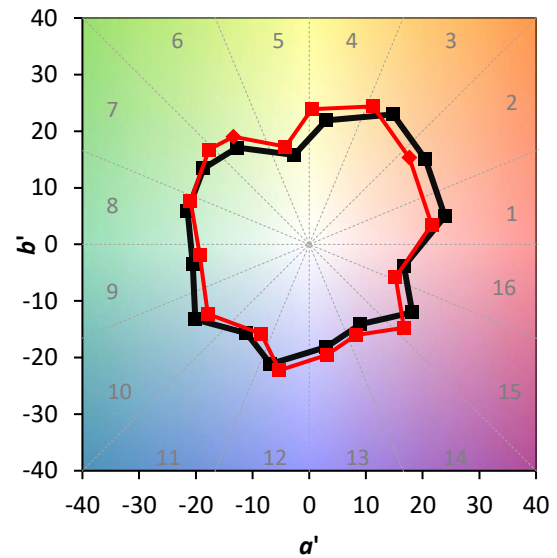
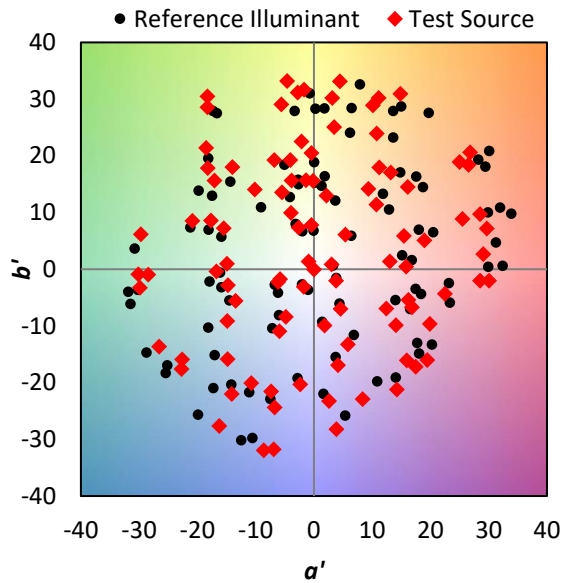
TM-30-18

Summary

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

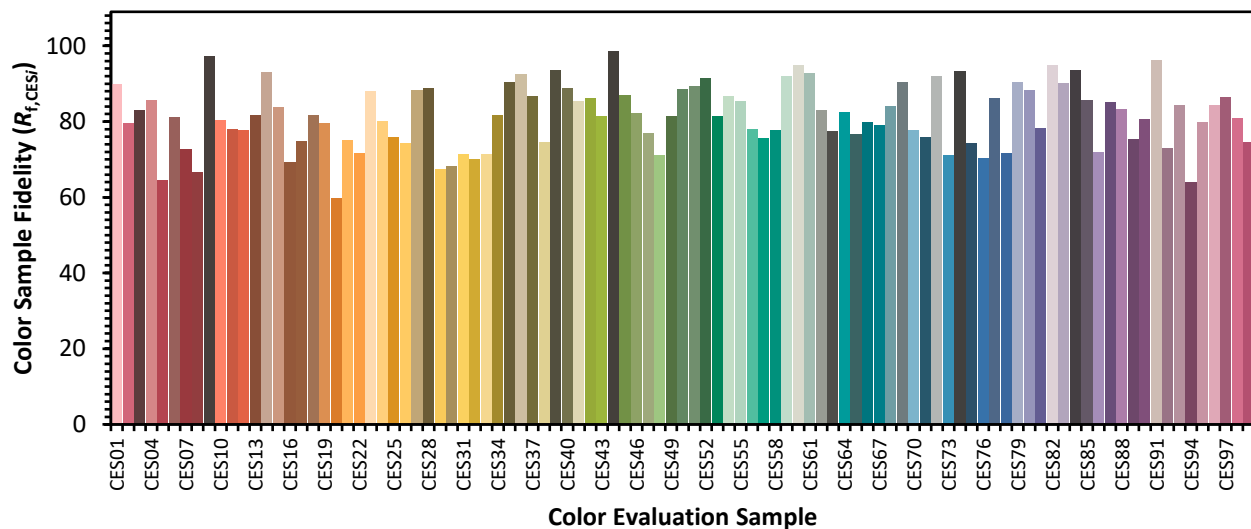


Color Vector Graphics

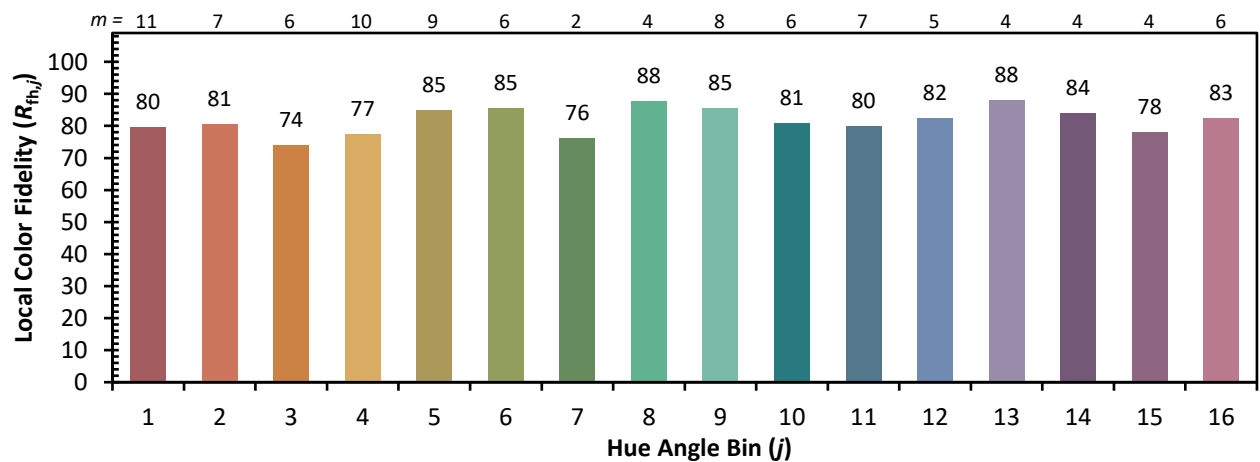
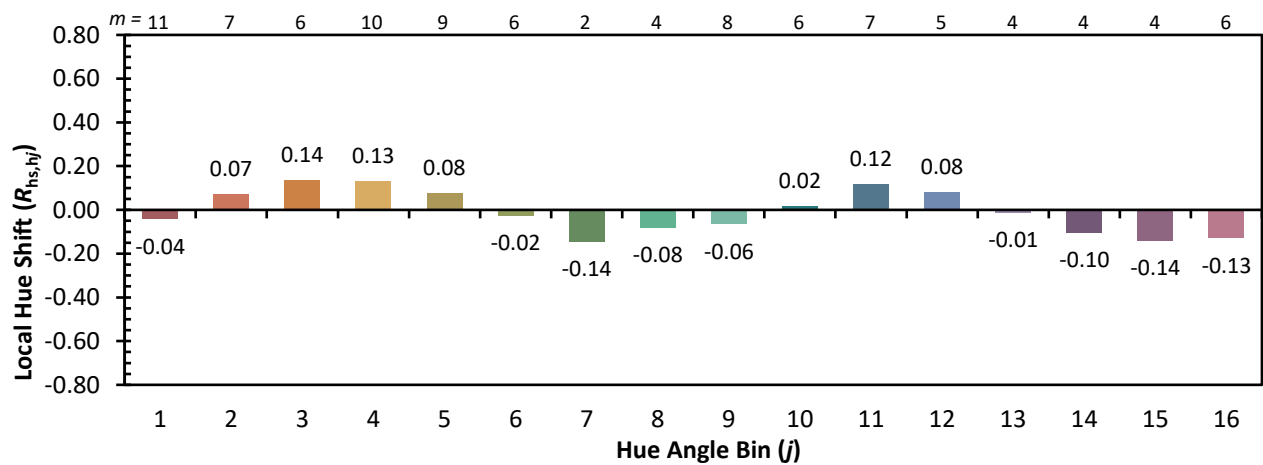
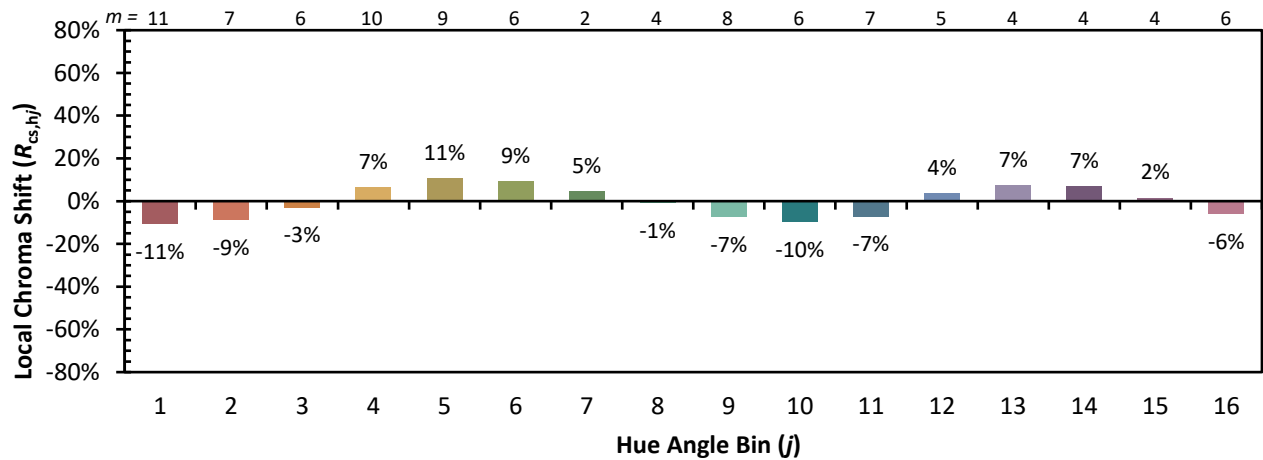


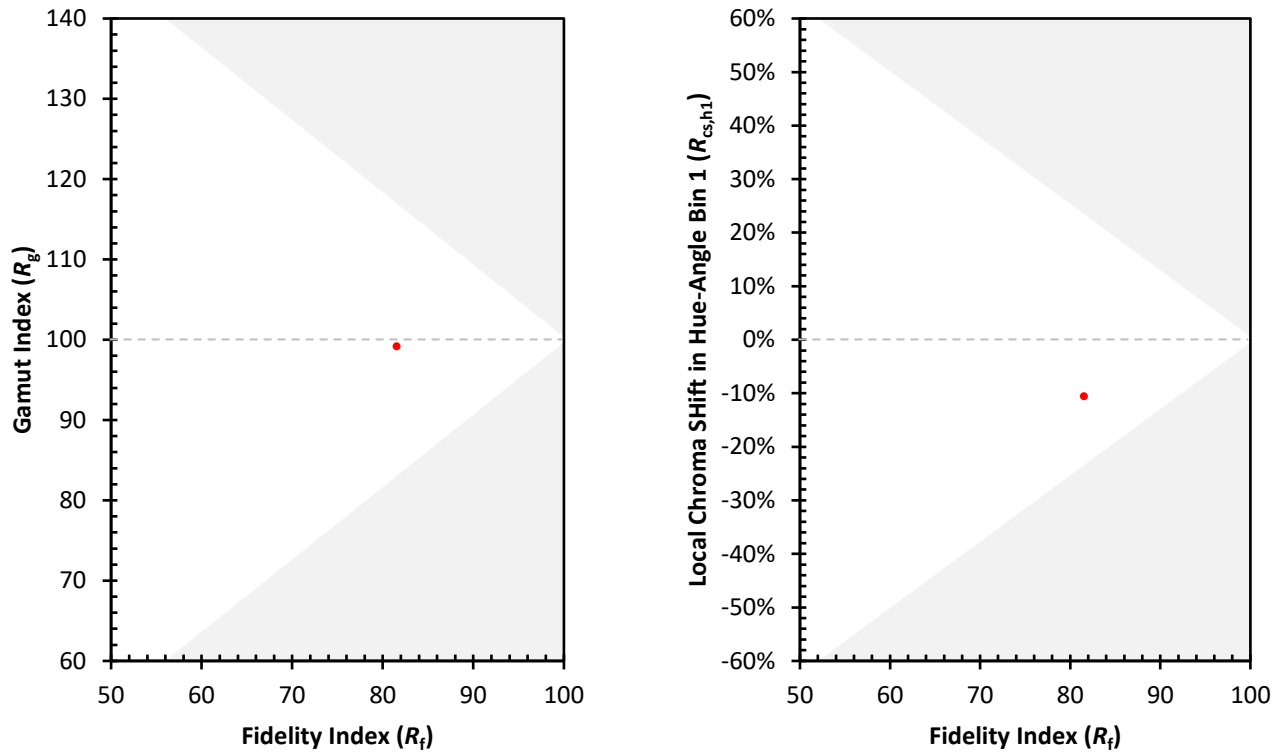
Individual Sample Fidelity Index ($R_{f,i}$)

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)