

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: P321118

Luminaire Tested: **GLEON-SA4B-830-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321118
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-SA4B-830-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 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: 18793 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

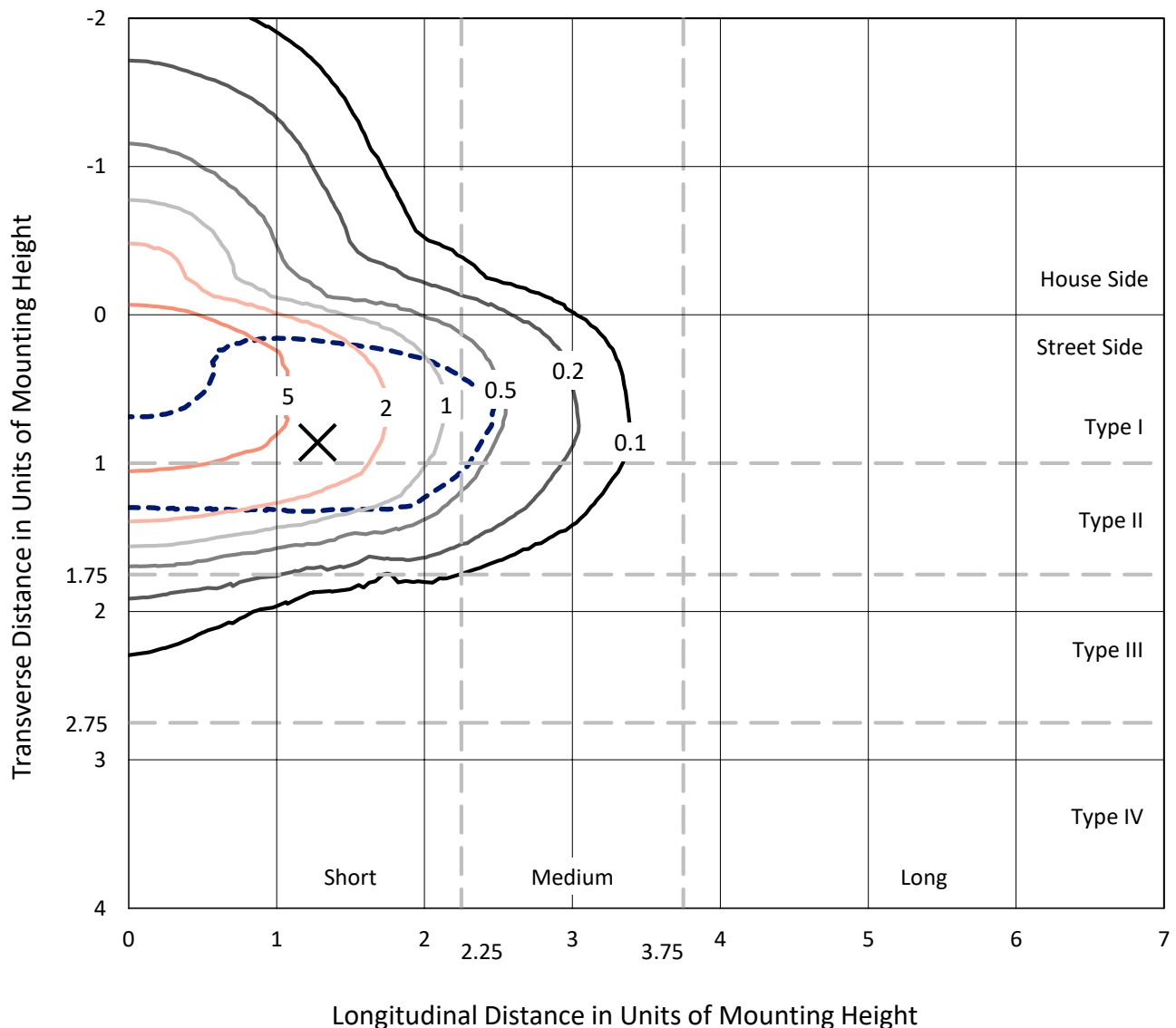
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P321118
 CATALOG NUMBER: GLEON-SA4B-830-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

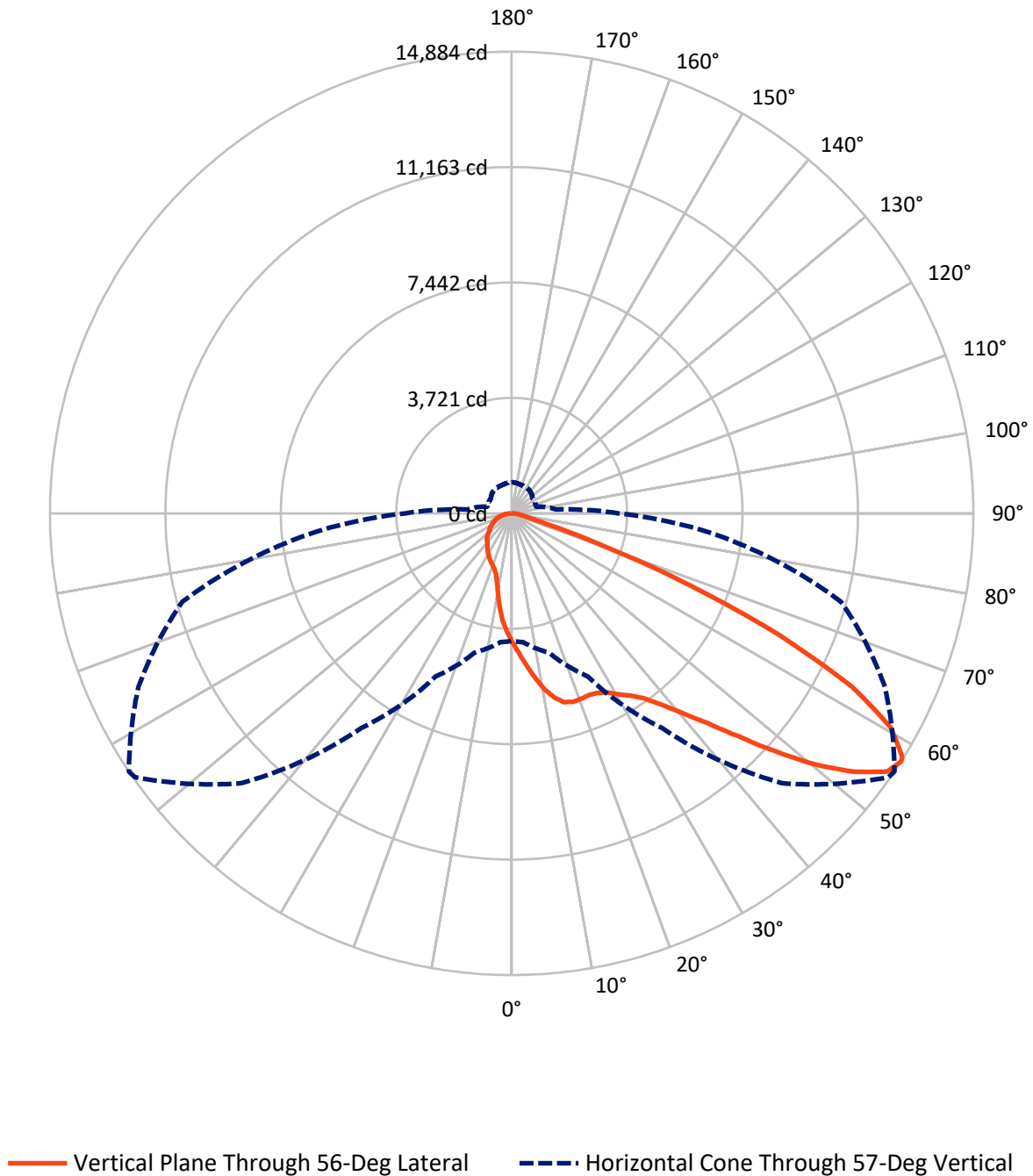
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type II - Short - N/A

REPORT NUMBER: P321118
CATALOG NUMBER: GLEON-SA4B-830-U-AFL

Luminous Intensity Polar Plot



REPORT NUMBER: P321118

CATALOG NUMBER: GLEON-SA4B-830-U-AFL

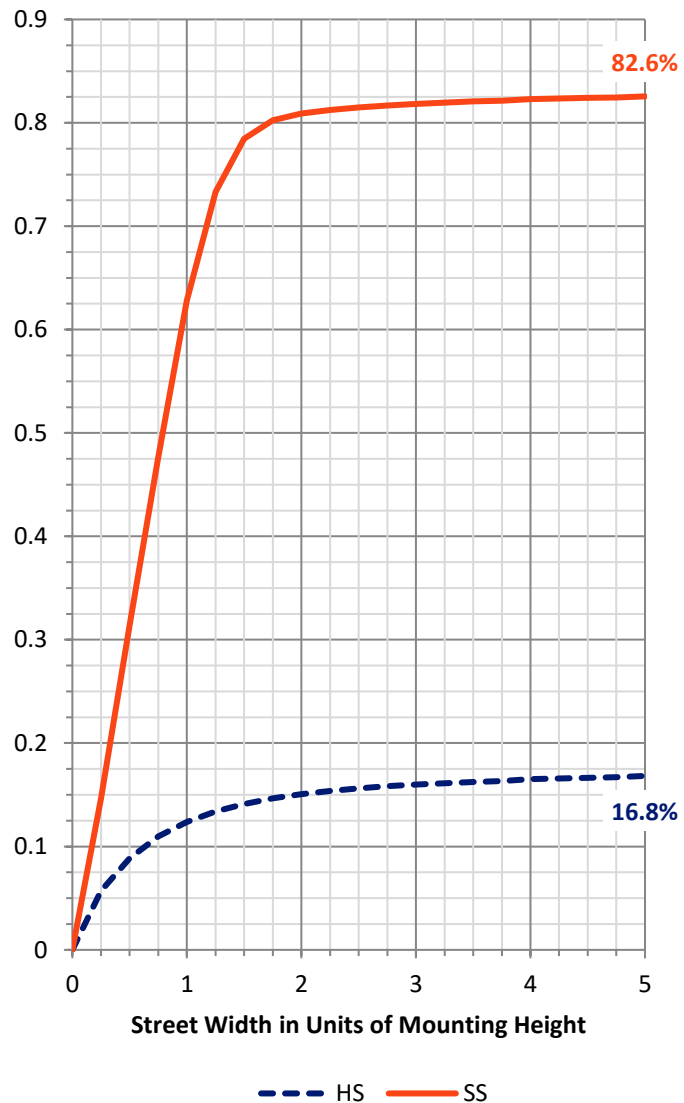
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3239.5	0.0	3239.5
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	15553.5	0.0	15553.5
	% Fixture	82.8	0.0	82.8
Total	Lumens	18793.0	0.0	18793.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	398.2	2.1
10°-20°	1125.7	6.0
20°-30°	1833.6	9.8
30°-40°	2741.0	14.6
40°-50°	4157.6	22.1
50°-60°	4659.9	24.8
60°-70°	2752.3	14.6
70°-80°	901.8	4.8
80°-90°	222.8	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°	18793.0	100.0
0°-180°	18793.0	100.0

Coefficient of Utilization



REPORT NUMBER: P321118

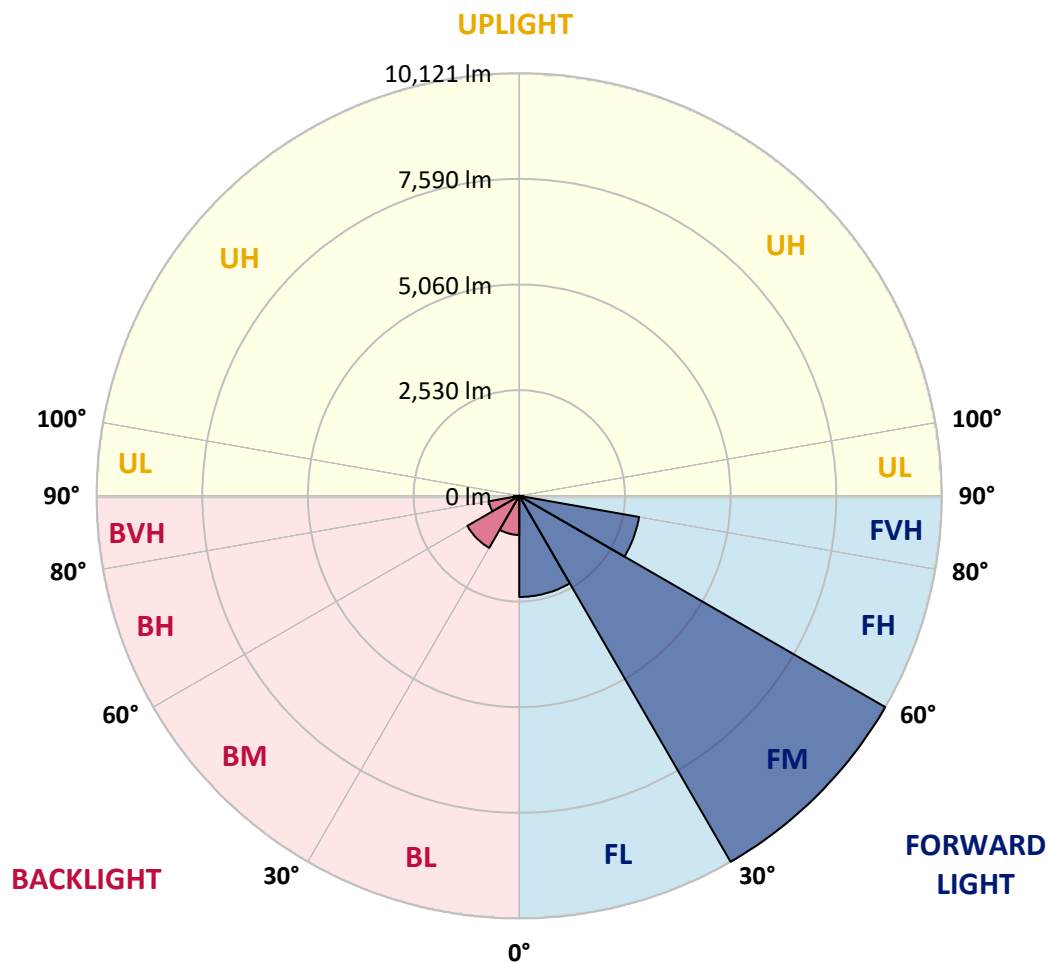
CATALOG NUMBER: GLEON-SA4B-830-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2420.8	12.9			
FM	(30°-60°)	10120.7	53.9			
FH	(60°-80°)	2913.9	15.5			G2/5000
FVH	(80°-90°)	98.1	0.5			G1/100
BL	(0°-30°)	936.7	5.0	B2/1000		
BM	(30°-60°)	1437.9	7.7	B2/2500		
BH	(60°-80°)	740.2	3.9	B2/1000		G2/1000
BVH	(80°-90°)	124.7	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P321118

CATALOG NUMBER: GLEON-SA4B-830-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	4168.3	4168.3	4168.3	4168.3	4168.3	4168.3	4168.3	4168.3	4168.3	4168.3	4168.3
2.5°	4786.4	4830.3	4810.9	4743.8	4692.1	4619.1	4537.7	4513.2	4427.3	4331.1	4215.5
5°	5544.0	5522.0	5490.4	5385.7	5275.3	5146.8	4942.7	4910.4	4719.2	4501.6	4271.6
7.5°	5975.4	5973.5	5954.7	5893.4	5792.6	5624.7	5378.6	5340.5	5051.8	4701.8	4345.3
10°	5912.7	5908.2	5939.2	6003.2	6033.5	5998.6	5791.3	5753.2	5398.6	4923.3	4430.5
12.5°	5556.9	5559.5	5609.2	5743.5	5926.3	6145.9	6112.3	6093.6	5758.4	5173.9	4533.9
15°	5279.8	5285.6	5325.0	5441.9	5657.6	6056.1	6307.4	6313.8	6106.5	5450.3	4654.6
17.5°	5158.4	5170.7	5188.7	5270.8	5468.4	5877.2	6353.9	6388.7	6411.3	5737.1	4770.9
20°	5197.1	5208.8	5213.9	5266.2	5428.4	5768.7	6321.6	6384.2	6645.1	6007.0	4887.1
22.5°	5370.9	5378.0	5381.2	5394.8	5520.7	5799.7	6300.2	6366.1	6814.3	6249.2	4975.0
25°	5658.9	5653.8	5633.1	5615.7	5700.3	5922.4	6349.3	6412.0	6951.9	6468.8	5032.4
27.5°	6003.8	5997.3	5957.3	5909.5	5957.9	6113.6	6490.8	6540.5	7075.3	6674.2	5061.5
30°	6417.8	6401.0	6325.4	6268.6	6287.3	6400.4	6723.9	6769.1	7265.8	6907.3	5089.9
32.5°	6896.4	6878.3	6769.1	6674.8	6674.8	6769.1	6964.2	7001.6	7427.3	7170.9	5135.8
35°	7495.7	7473.1	7331.0	7172.8	7128.2	7176.0	7291.6	7318.1	7717.9	7502.8	5219.1
37.5°	8202.3	8171.9	7987.9	7776.0	7678.5	7675.9	7759.2	7813.5	8182.3	7938.8	5360.5
40°	8910.8	8889.5	8728.6	8562.0	8370.8	8309.5	8438.0	8454.8	8789.3	8480.0	5541.4
42.5°	9458.4	9454.6	9424.9	9446.8	9251.1	9127.1	9227.9	9241.4	9530.8	9065.8	5733.8
45°	9747.8	9754.2	9898.3	10217.3	10289.7	10199.2	10249.0	10252.8	10378.1	9656.7	5910.2
47.5°	9515.9	9549.5	9913.8	10627.4	11219.7	11520.0	11437.3	11485.1	11199.7	10164.4	6048.4
50°	8612.4	8653.7	9273.7	10444.7	11653.7	12798.1	12754.9	12743.9	11862.3	10536.4	6123.3
52.5°	7493.1	7525.4	8036.9	9494.6	11335.3	13504.7	13901.9	13845.0	12451.3	10814.7	6137.5
55°	5788.7	5839.1	6329.3	7598.4	10047.5	13234.7	14745.4	14694.3	12988.0	10960.7	6120.7
57°	4115.3	4168.3	4655.3	5799.1	8452.2	12300.2	14829.3	14883.6	13278.0	10985.2	6139.4
57.5°	3672.3	3726.5	4209.0	5319.9	7954.9	11962.4	14757.0	14847.4	13330.3	10981.4	6149.8
60°	1849.1	1869.7	2177.2	2969.6	5028.6	9670.9	13813.4	14046.6	13377.5	10791.5	6194.3
62.5°	1149.6	1134.8	1125.1	1367.9	2446.5	6413.3	11866.2	12315.0	12475.2	10331.6	6086.5
65°	1010.8	983.0	876.4	857.0	1080.5	3114.9	8936.0	9494.6	10547.3	9607.0	5829.4
67.5°	949.4	922.3	802.1	729.8	730.5	1234.9	5547.8	6176.9	8216.5	8381.8	5223.0
70°	886.1	861.6	749.2	663.9	622.0	684.0	2552.4	3029.7	5356.0	6588.3	4365.3
72.5°	804.7	787.9	681.4	593.5	549.0	512.2	977.2	1154.1	3100.7	4424.7	3031.6
75°	719.5	704.0	612.9	528.9	474.7	403.0	550.3	592.9	1575.2	2263.7	1492.6
77.5°	625.8	616.8	545.1	467.6	424.3	333.9	389.4	410.1	675.6	970.7	748.5
80°	497.9	515.4	476.6	416.6	376.5	267.4	275.8	289.3	393.3	474.1	425.0
82.5°	324.2	354.6	373.3	338.4	310.0	210.5	198.3	204.1	256.4	289.3	184.7
85°	135.0	151.8	245.4	221.5	206.0	153.7	133.0	135.6	158.9	164.7	75.6
87.5°	60.1	63.9	107.9	101.4	87.2	53.0	56.8	62.0	84.6	80.1	29.1
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: P321118

CATALOG NUMBER: GLEON-SA4B-830-U-AFL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4168.3	4168.3	4168.3	4168.3	4168.3	4168.3	4168.3	4168.3	4168.3	4168.3	4168.3
2.5°	4172.2	4117.9	4024.9	3922.2	3838.3	3771.1	3703.3	3656.8	3602.5	3573.5	3558.6
5°	4175.4	4068.8	3873.2	3672.3	3492.7	3328.7	3172.4	3052.3	2939.9	2879.2	2862.4
7.5°	4189.0	4028.8	3712.3	3381.7	3062.6	2771.3	2546.6	2405.8	2304.4	2259.2	2246.3
10°	4200.0	3981.7	3513.4	3023.9	2589.9	2294.7	2120.3	2041.5	2006.7	2000.8	1995.0
12.5°	4225.8	3933.2	3304.2	2650.6	2222.4	2018.3	1957.6	1952.4	1962.1	1976.3	1976.3
15°	4266.5	3885.4	3065.2	2330.2	1988.6	1916.9	1929.1	1957.6	1984.0	2006.0	2009.2
17.5°	4296.2	3826.7	2808.1	2073.8	1863.9	1883.3	1927.2	1967.3	1994.4	2015.7	2017.6
20°	4317.5	3735.6	2533.7	1878.1	1792.2	1852.3	1907.2	1942.7	1961.4	1982.8	1986.0
22.5°	4306.5	3613.5	2290.2	1738.0	1734.1	1807.1	1859.4	1902.0	1887.8	1867.1	1880.7
25°	4253.6	3445.6	2039.6	1633.4	1672.7	1746.4	1811.0	1782.5	1734.7	1725.7	1730.9
27.5°	4159.3	3231.2	1807.7	1536.5	1601.7	1690.2	1686.3	1657.9	1641.1	1629.5	1636.6
30°	4057.9	2998.7	1604.9	1451.9	1522.9	1595.9	1581.0	1580.4	1563.6	1544.9	1553.9
32.5°	3957.8	2764.9	1444.1	1382.1	1463.5	1473.2	1505.5	1515.2	1482.2	1442.8	1440.2
35°	3870.6	2544.0	1322.1	1318.8	1391.8	1393.1	1440.2	1426.7	1344.7	1304.0	1304.0
37.5°	3805.3	2323.8	1229.0	1262.0	1297.5	1331.1	1355.0	1298.8	1285.2	1262.6	1262.0
40°	3776.9	2130.0	1170.9	1218.7	1231.0	1273.6	1212.3	1234.2	1240.7	1229.0	1229.0
42.5°	3747.2	1961.4	1120.5	1185.8	1183.8	1178.0	1147.0	1175.4	1201.3	1201.9	1200.0
45°	3717.5	1816.1	1076.0	1115.4	1142.5	1079.9	1085.7	1116.0	1152.2	1165.1	1165.1
47.5°	3684.6	1701.2	1035.3	1041.1	1083.1	1041.1	1036.6	1059.8	1102.5	1123.1	1127.7
50°	3612.2	1597.8	988.8	975.9	987.5	1001.7	1005.6	1016.6	1063.7	1096.7	1104.4
52.5°	3512.1	1505.5	929.4	915.8	915.8	969.4	987.5	990.7	1030.8	1070.2	1077.9
55°	3428.8	1446.7	868.0	865.4	862.9	935.2	966.2	971.4	999.1	1030.1	1034.0
57°	3434.6	1442.2	820.9	823.5	822.8	900.3	946.2	957.1	971.4	997.8	1002.4
57.5°	3437.9	1445.4	810.5	811.8	811.2	890.6	940.4	952.6	963.6	991.4	995.9
60°	3486.3	1453.8	768.6	754.4	757.6	839.0	907.4	922.9	930.0	966.8	972.6
62.5°	3414.6	1416.3	735.0	700.7	700.7	784.7	861.6	886.1	897.1	946.8	956.5
65°	3206.6	1311.1	695.6	640.0	646.5	730.5	806.7	846.7	863.5	925.5	935.8
67.5°	2885.6	1189.0	653.6	585.8	592.2	673.6	749.8	793.1	819.6	902.2	910.6
70°	2467.8	1039.8	596.8	528.3	536.1	611.6	682.7	731.7	771.1	880.3	882.9
72.5°	1819.4	852.5	517.3	465.0	473.4	539.3	614.8	671.7	724.6	825.4	824.1
75°	1081.8	666.5	429.5	401.1	406.9	468.2	553.5	622.6	702.0	804.1	816.4
77.5°	656.2	501.8	350.0	335.8	342.9	405.6	509.6	583.2	692.3	758.2	754.4
80°	396.6	358.4	279.7	270.6	277.7	346.8	471.5	553.5	605.2	647.8	647.8
82.5°	207.3	218.9	205.4	198.3	208.0	281.6	428.8	483.1	534.8	459.2	428.8
85°	84.6	114.3	124.6	124.0	129.8	195.0	370.1	413.3	344.9	327.4	335.2
87.5°	28.4	48.4	60.7	52.3	54.9	122.7	256.4	199.6	237.0	165.3	156.9
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.

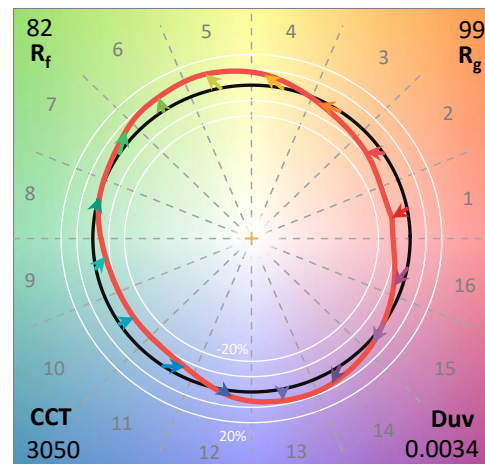
Test Information

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

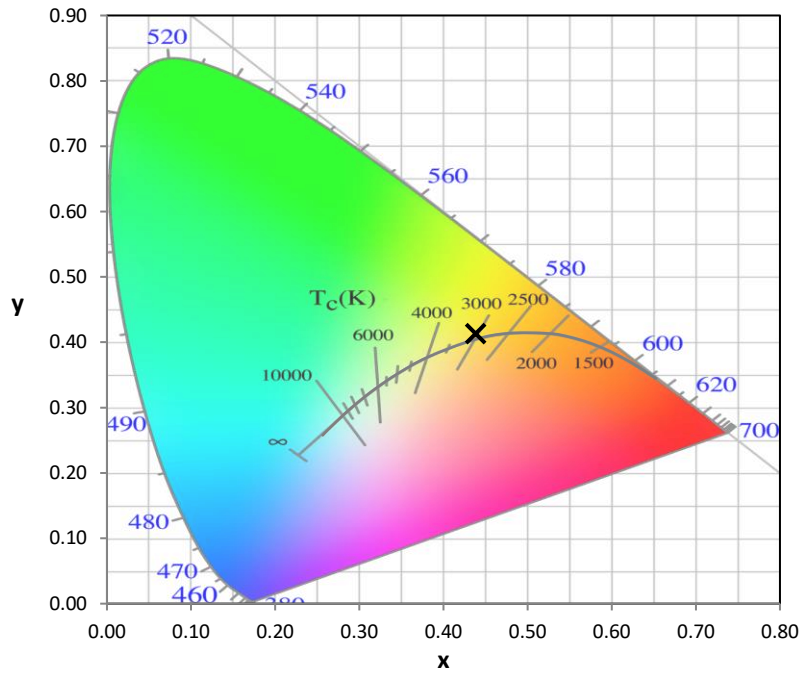
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

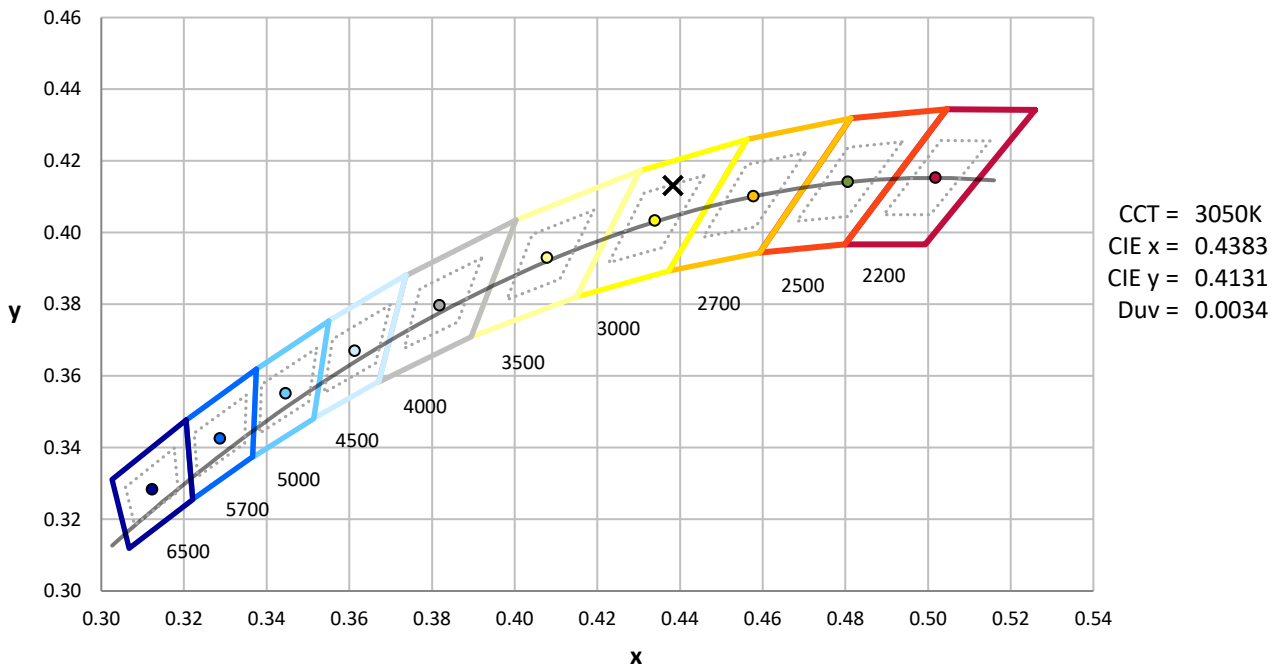
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

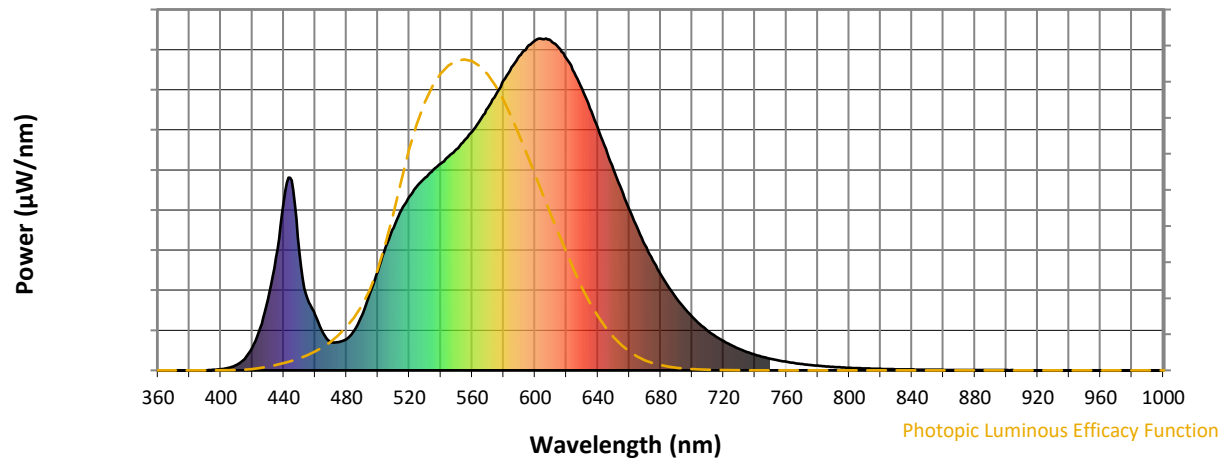


CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

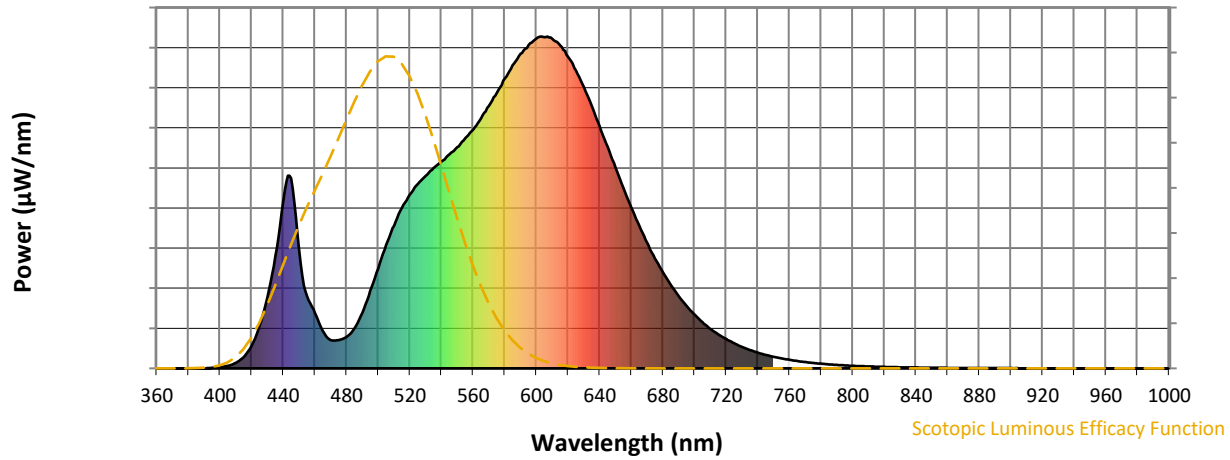


Photopic Lumens: NR

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			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength



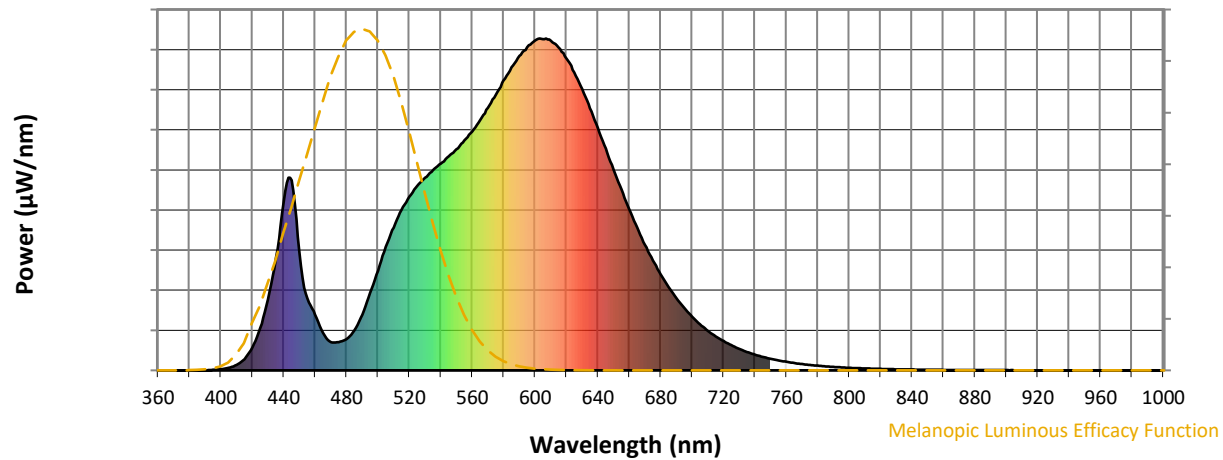
Scotopic Lumens: NR

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			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

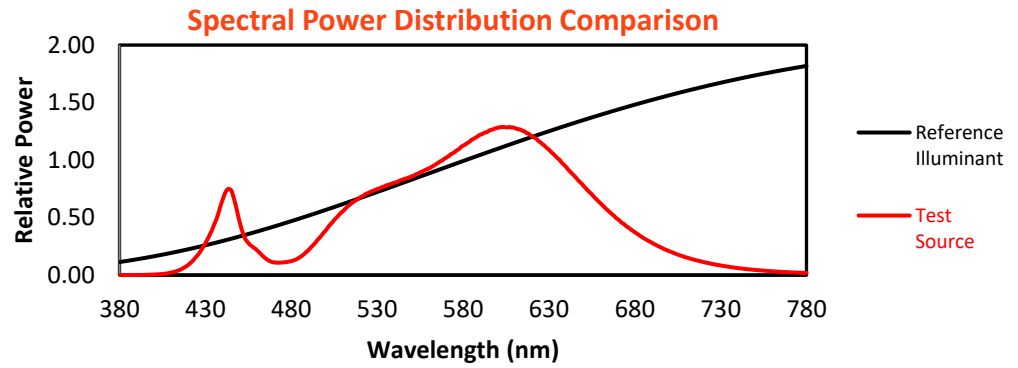
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168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

REPORT NUMBER: SP1-2408-195-9

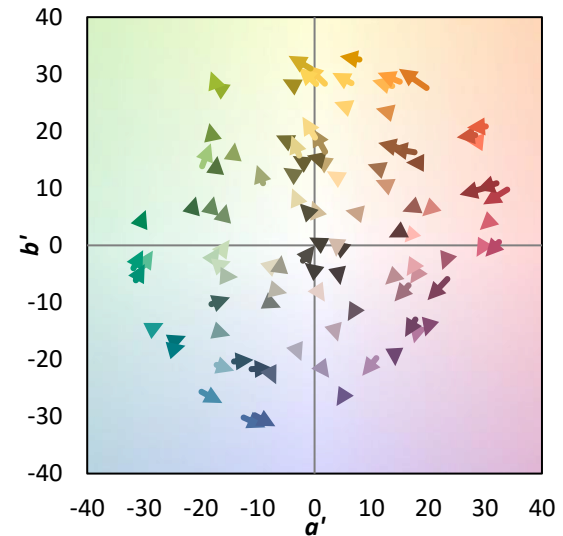
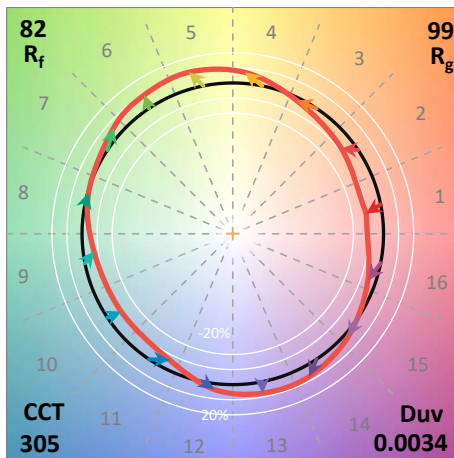
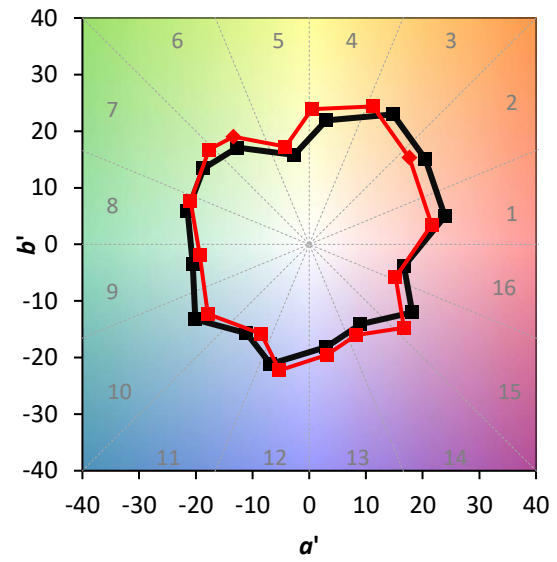
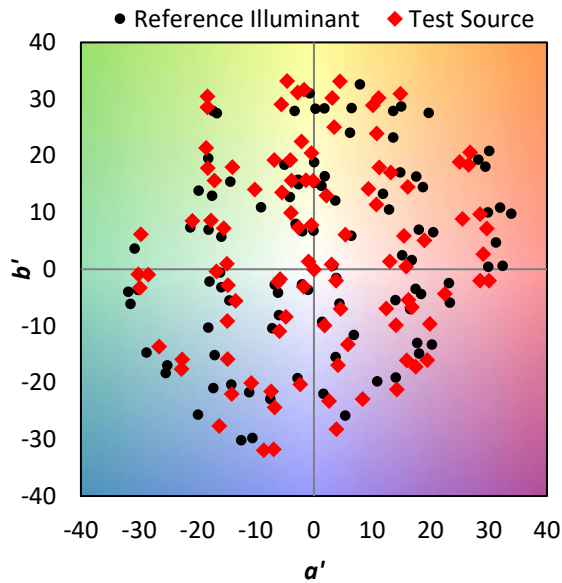
TM-30-18

Summary

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

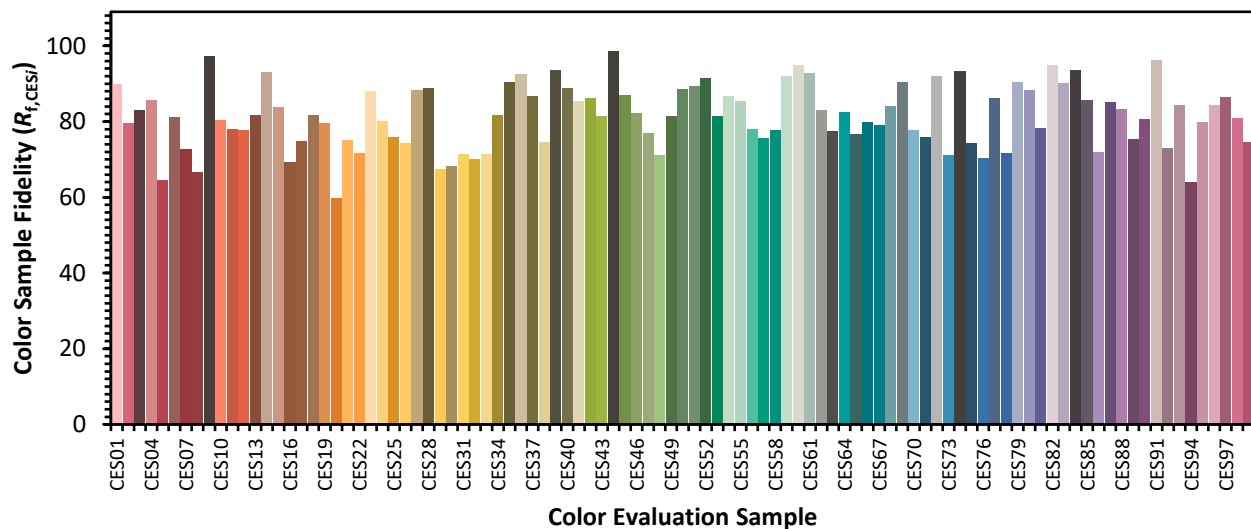


Color Vector Graphics

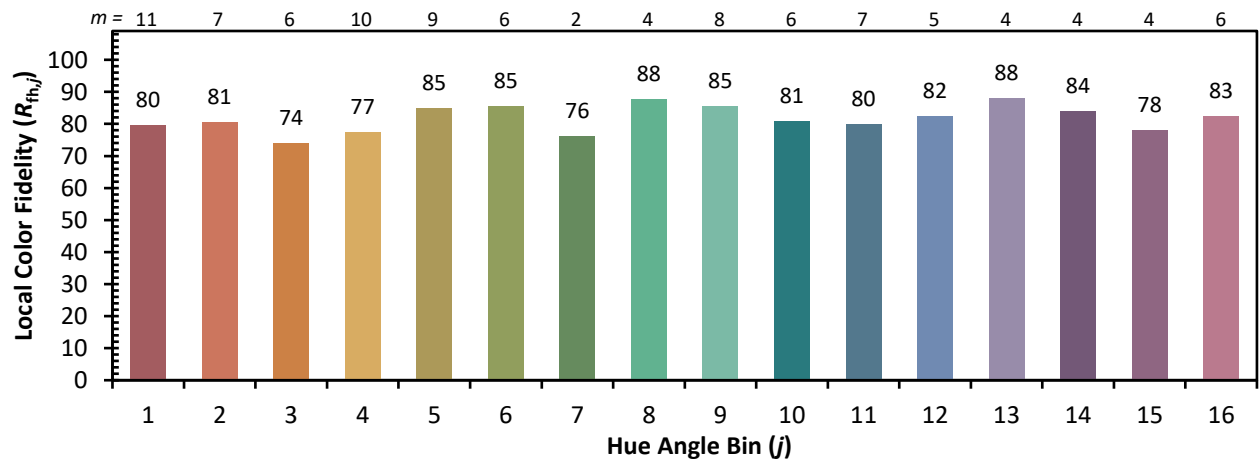
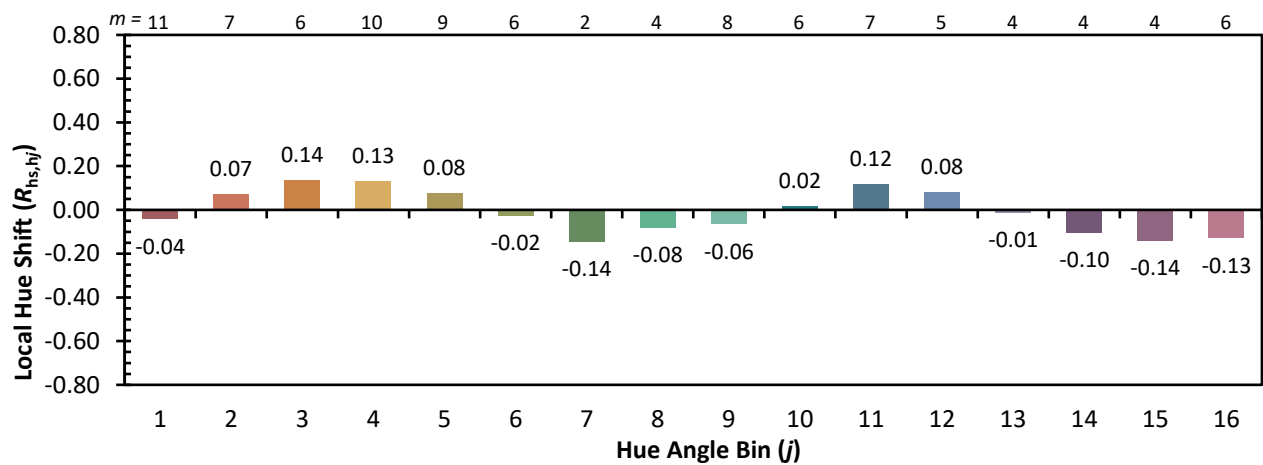
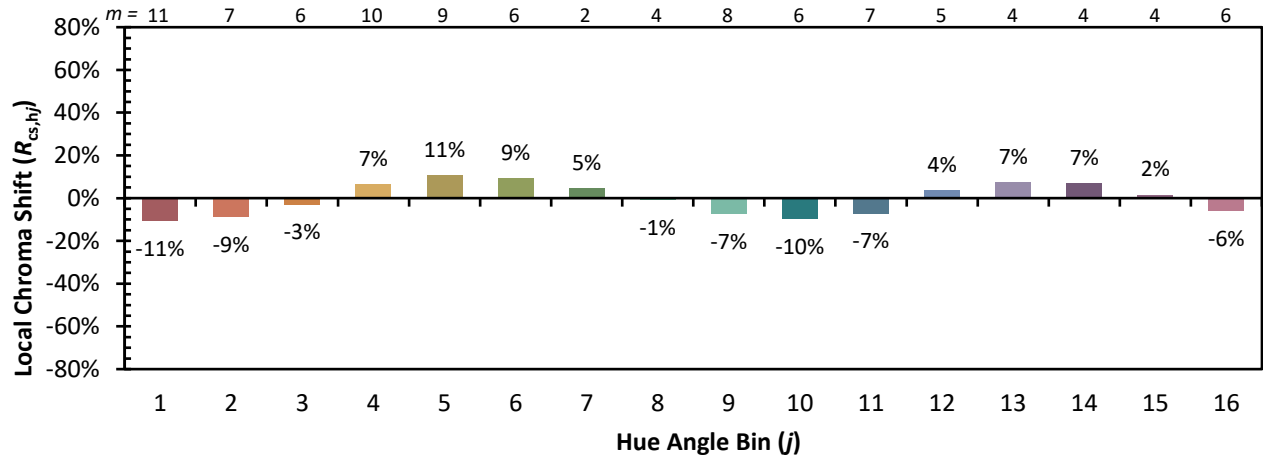


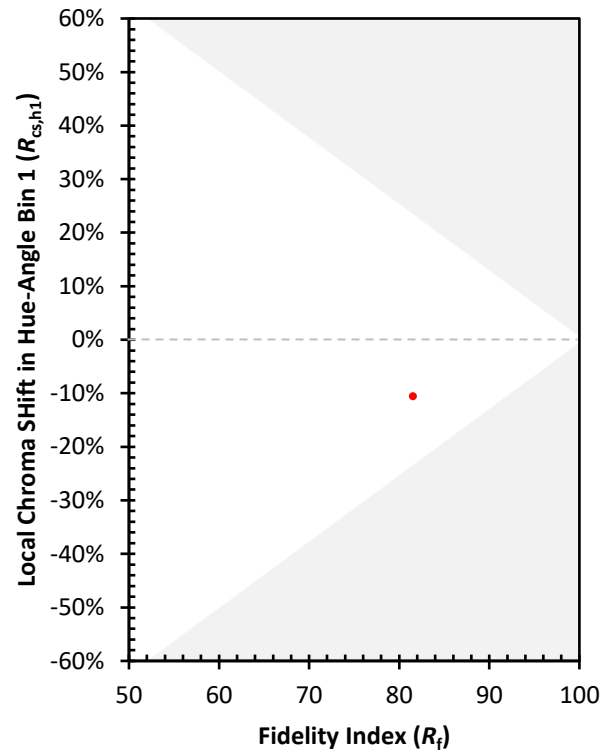
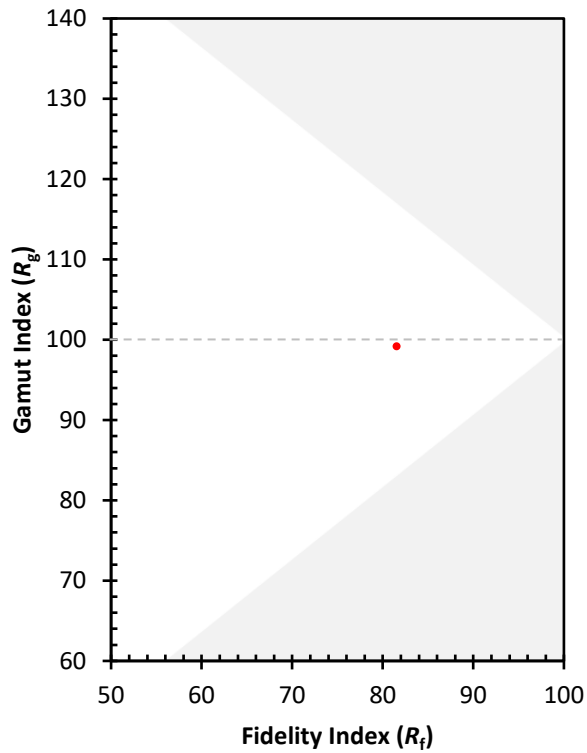
Individual Sample Fidelity Index ($R_{f,i}$)

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)