

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: P317919

Luminaire Tested: **GLEON-SA5B-830-U-T3R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P317919
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-10)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA5B-830-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23206 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 210
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

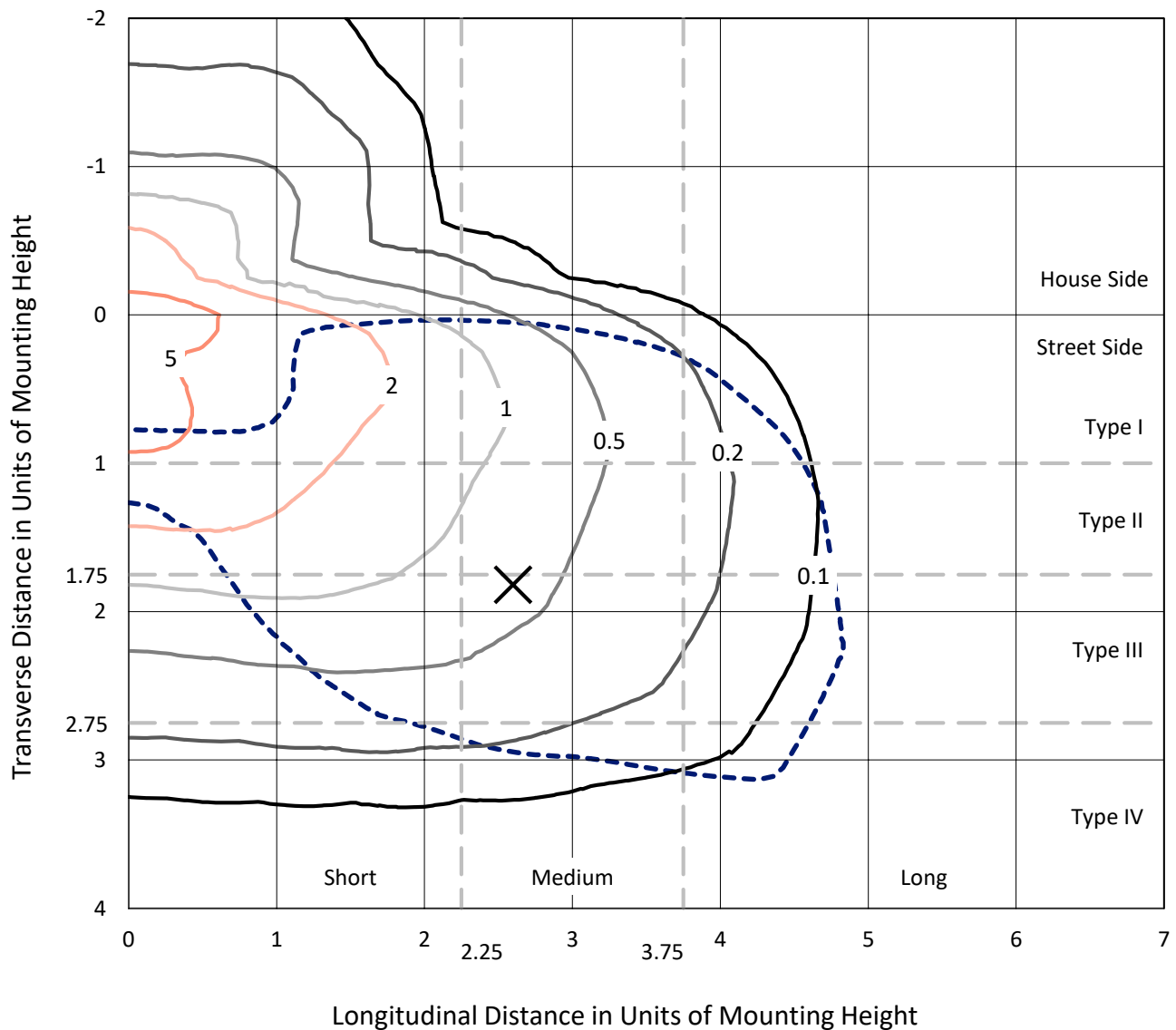


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Iso-Footcandle Lines of Horizontal Illumination

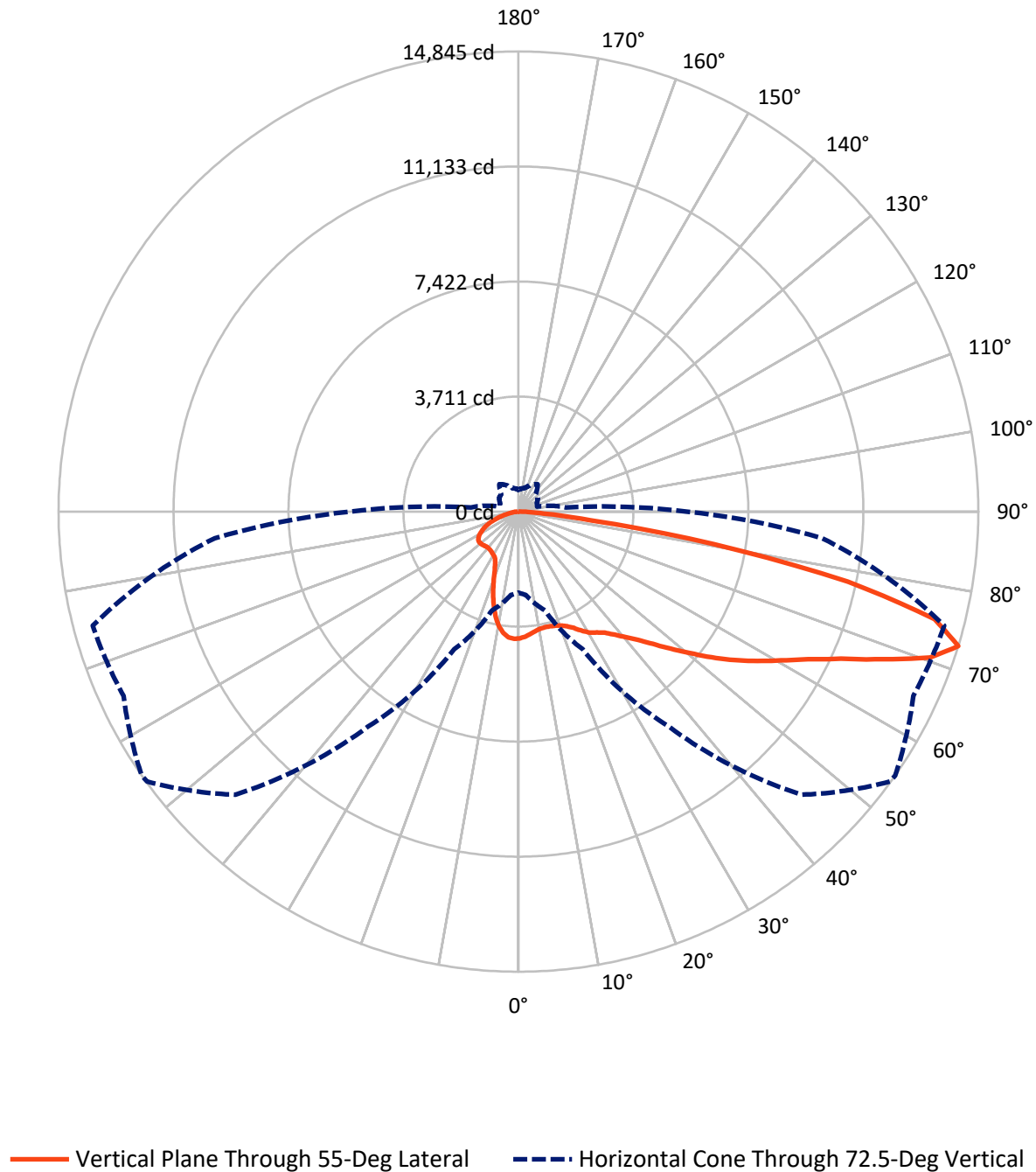
× Max cd
 --- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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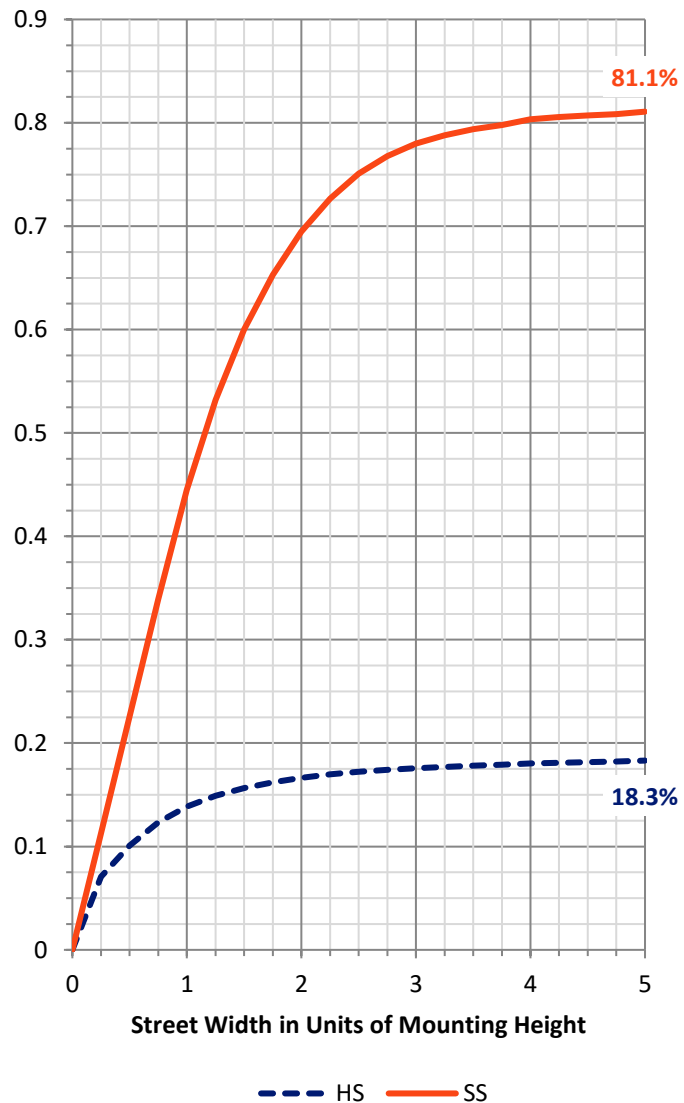
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4313.2	0.0	4313.2
	% Fixture	18.6	0.0	18.6
Street Side	Lumens	18892.8	0.0	18892.8
	% Fixture	81.4	0.0	81.4
Total	Lumens	23206.0	0.0	23206.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.4	1.6
10°-20°	986.1	4.2
20°-30°	1625.8	7.0
30°-40°	2404.9	10.4
40°-50°	3356.8	14.5
50°-60°	4370.6	18.8
60°-70°	5371.4	23.1
70°-80°	4210.5	18.1
80°-90°	509.5	2.2
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°	23206.0	100.0
0°-180°	23206.0	100.0

Coefficient of Utilization



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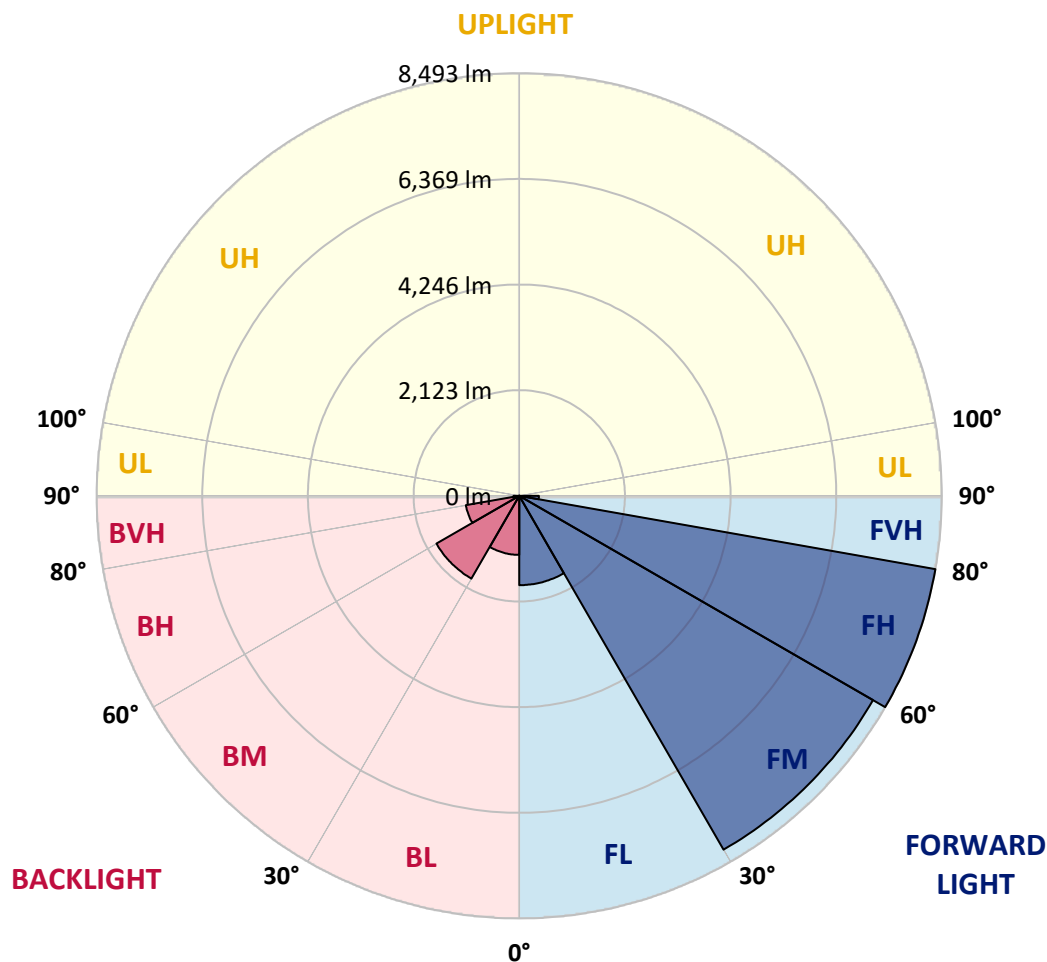
CATALOG NUMBER: GLEON-SA5B-830-U-T3R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1795.5	7.7			
FM	(30°-60°)	8210.7	35.4			
FH	(60°-80°)	8492.6	36.6			G4/12000
FVH	(80°-90°)	393.9	1.7			G3/500
BL	(0°-30°)	1186.8	5.1	B3/2500		
BM	(30°-60°)	1921.6	8.3	B2/2500		
BH	(60°-80°)	1089.3	4.7	B3/2500		G3/2500
BVH	(80°-90°)	115.6	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	4093.0	4093.0	4093.0	4093.0	4093.0	4093.0	4093.0	4093.0	4093.0	4093.0	4093.0
2.5°	3959.8	3950.4	3962.1	3978.6	3996.6	4020.9	4035.0	4041.3	4065.6	4075.0	4095.4
5°	3776.4	3771.7	3791.3	3819.5	3859.5	3915.9	3961.4	3970.0	4034.3	4079.7	4121.3
7.5°	3643.1	3643.1	3665.9	3699.6	3744.2	3820.3	3884.5	3896.3	4005.3	4103.2	4180.0
10°	3537.3	3541.2	3567.9	3607.9	3660.4	3741.1	3826.5	3839.9	3997.4	4158.1	4280.4
12.5°	3466.8	3476.2	3500.5	3536.5	3601.6	3699.6	3807.7	3825.8	4013.9	4236.5	4401.1
15°	3511.5	3527.1	3529.5	3544.4	3580.4	3687.0	3818.7	3837.5	4049.1	4316.4	4538.2
17.5°	3707.4	3712.9	3688.6	3657.2	3640.0	3708.2	3851.6	3871.2	4091.5	4395.6	4669.9
20°	4005.3	4002.1	3949.6	3865.0	3777.2	3788.1	3905.7	3926.1	4148.7	4465.3	4801.6
22.5°	4381.5	4370.5	4289.8	4133.8	3984.1	3921.4	4000.5	4017.8	4234.9	4564.9	4942.7
25°	4837.7	4813.4	4706.8	4497.5	4277.2	4115.8	4143.2	4159.7	4360.3	4676.2	5072.0
27.5°	5318.9	5294.6	5159.0	4905.8	4612.7	4361.1	4339.9	4354.0	4503.0	4758.5	5167.6
30°	5822.1	5796.3	5672.4	5388.7	4968.6	4615.1	4523.3	4528.8	4603.3	4803.2	5246.0
32.5°	6327.7	6303.4	6164.6	5835.4	5355.0	4887.8	4655.8	4648.8	4663.7	4849.4	5334.6
35°	6840.3	6849.7	6687.4	6323.0	5782.9	5191.2	4812.6	4797.7	4764.8	4944.3	5460.0
37.5°	7388.9	7382.7	7172.6	6791.7	6230.5	5520.4	5037.5	5035.2	4921.5	5123.7	5656.7
40°	7755.8	7759.7	7631.9	7271.4	6682.7	5884.8	5326.0	5320.5	5171.6	5392.6	5914.6
42.5°	7899.2	7925.1	7958.0	7729.1	7156.2	6307.3	5670.1	5662.2	5520.4	5778.2	6217.9
45°	7909.4	7961.1	8164.9	8135.9	7635.8	6790.9	6109.8	6087.8	5985.9	6290.8	6580.1
47.5°	7821.6	7874.9	8213.5	8378.1	8064.6	7301.2	6624.0	6606.7	6518.9	6932.0	6972.0
50°	7629.6	7680.5	8113.2	8496.5	8417.3	7791.8	7216.5	7171.0	7124.0	7672.7	7420.3
52.5°	7269.8	7367.8	7979.2	8524.7	8628.1	8227.6	7839.6	7809.9	7835.7	8454.1	7869.4
55°	6417.8	6527.5	7633.5	8501.2	8784.1	8593.7	8462.8	8461.2	8595.2	9274.0	8351.5
57.5°	5940.5	6018.1	6929.6	8461.2	8969.1	8957.3	9079.6	9094.5	9355.5	10166.8	8856.2
60°	5670.8	5752.4	6573.0	8313.1	9256.0	9427.6	9709.0	9738.8	10128.4	11155.1	9463.7
62.5°	5425.5	5514.9	6352.0	8011.3	9593.8	10100.1	10463.0	10489.7	10946.6	12171.0	10050.8
65°	5006.2	5107.3	6028.3	7813.0	9901.0	10977.2	11421.6	11439.7	11886.4	13235.4	10499.9
67.5°	4413.6	4506.1	5417.7	7374.8	10128.4	12042.4	12696.1	12706.3	12818.4	13987.0	10729.5
70°	3721.5	3756.8	4547.6	6470.3	9859.5	13038.6	14092.8	14095.2	13668.0	14468.3	10691.9
72.5°	2614.8	2697.9	3301.4	4898.0	8473.0	12917.1	14817.9	14844.5	14063.1	14225.3	9837.6
75°	1603.7	1691.5	2070.8	2968.3	5375.3	10158.9	13690.8	13875.7	13322.4	12683.6	8036.4
77.5°	1072.2	1105.2	1351.3	1730.6	2435.3	5844.8	10525.7	10873.8	11067.4	9249.7	5139.4
80°	598.0	660.7	895.9	1075.4	1083.2	2322.4	6311.2	6392.7	6157.6	3683.1	1585.6
82.5°	316.7	351.1	598.0	631.7	591.0	777.5	2352.2	2354.6	1967.4	987.6	471.1
85°	245.3	274.3	409.9	385.6	301.8	344.9	776.0	818.3	669.4	404.4	153.6
87.5°	122.3	152.1	278.3	244.5	118.4	98.8	277.5	296.3	264.1	158.3	55.7
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: P317919

CATALOG NUMBER: GLEON-SA5B-830-U-T3R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4093.0	4093.0	4093.0	4093.0	4093.0	4093.0	4093.0	4093.0	4093.0	4093.0	4093.0
2.5°	4103.2	4110.3	4118.9	4109.5	4106.4	4093.8	4072.7	4068.0	4057.0	4057.8	4064.0
5°	4139.3	4151.0	4146.3	4110.3	4067.2	4006.8	3944.1	3890.8	3855.5	3853.2	3850.8
7.5°	4208.3	4216.1	4179.3	4076.6	3955.9	3816.4	3684.7	3569.5	3499.7	3482.5	3478.5
10°	4316.4	4314.9	4213.7	4006.8	3766.2	3516.9	3305.3	3145.4	3052.1	3024.7	3017.7
12.5°	4437.1	4419.1	4225.5	3879.8	3498.1	3152.5	2884.4	2706.5	2609.3	2577.9	2570.1
15°	4561.8	4517.1	4196.5	3690.2	3168.9	2759.8	2478.4	2313.8	2261.3	2244.0	2240.9
17.5°	4677.8	4591.5	4113.4	3433.1	2793.5	2368.7	2149.2	2083.4	2095.9	2118.6	2119.4
20°	4791.4	4641.7	3980.2	3108.6	2397.7	2046.5	1972.1	2020.7	2080.2	2126.5	2132.7
22.5°	4903.5	4677.0	3808.5	2733.9	2043.4	1865.5	1918.0	2006.5	2074.7	2124.9	2133.5
25°	4997.6	4685.6	3571.8	2334.2	1797.3	1797.3	1892.1	1976.0	2043.4	2092.8	2101.4
27.5°	5032.0	4627.6	3237.9	1964.2	1673.4	1765.9	1856.1	1925.8	1983.0	2035.5	2045.0
30°	5045.4	4520.2	2852.3	1667.2	1622.5	1732.2	1807.5	1867.0	1921.1	1970.5	1979.1
32.5°	5047.7	4390.9	2443.1	1498.6	1587.2	1696.9	1747.1	1799.6	1857.6	1877.2	1880.4
35°	5062.6	4238.0	2012.0	1412.4	1554.3	1664.0	1704.0	1741.6	1647.6	1654.6	1660.9
37.5°	5105.7	4086.8	1651.5	1363.8	1533.1	1646.8	1694.6	1558.2	1484.5	1467.3	1464.9
40°	5186.4	3925.3	1384.2	1324.6	1525.3	1655.4	1634.2	1454.7	1327.8	1232.9	1218.8
42.5°	5298.5	3751.3	1213.3	1298.8	1530.8	1696.9	1550.4	1355.2	1144.4	1083.2	1075.4
45°	5424.7	3568.7	1120.8	1280.7	1549.6	1729.1	1533.1	1222.7	1058.9	1012.7	1008.8
47.5°	5547.0	3345.3	1073.0	1272.9	1575.5	1703.2	1460.2	1182.0	1018.2	993.9	996.2
50°	5687.3	3143.8	1044.0	1264.3	1598.2	1686.8	1377.9	1160.8	1002.5	1032.3	1063.6
52.5°	5805.7	2935.4	1018.2	1247.0	1606.8	1657.8	1356.8	1164.7	1002.5	1059.7	1089.5
55°	5946.0	2777.8	988.4	1211.0	1590.3	1575.5	1341.9	1188.3	1014.2	978.2	981.3
57.5°	6127.0	2726.1	955.5	1154.5	1535.5	1455.5	1334.8	1211.0	1007.2	984.5	992.3
60°	6377.8	2780.9	942.1	1080.9	1450.0	1361.5	1335.6	1199.2	957.8	918.6	919.4
62.5°	6616.9	2842.1	941.4	1034.6	1345.0	1277.6	1317.6	1160.8	932.7	910.0	918.6
65°	6695.3	2780.2	903.7	982.9	1226.7	1177.3	1284.7	1120.1	913.9	879.4	877.9
67.5°	6590.2	2588.1	827.7	899.0	1091.1	1060.5	1241.5	1071.5	884.1	855.9	851.2
70°	6278.3	2159.4	733.6	788.5	936.6	928.8	1173.4	1015.0	844.2	819.9	799.5
72.5°	5438.8	1538.6	618.4	656.0	762.6	787.7	1079.3	941.4	787.7	735.2	703.9
75°	4466.9	1138.9	507.9	515.7	579.2	647.4	950.0	855.1	721.1	631.7	607.5
77.5°	2735.5	696.8	404.4	407.6	415.4	516.5	782.2	758.7	636.5	526.7	509.5
80°	885.7	380.1	292.4	307.3	283.7	378.6	605.1	645.9	546.3	440.5	421.7
82.5°	337.0	221.8	197.5	207.7	196.7	254.0	441.3	517.3	447.6	362.1	294.7
85°	163.0	125.4	116.8	130.9	121.5	130.1	282.2	380.9	339.4	235.9	219.5
87.5°	58.0	55.7	44.7	60.4	51.7	46.2	86.2	192.0	224.2	162.2	145.0
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.

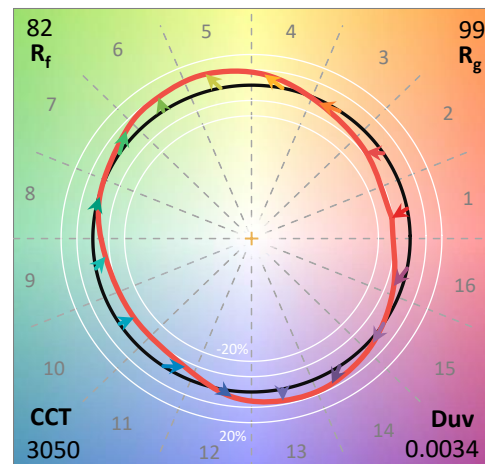
Test Information

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

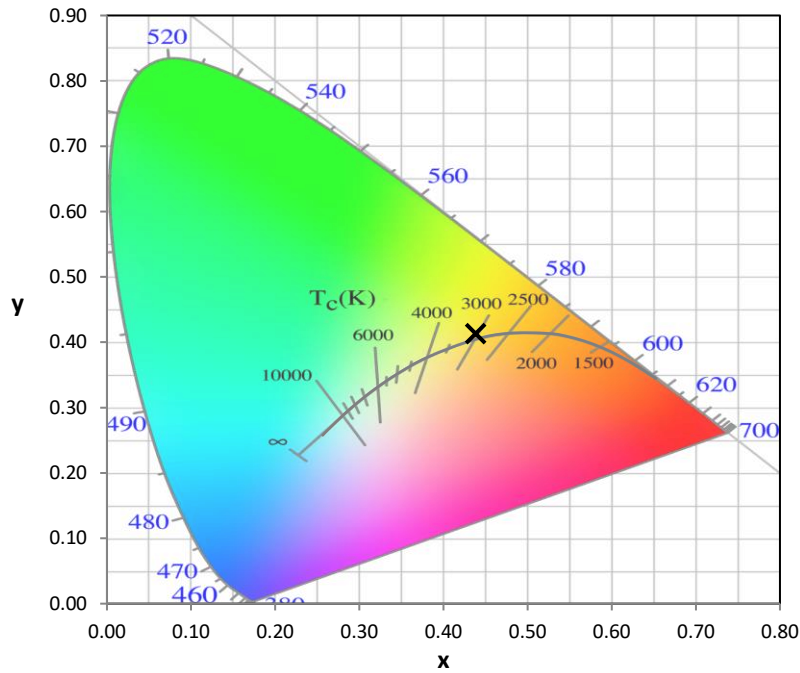
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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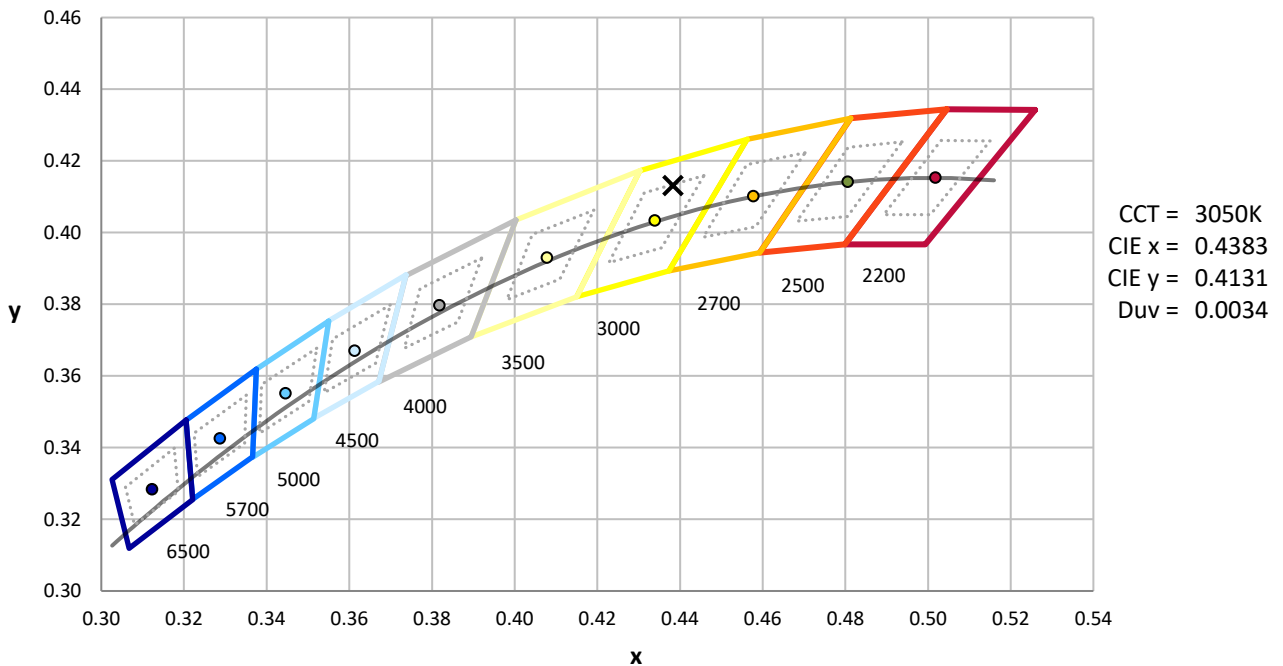
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



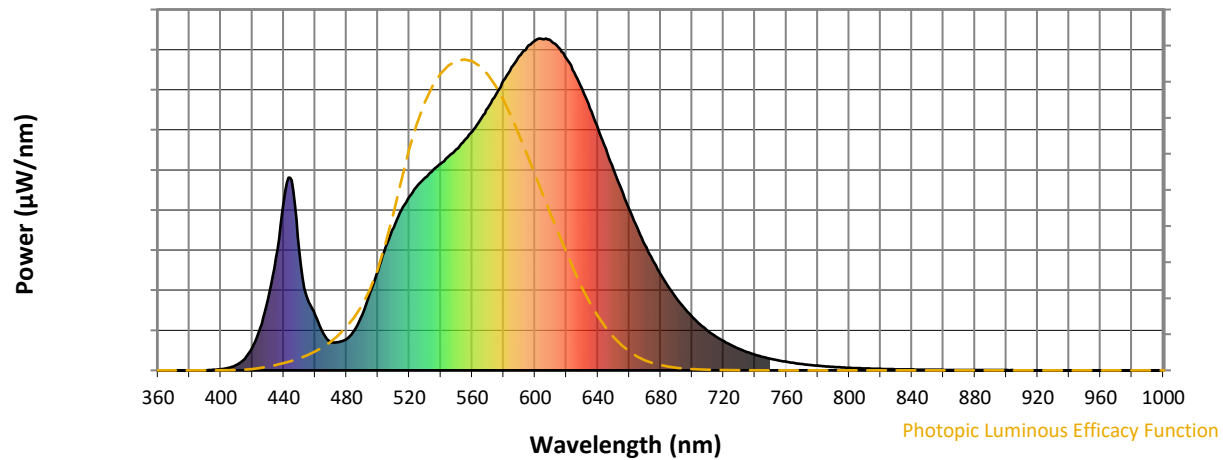
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

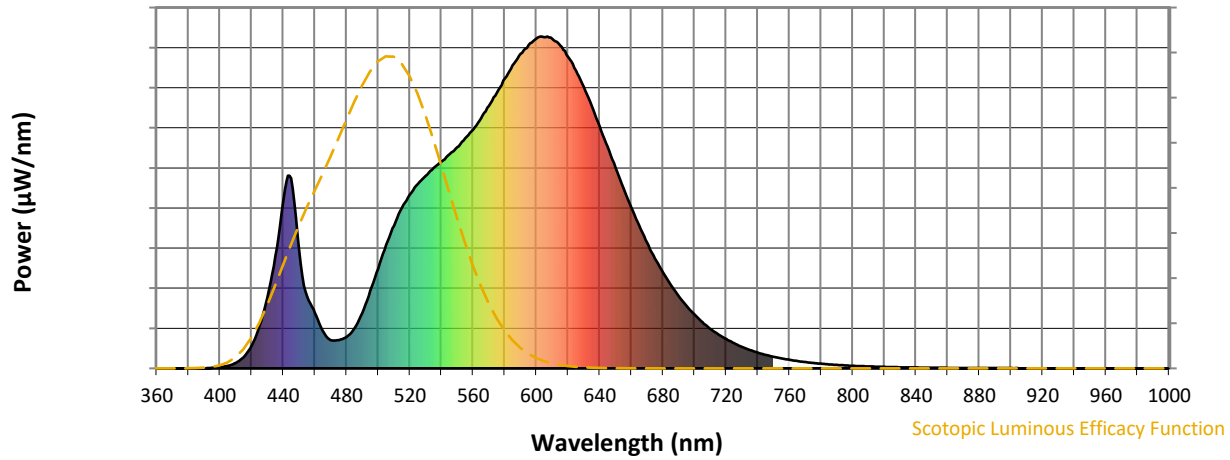


Photopic Lumens: NR

λ (nm)	Power 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



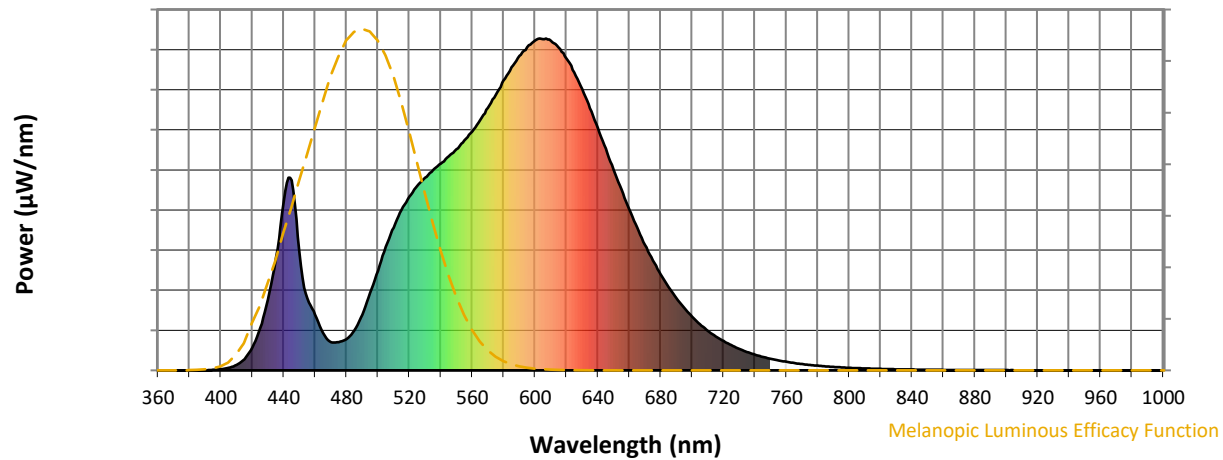
Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

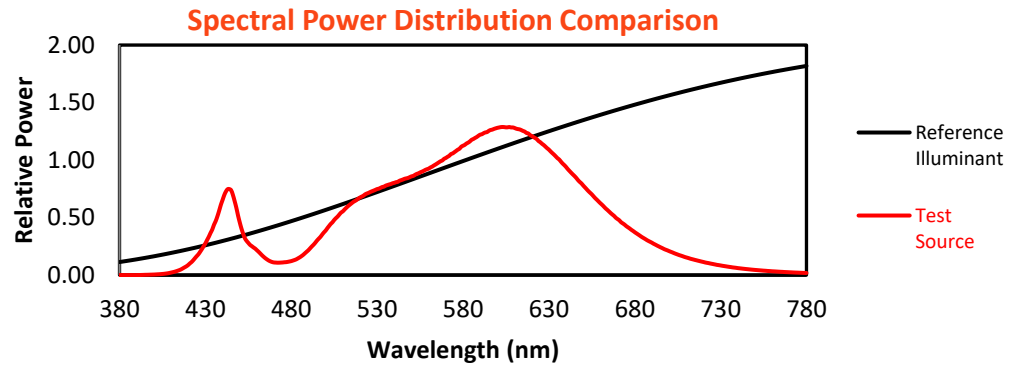
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168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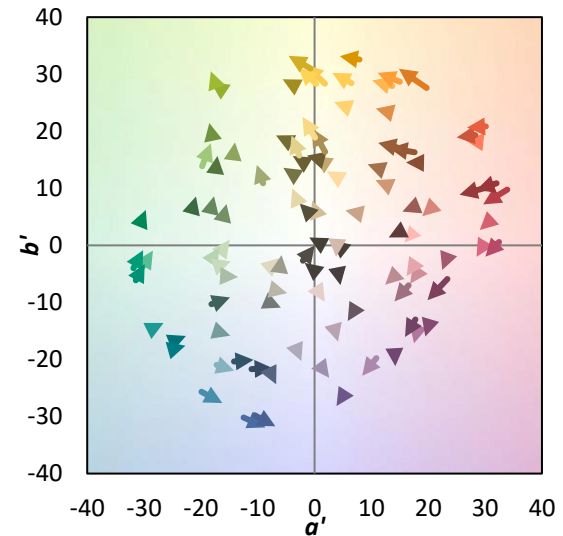
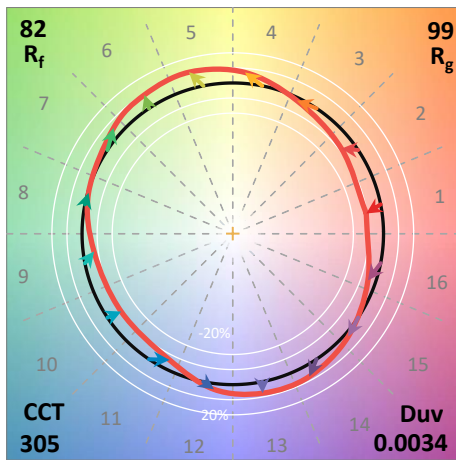
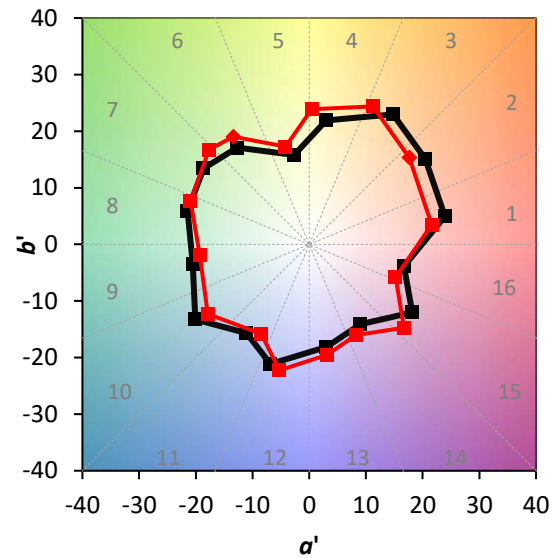
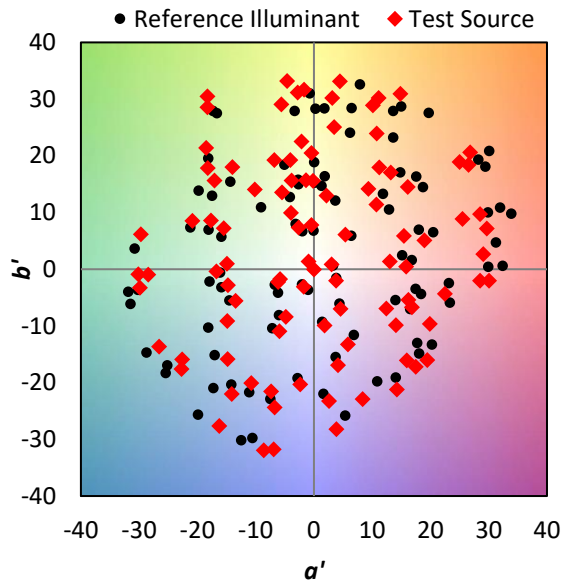
TM-30-18

Summary

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

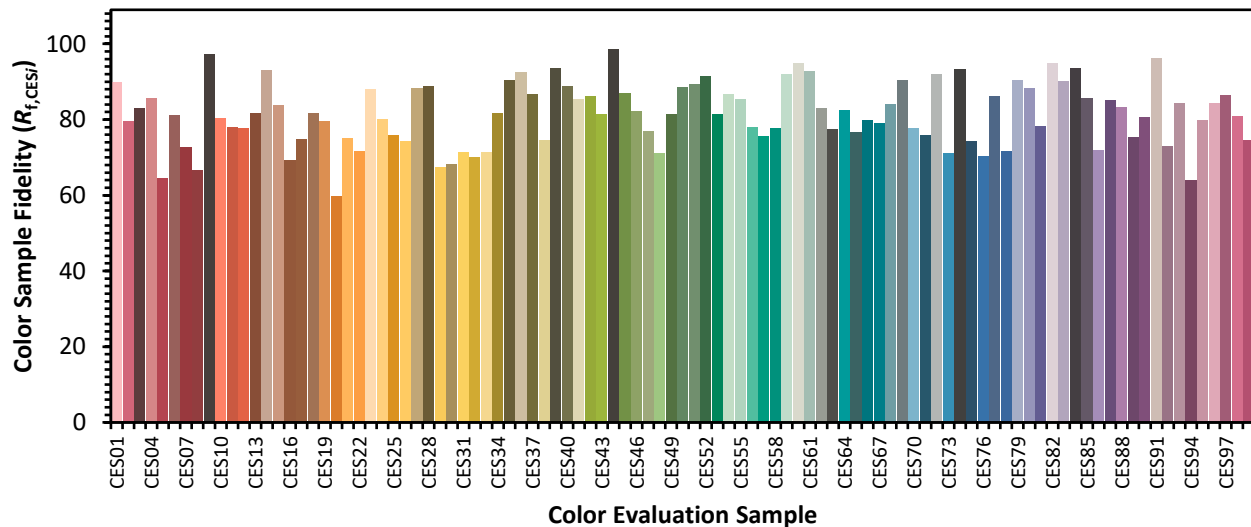


Color Vector Graphics

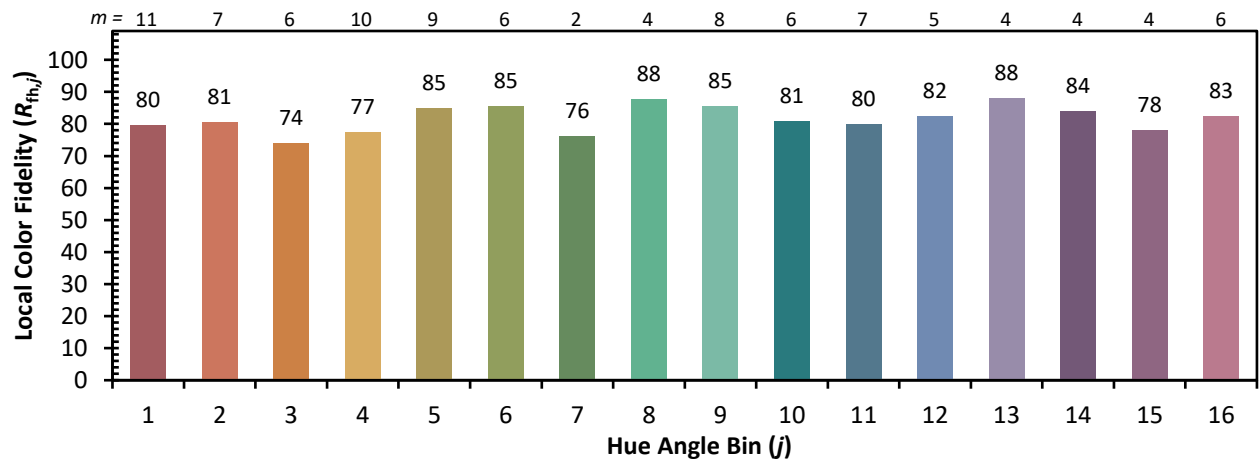
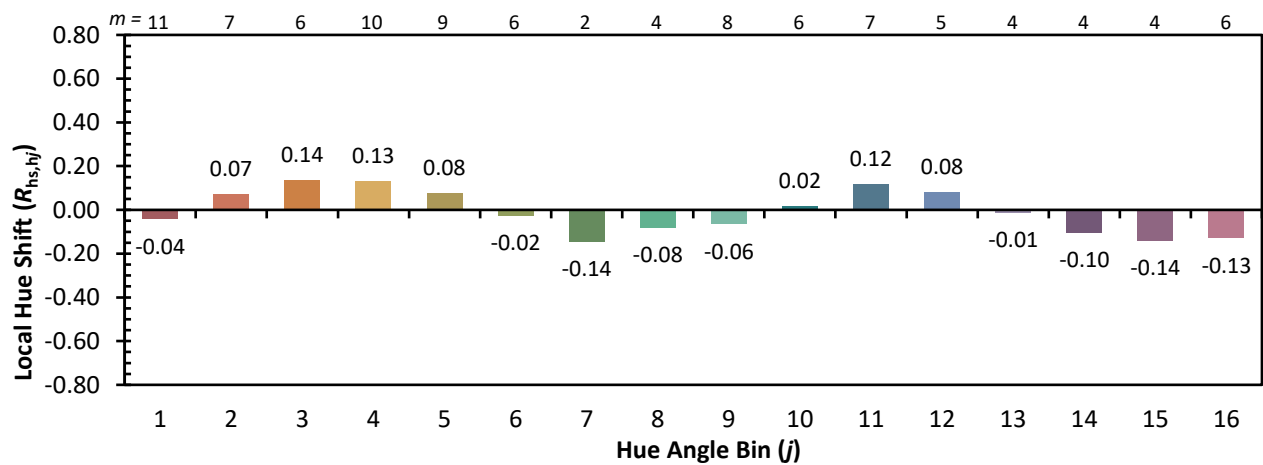
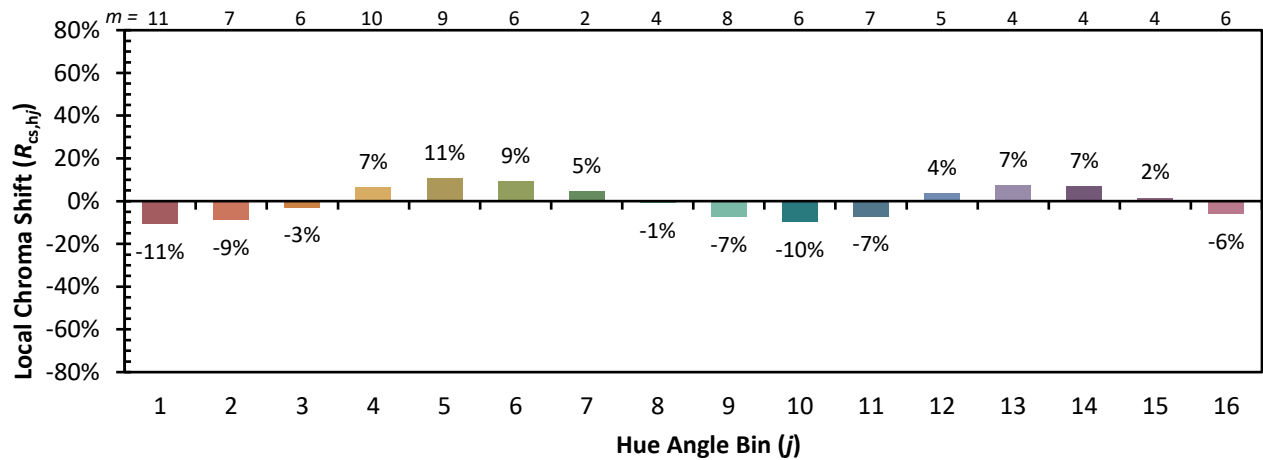


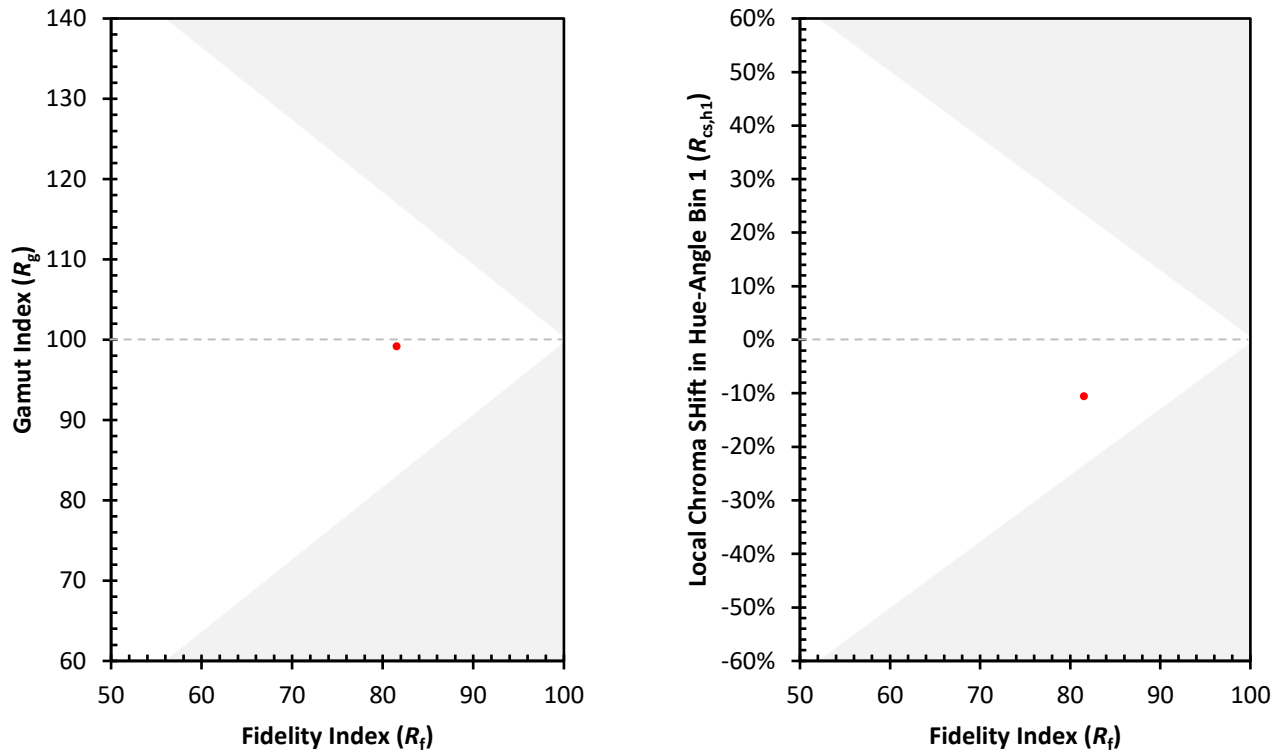
Individual Sample Fidelity Index ($R_{f,i}$)

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)