

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: P324012

Luminaire Tested: **GLEON-SA8C-830-U-SL4-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324012
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-25)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA8C-830-U-SL4-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36560 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

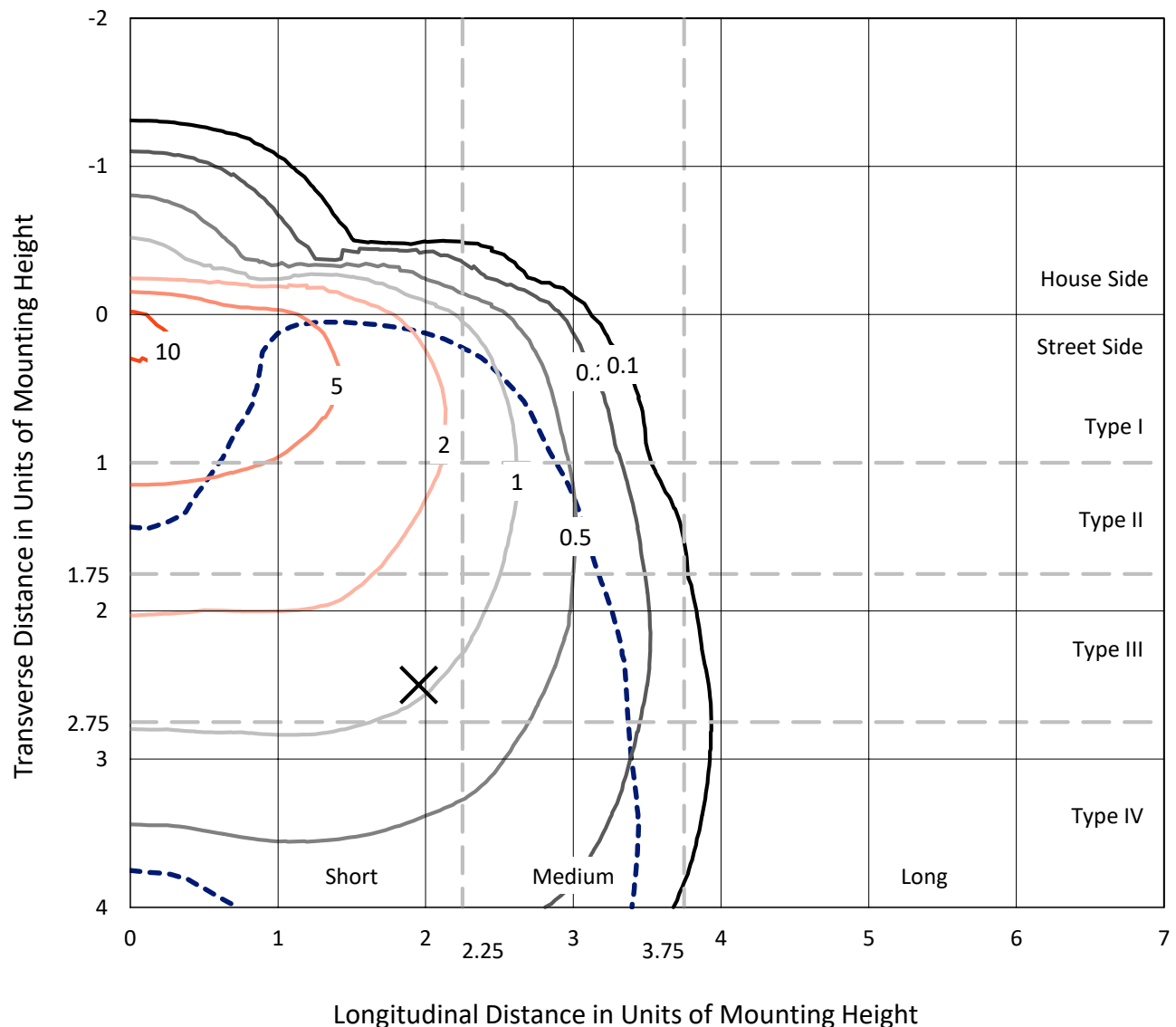
Input Watts (W): 445
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

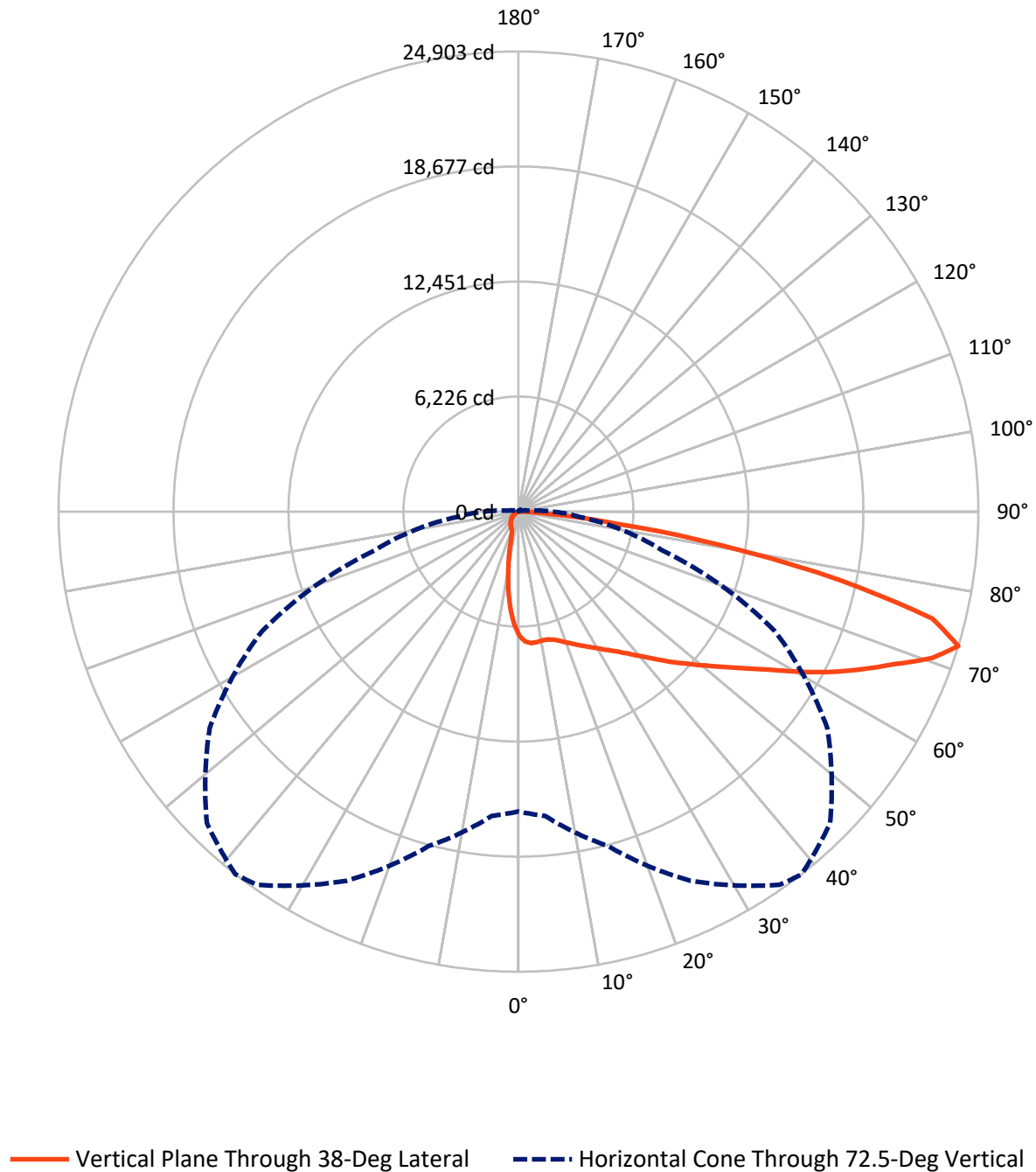
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.4 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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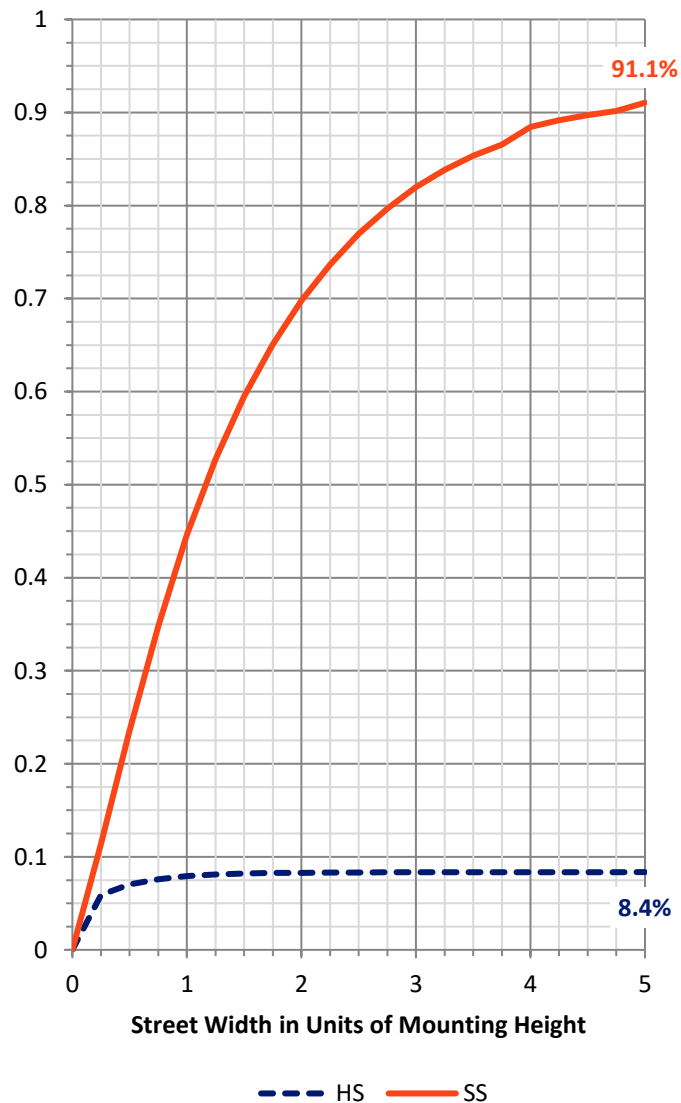
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3076.7	0.0	3076.7
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	33483.3	0.0	33483.3
	% Fixture	91.6	0.0	91.6
Total	Lumens	36560.0	0.0	36560.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	572.9	1.6
10°-20°	1401.0	3.8
20°-30°	2228.3	6.1
30°-40°	3349.9	9.2
40°-50°	5110.6	14.0
50°-60°	7222.9	19.8
60°-70°	9060.0	24.8
70°-80°	6774.3	18.5
80°-90°	840.0	2.3
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°	36560.0	100.0
0°-180°	36560.0	100.0

Coefficient of Utilization



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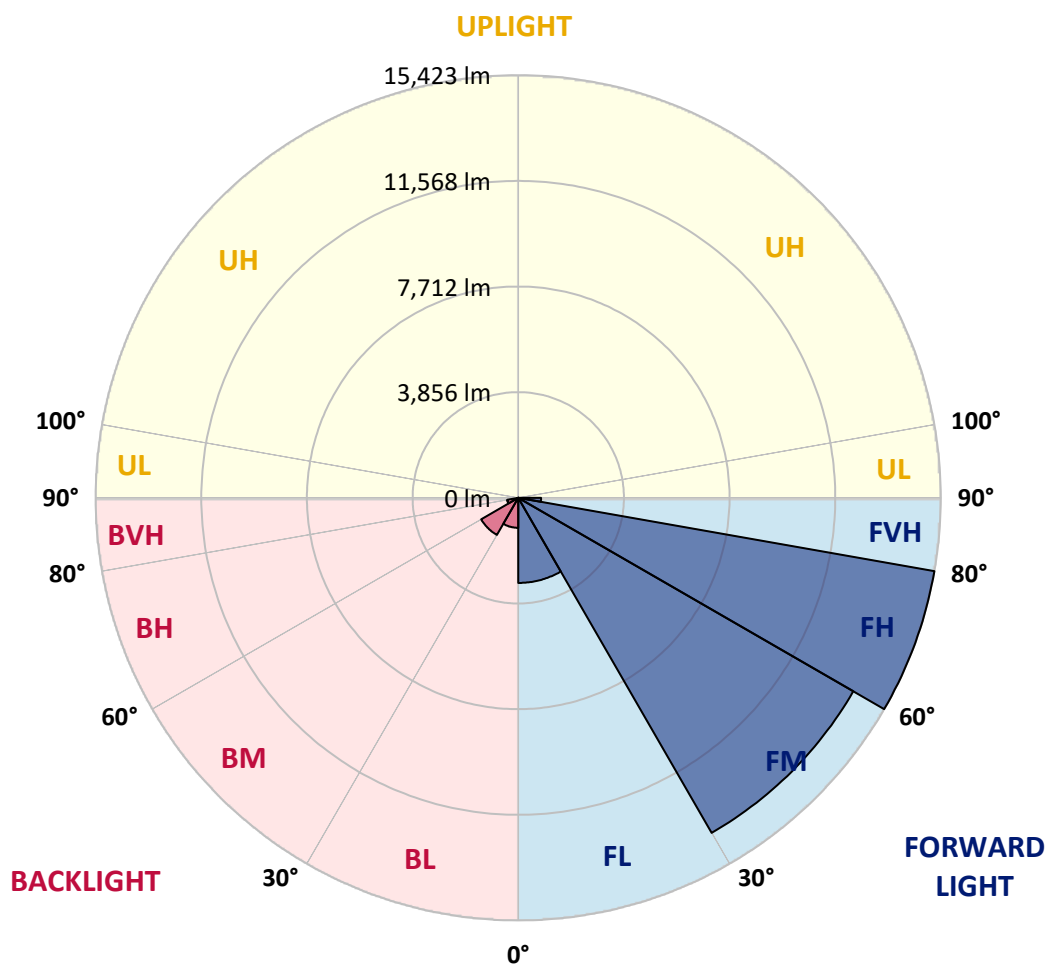
CATALOG NUMBER: GLEON-SA8C-830-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3106.7	8.5			
FM	(30°-60°)	14121.1	38.6			
FH	(60°-80°)	15423.4	42.2			G5
FVH	(80°-90°)	832.2	2.3			G5
BL	(0°-30°)	1095.5	3.0	B3/2500		
BM	(30°-60°)	1562.4	4.3	B2/2500		
BH	(60°-80°)	411.0	1.1	B1/500		G1/500
BVH	(80°-90°)	7.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	6723.3	6723.3	6723.3	6723.3	6723.3	6723.3	6723.3	6723.3	6723.3	6723.3	6723.3
2.5°	7136.3	7137.8	7121.1	7093.7	7058.8	7040.6	7010.2	6961.6	6910.0	6817.4	6717.2
5°	7282.0	7282.0	7260.8	7224.3	7168.1	7151.4	7093.7	7016.3	6910.0	6759.7	6591.2
7.5°	7266.8	7269.9	7241.0	7203.1	7146.9	7131.7	7061.9	6975.3	6843.2	6661.0	6445.4
10°	7187.9	7195.5	7172.7	7154.5	7102.9	7086.1	7020.9	6934.3	6802.2	6607.9	6360.4
12.5°	7107.4	7115.0	7122.6	7139.3	7107.4	7101.3	7049.7	6976.8	6850.8	6648.9	6369.5
15°	7055.8	7071.0	7125.6	7190.9	7198.5	7192.4	7159.0	7090.7	6963.2	6753.6	6434.8
17.5°	7055.8	7080.1	7194.0	7318.5	7362.5	7367.0	7338.2	7242.5	7090.7	6866.0	6495.5
20°	7115.0	7148.4	7326.0	7502.2	7575.1	7575.1	7518.9	7385.3	7207.6	6967.7	6536.5
22.5°	7266.8	7310.9	7534.1	7737.5	7815.0	7798.3	7722.3	7528.0	7329.1	7083.1	6588.1
25°	7565.9	7599.4	7831.7	8036.6	8083.7	8045.7	7950.1	7701.1	7484.0	7239.5	6682.3
27.5°	7951.6	7956.2	8196.1	8369.2	8340.3	8314.5	8194.5	7918.2	7707.2	7462.7	6844.7
30°	8375.2	8375.2	8586.3	8718.4	8630.3	8609.1	8489.1	8180.9	7992.6	7766.4	7075.5
32.5°	8785.2	8803.4	8975.0	9058.5	8959.8	8938.5	8821.6	8513.4	8372.2	8229.5	7435.4
35°	9181.5	9195.1	9357.6	9403.2	9309.0	9315.1	9231.6	8970.4	8917.3	8899.1	7977.4
37.5°	9565.6	9568.7	9734.2	9763.0	9715.9	9767.6	9775.2	9544.4	9643.1	9790.3	8741.2
40°	9916.4	9919.4	10083.4	10157.8	10238.2	10305.1	10364.3	10241.3	10567.7	10909.4	9650.6
42.5°	10197.3	10229.1	10437.2	10578.4	10790.9	10918.5	11079.4	11073.3	11668.5	12181.7	10749.9
45°	10444.7	10499.4	10789.4	11036.9	11401.3	11604.8	11856.8	12054.2	12907.5	13598.4	11862.9
47.5°	10771.2	10822.8	11153.8	11559.2	12045.1	12312.3	12729.9	13156.5	14269.5	14989.2	12950.0
50°	11231.3	11208.5	11534.9	12116.5	12740.5	13091.2	13686.4	14325.7	15620.8	16200.8	13589.3
52.5°	11721.7	11712.6	11954.0	12722.3	13560.4	13970.4	14756.9	15534.3	16912.9	17035.9	13882.3
55°	12329.0	12263.7	12467.2	13413.1	14533.7	14974.0	15900.2	16730.7	17942.4	17506.6	14029.6
57.5°	12965.2	12857.4	13051.8	14182.9	15631.4	16152.2	17166.5	17896.8	18627.1	17828.5	14028.1
60°	13622.7	13495.1	13725.9	15145.6	16994.9	17597.7	18539.1	18684.8	19266.4	17991.0	13924.8
62.5°	14172.3	14096.4	14439.5	16175.0	18517.8	19110.0	19576.1	19401.5	19805.4	18117.0	13683.4
65°	14753.8	14758.4	15312.6	17376.0	20136.4	20535.7	20575.2	20330.7	20256.3	18091.2	12866.5
67.5°	15540.3	15613.2	16537.9	19006.7	21710.9	22019.1	22016.1	21337.4	20585.8	17064.8	11055.1
70°	16372.4	16544.0	17950.0	20872.8	23429.7	23742.5	23581.5	21978.1	19383.3	13798.8	7824.1
72.5°	16232.7	16530.3	18734.9	22049.5	24664.1	24902.5	23856.3	20403.6	15320.2	8019.9	3331.3
75°	12523.4	12868.0	17178.6	20883.4	23369.0	23154.9	20497.8	15877.4	8372.2	2238.1	750.1
77.5°	6615.5	6799.2	11348.2	15909.3	18221.7	17773.8	14439.5	8808.0	2552.4	554.2	337.1
80°	3464.9	3507.4	4945.3	9026.6	11246.4	11249.5	8557.4	3868.8	1052.2	283.9	226.2
82.5°	1855.4	1891.9	2613.1	4170.9	5892.7	5341.6	3276.6	2128.7	611.9	160.9	217.1
85°	446.4	454.0	1481.9	1905.5	2317.0	1655.0	973.3	1787.1	165.5	94.1	176.1
87.5°	171.6	174.6	549.6	824.5	590.6	382.6	455.5	666.6	21.3	36.4	27.3
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: P324012

CATALOG NUMBER: GLEON-SA8C-830-U-SL4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6723.3	6723.3	6723.3	6723.3	6723.3	6723.3	6723.3	6723.3	6723.3	6723.3	6723.3
2.5°	6656.5	6617.0	6519.8	6396.8	6287.5	6208.5	6090.1	6012.7	5961.1	5959.5	5939.8
5°	6487.9	6407.4	6197.9	5948.9	5722.7	5519.2	5279.3	5089.5	4948.3	4925.5	4876.9
7.5°	6307.2	6175.1	5853.2	5464.5	5085.0	4699.3	4251.4	3973.5	3735.1	3621.3	3609.1
10°	6196.4	6011.2	5554.1	4992.3	4397.1	3770.1	3184.0	2778.6	2485.5	2402.0	2339.8
12.5°	6173.6	5929.2	5323.3	4549.0	3698.7	2869.7	2221.3	1790.1	1556.3	1481.9	1462.2
15°	6196.4	5891.2	5129.0	4110.2	2991.2	2036.1	1491.0	1240.5	1152.4	1131.2	1129.7
17.5°	6210.1	5845.7	4908.8	3622.8	2304.9	1454.6	1141.8	1068.9	1055.3	1053.7	1056.8
20°	6208.5	5775.8	4646.2	3079.2	1714.2	1143.3	1032.5	1017.3	1014.3	1015.8	1014.3
22.5°	6197.9	5693.8	4357.7	2518.9	1295.2	1021.9	985.4	976.3	974.8	974.8	974.8
25°	6217.7	5628.5	4040.3	1983.0	1067.4	965.7	942.9	935.3	933.8	933.8	930.7
27.5°	6289.0	5592.1	3692.6	1525.9	964.2	915.6	897.3	895.8	891.3	889.8	892.8
30°	6404.4	5592.1	3311.5	1187.4	901.9	863.9	850.3	847.2	845.7	844.2	845.7
32.5°	6607.9	5634.6	2895.5	986.9	842.7	806.2	797.1	801.7	797.1	797.1	797.1
35°	6975.3	5762.1	2459.7	860.9	780.4	750.1	741.0	747.0	744.0	744.0	742.5
37.5°	7511.3	5999.0	2020.9	785.0	725.8	693.9	681.7	690.9	687.8	687.8	686.3
40°	8164.2	6343.7	1603.4	727.3	672.6	639.2	628.6	633.2	625.6	625.6	628.6
42.5°	8970.4	6781.0	1239.0	671.1	619.5	587.6	581.5	577.0	563.3	555.7	557.2
45°	9866.3	7236.5	965.7	616.5	569.4	543.6	534.5	522.3	499.5	484.4	485.9
47.5°	10666.4	7587.2	785.0	563.3	523.8	504.1	490.4	467.7	434.2	416.0	417.5
50°	11087.0	7640.3	668.1	510.2	481.3	461.6	441.8	406.9	367.4	347.7	346.2
52.5°	11194.8	7391.3	581.5	461.6	438.8	416.0	390.2	343.1	299.1	277.9	274.8
55°	11234.3	7011.8	504.1	416.0	393.3	367.4	334.0	280.9	239.9	218.6	217.1
57.5°	11103.7	6445.4	443.4	375.0	347.7	315.8	274.8	224.7	185.2	168.5	168.5
60°	10813.7	5678.6	396.3	331.0	300.6	264.2	221.7	174.6	138.2	124.5	124.5
62.5°	10235.2	4685.6	352.3	285.5	256.6	218.6	179.2	132.1	97.2	89.6	91.1
65°	9143.5	3554.5	308.2	244.5	218.6	180.7	139.7	94.1	65.3	65.3	68.3
67.5°	7456.6	2468.8	262.7	208.0	188.3	147.3	106.3	65.3	45.6	51.6	57.7
70°	4936.2	1384.7	224.7	171.6	160.9	116.9	79.0	44.0	36.4	48.6	59.2
72.5°	1863.0	539.0	188.3	138.2	139.7	89.6	56.2	33.4	33.4	53.1	69.8
75°	519.3	264.2	135.1	101.7	109.3	65.3	41.0	28.8	31.9	60.7	82.0
77.5°	305.2	194.3	88.1	59.2	74.4	45.6	27.3	22.8	27.3	51.6	79.0
80°	246.0	103.2	51.6	30.4	41.0	25.8	18.2	13.7	7.6	19.7	41.0
82.5°	246.0	62.3	24.3	21.3	21.3	13.7	9.1	6.1	1.5	0.0	10.6
85°	165.5	25.8	15.2	13.7	10.6	4.6	3.0	1.5	0.0	0.0	0.0
87.5°	27.3	10.6	6.1	3.0	1.5	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.

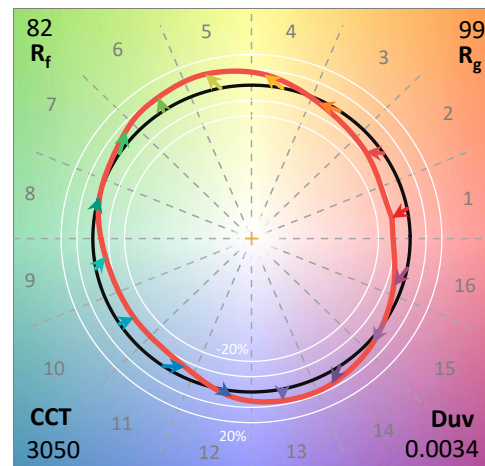
Test Information

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

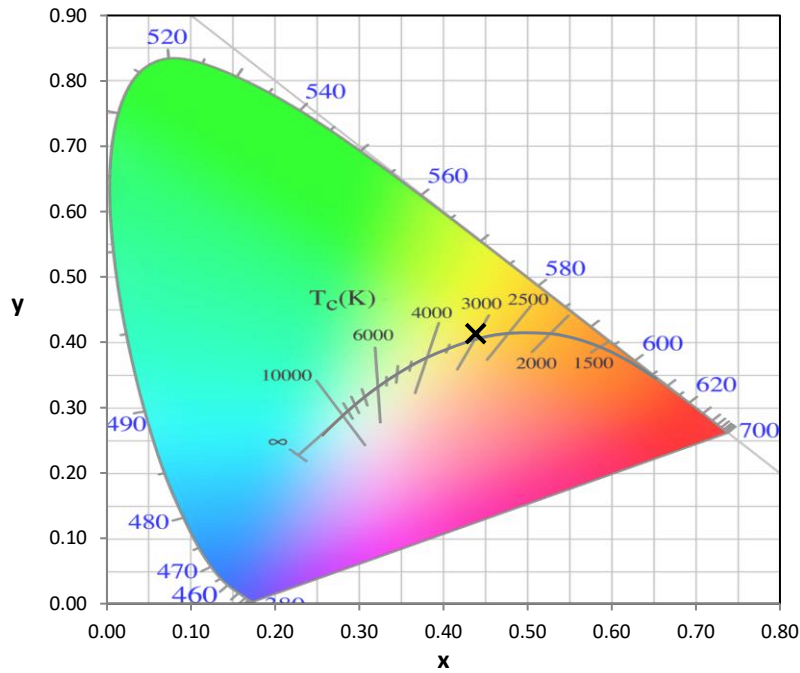
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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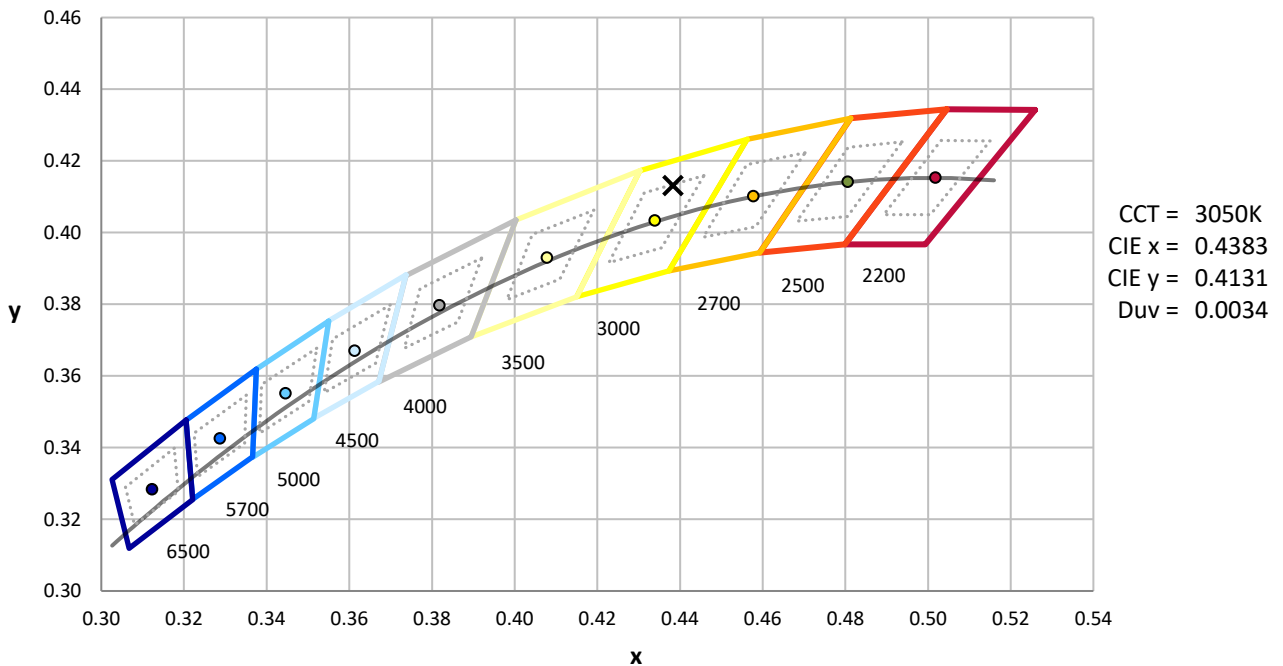
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



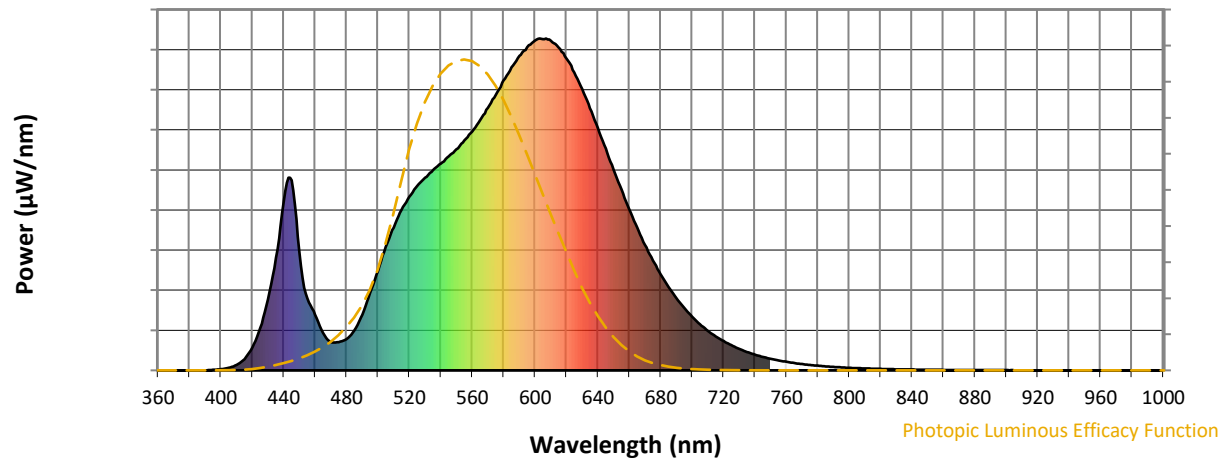
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

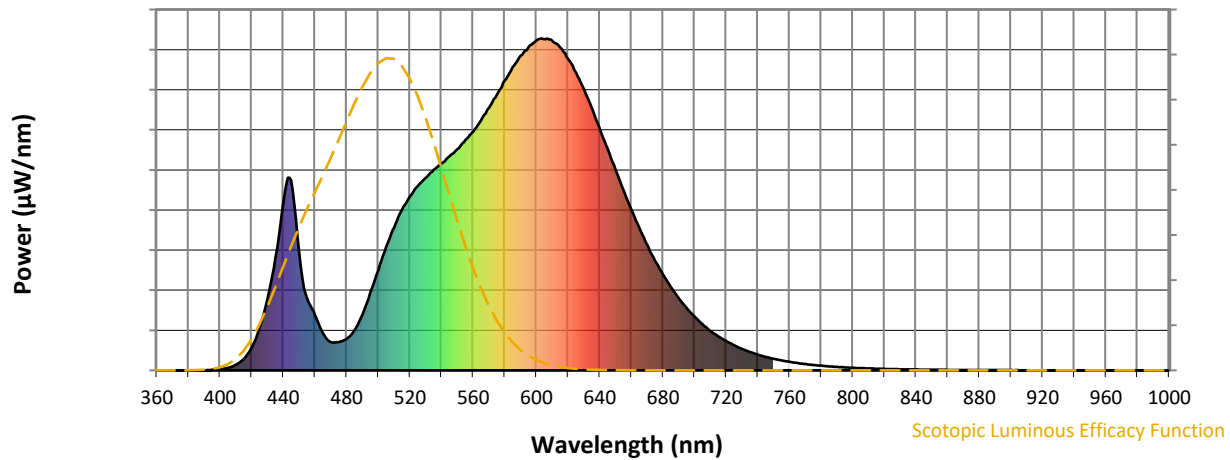


Photopic Lumens: NR

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



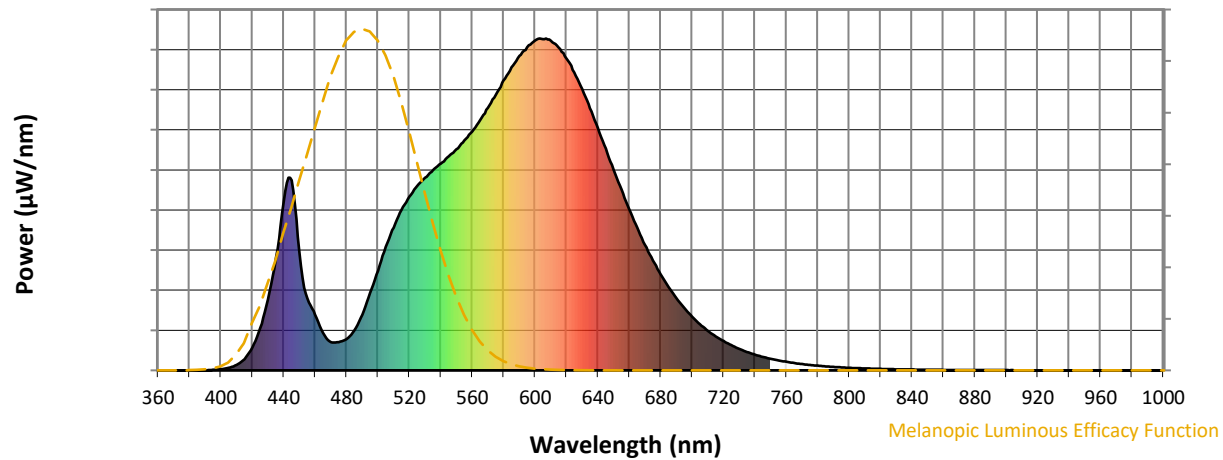
Scotopic Lumens: NR

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

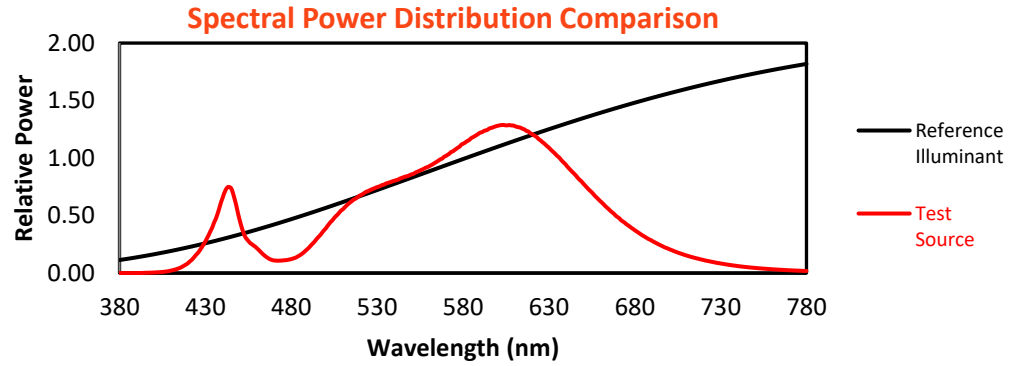
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940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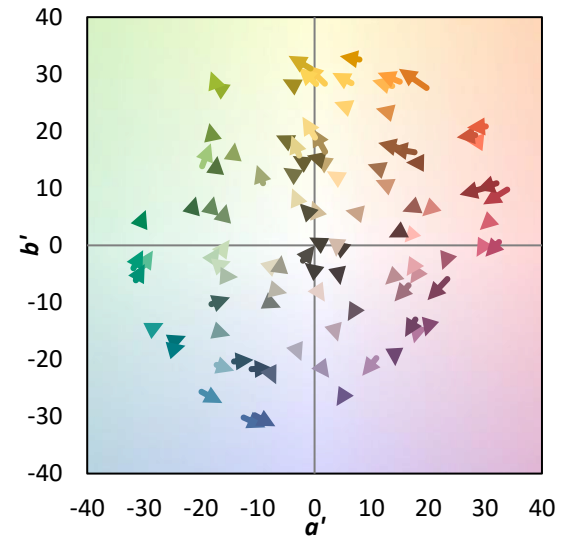
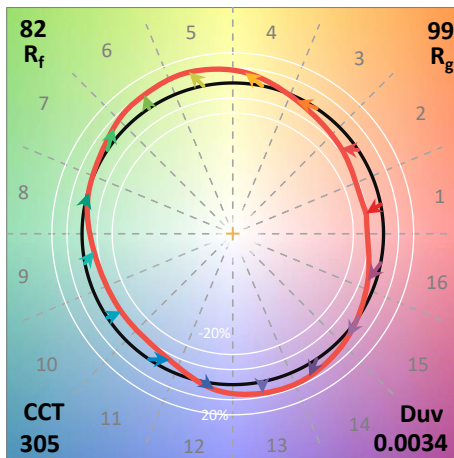
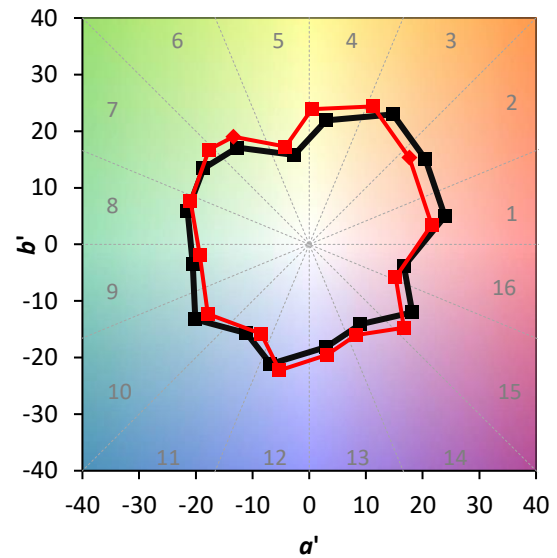
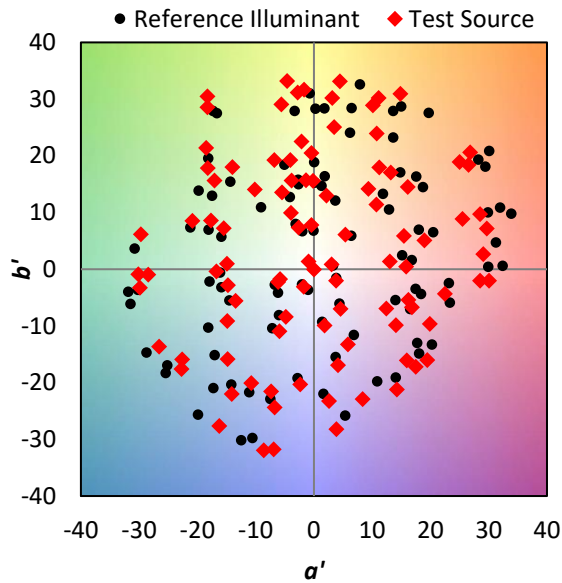
TM-30-18

Summary

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

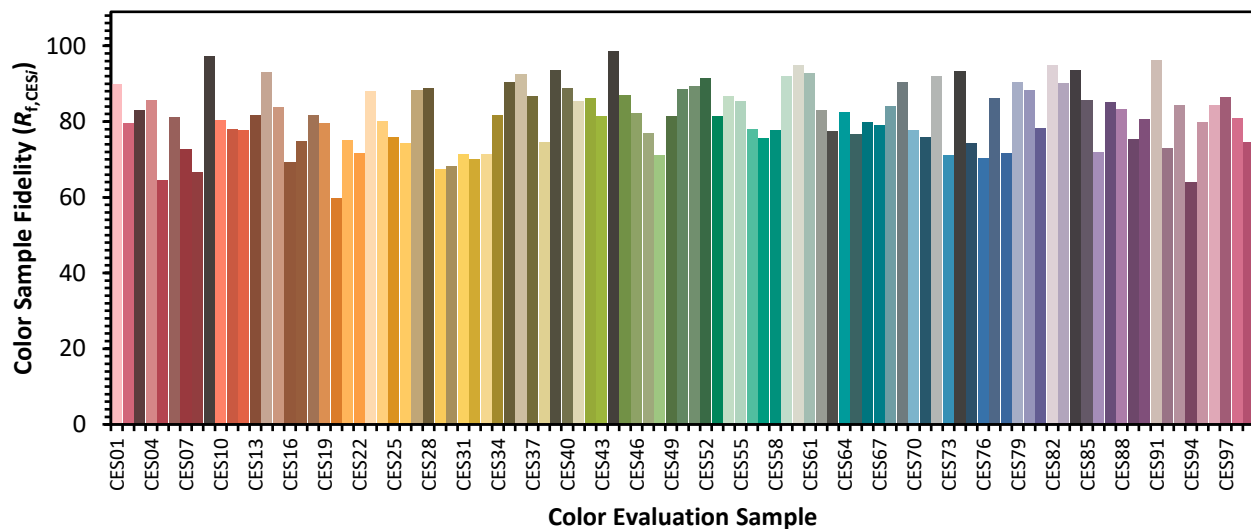


Color Vector Graphics

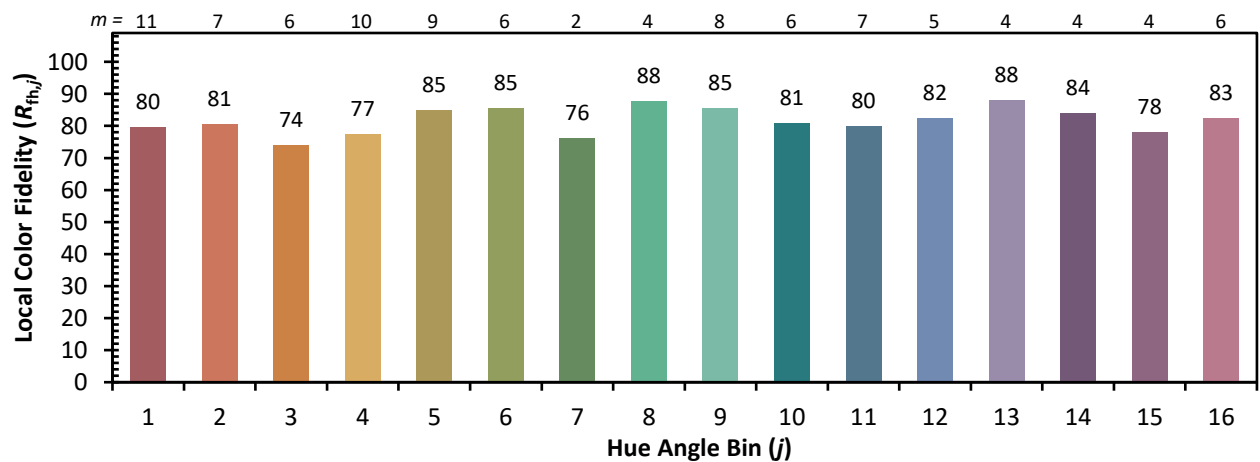
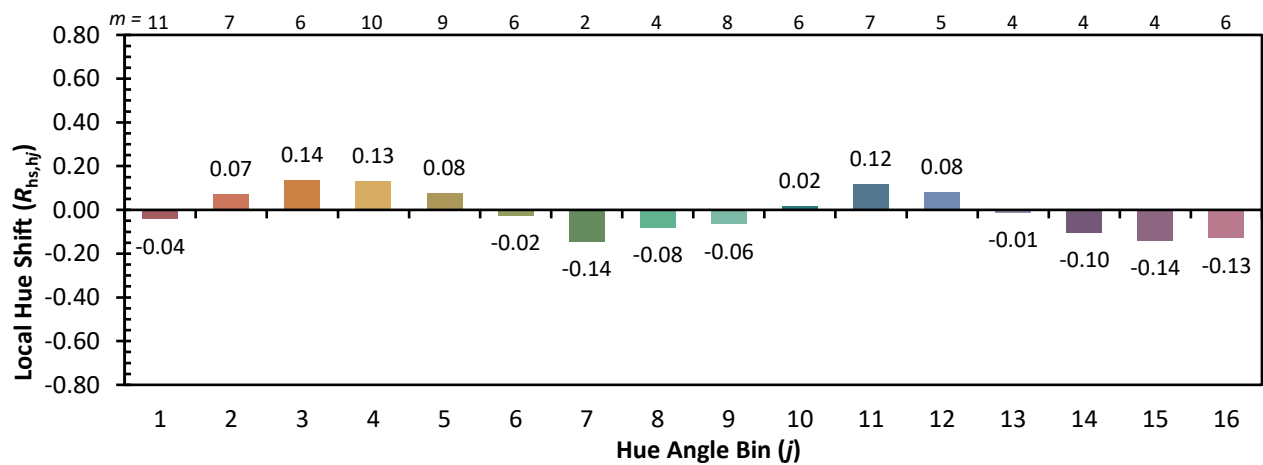
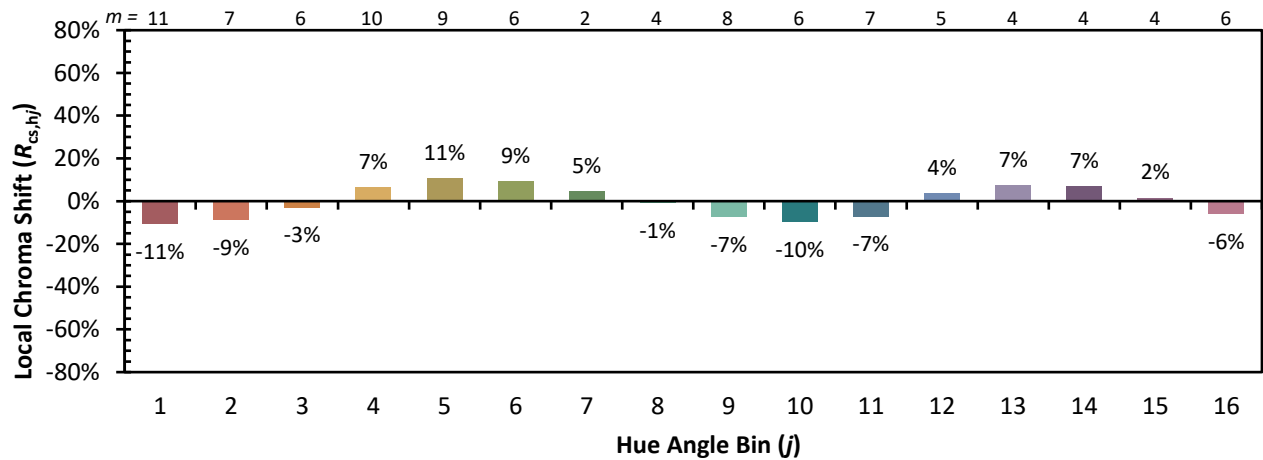


Individual Sample Fidelity Index ($R_{f,i}$)

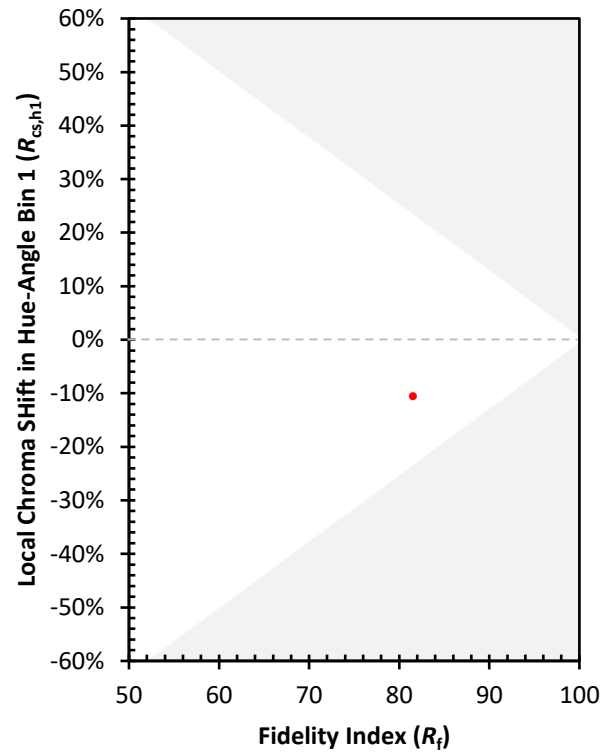
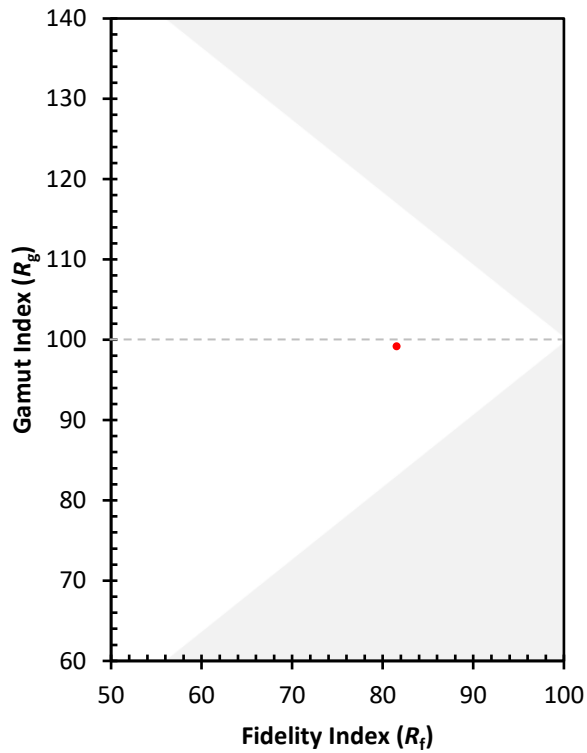
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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