

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: P322711

Luminaire Tested: **GLEON-SA7A-830-U-T4FT-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322711
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA7A-830-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18602 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

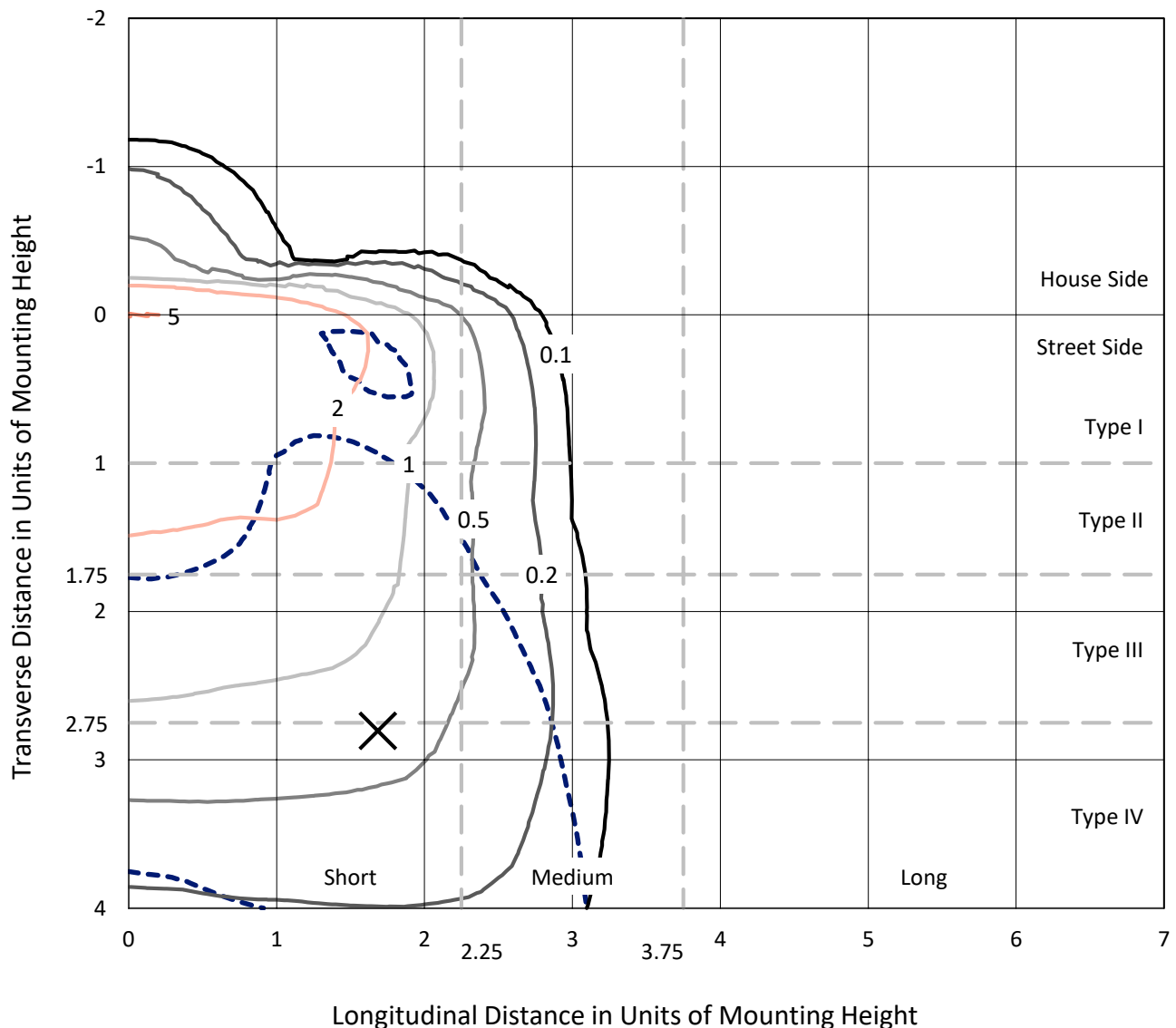
Input Watts (W): 226
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P322711
 CATALOG NUMBER: GLEON-SA7A-830-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

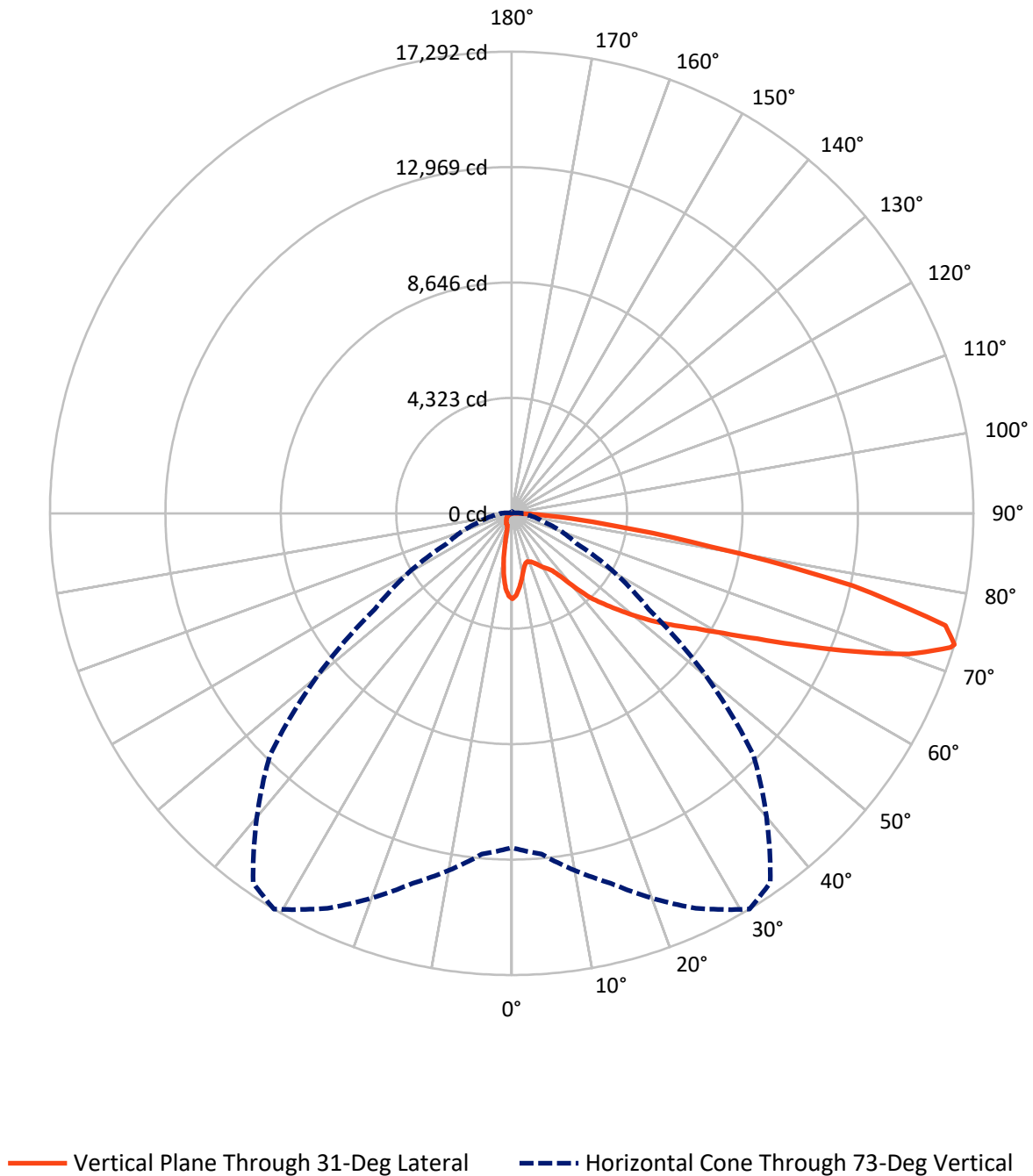
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type IV - Short - N/A

REPORT NUMBER: P322711
CATALOG NUMBER: GLEON-SA7A-830-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P322711
 CATALOG NUMBER: GLEON-SA7A-830-U-T4FT-HSS

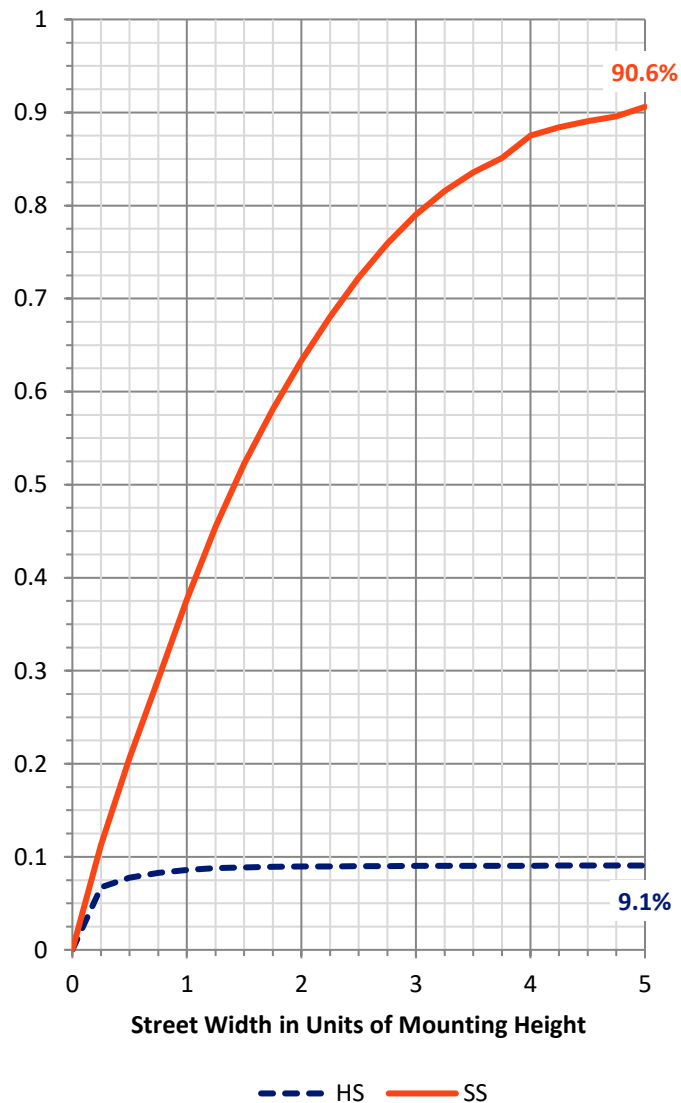
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1695.6	0.0	1695.6
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	16906.4	0.0	16906.4
	% Fixture	90.9	0.0	90.9
Total	Lumens	18602.0	0.0	18602.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.4	1.4
10°-20°	576.2	3.1
20°-30°	863.3	4.6
30°-40°	1373.5	7.4
40°-50°	2452.7	13.2
50°-60°	3805.9	20.5
60°-70°	5059.4	27.2
70°-80°	3805.7	20.5
80°-90°	399.9	2.1
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°	18602.0	100.0
0°-180°	18602.0	100.0

Coefficient of Utilization



REPORT NUMBER: P322711

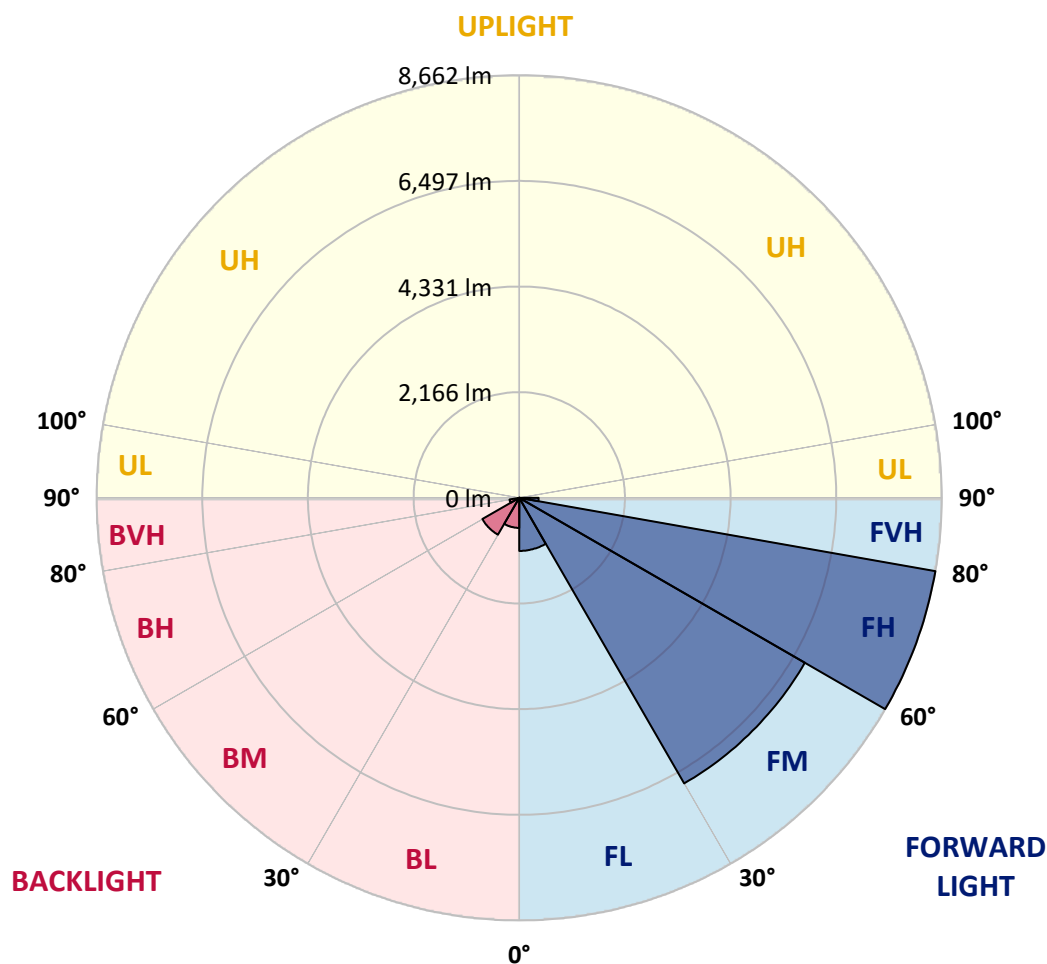
CATALOG NUMBER: GLEON-SA7A-830-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1088.2	5.9			
FM	(30°-60°)	6759.3	36.3			
FH	(60°-80°)	8662.3	46.6			G4/12000
FVH	(80°-90°)	396.5	2.1			G3/500
BL	(0°-30°)	616.6	3.3	B2/1000		
BM	(30°-60°)	872.8	4.7	B1/1000		
BH	(60°-80°)	202.9	1.1	B1/500		G1/500
BVH	(80°-90°)	3.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short



REPORT NUMBER: P322711

CATALOG NUMBER: GLEON-SA7A-830-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	31°	35°	45°	55°	65°	75°	85°
0°	3200.5	3200.5	3200.5	3200.5	3200.5	3200.5	3200.5	3200.5	3200.5	3200.5	3200.5
2.5°	3033.0	3045.8	3059.4	3062.2	3084.9	3085.8	3118.6	3143.2	3167.7	3191.4	3199.6
5°	2721.7	2742.6	2767.2	2791.8	2840.0	2859.2	2939.3	3021.2	3099.5	3174.1	3210.5
7.5°	2389.5	2413.1	2447.7	2508.7	2562.4	2599.7	2726.3	2871.9	3017.5	3155.0	3234.2
10°	2086.3	2108.2	2144.6	2209.2	2292.1	2343.0	2513.3	2715.3	2929.3	3137.7	3269.7
12.5°	1893.4	1905.2	1925.2	1994.4	2069.0	2126.4	2326.7	2577.0	2856.4	3136.8	3327.0
15°	1857.9	1861.5	1845.1	1876.1	1934.3	1989.9	2192.8	2465.0	2800.9	3151.4	3401.7
17.5°	1914.3	1912.5	1857.9	1854.2	1900.6	1946.2	2127.3	2387.6	2761.8	3185.0	3498.2
20°	1999.9	1993.5	1898.8	1881.5	1930.7	1973.5	2122.8	2358.5	2747.2	3241.5	3615.6
22.5°	2113.6	2102.7	1954.4	1936.1	1988.9	2033.5	2179.2	2386.7	2759.9	3317.0	3752.1
25°	2254.7	2238.4	2049.9	2029.9	2083.6	2128.2	2280.2	2467.7	2798.2	3409.0	3925.1
27.5°	2414.0	2390.4	2202.9	2151.0	2212.0	2258.4	2414.9	2591.5	2858.3	3506.4	4137.2
30°	2564.2	2533.3	2364.0	2278.4	2353.1	2404.9	2560.6	2739.0	2954.7	3656.6	4427.6
32.5°	2715.3	2680.7	2507.8	2405.8	2473.2	2529.6	2710.8	2942.0	3135.9	3885.9	4813.5
35°	3063.1	3026.7	2814.6	2646.2	2645.2	2677.1	2921.1	3219.6	3375.3	4205.5	5274.1
37.5°	3648.4	3627.4	3425.3	3105.8	3020.3	2984.8	3207.8	3551.0	3719.4	4645.1	5793.9
40°	4289.2	4271.0	4044.3	3754.9	3624.7	3537.3	3619.2	4012.5	4205.5	5182.2	6324.6
42.5°	5012.9	4926.4	4522.2	4435.7	4319.2	4252.8	4179.1	4581.4	4802.6	5766.6	6850.7
45°	5670.1	5524.4	5000.1	4869.0	4842.6	4859.0	4900.0	5346.0	5474.4	6461.1	7375.0
47.5°	6061.5	5946.8	5544.5	5418.8	5411.6	5519.9	5829.4	6209.9	6143.4	7066.4	7836.5
50°	6433.8	6330.0	5996.0	6026.9	6060.6	6208.0	6884.4	7098.3	6754.2	7615.3	8259.8
52.5°	6735.1	6576.7	6401.9	6575.8	6741.5	6979.0	7973.1	7895.7	7187.5	8052.3	8622.1
55°	6909.0	6837.0	6921.7	7096.5	7407.8	7793.7	9000.8	8559.3	7504.3	8451.0	8863.3
57.5°	7546.1	7405.1	7573.5	7724.6	8130.5	8670.3	9881.0	9053.6	7732.8	8697.6	8918.8
60°	8317.1	8203.4	8302.6	8553.8	9101.8	9736.3	10703.9	9456.8	7852.0	8856.0	8775.0
62.5°	9544.2	9394.0	9332.1	9613.4	10339.8	11032.5	11328.3	9736.3	7825.6	8785.9	8281.6
65°	11188.1	11032.5	10755.8	11010.6	11934.6	12423.4	12026.5	9795.4	7643.5	8218.8	7034.6
67.5°	12872.1	12759.3	12522.6	12952.2	13786.1	13943.5	12764.7	9651.6	7057.3	6664.1	4970.1
70°	13984.5	13936.2	14090.1	15040.4	15784.1	15738.6	13442.0	8878.8	5500.8	4098.0	2458.6
72.5°	13182.5	13413.8	14549.8	16272.9	17181.4	16810.0	13094.2	6817.9	3144.1	1576.6	710.9
73°	12518.0	12813.9	14343.1	16319.3	17291.5	16884.6	12802.0	6258.1	2679.8	1244.3	538.9
75°	8708.6	9071.8	11874.5	15198.8	16776.3	16087.2	10671.1	3830.4	1241.6	551.6	217.6
77.5°	4228.2	4496.7	6538.5	10981.5	13046.9	12569.0	6643.2	1427.3	560.7	345.0	100.1
80°	1578.4	1755.0	2838.2	5589.1	7539.8	7737.3	2922.0	539.8	373.2	277.6	51.0
82.5°	413.3	460.6	1046.8	2492.3	3864.1	4044.3	921.2	272.2	273.1	228.5	30.9
85°	132.0	151.1	326.8	1118.7	1820.5	1598.4	240.3	132.0	198.4	170.2	17.3
87.5°	16.4	20.9	103.8	263.1	401.4	223.0	37.3	39.1	84.7	94.7	10.0
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: P322711

CATALOG NUMBER: GLEON-SA7A-830-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3200.5	3200.5	3200.5	3200.5	3200.5	3200.5	3200.5	3200.5	3200.5	3200.5	3200.5
2.5°	3207.8	3203.2	3204.2	3180.5	3165.0	3134.1	3102.2	3087.6	3072.2	3065.8	3072.2
5°	3224.2	3216.0	3192.3	3119.5	3042.1	2942.0	2848.2	2777.2	2688.0	2663.5	2688.9
7.5°	3249.7	3233.3	3164.1	3015.7	2843.7	2652.5	2437.7	2281.1	2152.8	2070.0	2100.0
10°	3287.0	3256.0	3116.8	2864.6	2557.0	2218.3	1913.4	1675.8	1507.4	1438.2	1435.5
12.5°	3349.8	3291.5	3058.5	2668.0	2206.5	1755.0	1355.4	1097.8	961.2	872.9	871.1
15°	3419.0	3333.4	2984.8	2432.2	1798.7	1257.1	872.9	677.2	588.9	560.7	557.1
17.5°	3503.6	3381.7	2889.2	2141.9	1371.8	832.9	569.8	513.4	509.8	507.0	507.0
20°	3610.1	3439.0	2766.3	1809.6	973.1	556.2	484.3	487.9	489.7	486.1	487.0
22.5°	3733.9	3497.3	2619.8	1452.8	658.1	465.1	463.3	467.9	469.7	467.9	468.8
25°	3877.8	3564.6	2441.3	1078.7	475.2	441.5	446.0	452.4	457.0	457.0	457.0
27.5°	4056.2	3646.5	2226.5	752.8	410.5	416.9	429.6	441.5	447.9	449.7	449.7
30°	4288.3	3748.5	1968.9	516.1	373.2	384.1	407.8	430.6	442.4	444.2	445.1
32.5°	4581.4	3863.2	1670.3	381.4	341.4	349.5	375.0	413.3	436.0	439.7	439.7
35°	4917.3	3996.1	1349.0	332.2	318.6	321.3	341.4	385.0	425.1	435.1	436.0
37.5°	5285.0	4127.2	1025.9	310.4	299.5	299.5	314.0	351.4	398.7	429.6	433.3
40°	5628.2	4206.4	719.1	293.1	282.2	282.2	294.9	322.2	366.8	413.3	423.3
42.5°	5945.0	4233.7	500.6	276.7	265.8	268.5	279.5	301.3	335.0	381.4	390.5
45°	6270.9	4229.1	365.0	257.6	249.4	257.6	265.8	282.2	306.8	333.2	335.0
47.5°	6516.6	4190.9	289.5	239.4	233.9	244.9	252.1	263.1	276.7	274.9	274.9
50°	6746.9	4098.0	233.0	214.8	218.5	231.2	234.8	238.5	239.4	222.1	220.3
52.5°	6921.7	3953.3	186.6	188.4	203.0	215.7	212.1	206.6	197.5	176.6	173.0
55°	6980.0	3674.8	146.6	155.7	180.2	196.6	183.0	171.1	153.8	136.5	132.9
57.5°	6874.4	3315.2	119.2	121.1	152.0	165.7	150.2	136.5	117.4	102.9	100.1
60°	6650.4	2915.6	98.3	91.0	117.4	129.3	119.2	105.6	88.3	77.4	76.5
62.5°	6206.2	2489.6	81.0	71.0	89.2	99.2	92.8	82.8	68.3	61.0	60.1
65°	5272.3	1991.7	65.5	57.3	69.2	77.4	71.9	64.6	53.7	48.2	47.3
67.5°	3680.2	1346.3	53.7	47.3	54.6	61.0	56.4	52.8	42.8	41.9	42.8
70°	1775.0	649.0	44.6	38.2	42.8	47.3	45.5	42.8	41.0	47.3	54.6
72.5°	508.8	217.6	35.5	31.9	34.6	37.3	39.1	38.2	44.6	57.3	66.4
73°	391.4	175.7	33.7	30.0	32.8	36.4	38.2	37.3	45.5	58.3	66.4
75°	167.5	84.7	25.5	24.6	27.3	31.9	33.7	33.7	45.5	59.2	63.7
77.5°	75.6	45.5	16.4	19.1	23.7	25.5	28.2	28.2	36.4	45.5	45.5
80°	42.8	24.6	12.7	14.6	17.3	17.3	17.3	15.5	16.4	18.2	20.0
82.5°	27.3	16.4	10.0	11.8	10.9	9.1	7.3	7.3	6.4	7.3	9.1
85°	15.5	9.1	9.1	7.3	4.6	3.6	4.6	3.6	0.9	0.0	0.9
87.5°	9.1	5.5	2.7	0.0	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.

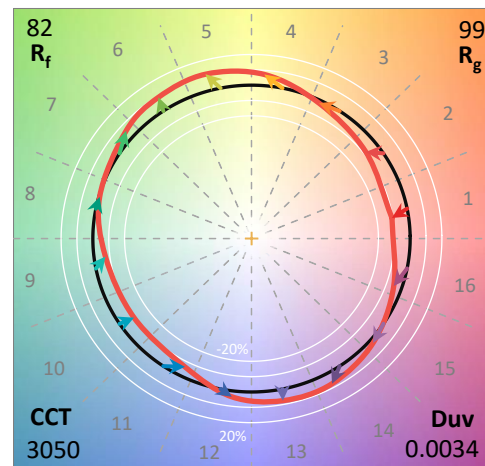
Test Information

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
 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

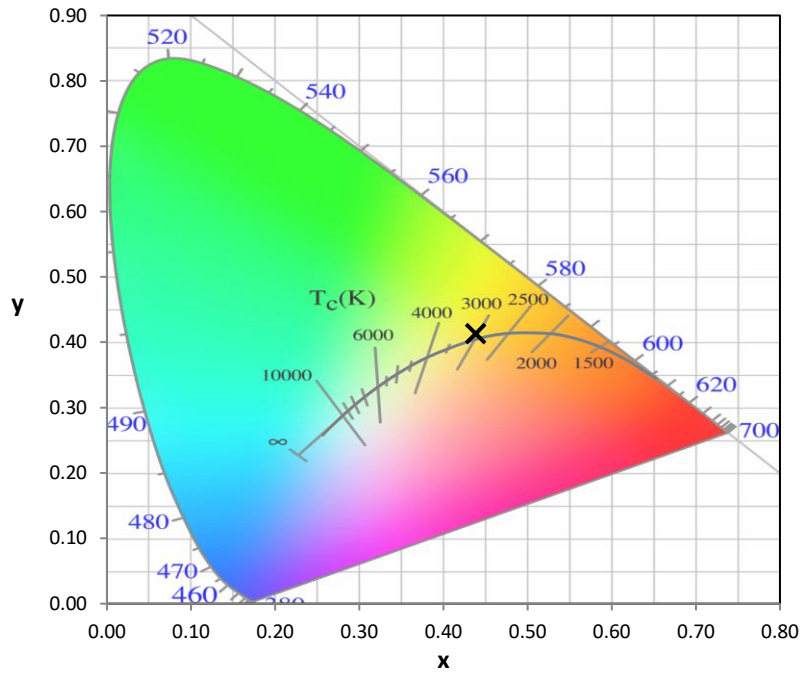
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

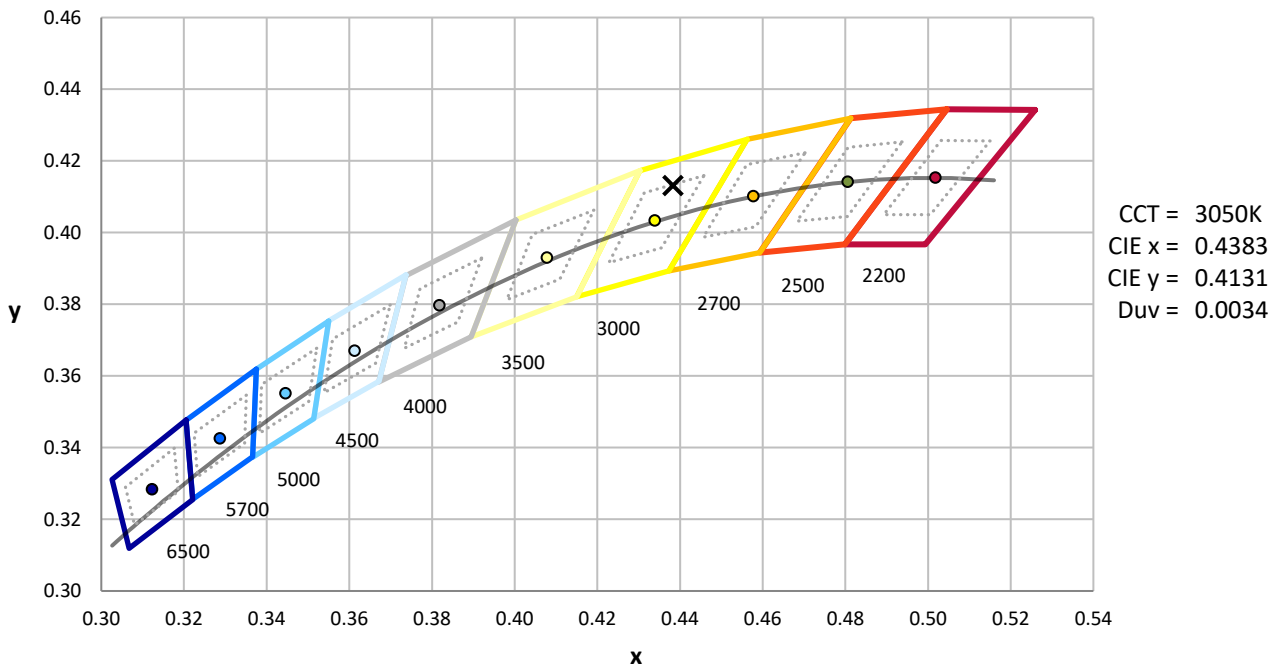
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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



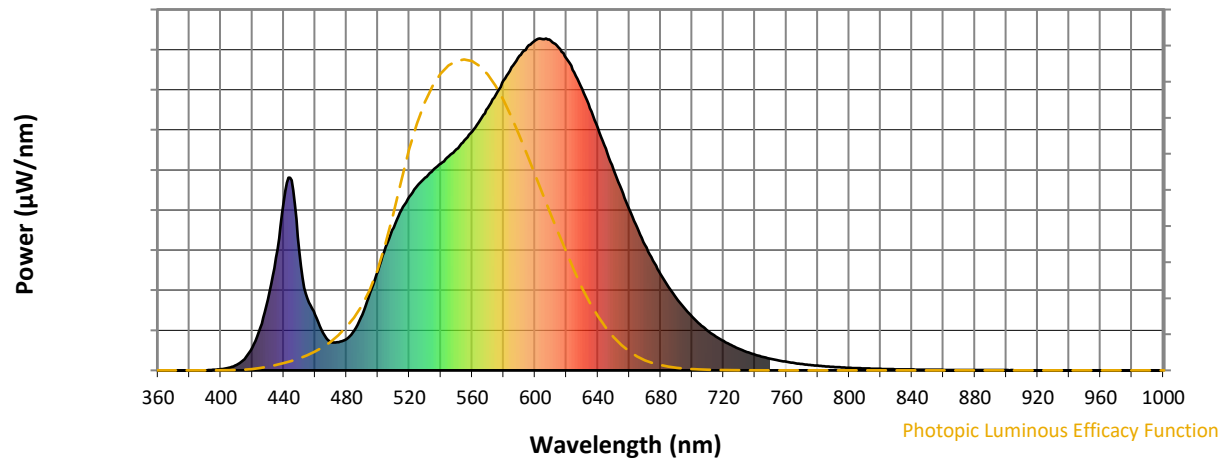
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

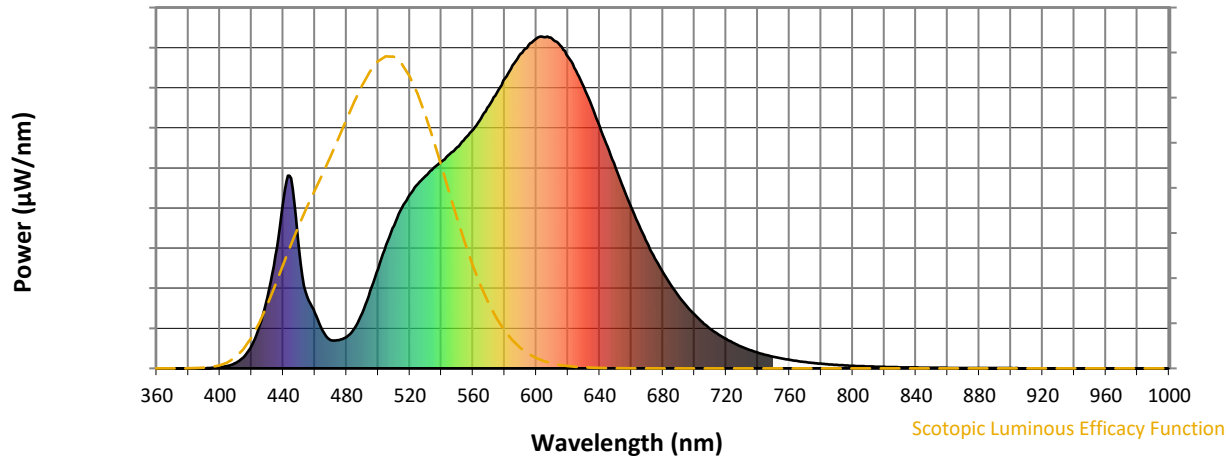


Photopic Lumens: NR

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			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength



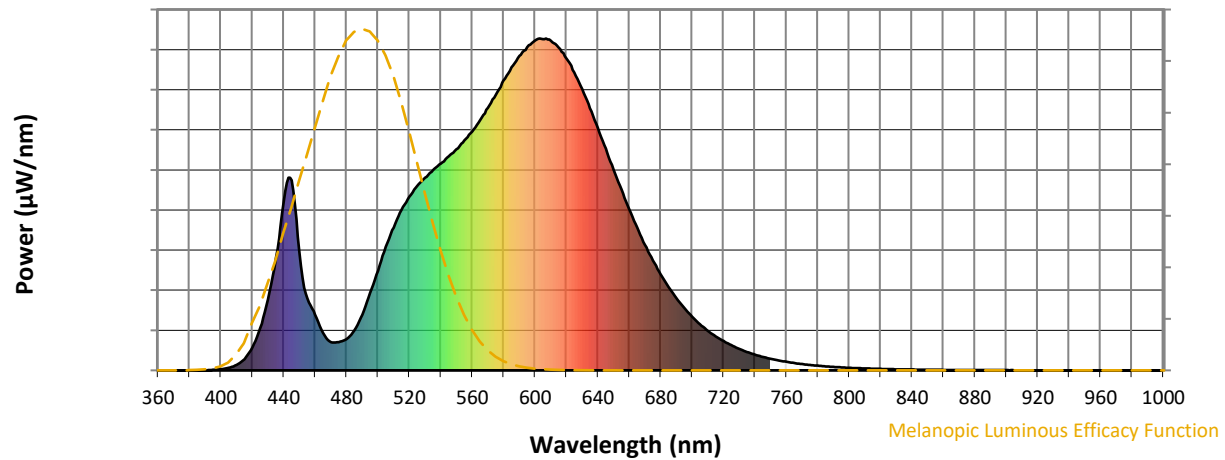
Scotopic Lumens: NR

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

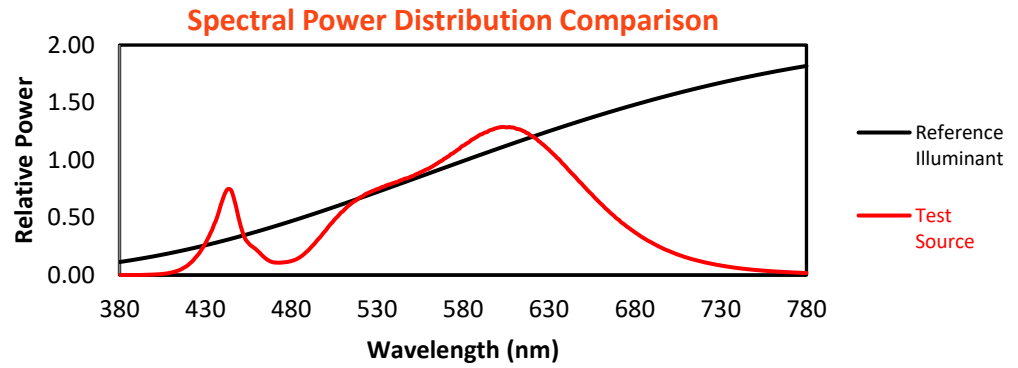
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940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

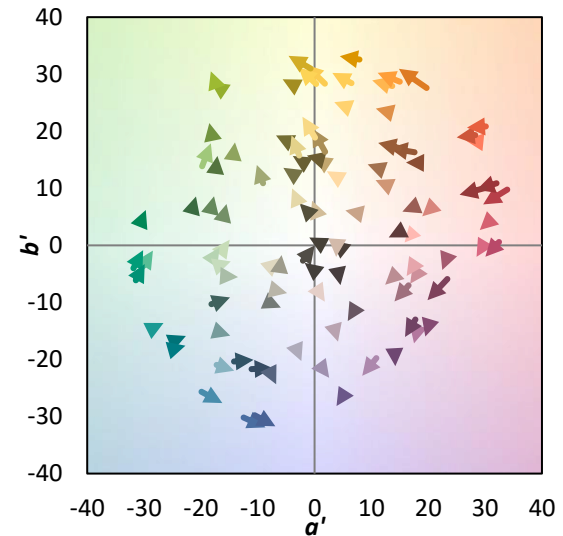
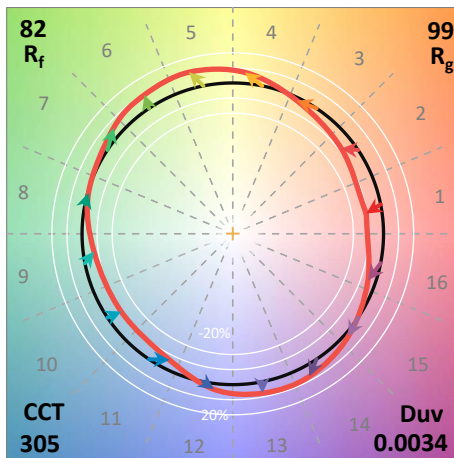
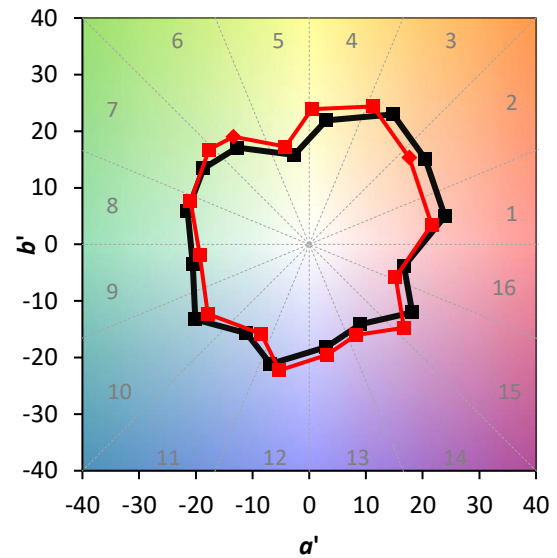
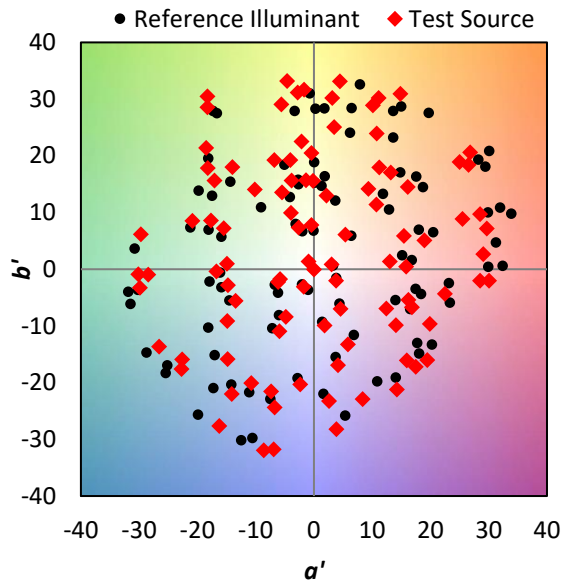
TM-30-18

Summary

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

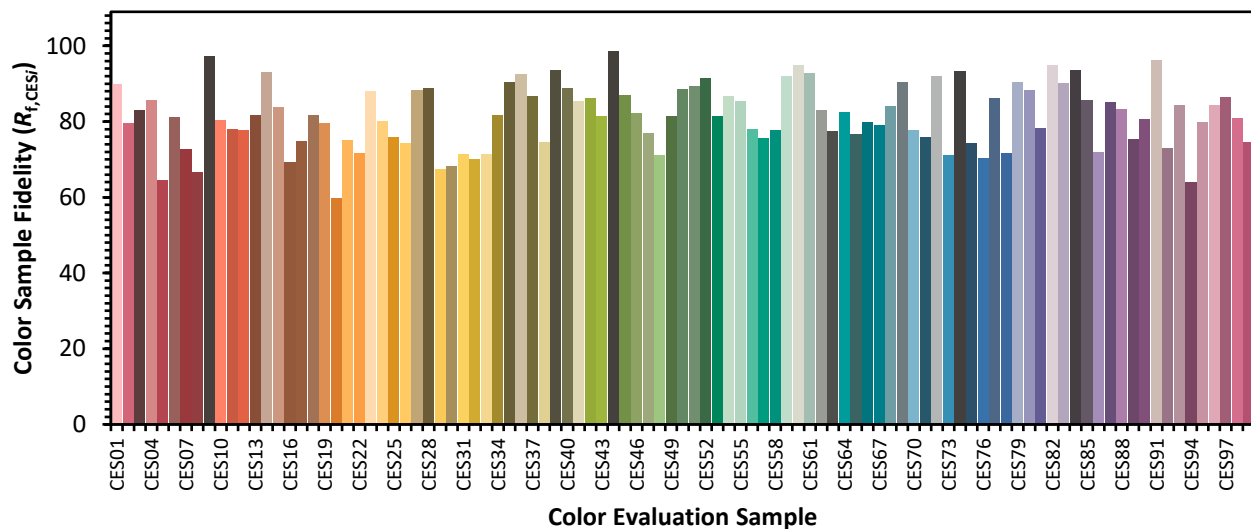


Color Vector Graphics

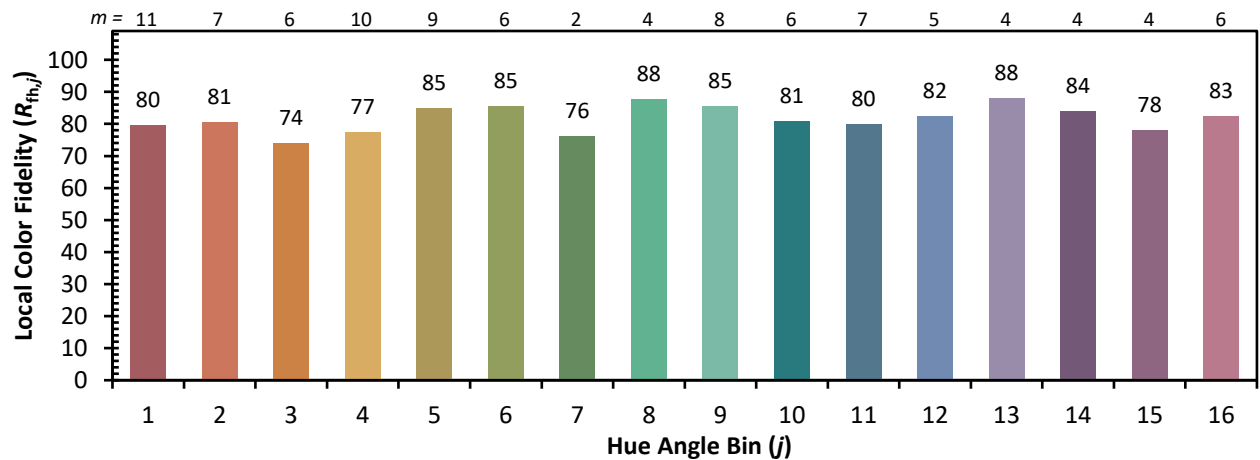
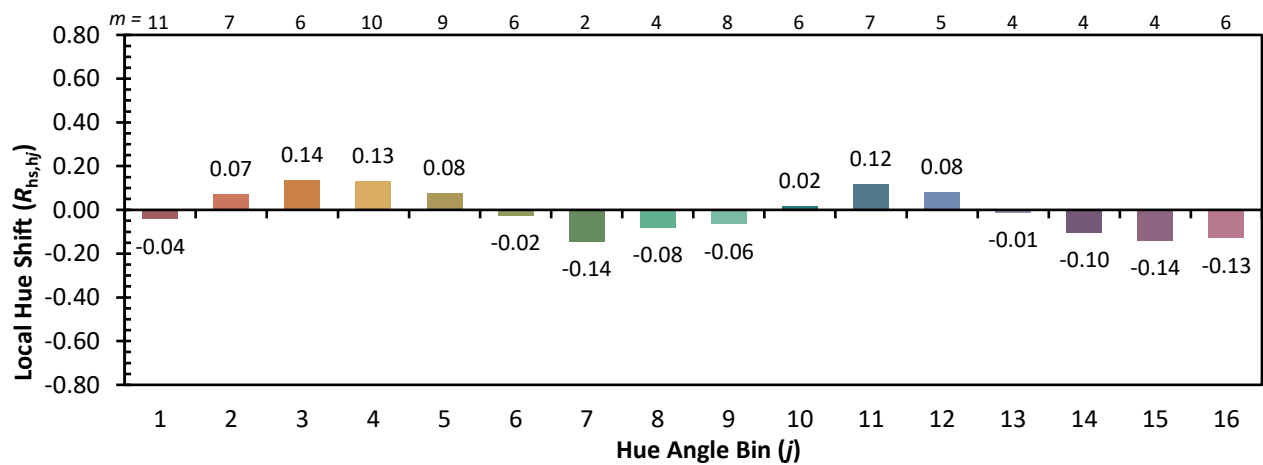
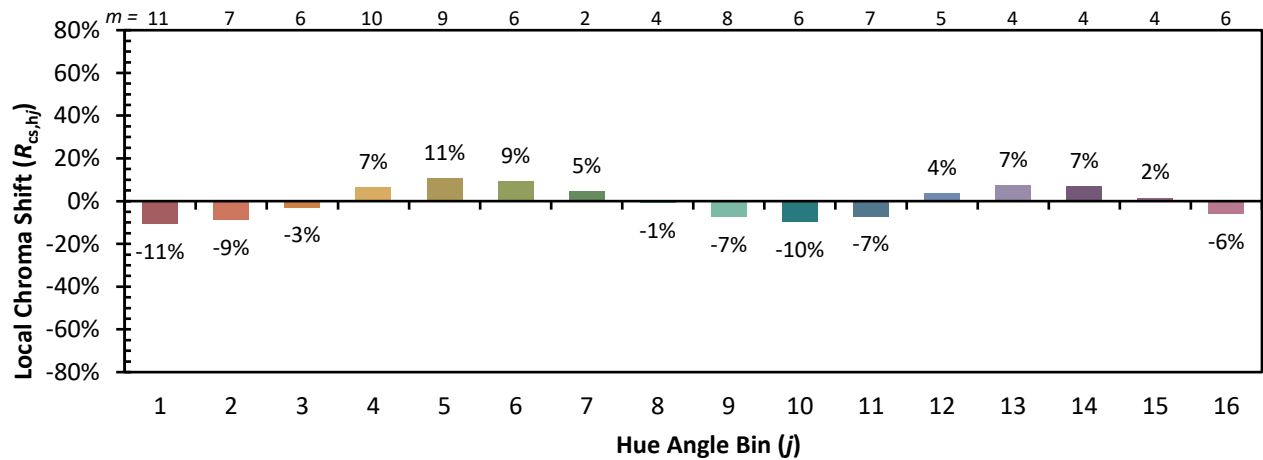


Individual Sample Fidelity Index ($R_{f,i}$)

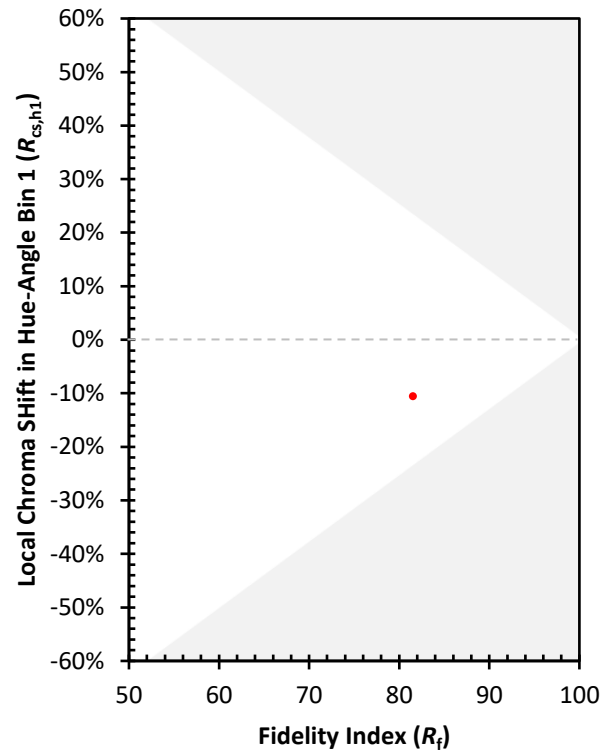
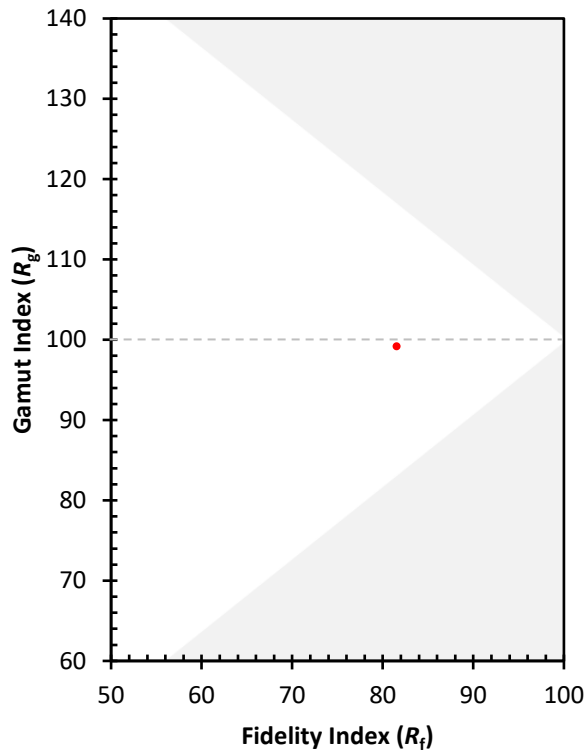
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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