

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P642955

Luminaire Tested: GWS-SA6D-830-U-T3R-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P642955
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA6D-830-U-T3R-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND
TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (96) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17847.5 lumens
Efficiency: N/A
Efficacy: 72.6 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G1

Input Watts (W): 245.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



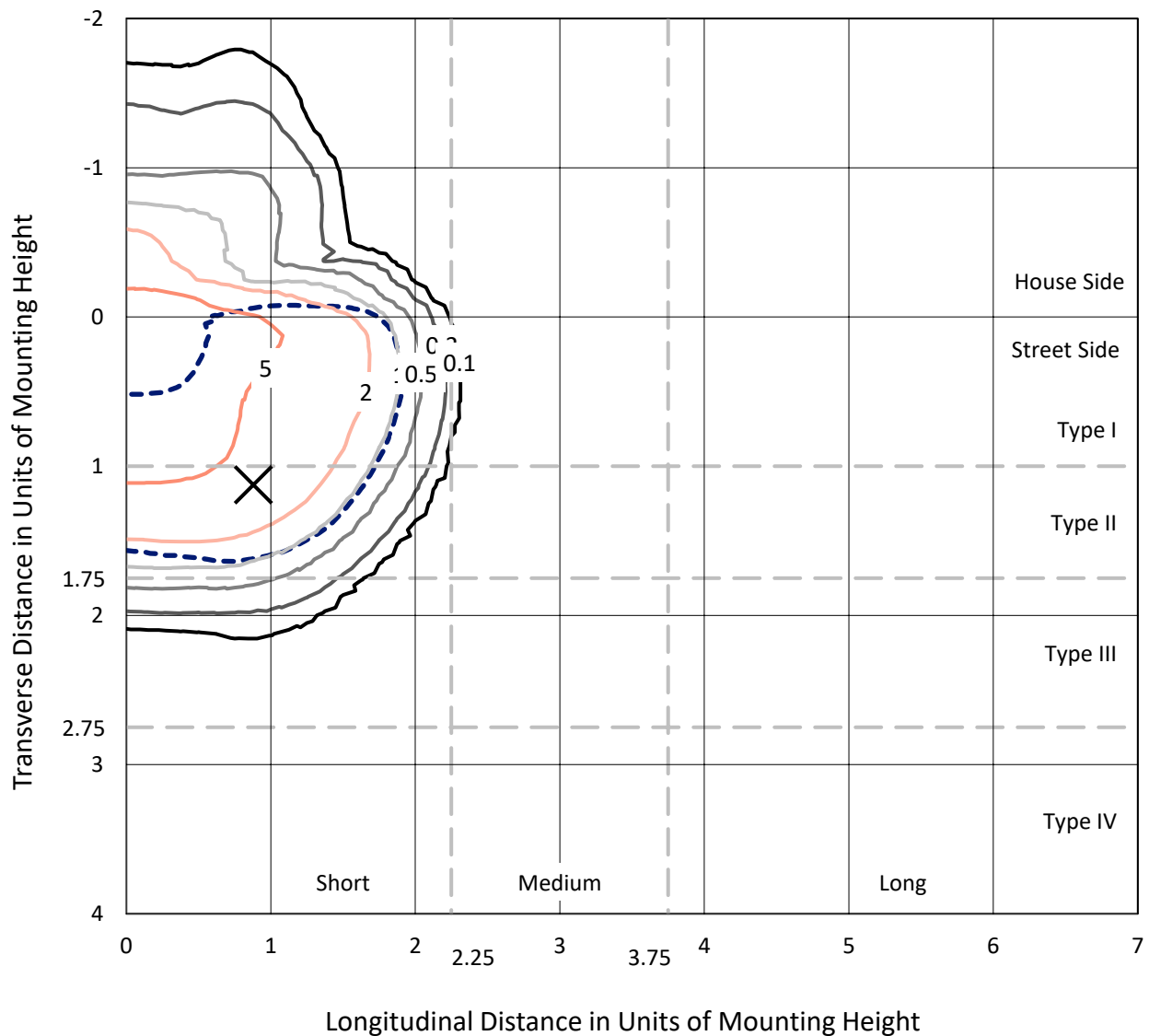
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CATALOG NUMBER: GWS-SA6D-830-U-T3R-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

✗ Max cd

--- 1/2 Max cd

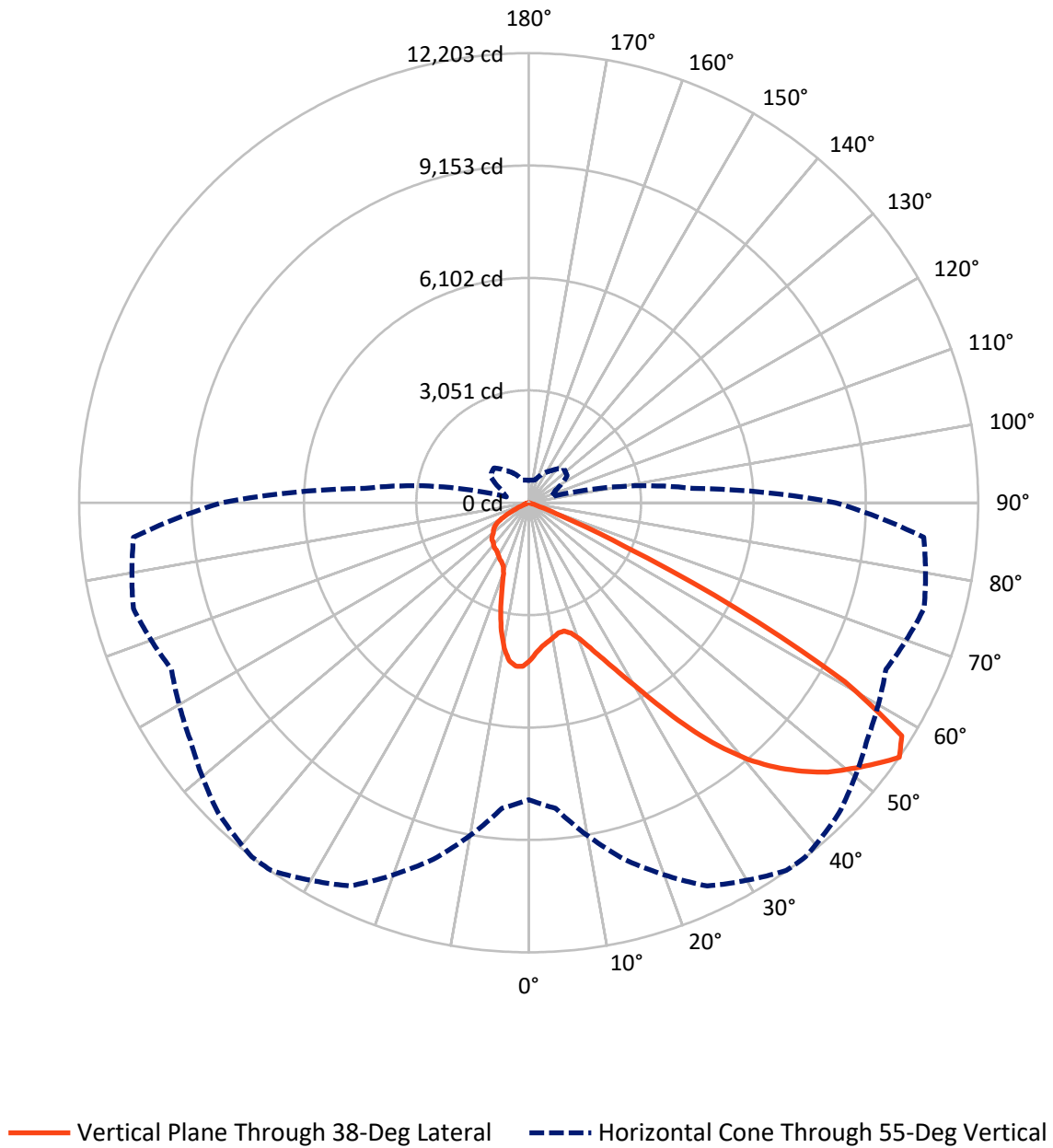


Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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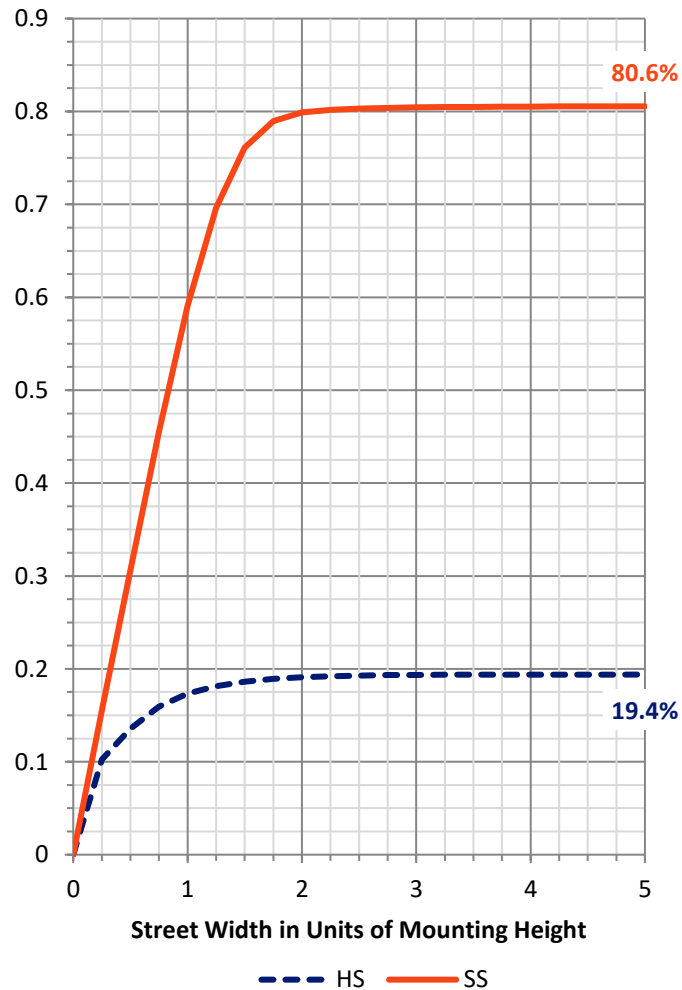
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3477.2	0.0	3477.2
	% Fixture	19.5	0.0	19.5
Street Side	Lumens	14370.3	0.0	14370.3
	% Fixture	80.5	0.0	80.5
Total	Lumens	17847.5	0.0	17847.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	395.7	2.2
10°-20°	1065.4	6.0
20°-30°	1828.2	10.2
30°-40°	3032.3	17.0
40°-50°	4457.6	25.0
50°-60°	5208.8	29.2
60°-70°	1765.6	9.9
70°-80°	90.3	0.5
80°-90°	3.5	0.0
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°	17847.5	100.0
0°-180°	17847.5	100.0

Coefficient of Utilization



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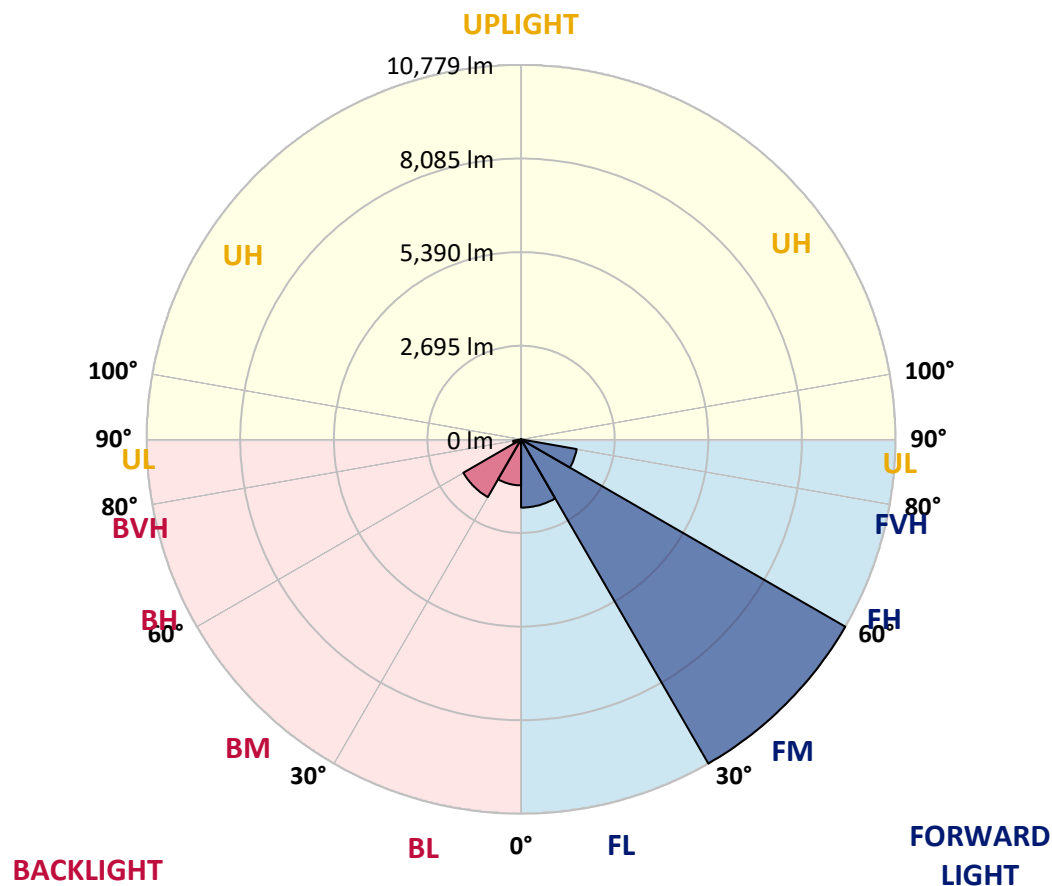
CATALOG NUMBER: GWS-SA6D-830-U-T3R-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1964.6	11.0			
FM	(30°-60°)	10779.4	60.4			
FH	(60°-80°)	1624.4	9.1			G1/1800
FVH	(80°-90°)	1.9	0.0			G0/10
BL	(0°-30°)	1324.8	7.4	B3/2500		
BM	(30°-60°)	1919.3	10.8	B2/2500		
BH	(60°-80°)	231.5	1.3	B1/500		G1/500
BVH	(80°-90°)	1.7	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-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	4280.0	4280.0	4280.0	4280.0	4280.0	4280.0	4280.0	4280.0	4280.0	4280.0	4280.0
2.5°	3986.2	3978.0	3994.4	4027.0	4057.6	4067.8	4098.4	4141.2	4167.8	4231.0	4282.0
5°	3806.7	3802.6	3818.9	3847.5	3888.3	3902.6	3949.5	4020.9	4092.3	4202.4	4310.6
7.5°	3643.5	3641.4	3665.9	3729.2	3788.3	3806.7	3863.8	3951.5	4047.4	4216.7	4375.8
10°	3429.3	3431.3	3478.2	3568.0	3676.1	3712.8	3804.6	3931.1	4055.6	4273.8	4494.2
12.5°	3359.9	3364.0	3388.5	3457.8	3576.2	3623.1	3751.6	3943.4	4102.5	4355.4	4647.2
15°	3529.2	3529.2	3508.8	3517.0	3570.0	3612.9	3747.5	3984.2	4182.0	4453.4	4798.1
17.5°	3857.7	3845.4	3794.4	3725.1	3706.7	3721.0	3829.1	4071.9	4294.2	4567.6	4969.5
20°	4302.4	4306.5	4206.5	4061.7	3945.4	3943.4	4008.6	4226.9	4455.4	4704.3	5155.1
22.5°	4841.0	4824.7	4692.1	4494.2	4292.2	4275.9	4302.4	4463.6	4688.0	4920.5	5383.6
25°	5465.2	5457.1	5269.4	5004.2	4736.9	4698.2	4698.2	4857.3	5020.5	5228.6	5657.0
27.5°	6118.0	6118.0	5936.5	5630.5	5275.5	5206.1	5195.9	5383.6	5491.7	5532.5	5887.5
30°	6789.2	6781.0	6601.5	6287.3	5907.9	5836.5	5807.9	5946.7	6024.2	5901.8	6175.1
32.5°	7470.6	7484.8	7303.3	7011.6	6672.9	6626.0	6538.3	6538.3	6601.5	6430.2	6628.0
35°	8202.9	8198.9	8056.0	7858.2	7568.5	7515.4	7370.6	7144.2	7240.0	7164.6	7254.3
37.5°	8849.6	8880.2	8810.9	8664.0	8429.4	8376.3	8137.6	7727.6	7801.0	7919.4	7998.9
40°	9506.5	9531.0	9600.3	9553.4	9257.6	9159.7	8735.4	8062.2	8143.8	8549.7	8778.2
42.5°	10151.2	10163.4	10304.2	10381.7	9985.9	9814.5	9188.3	8266.2	8351.9	9043.4	9443.3
45°	10561.2	10587.7	10820.3	11056.9	10628.5	10393.9	9582.0	8527.3	8564.0	9386.1	9934.9
47.5°	10544.9	10606.1	11042.6	11473.1	11181.4	10928.4	10055.3	8945.5	8884.3	9708.5	10259.3
50°	10216.4	10289.9	10916.2	11599.6	11579.2	11344.6	10581.6	9551.4	9359.6	9994.1	10300.1
52.5°	9535.1	9747.2	10693.8	11615.9	11899.5	11781.1	11232.4	10367.4	10002.2	10404.1	10365.4
55°	8062.2	8323.3	10018.6	11477.2	12189.1	12203.4	11915.8	11218.1	10699.9	11110.0	10767.2
57.5°	6120.1	6328.1	7711.3	10216.4	11709.7	11944.3	12181.0	11666.9	11130.4	11591.4	10861.1
60°	3688.4	3929.1	4828.7	7497.1	9457.5	9857.4	10785.6	10685.6	10039.0	10236.8	8906.7
62.5°	1495.3	1621.8	2229.7	4131.0	5952.8	6326.1	7215.6	7366.5	7207.4	7005.4	5402.0
65°	546.7	597.7	893.5	1707.5	2737.7	2874.4	3343.6	3610.8	3831.2	3262.0	2009.4
67.5°	338.6	371.3	581.4	877.2	995.5	926.2	942.5	1124.1	1073.1	663.0	359.0
70°	250.9	277.4	454.9	607.9	401.9	310.1	210.1	224.4	202.0	177.5	175.4
72.5°	173.4	197.9	340.7	359.0	155.0	110.2	77.5	108.1	122.4	120.4	124.4
75°	114.2	132.6	214.2	140.8	38.8	30.6	26.5	57.1	73.4	73.4	75.5
77.5°	67.3	77.5	75.5	28.6	8.2	8.2	6.1	10.2	16.3	18.4	22.4
80°	8.2	6.1	4.1	4.1	4.1	4.1	4.1	4.1	6.1	6.1	6.1
82.5°	2.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1	4.1	6.1	6.1
85°	0.0	0.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1	6.1	6.1
87.5°	0.0	0.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: GWS-SA6D-830-U-T3R-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4280.0	4280.0	4280.0	4280.0	4280.0	4280.0	4280.0	4280.0	4280.0	4280.0	4280.0
2.5°	4320.8	4306.5	4365.6	4408.5	4443.2	4459.5	4437.0	4435.0	4435.0	4390.1	4377.9
5°	4371.8	4377.9	4461.5	4498.2	4504.4	4484.0	4433.0	4398.3	4377.9	4331.0	4304.4
7.5°	4469.7	4490.1	4569.7	4563.5	4508.4	4414.6	4280.0	4175.9	4108.6	4035.2	3990.3
10°	4610.5	4649.2	4698.2	4612.5	4437.0	4198.4	3920.9	3723.0	3604.7	3521.1	3470.1
12.5°	4781.8	4820.6	4804.3	4602.3	4237.1	3810.8	3453.8	3168.2	3031.5	2956.0	2903.0
15°	4955.2	4979.7	4873.6	4479.9	3884.2	3311.0	2913.2	2629.6	2462.3	2401.1	2356.2
17.5°	5132.7	5126.6	4885.9	4239.2	3413.0	2747.9	2356.2	2162.4	2115.5	2105.3	2101.2
20°	5318.3	5263.3	4836.9	3894.4	2845.8	2191.0	1968.6	1980.9	2066.5	2107.3	2115.5
22.5°	5530.5	5391.8	4714.5	3427.2	2266.5	1825.8	1848.3	1968.6	2084.9	2140.0	2148.1
25°	5756.9	5510.1	4510.5	2827.5	1787.1	1678.9	1811.5	1950.3	2074.7	2142.0	2150.2
27.5°	5905.9	5538.7	4175.9	2223.6	1534.1	1621.8	1762.6	1895.2	2023.7	2097.1	2107.3
30°	6067.0	5526.4	3721.0	1713.6	1448.4	1572.9	1695.3	1815.6	1933.9	2015.5	2023.7
32.5°	6303.7	5518.3	3166.1	1391.3	1413.7	1534.1	1623.9	1723.8	1805.4	1852.3	1846.2
35°	6613.8	5508.1	2519.4	1254.6	1393.3	1503.5	1574.9	1621.8	1532.1	1503.5	1509.6
37.5°	7011.6	5532.5	1974.7	1197.5	1387.2	1495.3	1556.5	1421.9	1283.2	1230.1	1222.0
40°	7452.2	5595.8	1505.5	1175.1	1407.6	1515.7	1487.2	1264.8	1093.5	989.4	967.0
42.5°	7894.9	5665.1	1191.4	1166.9	1442.3	1572.9	1372.9	1150.6	893.5	834.4	826.2
45°	8223.3	5652.9	1030.2	1152.6	1472.9	1605.5	1342.3	987.4	797.6	771.1	773.2
47.5°	8388.6	5518.3	942.5	1120.0	1485.1	1572.9	1266.9	920.1	732.4	760.9	785.4
50°	8300.9	5169.4	860.9	1056.7	1458.6	1530.0	1146.5	869.0	699.7	818.0	873.1
52.5°	8194.8	4741.0	771.1	958.8	1395.4	1470.9	1099.6	854.8	679.3	789.5	830.3
55°	8335.5	4469.7	624.2	807.8	1270.9	1332.1	1062.9	852.7	632.4	614.0	607.9
57.5°	8137.6	3929.1	446.8	581.4	975.1	1054.7	1036.3	838.4	561.0	559.0	567.1
60°	6289.4	2397.0	306.0	369.2	597.7	673.2	940.5	801.7	483.5	444.7	446.8
62.5°	3574.1	1020.0	210.1	228.5	306.0	363.1	718.1	728.3	446.8	424.3	446.8
65°	1244.4	365.2	163.2	153.0	169.3	193.8	412.1	563.0	406.0	367.2	371.3
67.5°	257.0	181.6	144.8	126.5	126.5	126.5	210.1	350.9	334.6	291.7	295.8
70°	163.2	155.0	126.5	108.1	104.0	95.9	120.4	193.8	230.5	212.2	214.2
72.5°	120.4	118.3	100.0	87.7	77.5	69.4	75.5	95.9	118.3	122.4	124.4
75°	73.4	75.5	65.3	55.1	49.0	42.8	44.9	44.9	44.9	40.8	44.9
77.5°	22.4	24.5	20.4	16.3	14.3	14.3	14.3	12.2	10.2	6.1	6.1
80°	6.1	6.1	6.1	6.1	6.1	4.1	4.1	2.0	2.0	0.0	0.0
82.5°	6.1	6.1	6.1	6.1	4.1	4.1	2.0	2.0	0.0	0.0	0.0
85°	6.1	6.1	6.1	6.1	4.1	4.1	2.0	2.0	0.0	0.0	0.0
87.5°	6.1	6.1	6.1	6.1	4.1	4.1	2.0	2.0	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
 Rf: 81.5
 Rg: 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

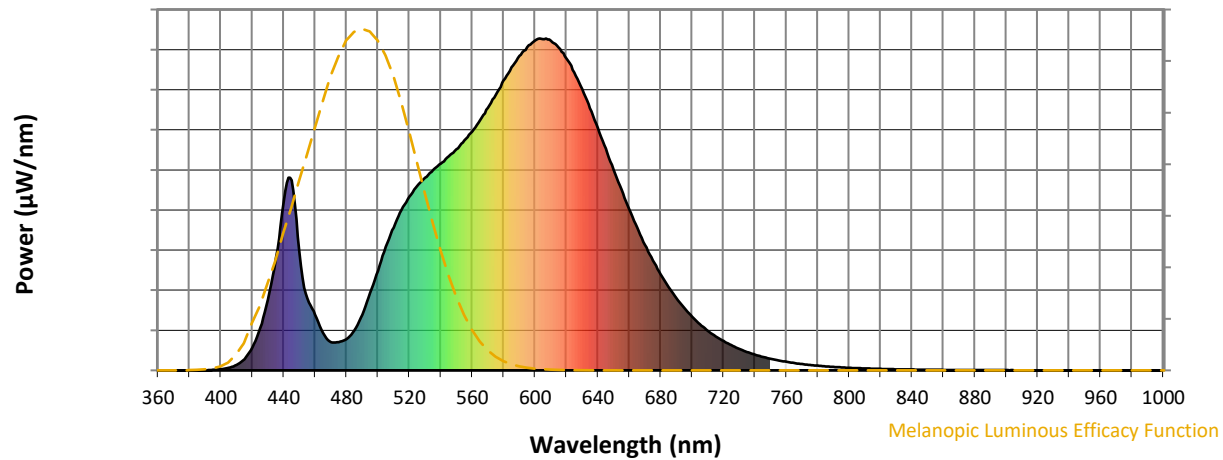


Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power W [^] /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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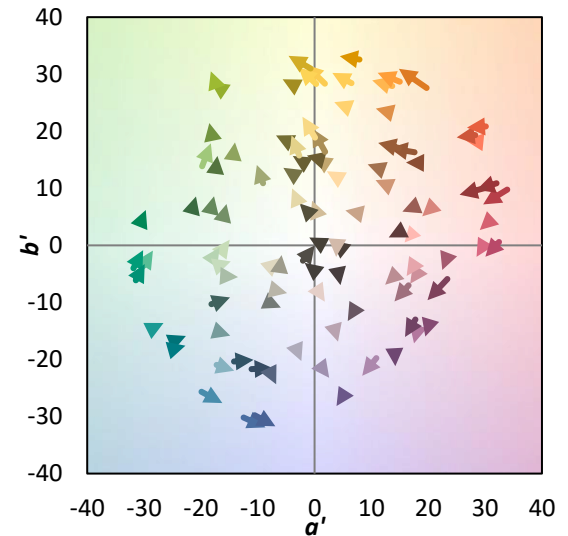
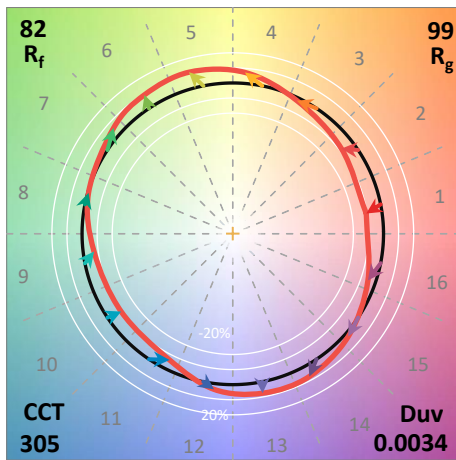
TM-30-18

Summary

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

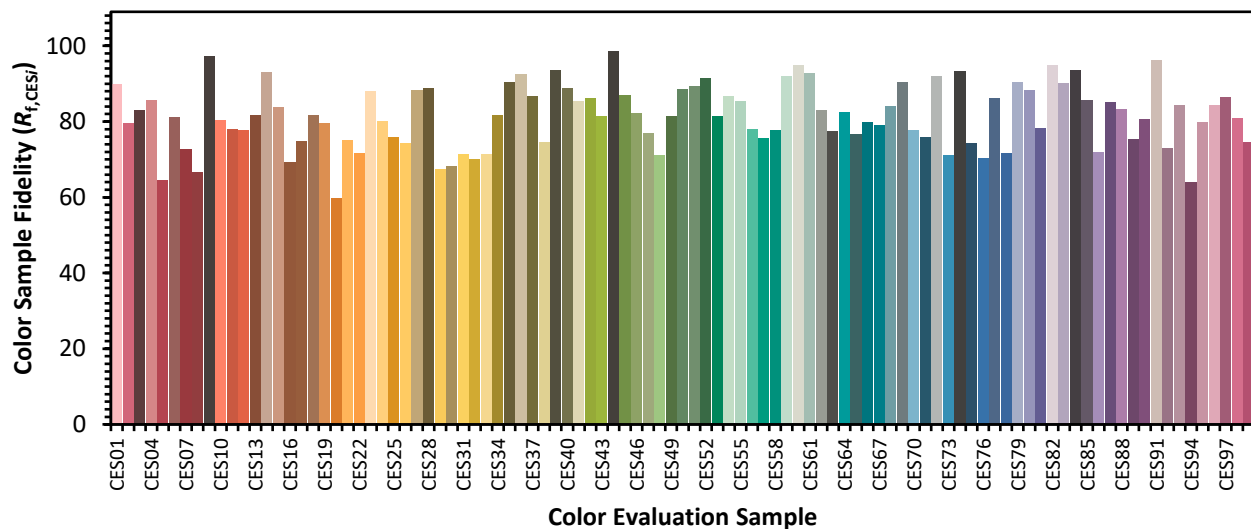


Color Vector Graphics

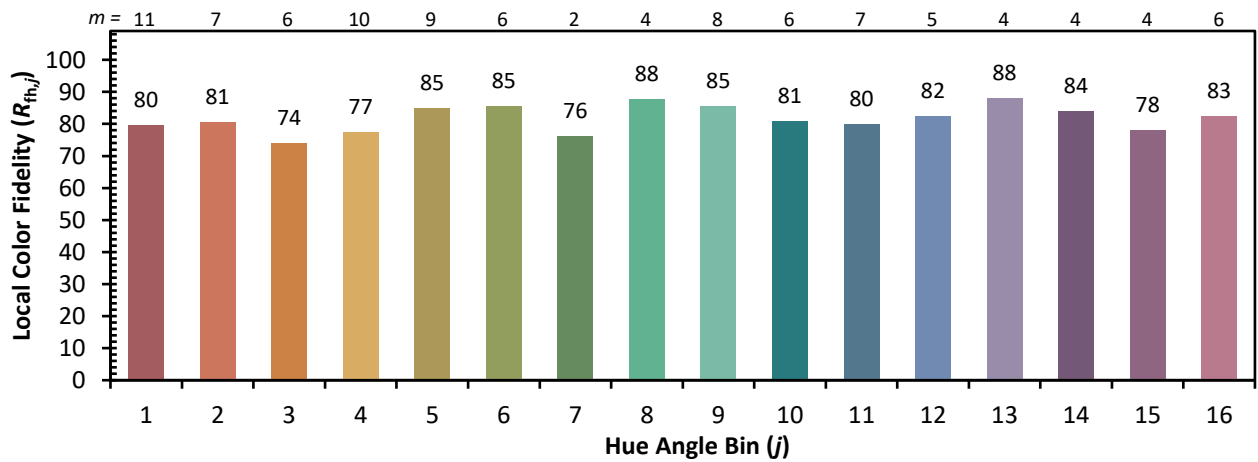
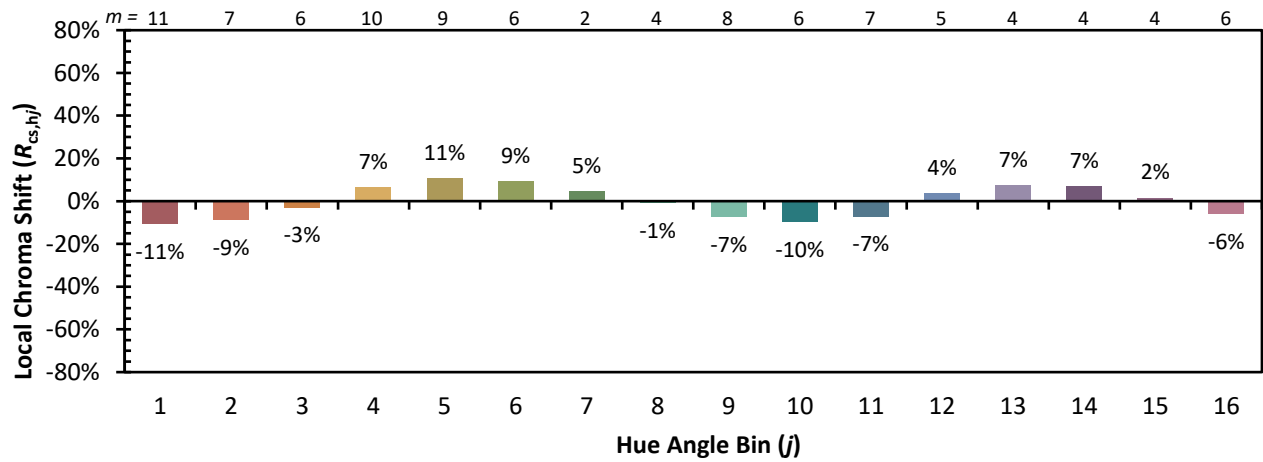


Individual Sample Fidelity Index ($R_{f,i}$)

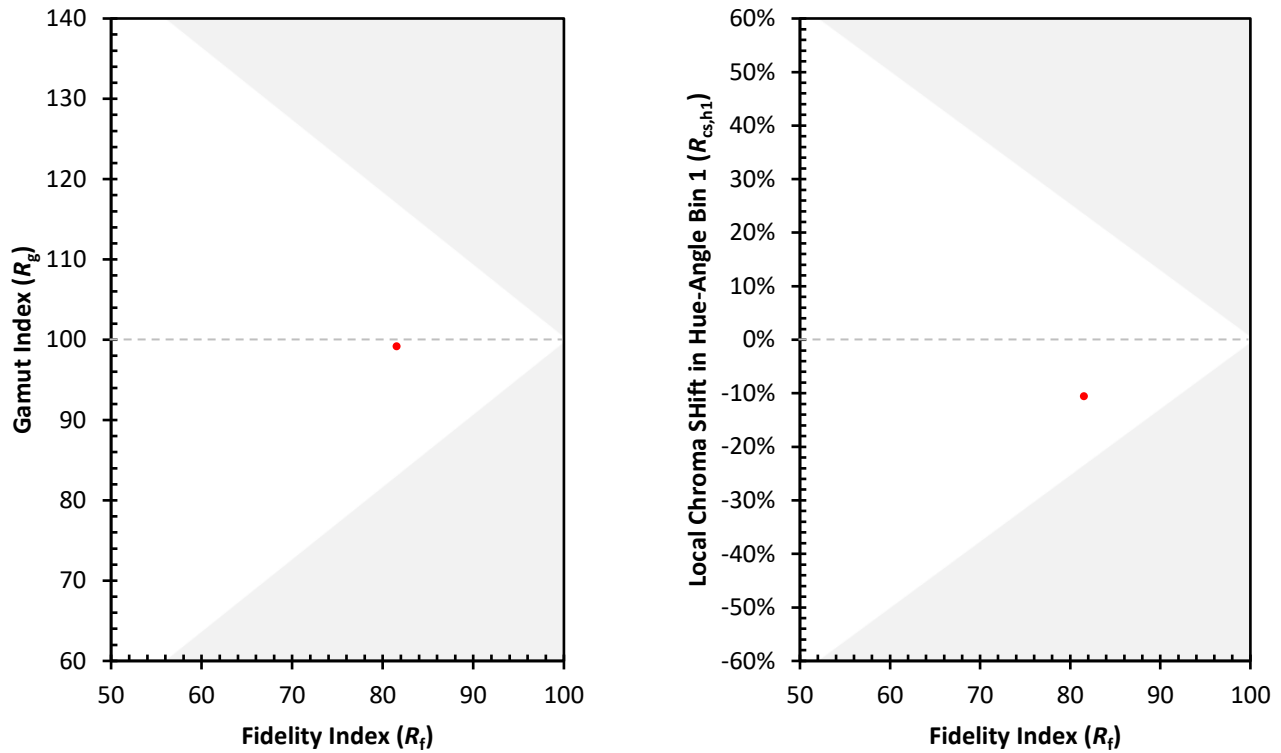
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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