

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: P322418

Luminaire Tested: **GLEON-SA4D-830-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322418
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA4D-830-U-T3-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18125 lumens
Efficiency: N/A
Efficacy: 70.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

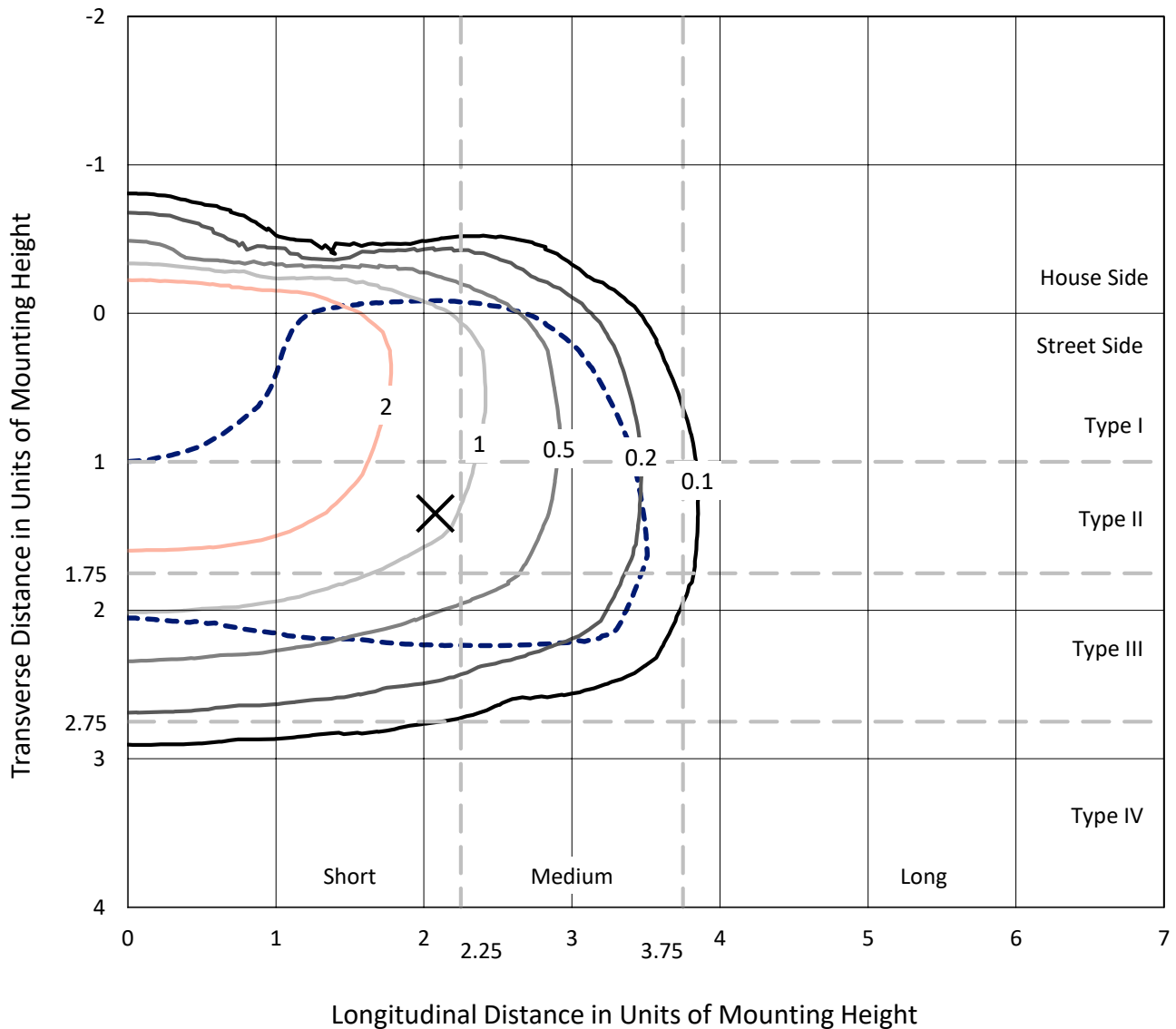
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

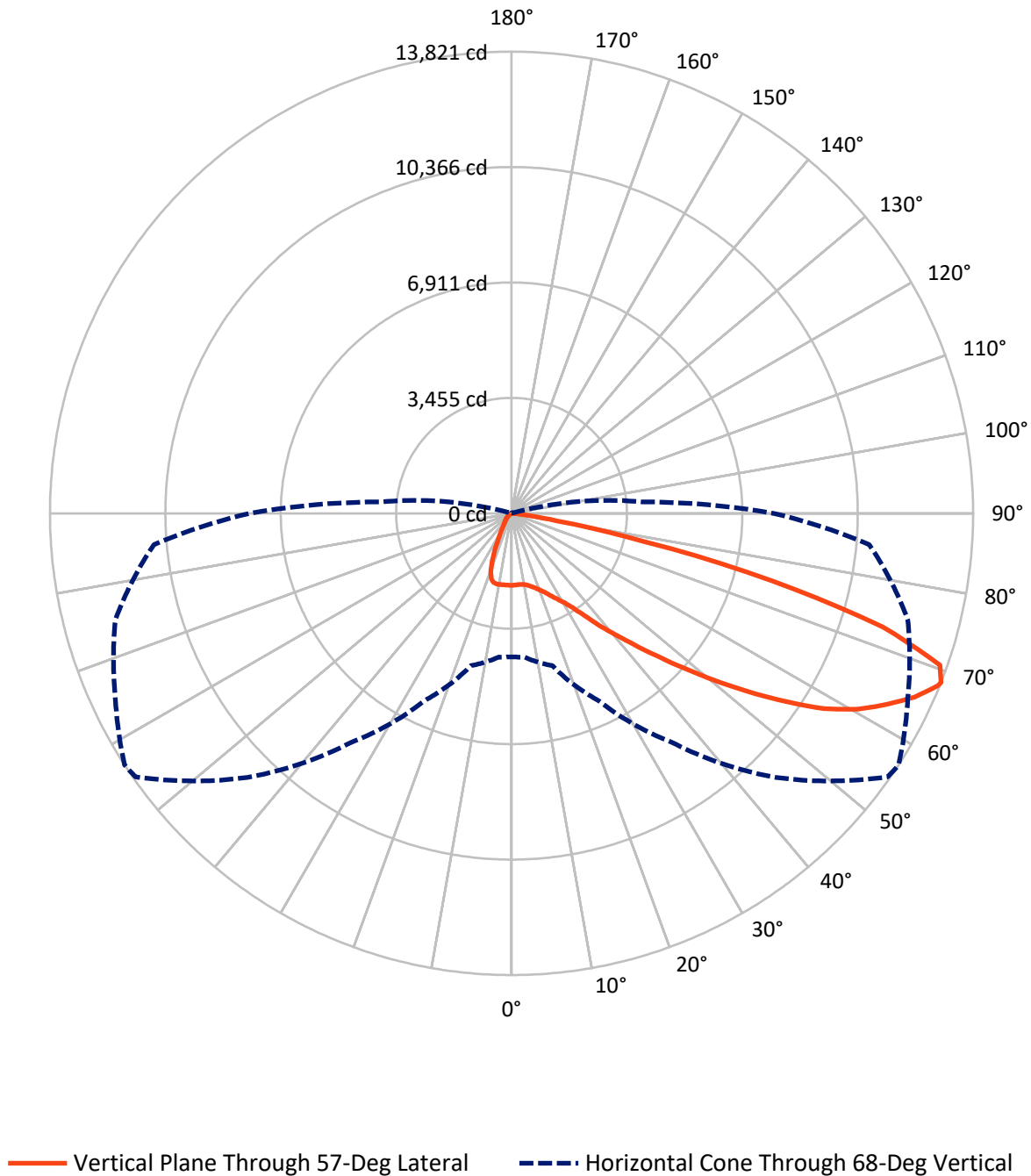
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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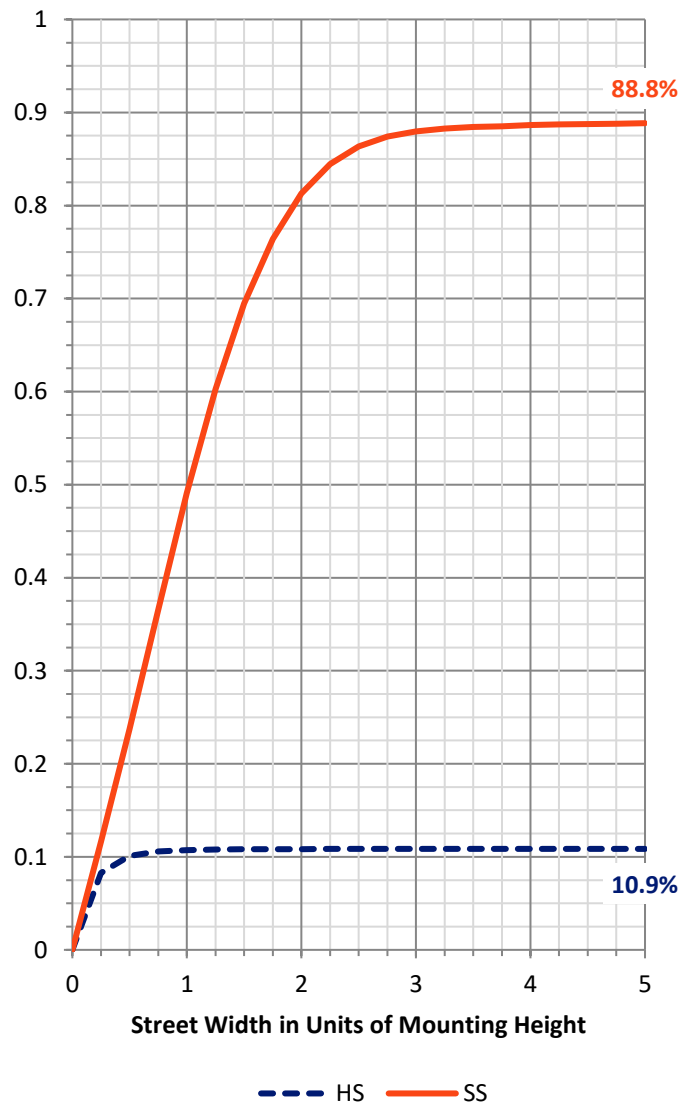
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1987.5	0.0	1987.5
	% Fixture	11.0	0.0	11.0
Street Side	Lumens	16137.5	0.0	16137.5
	% Fixture	89.0	0.0	89.0
Total	Lumens	18125.0	0.0	18125.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.6	1.1
10°-20°	558.5	3.1
20°-30°	963.5	5.3
30°-40°	1663.0	9.2
40°-50°	2844.6	15.7
50°-60°	4551.0	25.1
60°-70°	5258.2	29.0
70°-80°	2009.2	11.1
80°-90°	75.3	0.4
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°	18125.0	100.0
0°-180°	18125.0	100.0

Coefficient of Utilization



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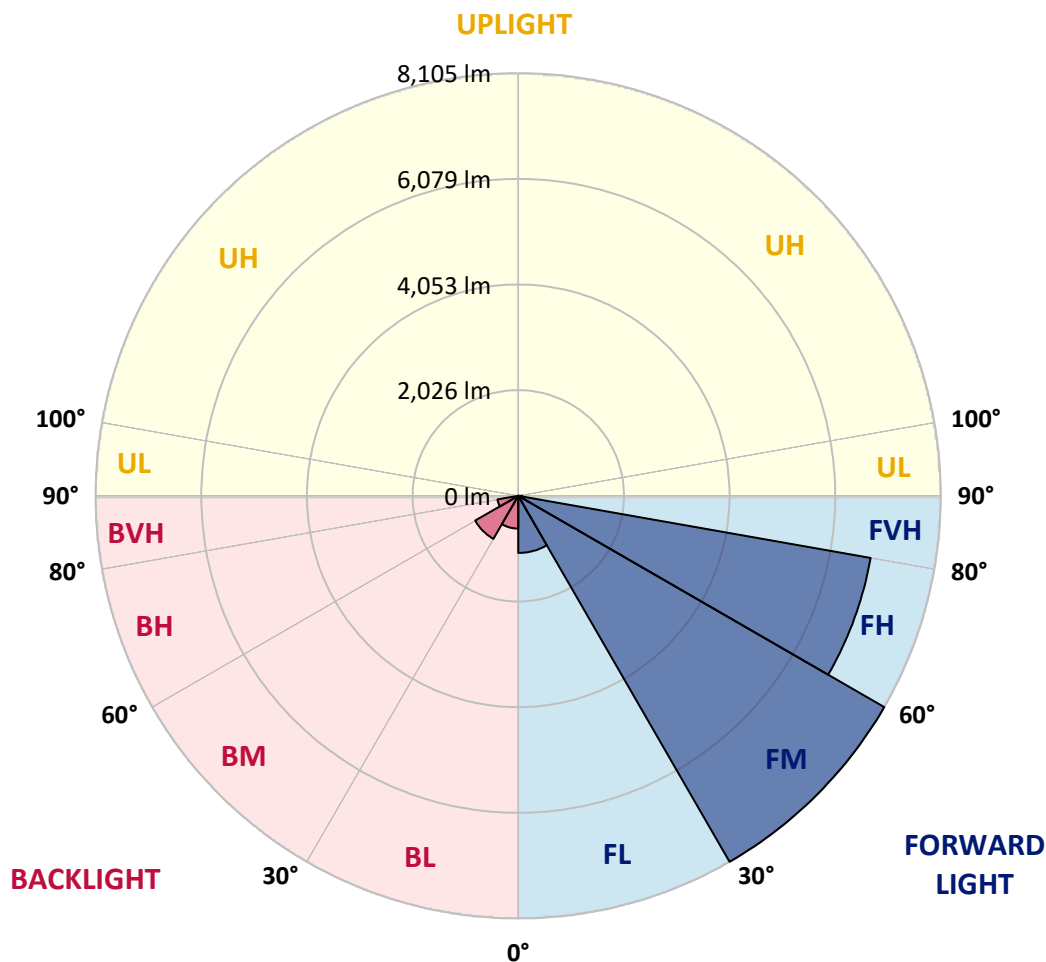
CATALOG NUMBER: GLEON-SA4D-830-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1095.5	6.0			
FM	(30°-60°)	8105.3	44.7			
FH	(60°-80°)	6862.7	37.9			G3/7500
FVH	(80°-90°)	74.0	0.4			G1/100
BL	(0°-30°)	628.1	3.5	B2/1000		
BM	(30°-60°)	953.3	5.3	B1/1000		
BH	(60°-80°)	404.8	2.2	B1/500		G1/500
BVH	(80°-90°)	1.4	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-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2153.7	2153.7	2153.7	2153.7	2153.7	2153.7	2153.7	2153.7	2153.7	2153.7	2153.7
2.5°	2103.2	2112.6	2119.4	2123.7	2128.9	2140.0	2143.4	2148.6	2151.2	2151.2	2157.2
5°	2020.0	2030.3	2044.9	2056.9	2080.9	2111.7	2134.0	2142.6	2158.0	2171.7	2179.4
7.5°	1942.9	1954.9	1972.0	2000.3	2041.5	2091.2	2137.4	2149.4	2179.4	2208.6	2223.1
10°	1893.2	1902.6	1924.9	1965.2	2019.2	2088.6	2153.7	2168.3	2219.7	2268.6	2296.0
12.5°	1876.0	1884.6	1907.8	1953.2	2020.0	2101.4	2191.4	2212.9	2288.3	2359.4	2398.0
15°	1900.9	1902.6	1927.5	1970.3	2036.3	2133.2	2254.0	2279.7	2374.8	2467.4	2515.4
17.5°	1996.9	1989.2	2002.0	2020.9	2073.2	2175.2	2320.0	2358.6	2485.4	2594.2	2639.7
20°	2236.9	2236.9	2207.7	2156.3	2157.2	2240.3	2409.1	2452.8	2608.0	2733.9	2775.1
22.5°	2647.4	2639.7	2581.4	2455.4	2339.7	2352.6	2518.0	2574.5	2755.4	2889.9	2903.6
25°	3141.0	3131.6	3041.6	2864.2	2663.7	2534.3	2665.4	2730.5	2931.1	3050.2	3021.9
27.5°	3663.8	3656.1	3567.0	3346.7	3061.3	2823.9	2841.1	2902.8	3110.2	3227.6	3137.6
30°	4170.3	4172.9	4084.6	3858.4	3535.3	3193.3	3063.9	3099.9	3284.2	3403.3	3274.7
32.5°	4652.0	4655.4	4579.1	4326.3	4024.6	3622.7	3372.4	3363.0	3486.4	3603.8	3456.4
35°	5081.4	5089.9	5037.6	4841.4	4521.7	4100.9	3772.7	3750.4	3773.5	3906.4	3735.0
37.5°	5495.3	5500.4	5461.0	5295.6	5028.2	4626.3	4278.3	4246.6	4196.9	4298.9	4102.6
40°	5948.7	5935.8	5890.4	5740.4	5510.7	5206.5	4821.7	4766.8	4680.3	4771.1	4586.0
42.5°	6370.3	6355.8	6363.5	6193.8	6000.1	5803.0	5455.0	5360.8	5310.2	5414.7	5179.1
45°	6897.4	6889.7	6915.4	6768.0	6611.2	6468.0	6180.9	6078.1	6055.8	6178.4	5896.4
47.5°	7417.6	7436.5	7516.2	7453.6	7390.2	7264.2	6949.7	6903.4	6917.1	7065.4	6653.2
50°	7851.3	7873.6	8092.1	8164.1	8255.8	8182.1	7866.7	7838.4	7892.4	8026.1	7467.3
52.5°	8165.0	8210.4	8482.1	8813.7	9148.0	9197.7	8883.2	8857.5	8930.3	8950.9	8096.4
55°	8382.7	8422.9	8730.6	9337.4	10017.9	10232.1	10036.7	9937.3	9923.6	9720.5	8758.0
57.5°	8421.2	8416.9	8859.2	9675.9	10700.1	11252.9	11129.5	11031.7	10750.6	10431.8	9516.5
60°	8203.5	8228.4	8741.8	9793.3	11128.6	12025.1	12034.5	11907.6	11469.7	11123.5	10251.8
62.5°	7533.3	7634.5	8153.0	9485.7	11123.5	12336.2	12697.8	12601.0	12077.3	11690.0	10997.5
65°	6446.6	6482.6	6977.1	8431.5	10371.8	12205.9	13295.2	13259.2	12625.0	12240.2	11380.6
67.5°	4707.7	4629.7	5149.1	6639.4	8781.2	11446.6	13723.7	13769.1	13047.5	12353.3	10972.6
68°	4296.3	4319.5	4724.0	6196.4	8364.7	11178.3	13752.0	13821.4	13089.5	12279.6	10749.8
70°	2560.8	2605.4	2966.2	4266.3	6363.5	9660.5	13446.9	13605.4	12839.2	11519.4	9298.0
72.5°	653.9	707.1	1048.2	1909.5	3634.7	6806.6	11351.4	11619.7	11147.4	9345.1	6276.9
75°	269.1	282.8	374.5	629.1	1354.1	3066.5	7481.9	8056.1	7727.9	5594.7	2836.8
77.5°	186.0	195.4	240.8	348.8	586.2	1039.6	3668.1	4082.9	3678.4	1909.5	618.8
80°	133.7	141.4	172.3	232.3	336.8	371.1	1195.6	1382.4	1097.9	419.1	153.4
82.5°	79.7	85.7	128.6	165.4	204.8	177.4	297.4	337.7	318.0	208.3	68.6
85°	39.4	46.3	86.6	118.3	110.6	74.6	90.8	101.1	125.1	126.8	36.9
87.5°	2.6	5.1	50.6	71.1	30.9	17.1	26.6	32.6	44.6	62.6	15.4
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: P322418

CATALOG NUMBER: GLEON-SA4D-830-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2153.7	2153.7	2153.7	2153.7	2153.7	2153.7	2153.7	2153.7	2153.7	2153.7	2153.7
2.5°	2159.7	2160.6	2154.6	2152.0	2153.7	2143.4	2139.2	2140.9	2140.9	2143.4	2139.2
5°	2181.2	2181.2	2170.9	2157.2	2149.4	2129.7	2116.9	2113.4	2110.9	2109.2	2105.7
7.5°	2227.4	2222.3	2204.3	2174.3	2148.6	2105.7	2073.2	2056.0	2047.5	2044.0	2041.5
10°	2302.0	2292.6	2262.6	2206.9	2147.7	2071.5	2000.3	1949.8	1907.8	1890.6	1880.3
12.5°	2402.3	2388.6	2338.0	2245.4	2141.7	2001.2	1846.9	1698.6	1560.7	1504.1	1475.8
15°	2518.0	2498.3	2418.6	2278.0	2106.6	1842.6	1507.5	1247.8	1056.7	984.7	953.9
17.5°	2635.4	2609.7	2488.8	2298.6	2001.2	1514.4	1057.6	798.8	671.1	636.8	624.8
20°	2753.7	2715.9	2549.7	2283.1	1762.9	1091.9	697.6	583.6	546.8	536.5	533.1
22.5°	2865.9	2807.6	2604.5	2223.1	1396.1	732.8	551.9	515.9	503.9	497.9	496.2
25°	2963.6	2882.2	2652.5	2038.0	988.2	553.6	497.1	485.1	469.7	458.5	459.4
27.5°	3055.3	2956.8	2681.7	1732.9	659.1	473.1	460.2	443.9	415.7	399.4	399.4
30°	3165.9	3056.2	2703.1	1333.5	485.1	418.2	407.9	383.1	344.5	323.1	323.1
32.5°	3332.2	3207.0	2689.4	935.9	401.9	367.7	343.7	309.4	267.4	246.8	246.0
35°	3586.7	3440.1	2591.7	613.6	354.8	319.7	281.1	239.1	202.3	185.1	184.3
37.5°	3929.5	3752.1	2372.3	438.8	318.0	275.1	228.8	182.5	155.1	144.0	143.1
40°	4374.3	4114.6	2058.6	355.7	283.7	232.3	176.5	141.4	122.6	114.0	114.8
42.5°	4908.2	4502.9	1682.4	306.8	250.3	191.1	138.0	111.4	99.4	93.4	91.7
45°	5501.3	4886.0	1288.1	273.4	216.8	154.3	108.0	88.3	78.8	75.4	75.4
47.5°	6153.5	5258.8	942.7	244.3	180.8	119.1	86.6	72.0	64.3	61.7	60.8
50°	6745.7	5517.6	679.6	213.4	148.3	94.3	70.3	60.0	54.9	51.4	51.4
52.5°	7239.4	5599.0	500.5	180.0	120.0	75.4	58.3	51.4	46.3	43.7	43.7
55°	7673.9	5565.6	372.0	148.3	96.8	61.7	49.7	43.7	39.4	36.9	36.9
57.5°	8090.4	5457.6	277.7	120.8	78.0	49.7	42.0	36.9	32.6	30.9	30.9
60°	8430.6	5277.6	206.5	97.7	62.6	40.3	35.1	30.0	26.6	24.0	24.0
62.5°	8706.6	5078.8	151.7	80.6	49.7	31.7	27.4	24.9	19.7	17.1	17.1
65°	8708.3	4748.8	114.0	66.8	38.6	24.9	20.6	19.7	12.9	10.3	9.4
67.5°	8078.4	4094.1	87.4	57.4	30.0	18.9	15.4	16.3	6.9	4.3	3.4
68°	7849.6	3927.8	82.3	56.6	28.3	18.0	14.6	16.3	6.0	3.4	2.6
70°	6618.0	3124.7	66.0	54.9	24.9	13.7	12.0	16.3	5.1	2.6	1.7
72.5°	4232.9	1813.5	48.9	43.7	18.9	10.3	7.7	14.6	5.1	1.7	0.9
75°	1801.5	562.2	33.4	30.9	11.1	7.7	5.1	9.4	3.4	0.9	0.0
77.5°	379.7	126.8	19.7	18.9	7.7	5.1	3.4	2.6	0.9	0.0	0.0
80°	97.7	36.9	10.3	9.4	4.3	2.6	1.7	0.0	0.0	0.0	0.0
82.5°	30.9	14.6	6.0	4.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.4	8.6	3.4	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.6	2.6	0.9	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

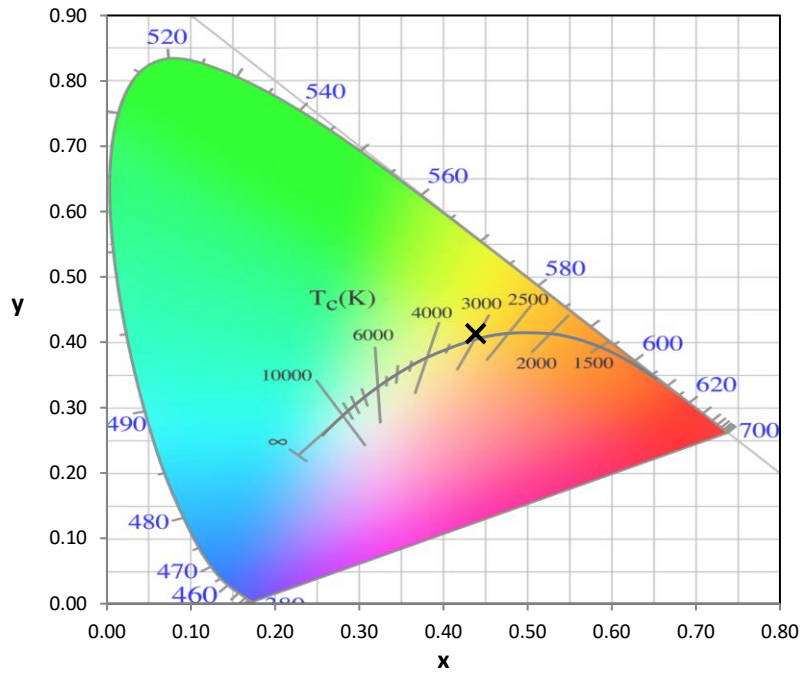
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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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

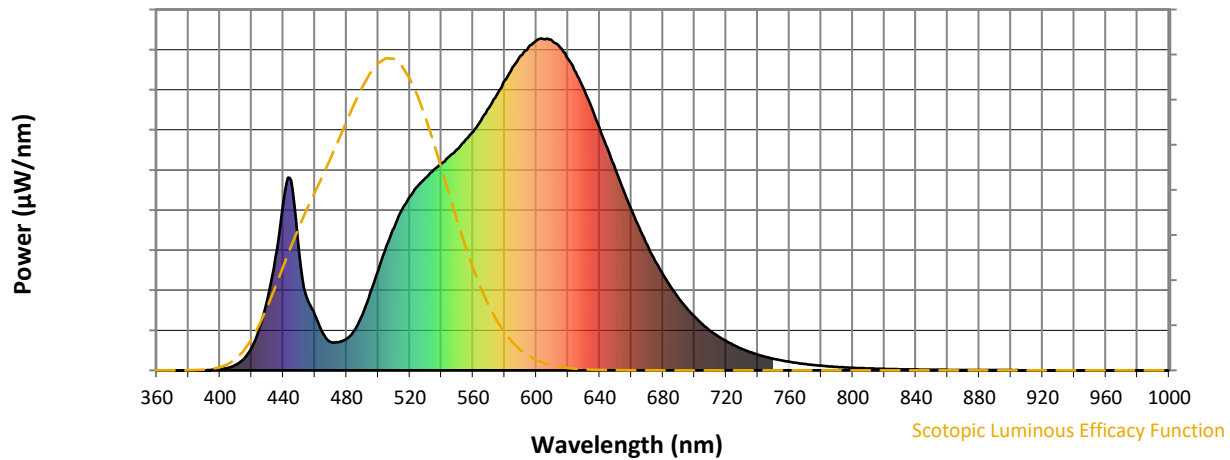


Photopic Lumens: NR

λ (nm)	Power W ^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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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

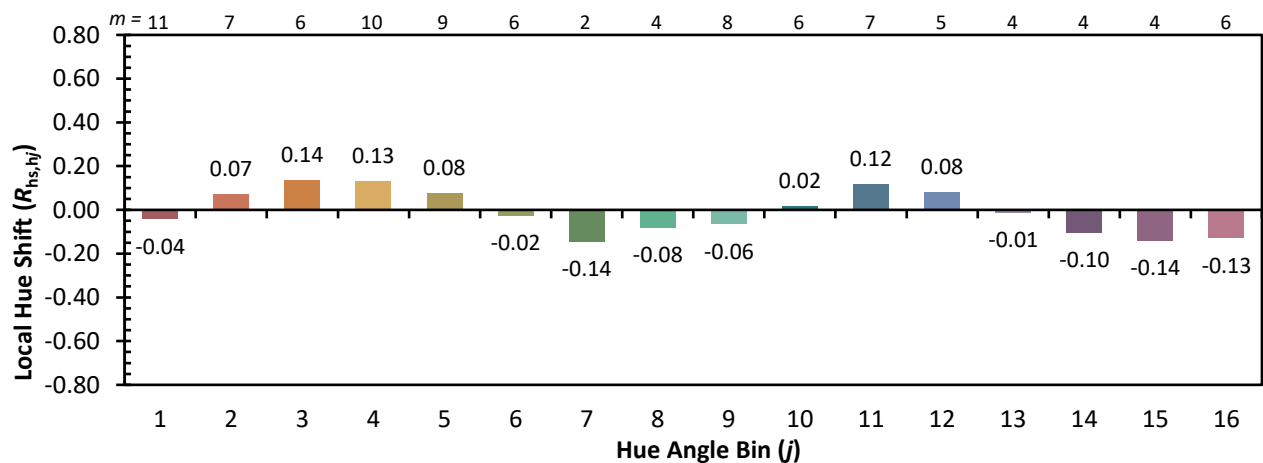
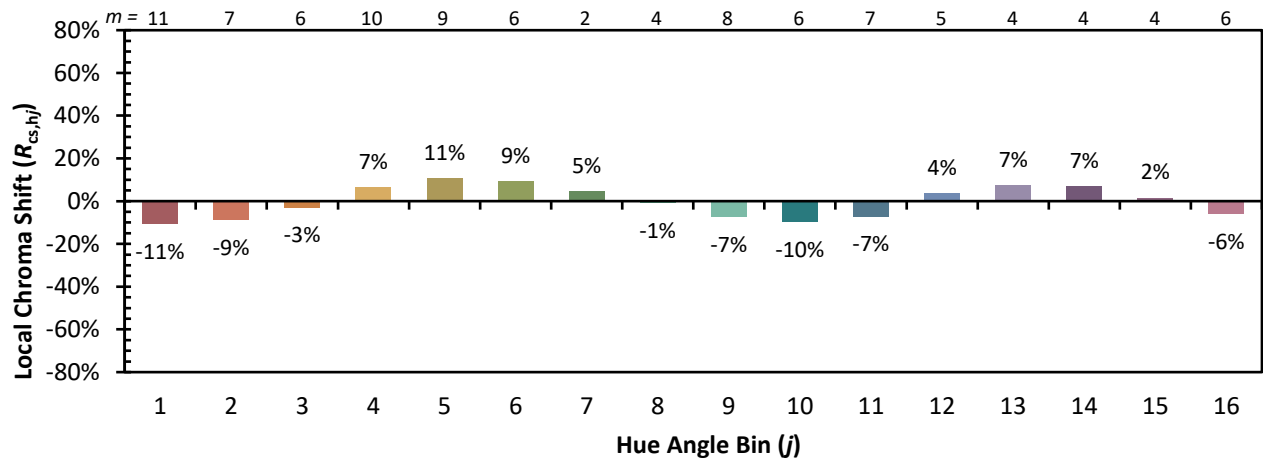


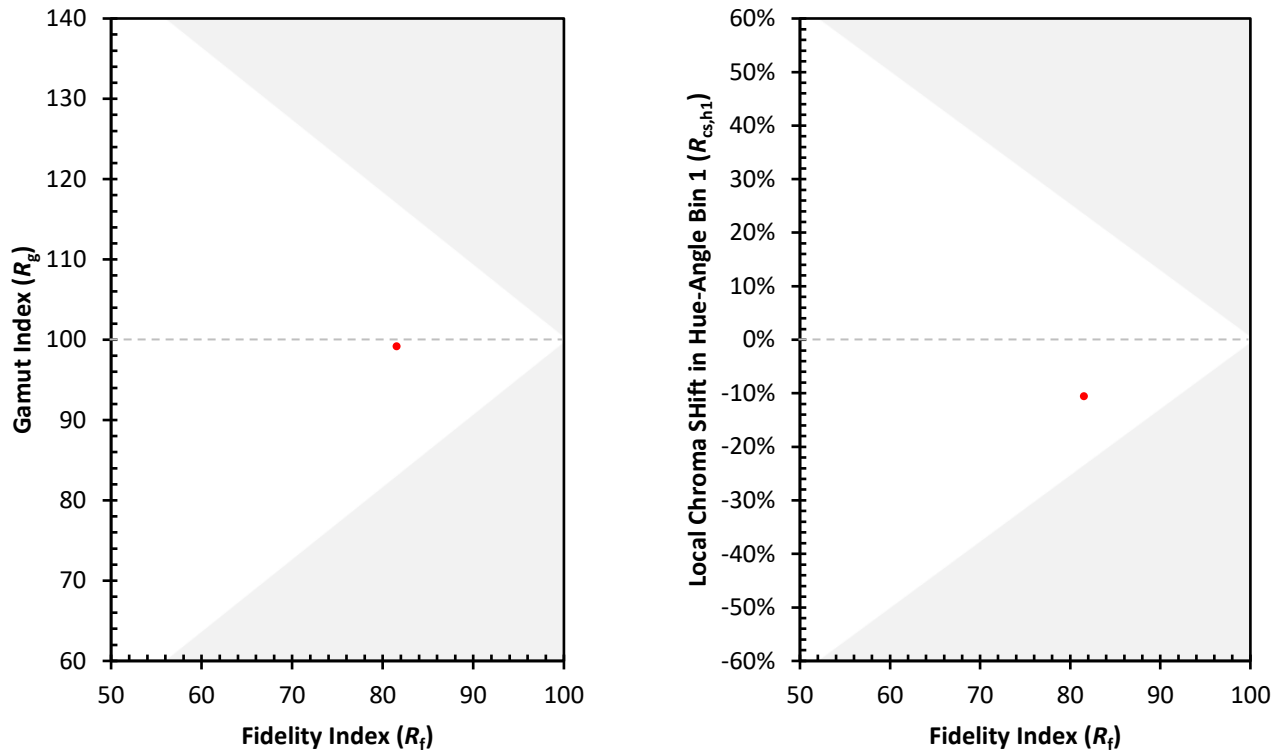
Individual Sample Fidelity Index ($R_{f,i}$)

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)