

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: P321139

Luminaire Tested: **GLEON-SA5D-830-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321139
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA5D-830-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31614 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 320
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

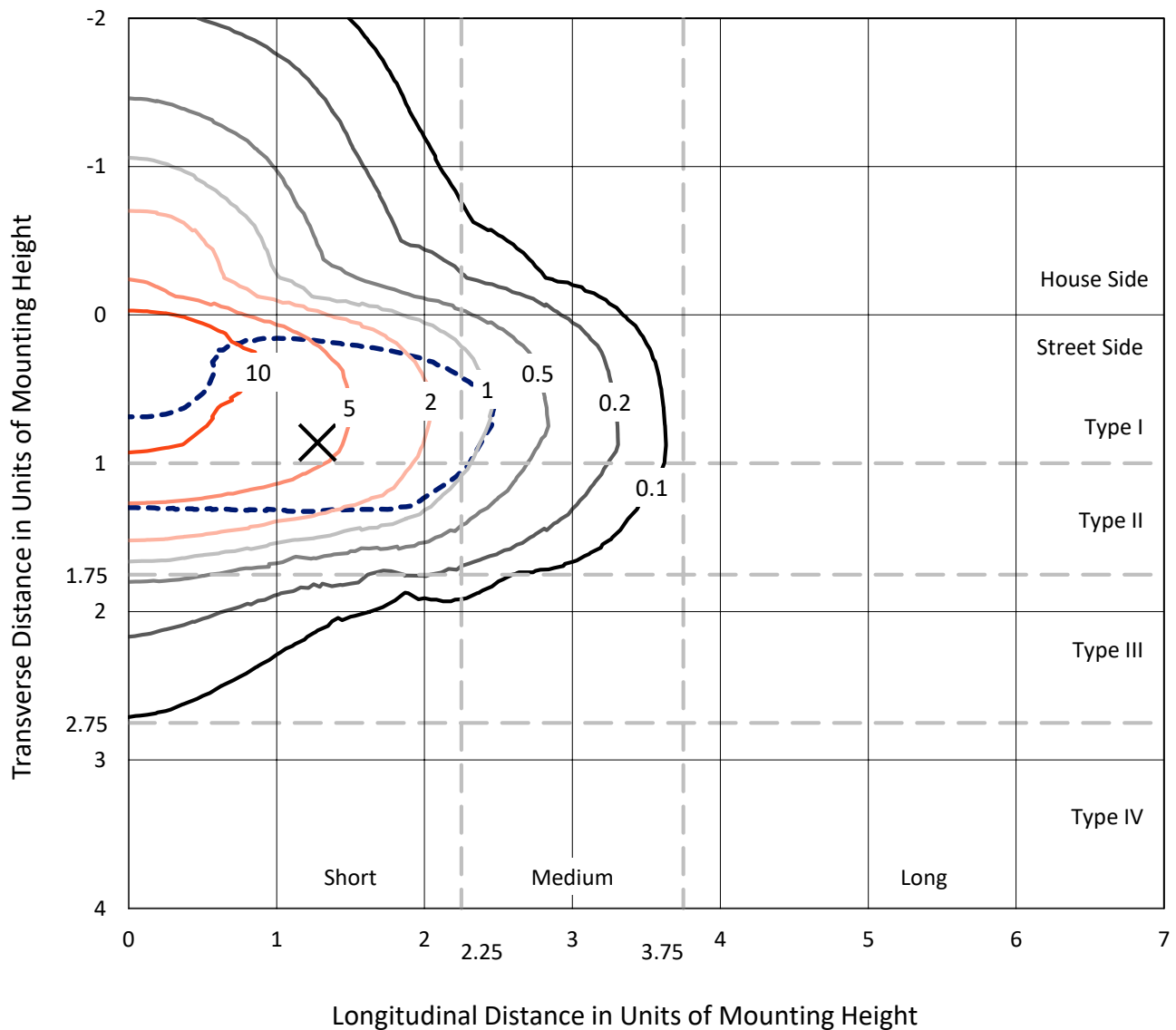


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Iso-Footcandle Lines of Horizontal Illumination

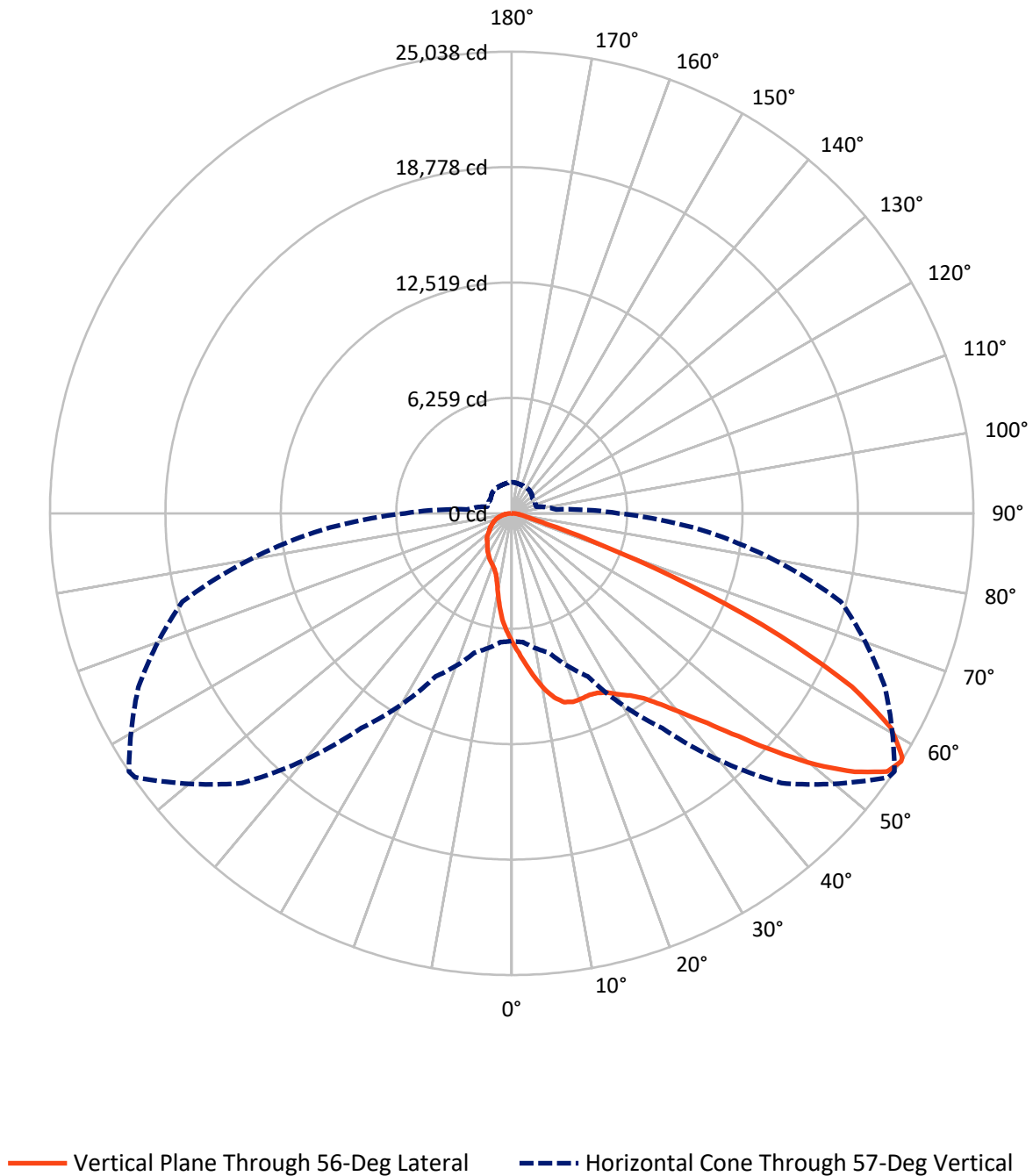
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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CATALOG NUMBER: GLEON-SA5D-830-U-AFL

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5449.6	0.0	5449.6
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	26164.4	0.0	26164.4
	% Fixture	82.8	0.0	82.8
Total	Lumens	31614.0	0.0	31614.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	669.8	2.1
10°-20°	1893.7	6.0
20°-30°	3084.6	9.8
30°-40°	4611.1	14.6
40°-50°	6994.0	22.1
50°-60°	7839.0	24.8
60°-70°	4630.0	14.6
70°-80°	1517.0	4.8
80°-90°	374.8	1.2
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°	31614.0	100.0
0°-180°	31614.0	100.0

Coefficient of Utilization



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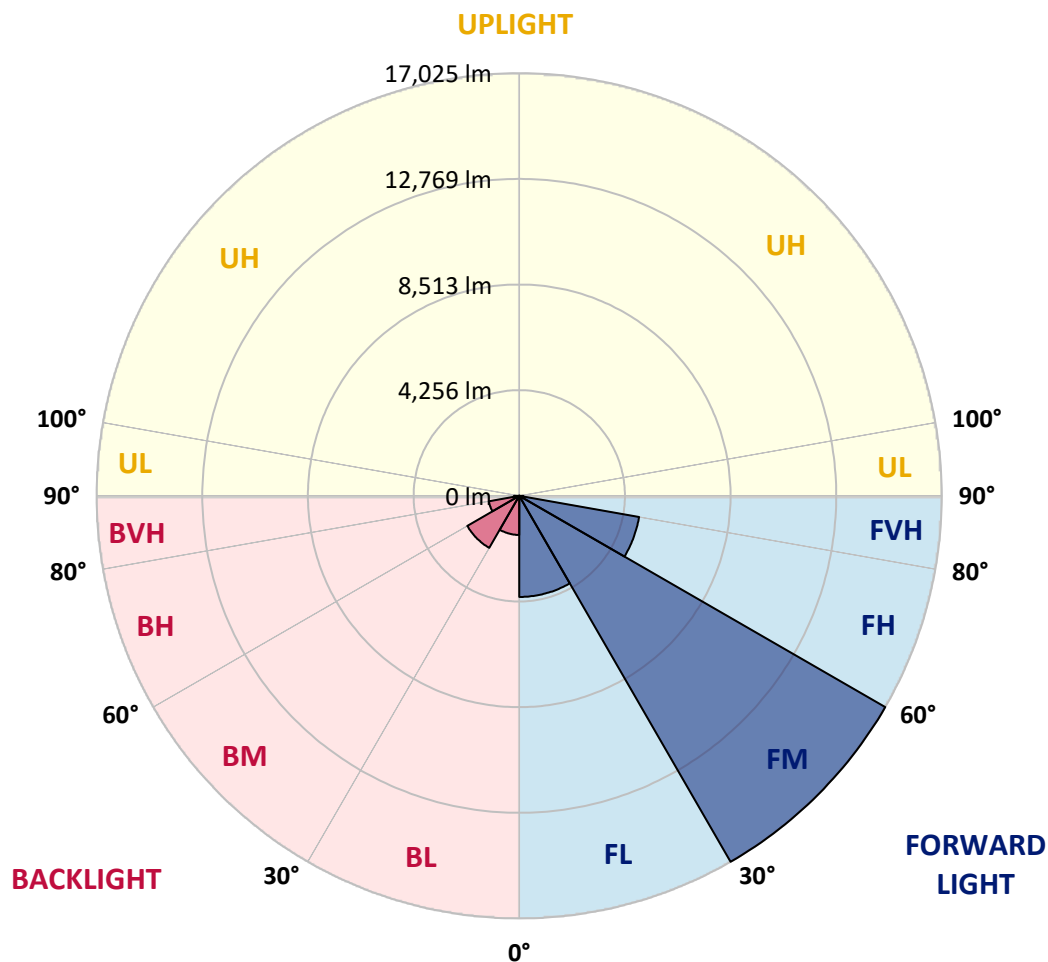
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4072.4	12.9			
FM	(30°-60°)	17025.2	53.9			
FH	(60°-80°)	4901.9	15.5			G2/5000
FVH	(80°-90°)	165.0	0.5			G2/225
BL	(0°-30°)	1575.8	5.0	B3/2500		
BM	(30°-60°)	2418.9	7.7	B2/2500		
BH	(60°-80°)	1245.2	3.9	B3/2500		G3/2500
BVH	(80°-90°)	209.8	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	7012.0	7012.0	7012.0	7012.0	7012.0	7012.0	7012.0	7012.0	7012.0	7012.0	7012.0
2.5°	8051.8	8125.6	8093.0	7980.0	7893.1	7770.4	7633.5	7592.2	7447.7	7285.8	7091.3
5°	9326.2	9289.2	9236.0	9060.0	8874.2	8658.0	8314.7	8260.4	7938.8	7572.6	7185.8
7.5°	10051.9	10048.7	10017.2	9913.9	9744.5	9462.0	9048.0	8983.9	8498.3	7909.4	7309.7
10°	9946.5	9938.9	9991.1	10098.6	10149.7	10091.0	9742.3	9678.2	9081.7	8282.1	7453.1
12.5°	9347.9	9352.2	9435.9	9661.9	9969.4	10338.8	10282.3	10250.8	9686.9	8703.6	7627.0
15°	8881.8	8891.6	8957.9	9154.5	9517.4	10187.7	10610.4	10621.2	10272.5	9168.6	7830.1
17.5°	8677.6	8698.2	8728.6	8866.6	9199.1	9886.8	10688.6	10747.3	10785.3	9651.0	8025.7
20°	8742.7	8762.3	8771.0	8859.0	9131.7	9704.3	10634.3	10739.7	11178.6	10105.2	8221.2
22.5°	9035.0	9047.0	9052.4	9075.2	9287.1	9756.4	10598.4	10709.2	11463.2	10512.6	8369.0
25°	9519.6	9510.9	9476.1	9446.8	9589.1	9962.8	10681.0	10786.4	11694.7	10882.0	8465.7
27.5°	10099.7	10088.9	10021.5	9941.1	10022.6	10284.4	10918.9	11002.6	11902.2	11227.5	8514.6
30°	10796.2	10767.9	10640.8	10545.2	10576.7	10766.8	11311.1	11387.2	12222.7	11619.7	8562.4
32.5°	11601.2	11570.8	11387.2	11228.6	11228.6	11387.2	11715.3	11778.3	12494.3	12063.0	8639.5
35°	12609.5	12571.4	12332.4	12066.2	11991.3	12071.7	12266.1	12310.7	12983.2	12621.4	8779.7
37.5°	13798.0	13747.0	13437.3	13081.0	12916.9	12912.6	13052.7	13144.0	13764.4	13354.8	9017.6
40°	14989.9	14954.0	14683.5	14403.2	14081.6	13978.4	14194.6	14222.9	14785.6	14265.2	9321.8
42.5°	15911.2	15904.7	15854.7	15891.7	15562.5	15353.9	15523.3	15546.2	16032.9	15250.6	9645.6
45°	16397.9	16408.8	16651.1	17187.8	17309.5	17157.4	17241.0	17247.6	17458.3	16244.8	9942.2
47.5°	16007.9	16064.4	16677.2	17877.7	18874.0	19379.2	19240.1	19320.5	18840.3	17098.7	10174.7
50°	14487.9	14557.5	15600.5	17570.2	19604.1	21529.3	21456.5	21438.0	19955.0	17724.5	10300.7
52.5°	12605.1	12659.4	13519.9	15972.1	19068.5	22717.9	23386.1	23290.4	20945.9	18192.8	10324.6
55°	9737.9	9822.7	10647.3	12782.2	16902.1	22263.7	24805.0	24719.1	21848.7	18438.3	10296.4
57°	6922.9	7012.0	7831.2	9755.3	14218.5	20691.6	24946.2	25037.5	22336.5	18479.6	10327.9
57.5°	6177.6	6268.9	7080.5	8949.2	13381.9	20123.4	24824.5	24976.6	22424.5	18473.1	10345.3
60°	3110.5	3145.3	3662.5	4995.5	8459.2	16268.7	23237.2	23629.4	22503.8	18153.7	10420.2
62.5°	1933.9	1908.9	1892.6	2301.1	4115.5	10788.5	19961.5	20716.6	20986.1	17380.1	10238.8
65°	1700.3	1653.6	1474.3	1441.7	1817.6	5240.0	15032.3	15972.1	17743.0	16161.1	9806.4
67.5°	1597.1	1551.5	1349.4	1227.7	1228.8	2077.3	9332.7	10390.9	13821.9	14100.1	8786.2
70°	1490.6	1449.3	1260.3	1116.9	1046.3	1150.6	4293.7	5096.6	9010.0	11083.0	7343.4
72.5°	1353.7	1325.5	1146.2	998.5	923.5	861.6	1643.8	1941.5	5216.1	7443.3	5099.8
75°	1210.3	1184.2	1031.1	889.8	798.5	678.0	925.7	997.4	2649.9	3808.0	2510.8
77.5°	1052.8	1037.6	917.0	786.6	713.8	561.7	655.1	689.9	1136.4	1632.9	1259.2
80°	837.7	867.0	801.8	700.8	633.4	449.8	463.9	486.7	661.7	797.5	714.9
82.5°	545.4	596.5	628.0	569.3	521.5	354.2	333.5	343.3	431.3	486.7	310.7
85°	227.1	255.3	412.9	372.7	346.6	258.6	223.8	228.2	267.3	277.0	127.1
87.5°	101.0	107.6	181.4	170.6	146.7	89.1	95.6	104.3	142.3	134.7	48.9
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: GLEON-SA5D-830-U-AFL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7012.0	7012.0	7012.0	7012.0	7012.0	7012.0	7012.0	7012.0	7012.0	7012.0	7012.0
2.5°	7018.5	6927.3	6770.8	6598.1	6456.8	6343.8	6229.8	6151.5	6060.3	6011.4	5986.4
5°	7024.0	6844.7	6515.5	6177.6	5875.6	5599.6	5336.7	5134.6	4945.6	4843.4	4815.2
7.5°	7046.8	6777.3	6245.0	5688.7	5152.0	4662.0	4283.9	4047.1	3876.5	3800.4	3778.7
10°	7065.3	6698.0	5910.3	5086.8	4356.7	3860.2	3566.8	3434.3	3375.6	3365.9	3356.1
12.5°	7108.7	6616.5	5558.3	4458.8	3738.5	3395.2	3293.1	3284.4	3300.7	3324.6	3324.6
15°	7177.2	6536.1	5156.3	3919.9	3345.2	3224.6	3245.3	3293.1	3337.6	3374.5	3380.0
17.5°	7227.1	6437.3	4723.9	3488.6	3135.5	3168.1	3242.0	3309.4	3355.0	3390.8	3394.1
20°	7263.0	6284.1	4262.2	3159.4	3014.9	3116.0	3208.3	3268.1	3299.6	3335.4	3340.9
22.5°	7244.5	6078.7	3852.6	2923.7	2917.1	3039.9	3127.9	3199.6	3175.7	3141.0	3163.8
25°	7155.4	5796.3	3431.0	2747.7	2813.9	2937.8	3046.4	2998.6	2918.2	2903.0	2911.7
27.5°	6996.8	5435.6	3041.0	2584.7	2694.4	2843.3	2836.7	2788.9	2760.7	2741.1	2753.1
30°	6826.2	5044.4	2699.9	2442.4	2561.9	2684.6	2659.7	2658.6	2630.3	2598.8	2614.0
32.5°	6657.8	4651.1	2429.3	2325.0	2461.9	2478.2	2532.5	2548.8	2493.4	2427.2	2422.8
35°	6511.2	4279.6	2224.0	2218.6	2341.3	2343.5	2422.8	2400.0	2262.0	2193.6	2193.6
37.5°	6401.4	3909.1	2067.5	2122.9	2182.7	2239.2	2279.4	2184.9	2162.1	2124.0	2122.9
40°	6353.6	3583.1	1969.8	2050.2	2070.8	2142.5	2039.3	2076.2	2087.1	2067.5	2067.5
42.5°	6303.6	3299.6	1885.0	1994.7	1991.5	1981.7	1929.6	1977.4	2020.8	2021.9	2018.6
45°	6253.7	3055.1	1810.0	1876.3	1921.9	1816.6	1826.3	1877.4	1938.2	1960.0	1960.0
47.5°	6198.3	2861.7	1741.6	1751.4	1822.0	1751.4	1743.8	1782.9	1854.6	1889.4	1897.0
50°	6076.6	2687.9	1663.4	1641.6	1661.2	1685.1	1691.6	1710.1	1789.4	1844.8	1857.8
52.5°	5908.2	2532.5	1563.4	1540.6	1540.6	1630.8	1661.2	1666.6	1734.0	1800.3	1813.3
55°	5768.0	2433.7	1460.2	1455.9	1451.5	1573.2	1625.3	1634.0	1680.8	1732.9	1739.4
57°	5777.8	2426.1	1380.9	1385.2	1384.2	1514.5	1591.7	1610.1	1634.0	1678.6	1686.2
57.5°	5783.2	2431.5	1363.5	1365.7	1364.6	1498.2	1581.9	1602.5	1621.0	1667.7	1675.3
60°	5864.7	2445.6	1292.9	1269.0	1274.4	1411.3	1526.5	1552.6	1564.5	1626.4	1636.2
62.5°	5744.1	2382.6	1236.4	1178.8	1178.8	1320.0	1449.3	1490.6	1509.1	1592.8	1609.0
65°	5394.3	2205.5	1170.1	1076.7	1087.5	1228.8	1357.0	1424.3	1452.6	1556.9	1574.3
67.5°	4854.3	2000.2	1099.5	985.4	996.3	1133.2	1261.4	1334.2	1378.7	1517.8	1531.9
70°	4151.4	1749.2	1003.9	888.7	901.8	1028.9	1148.4	1231.0	1297.2	1480.8	1485.2
72.5°	3060.6	1434.1	870.3	782.3	796.4	907.2	1034.3	1129.9	1219.0	1388.5	1386.3
75°	1819.8	1121.2	722.5	674.7	684.5	787.7	931.1	1047.3	1181.0	1352.6	1373.3
77.5°	1103.8	844.2	588.9	565.0	576.9	682.3	857.2	981.1	1164.7	1275.5	1269.0
80°	667.1	603.0	470.4	455.2	467.2	583.4	793.1	931.1	1018.0	1089.7	1089.7
82.5°	348.8	368.3	345.5	333.5	349.8	473.7	721.4	812.7	899.6	772.5	721.4
85°	142.3	192.3	209.7	208.6	218.4	328.1	622.5	695.3	580.2	550.8	563.9
87.5°	47.8	81.5	102.1	88.0	92.3	206.4	431.3	335.7	398.7	278.1	264.0
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

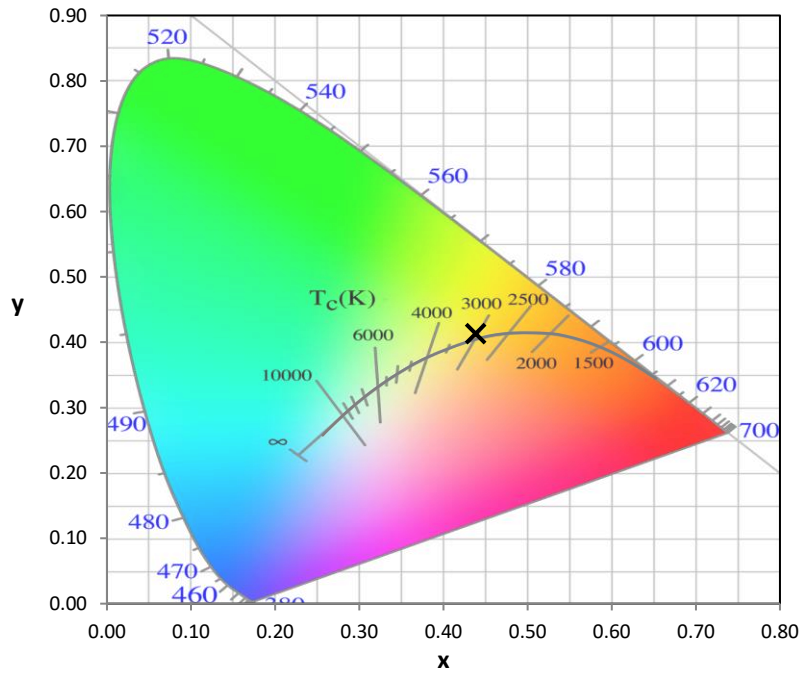
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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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

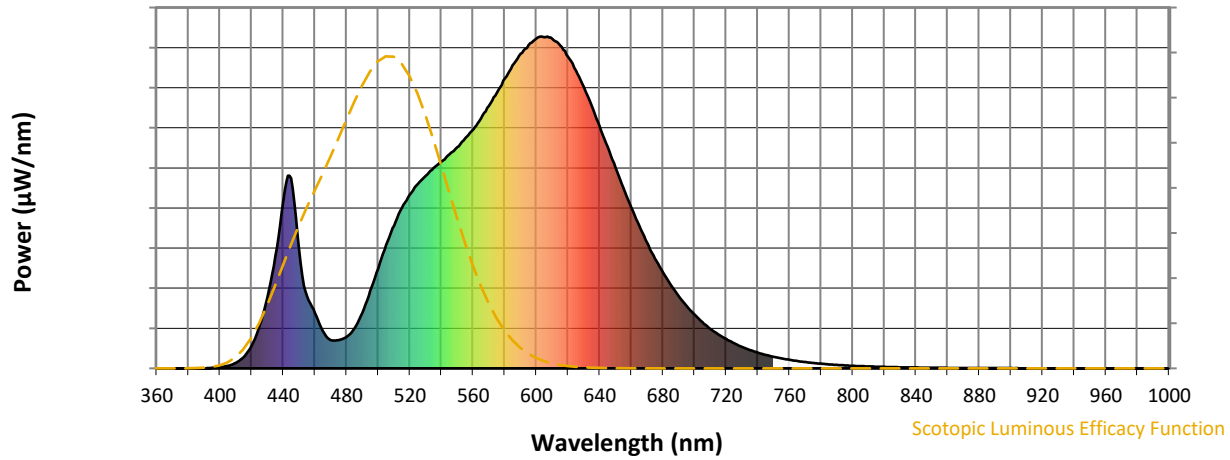


Photopic Lumens: NR

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



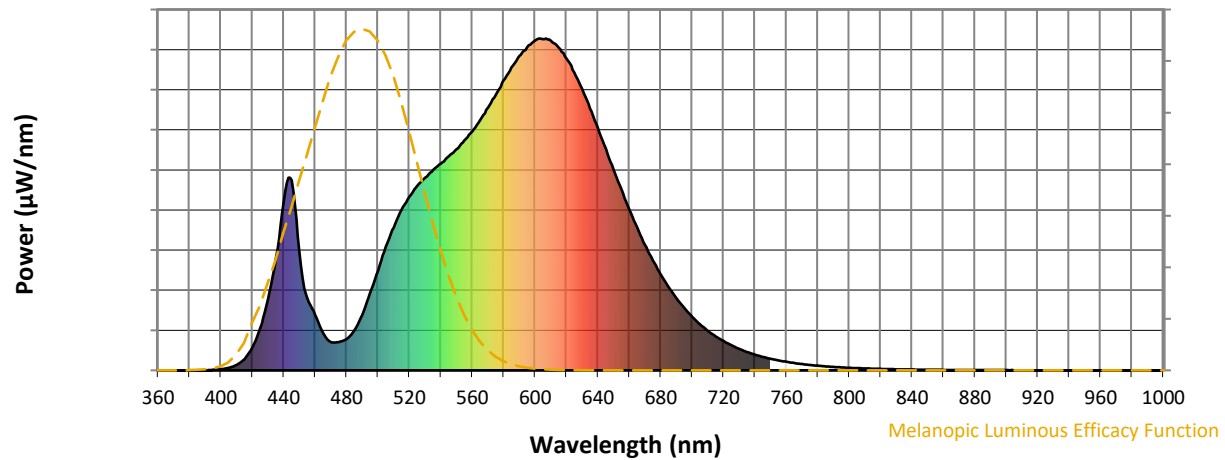
Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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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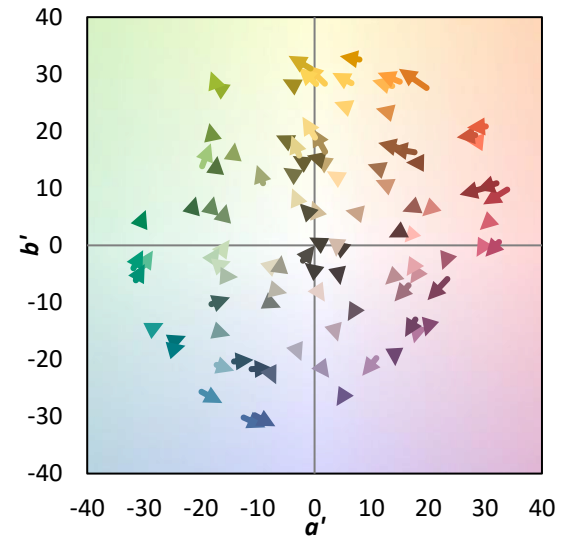
TM-30-18

Summary

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

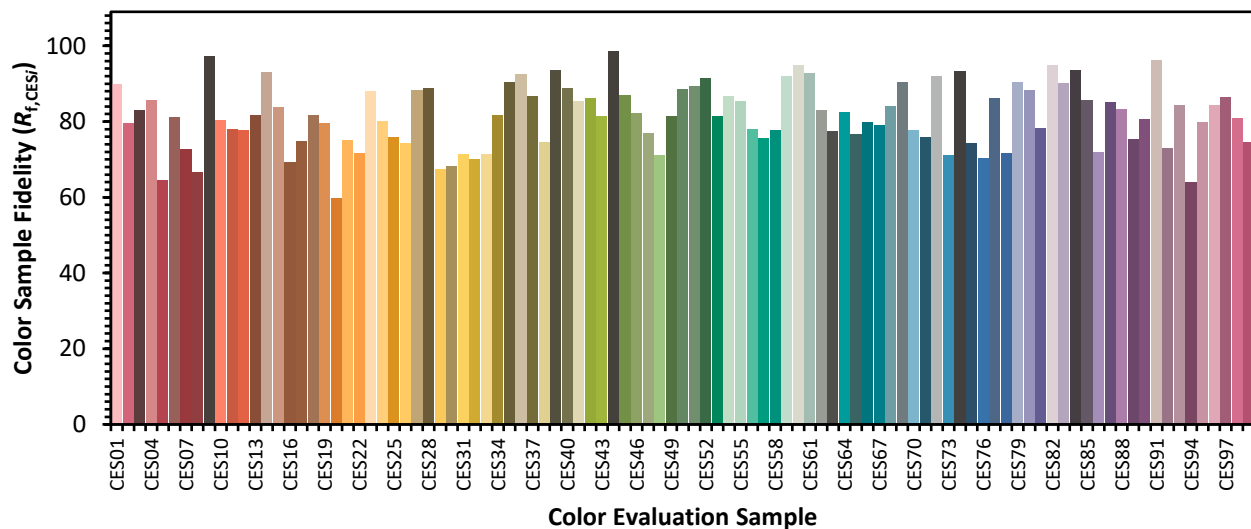


Color Vector Graphics

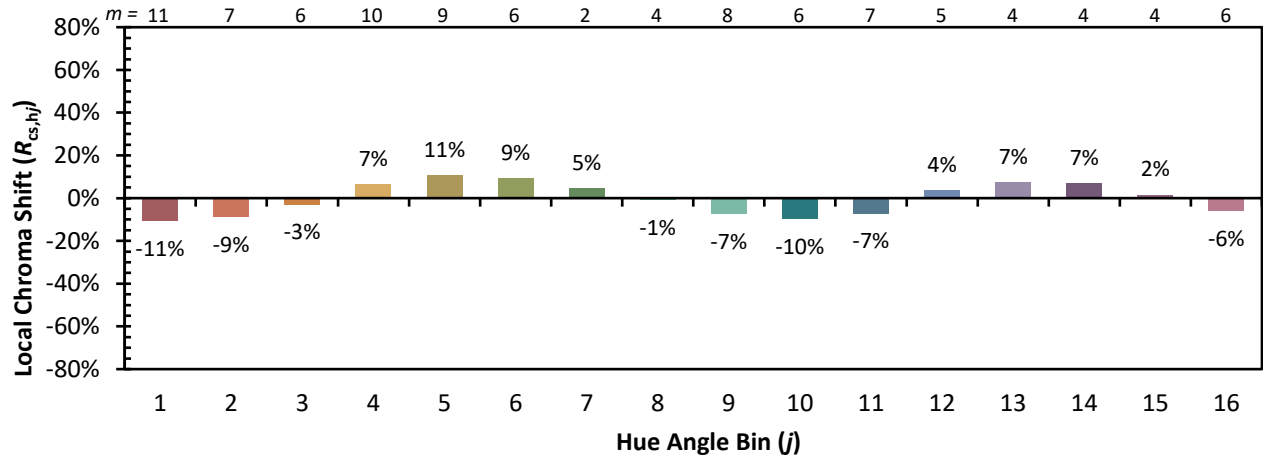


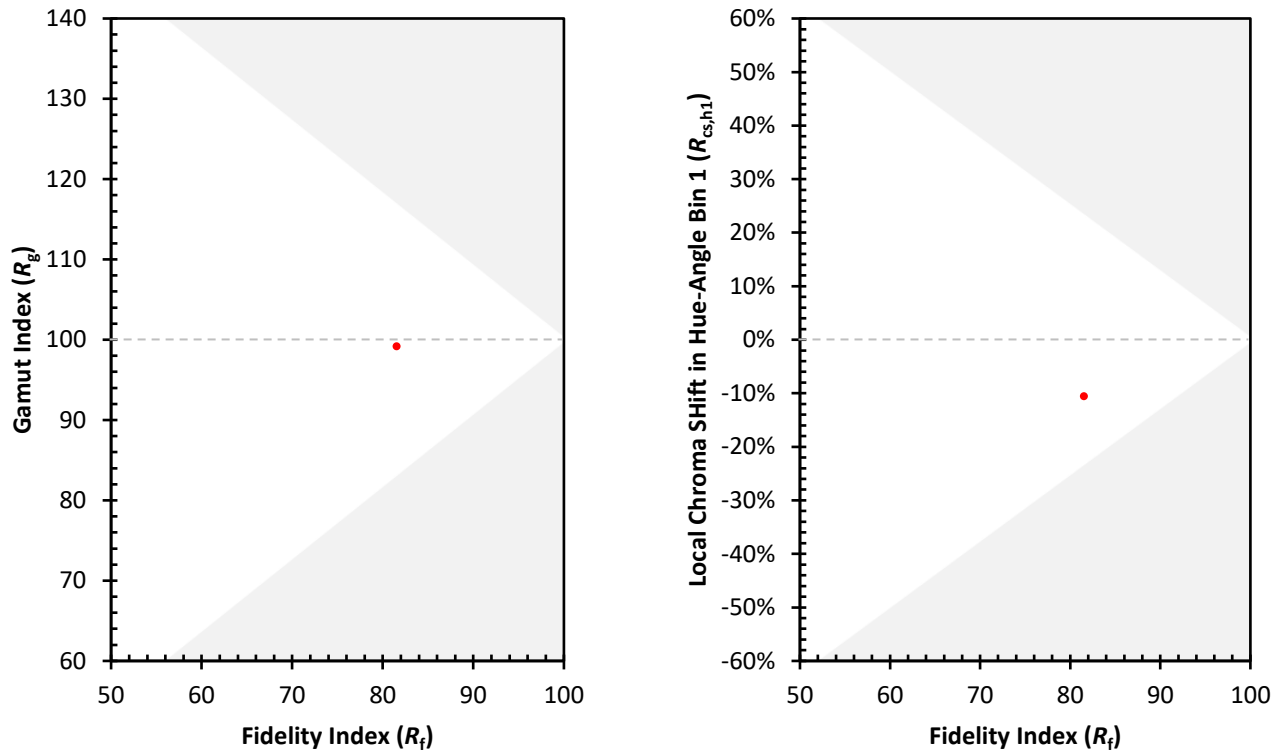
Individual Sample Fidelity Index ($R_{f,i}$)

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)